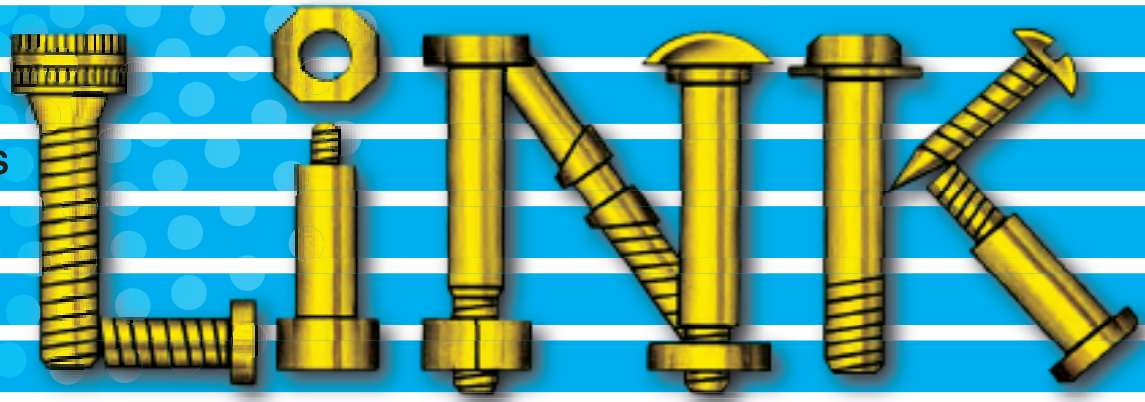


THE
DISTRIBUTOR'S

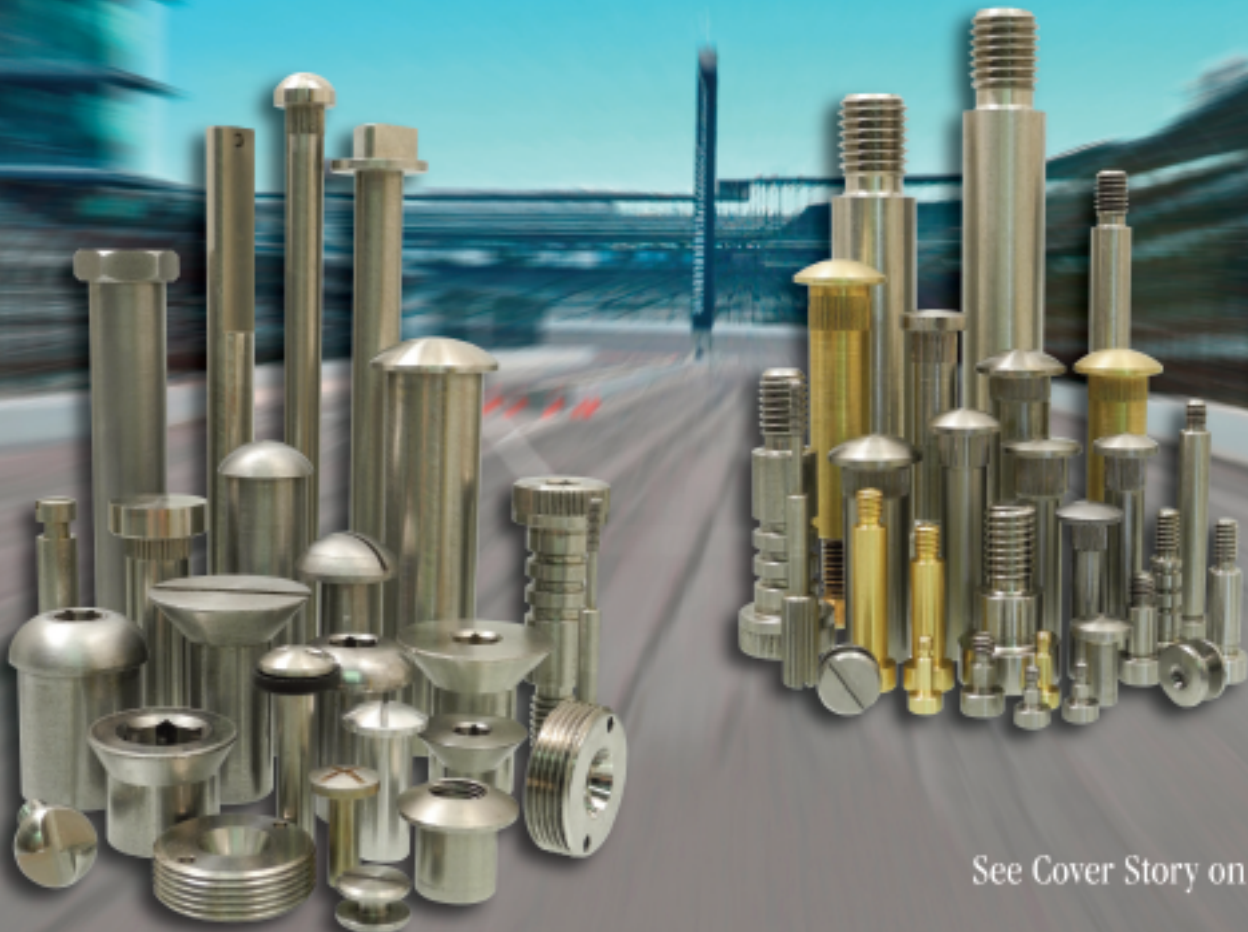


THE NATIONAL MAGAZINE FOR FASTENER DISTRIBUTORS

Manufacturing at Speed in Indianapolis



Accurate Manufactured Products Group



See Cover Story on Page 16



You know what you need when you need it.



So do we. That's why we have a deep and varied line of inventory with thousands of products always in stock. And if we don't have it, we will customize a solution that meets your needs.

That's the Elite Sales advantage. As one of the leading importers and wholesale distributors of Wire Rope, Cable, Strand, Chain and Hardware in the U.S., you can always expect unprecedented expertise, value, quality, service and reliability.



- Wire Rope, Cable & Strand
- Grade 30, 43, 70, 80, 100 Chain
- Wire Rope Hardware, Fittings & Accessories
- Chain Hardware, Fittings & Accessories
- Tie Downs & Related Hardware
- Blocks & Accessories
- Bright, Galvanized & Stainless Steel

EXECUTIVE OFFICE
9445 S.W. 40 Street, Second Floor
Miami, FL 33165
P. 305.262.3105 F. 305.262.3859

TAMPA WAREHOUSE
603 N. 19 Street
Tampa, FL 33605
P. 813.247.2094 F. 813.248.2821

HOUSTON WAREHOUSE
2003 Edwards Street
Houston, TX 77007
P. 713.861.4203 F. 713.861.4280

NEXT DAY DELIVERY

1-800-458-6659
www.elitesalesinc.com



**SPRING CLIPS
ALL FIT BUSHINGS**



**"EZ" TWIST LOCKS
WIRE AND TUBE RETAINING STRAP**



**CONTOUR ADHESIVE CLIPS
"EZ" STRAIN RELIEF BUSHINGS**



**STRAIN RELIEF BUSHINGS
DOUBLE ADHESIVE CABLE CLIPS**



**LED SPACER
QUICK CABLE CLAMPS**



**RELEASABLE ADH. CABLE CLIPS
INSULATING BUSHINGS**



**LAMPCORD BUSHINGS
"EZ" TWIST LOCK SUPPORTS**



**DUMMY PLUG
LOOP FASTENER**



**SINGLE ADHESIVE CABLE CLIPS
WIRE CLIP**

WIRE HANDLING HARDWARE
www.microplastics.com

THE PIASTA **MULTI-METAL** *SELF-DRILLING SCREW*

SUPERIOR CORROSION PROTECTION AND MAXIMUM DRILLING CAPACITY

THE BENEFITS OF STAINLESS 18-8 MULTI-METAL SELF-DRILLING SCREWS:

Maximum Drilling Capacity:

Drills through aluminum and steel up to 1/2" thick.

Maximum Corrosion Protection:

Resists weatherization, chemical and atmospheric corrosion.

Eliminates Unsightly Rust:

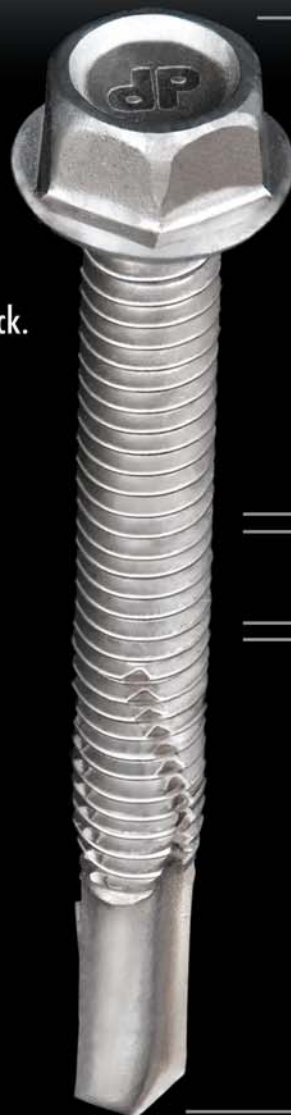
Protects against corrosive gasses and environmental stresses by coating the entire fastener with Ruspert 3®.

Resists Galvanic Corrosion:

Less contact corrosion to other metals.

Wide Selection:

Available in a broad assortment of sizes, head styles and washer assemblies.



STAINLESS 18-8
HEAD & BODY

ATTACHMENT AREA

HARDENED STEEL
SELF-DRILLING
POINT

HI-TECH FASTENER CORP.

800 858-7341

718 392-5786

Fax 718 392-4337

Fasteners3@gmail.com

www.hi-techfasteners.com

WITHOUT HIS BEACON FASTENER THE BOSS WAS A USELESS TOOL.



TO ALL EMPLOYEES:

Recent market conditions have made saving time and money more important than ever. It is critical we all do our part! To that end, it is now company policy to order all fasteners from Beacon.

Beacon Fasteners has the lowest prices, the largest inventory, and will track their shipments to us. Their entire product line is double tested in their own labs, and every piece is available RoHS compliant.

We will discuss further cost cutting measures when I return from Palm Springs.

—The Boss



Thread
Forming



Thread
Cutting



High-Low
Tapping



SEMS

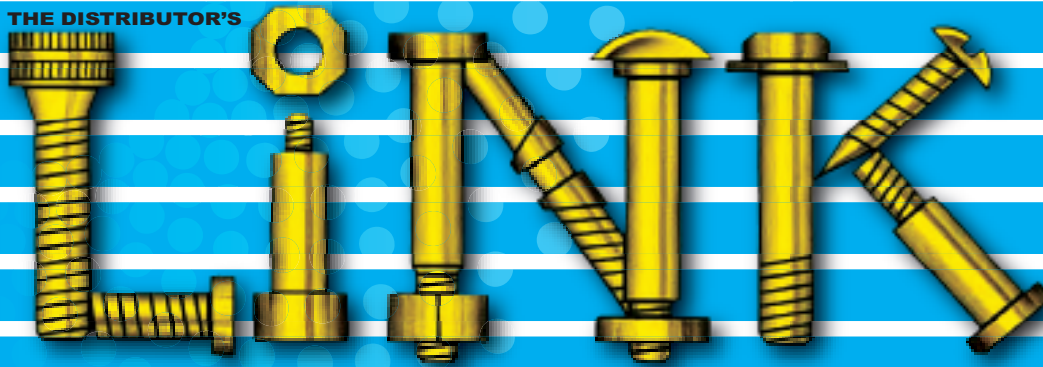


Sheet Metal
Tapping

Beacon[™]
FASTENERS AND COMPONENTS, INC.

beaconfasteners.com

800-669-2658



THE NATIONAL MAGAZINE FOR FASTENER DISTRIBUTORS

IN THE SPRING 2011 ISSUE...

- | | | | |
|----|--|-----|--|
| 6 | Distributor News | 68 | Southeastern Fastener Association Annual Spring Meeting |
| 8 | Fastener Strength – Real or Not?
<i>Bengt Blendulf</i> | 70 | Integrated Packaging & Fastener:
“Our Quality Goes in Before Our Bags Go Out” |
| 10 | How Torque Values Vary
<i>Guy Avellon</i> | 74 | Las Vegas Fastener Expo Going Gangbusters! |
| 12 | Re-Evaluating Your Counter Efforts
<i>Robert B. Footlik</i> | 78 | Teams, Collectives and the Clouds
<i>Larry Kilham</i> |
| 14 | Boeing: Lean Manufacturing Key to Fastener Profits
<i>John Wolz</i> | 82 | Morton Machine Works: Metalworking for Nearly 70 Years |
| 16 | Cover Story: Accurate Manufactured Products Group | 84 | AZ Lifting Hardware: Not Just Another Importer |
| 24 | Selling Stock Versus Selling Assets and the Tax
Minimization Analysis
<i>Bart Basi</i> | 90 | Pac-West Announces Second Mel Kirsner Memorial
Golf Outing |
| 26 | Business Comes Together to Fight Crippling Regulations
<i>Jim Truesdell</i> | 90 | N.A.W. Elects 2011 Officers |
| 30 | Applied Bolting Announces New Training
and Troubleshooting Videos | 92 | Cable Tie Express: Cable Ties 101 |
| 34 | Keeping it Together with Superbolt®
<i>Allan Steinbock</i> | 96 | Using the Power of Smartphones to Grow Your Business
<i>Ford Saeks</i> |
| 36 | Porteous Fastener Company:
How to Secure my Supply Chain? | 98 | Where is the Money?
<i>Jim Bain</i> |
| 40 | Brighton-Best Connection – A Complete Success | 100 | Southeastern Fastener Association Mardi Gras Photos |
| 42 | Columbus Fastener Expo Growing - Register Today | 101 | British Metrics Owner Retires |
| 44 | Caught Looking: Privacy Advocates Deal Fastener
Marketing a Blow
<i>Joe Dysart</i> | 102 | Fastener Crossword Puzzle |
| 46 | Tightening Strategies for Bolted Joints
<i>Ralph S. Shoberg</i> | 107 | Ideal Supply is QSLD Re-Approved |
| 50 | Northcoast Fastener Association Upcoming
“Distributor Social” | 108 | International Fastening Systems: Your One-Stop Rivet Shop! |
| 54 | U.S. Economic Outlook – Spring 2011
<i>Jeff Thredgold</i> | 110 | New England Fastener Distributors Association:
Dr. Jeff Dietrich Addresses Membership |
| 60 | Atlantic Fasteners: Employee-Owned Company
Comes of Age | 114 | Enhance Your Professional Credibility
<i>Jean Kelley</i> |
| 64 | American Imperial Screw Corp: It's Not Hard to Find Here | 120 | ASTM F1941 and F1941M Replaces ASTM B633
<i>Joe Greenslade</i> |
| | | 122 | The Hunt for Opportunities
<i>Jay Forte</i> |
| | | 126 | Chicago Bolt & Nut – Where Custom Fasteners Are a Big Deal |
| | | 128 | Mid-West Fastener Association News |
| | | 131 | Screw Products Inc: Need a Dependable,
Professional Fastener? |
| | | 133 | Subscription Form |

AVAILABLE NOW
Digital Edition
Online Magazine
www.linkmagazine.com

VOLUME 34 • ISSUE #2

- 138 Prospecting – Building an Advocate Army
John Boe
- 142 How to Avoid Being Left Behind in 2011
John R. Graham
- 144 Mid-Atlantic Fastener Distributors Association
Re-Engineered
- 145 Industrial Rivet & Fastener Co:
Introducing Kingset™ Riveting System
- 146 How Different Types of Blind Rivets Function
Anthony DiMaio
- 147 Solution Industries: Solutionman Announces...
- 150 New England Fastener Distributors Association Table Top Show
- 151 New England Fastener Distributors Association
Registration Form
- 163 DDI System: Converting Analytics into Sales
- 165 Word Search Puzzle
- 166 Gage Bilt: Your Rivet and Lock Bolt Tool Source
- 177 Fastener Tech™11 – Seminars and Meetings Taking Shape
- 178 Fastener Tech™11 Registration Form
- 182 Southwestern Fastener Association Spring Conference &
Expo Scheduled for 2012
- 186 Southwestern Fastener Association Photos
- 190 North Coast Fastener Association “Distributor Social”
Registration Form
- 196 IFI Certified Fastener Specialist™ Training to be Offered
July 25-26, 2011
- 198 North Coast Fastener Association DFAR/ITAR Meeting
Kelly Hommell
- 204 IFI’s Soaring Eagle Awards Program
- 206 See What’s New at Distributor’s Link
- 210 Cryptic Fasteners Puzzle
- 212 Puzzle Solutions
- 213 Vogelsang Corp: 3 New Ways for Fastener Distributors
to Think “Quick” and Save Big

Leo J. Coar
Editor/Publisher

leojcoar@linkmagazine.com



Maryann Marzocchi
Vice-President/Advertising Sales
maryann@linkmagazine.com



Tracey Lumia
Director, Sales and Marketing
tracey@linkmagazine.com



Distributor’s Link Magazine is a quarterly publication dedicated to the Fastener Industry and Fastener Distributors.

Address all Advertising Materials & Correspondence to:
DISTRIBUTOR’S LINK INC.

4297 Corporate Square • Naples • FL 34104

Phone: 1.800.356.1639 or 239.643.2713

Fax: 239.643.5220 • www.linkmagazine.com

All rights reserved. No part of this publication may be reproduced without permission of the publisher. Subscription price: \$50 USA, \$60 Canada, \$70 all others. Editorial reprints available upon request. Inquire about charges. *Publisher’s Notice:* Distributor’s Link Magazine assumes no responsibility for validity of claims in connection with items appearing in our magazine.

PUBLICATION DESIGN & LAYOUT PRODUCED BY:
phone 224.489.9533 email info@graphikacreative.com
www.graphikacreative.com

GRAPHIKA
CREATIVE

DISTRIBUTOR NEWS

Elgin Fastener Group has announced the latest addition to their expanding production capabilities through the acquisition of Silo Fasteners, Kansas City, MO, effective February 7, 2011. Silo Fasteners was established in 1990 and has provided fasteners for highway construction, concrete form, and general distribution since that time. Elgin Fastener Group will relocate the Silo Fasteners machinery and selected production personnel to their Ohio Rod Products facility in Versailles, IN. The acquisition will provide entry to new markets for EFG, as well as expansion of their current participation in the construction market.

Elgin Fastener Group combines four domestic industrial fastener manufacturers (Ohio Rod Products, Leland Powell Fasteners, Chandler Products, Precision Screw & Bolt) with an engineering and international procurement division (Elgin Fasteners International) and a metal finishing company (Best Metal Finishing) to provide quality solutions for various applications. All of the EFG companies are ISO certified.

For more information, contact Elgin Fastener Group. 1415 S. Benham Road, Versailles, IN 47042. Telephone: 812-689-8917, Fax: 812-689-1825. Website: www.elginfasteners.com, E-mail: info@elginfasteners.com.

* * *

U.S. Senator Richard Blumenthal and his staff visited **Crescent Manufacturing** on January 18, 2011 as reported in the "Register Citizen" on January 19, 2011. In addition, Connecticut Senator Beth Bye joined Senator Blumenthal during the senator's visit to Crescent Manufacturing.

This was Senator Blumenthal's second visit to Crescent Manufacturing. Senator Blumenthal previously visited Crescent while he was attorney general of Connecticut in March 2010.

The January 18th visit included detailed discussions about creating conditions to facilitate job growth both in Connecticut and the United States.

Accompanying Senator Blumenthal were Kevin Mullane, chief of policy, and Richard Kehoe, head of Connecticut operations for the senator.

Crescent Manufacturing can be reached at 700 George Washington Turnpike P.O. Box 1350 Burlington, CT 06013; Tel: 860-673-2591 Fax 860-673-5973 or www.crescentmanufacturing.com.

* * *

Solon Manufacturing Company is proud to announce that its quality management system achieved ISO 9001:2008 registration.

This ISO 9001:2008 registration validates the effectiveness of Solon's focus placed on complete customer satisfaction by meeting customer requirements for engineered solutions, quality, performance and customer service through continuous improvement throughout the organization.

"Achieving ISO registration strengthens our organization's internal processes which allow us to confidently and fully support our customers" said Tim Dunn, President. "As this milestone adds another dimension to Solon's competitive advantage, Solon looks forward to increasing our global competitiveness."

To become ISO 9001:2008 registered, Solon Manufacturing Company underwent an in-depth evaluation process including quality management system review, initial assessment, and final evaluation resulting in accreditation from BSI, British Standards Institute.

For more information, visit their website at www.solon.com.

* * *

BoltSize-It is now offering the old style L - Gauge in Inch (white) and Metric (yellow) versions, as well as a direct replacement for the old Rockford Check-A-Thread gauges in Inch and Metric.

Check out the website for other new products that we continue to add. www.boltsizeit.com, 800-369-0120, info@boltsizeit.com.



Stock

EXTENSIVE INVENTORY

Service

ENGINEERING SUPPORT

Success

FAST SHIPPING

Advance Components

is a master stocking distributor of A Raymond Tinnerman products, offering our customers the best in fastening solutions.



**Advance
Components**

The Distributor's Source for



A Raymond **TINNERMAN**

advancecomponents.com

800 275 7772



Bengt Blendulf

Bengt Blendulf is president/principal lecturer of EduPro US, Inc., a company specializing in fastener engineering education and consulting. In 1966, Bengt joined a leading European fastener manufacturer. Educated in Sweden, he moved to the United States in 1974 to start a subsidiary for a Swedish fastener manufacturer. Bengt also served for eight years on the faculty in the College of Engineering and Science at Clemson University. Since 1997 he (EduPro) teaches highly rated courses in Fastener Technology and Bolted/Screwed Joint Design in the U.S., Canada, Mexico, Europe, Asia and India, for engineers and other fastener professionals. Bengt was the chairman of ASTM F16.96 Bolting Technology from 1996 to 2006. In 2006 he received the Fred F. Weingruber award from ASTM for "his efforts to promote and develop standards for the fastener industry." He is the author of an extensive lecture book as well as over 100 technical papers and articles. His business address is: EduPro US, Inc., PO Box 232, Alameda, CA 94501; phone 510-316-3234; email: bengt@edupro.us; web: www.edupro.us.

FASTENER STRENGTH - REAL OR NOT?

When a bolt or a screw is manufactured, it is subjected to a number of tests to determine the fastener meets the specification to which it is made. For inch fasteners (bolts, screws, nuts, washers and rivets) ASTM F606 is the standard for testing most often specified, and for metric fasteners ISO 898/1 (bolts, screws and studs) or ISO 898/2 (nuts) are the normal specifications. The ISO 898 standards contain all relevant data for the fasteners, including materials, strength classes, test programs, types of tests and marking requirements. That is also the case for inch standards according to SAE J429. But when we use ASME and ASTM fastener standards for types and physical sizes, we also need to consult ASTM F606 for the testing procedures. That way, SAE and ISO are a lot easier to use since all is covered in one single document. The most obvious parts of any fastener testing program include proofing load, proof stress/Rp0.2 (yield in older terms), tensile strength, wedge test, hardness and various checks for flaws.

For the designer of a bolted/screwed joint, the most important issue is, of course, the available strength or load bearing capacity of the fasteners. But, if he/she only takes the table values for proofing loads as bench marks for the joint loads there will be problems coming. All types of tensile testing, including proofing load and Rp0.2 (yield) are performed by applying a straight and slow load to the fastener in a test apparatus.

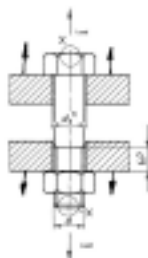


FIGURE 1

The minimum proofing loads and ultimate tensile loads are listed in tables in ISO 898/1, SAE J1199 and ASTM F568M for metric sizes and property classes. For inch fasteners we find the corresponding data in SAE J429 for the commonly used grades (Grade 5, 8, etc.). There are also a number of ASTM specifications that, in some cases, are almost duplicates of the SAE grades that most of us use, but also some that are unique to ASTM and not so often known or used in the mechanical industries.

Aside from finding load data, sometimes easy, sometimes not, a well educated designer will likely base fastener loads on a percentage of the proofing load. That is the load level where no fasteners in a lot show any permanent elongation after testing. In early text books (unfortunately still used in many technical colleges) a percentage, usually 75 % of yield strength (now Rp0.2 for heat treated fasteners) was suggested, but proofing load data are a much more reliable starting point. Proofing loads for high strength fasteners (8.8, Grade 5 and higher) usually are about 90 % of Rp0.2.

How much of the proofing load should we subject the fastener to?

There are several factors to consider, including the most important as follows:

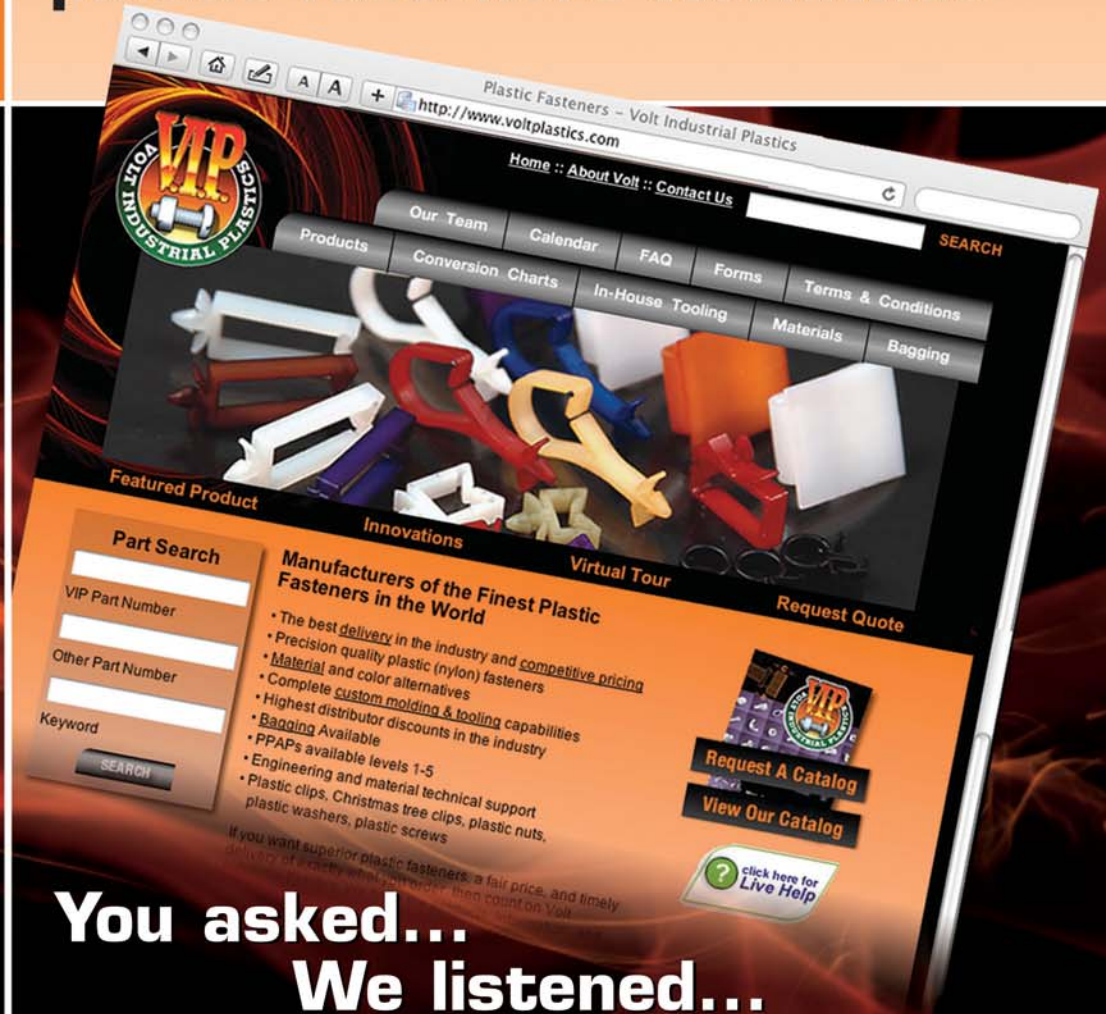
1. Tightening torque (real facts or charts).
2. Friction coefficients (threads and bearing areas).
3. Quality of assembly tools (scatter).
4. Torsional stresses

Tightening torque

I have over the years cautioned my readers about using torque charts. Although well intended, they are based on assumptions that may not reflect the conditions of a particular safety critical joint. Some of these torque charts just indicate values for "plain" or

THE primary source for plastic fasteners worldwide

just a click away...



You asked... We listened...

Volt Industrial Plastics proudly presents
our **NEW** website — redesigned with
YOU in mind!

- Improved product search
- Frequent updates on new products
- Featured product section
- Virtual tour of our facility
- Improved navigation and functionality

www.voltplastics.com

toll free fax 1-877-453-8707

1-800-844-8024



In addition to our 24/7 website availability –
Call Monday-Friday 7am-5pm Central time – you'll always reach
a real person – not voice mail or an automated answering service!



Guy Avellon

Guy Avellon has been in the MRO and fastener distribution industry for over 30 years. He began his metallurgical engineering career at Republic Steel Research Center in metal coatings and has since held positions as sales engineer; Chief Engineer; Manager of Product Marketing, Product Engineering and Quality and Director of Quality and Engineering. He founded GT Technical Consultants where he performs failure analysis, presents lectures on fastener safety, worked for law firms and designs and audits Quality systems.

He is a member of SAE and is Vice Chairman of the ASTM F16 Fastener Committee and Chairman of the F16.01 Test Methods Committee, since 1988. He also received the ASTM Award of Merit in 2005.

Guy and his wife, Linda currently reside in Lake Zurich, IL and may be reached at 847-477-5057 or visit his website at <http://www.BoltDoc.com>.

HOW TORQUE VALUES VARY

As we have seen before in prior articles, friction and the lack of friction, or rather the presence of any type of lubricant, greatly affects the applied torque and clamp load the fastener produces, as well as the integrity of the joint. What we are now going to show is how torque relates to clamp load and how the 'k', a representative factor for the coefficient of friction, influences the torque-tension relationship.

Going back to our simple formula for calculating torque, we have:

$$\text{Torque} = k \times D \times W$$

Using the above formula will provide torque in pound-inches. To compute our familiar pound-feet values we must divide this product by twelve (12), hence:

$$\text{Torque} = k \times D \times W \div 12 = \text{pound-feet}$$

k= the "coefficient of friction", determined experimentally.

D= the nominal diameter of the fastener (1/4", 3/8", etc.)
W= the preload with a 25% safety factor.

The value for W is derived from taking the proof load and multiplying it by 75% to provide for the fastener's safety factor. For example: proof loads for Grade 5 fasteners are: 85,000 psi from 1/2 - 1", 74,000 psi from 1 1/8 - 1 1/2", and 55,000 psi from 1 1/2 - 3"; Grade 8 fasteners are 120,000 psi from 1/2 - 1 1/2" and 180,000 psi fasteners are around 135,000 psi 1/2 - 1 1/2".

Some examples of common 'k' factors are:

- k = 0.30 Black, non plated fasteners.
- k = 0.235 Socket Head Cap Screws, as received.
- k = 0.20 Zinc plated
- k = 0.17 Phosphate and oil
- k = 0.15 Zinc plated locknut with wax (also depends upon the wax)
- k = 0.12 Metallic Anti-Seize (copper, nickel, aluminum with wax)
- k = 0.09 Cadmium plated locknut with wax

Again, these values can change slightly by viscosities, chemistry and even temperature. The 'k' factor can be determined by using a small fastener into a test plate. Simply apply the unknown lubricant to the

test fastener and assemble it into the test plate. Then tighten the nut using a beam or dial indicating torque wrench. As the nut is tightened, the indicator will increase in value proportionately to the tightening effort, and then will begin to slow and stop altogether even though you can still turn the nut. At this point the fastener has experienced yield. Take the highest reading and subtract between 25 - 30% for a safety factor. Calculate the per cent difference and use this for any size or grade fastener as the 'k' factor.

Let's now apply the formula to a few conditions:

- For a non-plated 3/8"-16 Grade 8 cap screw:

$$T = k \times D \times W \div 12$$

$$W = 9300 \times 75\% = 6,975 \text{ lbs.}$$

$$T = 0.30 \times 0.375" \times 6975 \text{ lbs} \div 12$$

$$T = 65 \text{ lb-ft.}$$

- For zinc plated 3/8"-16 Grade 8 cap screw:

$$T = 0.20 \times 0.375" \times 6975 \text{ lbs} \div 12$$

$$T = 44 \text{ lb-ft.}$$

- For zinc plated with anti-seize 3/8"-16 Grade 8 cap screw:

$$T = 0.12 \times 0.375" \times 6975 \text{ lbs} \div 12$$

$$T = 26 \text{ lb-ft.}$$

- Using a non-plated 1/2"-13 Grade 8 cap screw:

$$T = 0.30 \times 0.50" \times 12,788 \text{ lbs} \div 12$$

$$T = 160 \text{ lb-ft.}$$

- A zinc plated 1/2"-16 Grade 8 cap screw:

$$T = 0.20 \times 0.50" \times 12,788 \text{ lbs} \div 12$$

$$T = 107 \text{ lb-ft}$$

- For zinc plated with anti-seize, 1/2"-16 Grade 8 cap screw:

$$T = 0.12 \times .050" \times 12,788 \text{ lbs} \div 12$$

$$T = 64 \text{ lb-ft.}$$

Here are two examples of three different surface finishes commonly used with fasteners. The same torque cannot be used in all cases. This is also true with socket head cap screws because they are tightened by the head and have a slightly oiled surface. Always use the manufacturer's recommended torque for these products. However, these values will change if a lubricant is added.

It can clearly be seen how using the incorrect torque value can easily place a lubricated fastener into yield. It is especially difficult to gauge the correct torque when not using a torque wrench but by merely going by feel.

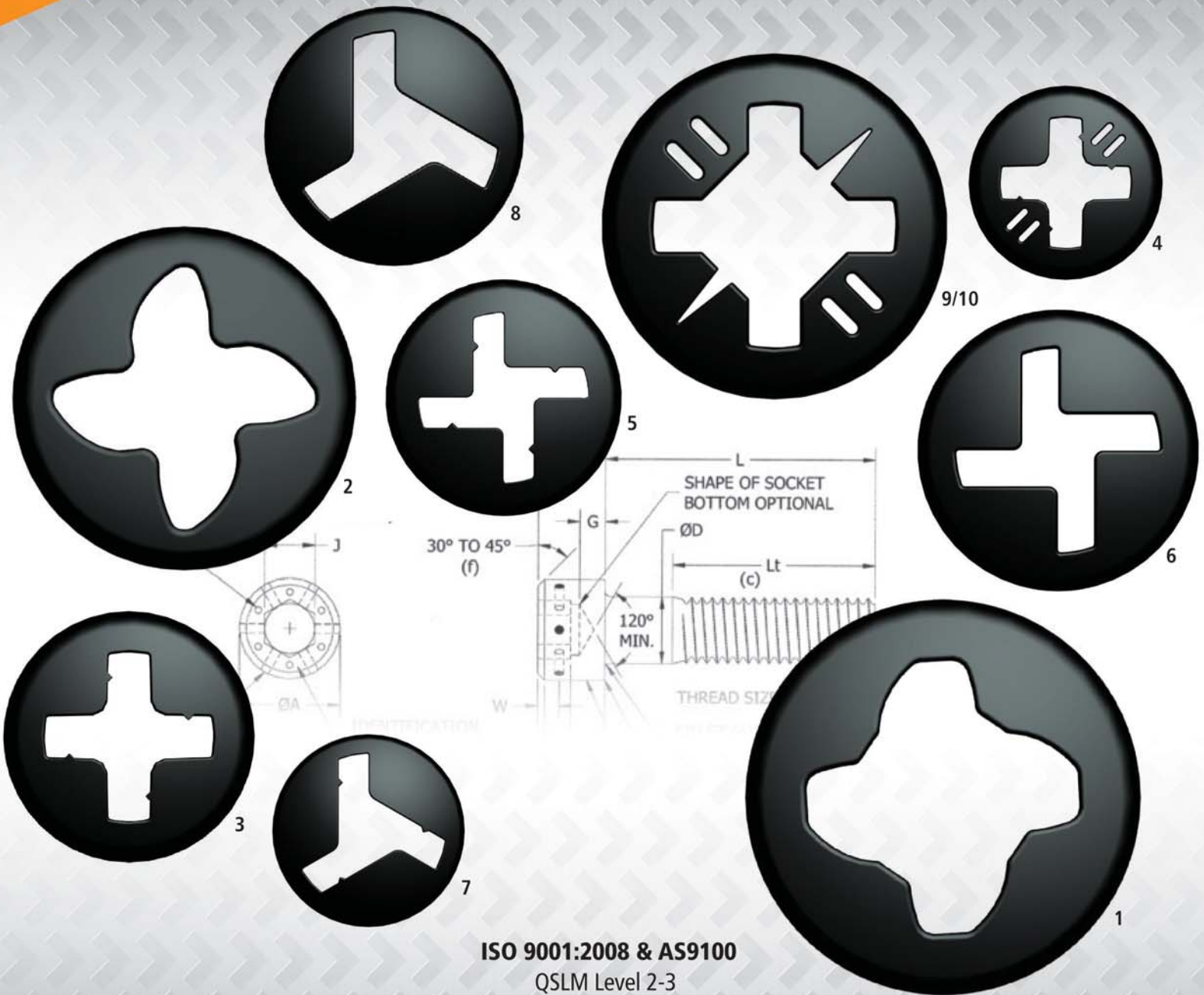


NORTH EAST FASTENERS

Commercial | Military | Aerospace | Automotive | Specials

announcing...

NEW PRODUCTS AND CERTIFICATIONS



ISO 9001:2008 & AS9100
QSLM Level 2-3



Robert B. Footlik

Robert B. Footlik is a licensed professional engineer. A graduate of Illinois Institute of Technology, he has worked extensively in the fields of material handling, plant layout, packaging and management systems. The firm of Footlik and Associates serves as staff warehousing and materials consultants to six trade associations. Footlik writes for 12 trade and professional journals. Footlik and Associates is located at 2521 Gross Point Road, Evanston, Illinois 60601; phone 847-328-5644.

RE-EVALUATING YOUR COUNTER EFFORTS

The most obvious differences between a “big box” distributor and the typical Fastener Distributor are at the counter. Certainly size is a factor, but even with “greeters” and well trained employees the “big box” is just a huge building filled with product but devoid of personality and offering little real customer service. Smiling “Associates” are nice but there is very little product knowledge and substance behind the mask.

Fastener Distributors know that the sales counter is the only place where their customers receive respect and the answers they need. Well trained personnel are a vital component of this sales effort, but that doesn't mean that one can neglect the environment where these interactions take place.

A well designed counter leads customers to what they need, and reminds them of things that might otherwise be forgotten, while providing education about new products, tools and techniques. There are many elements to establishing an image of being the single best source for fasteners and supplies. Whether planning a new space, redoing an existing area or just evaluating what you have here are a few of the main considerations.

Color

A bright, airy and comfortable environment can be established through creative use of color and some relatively simple eye catching design elements. Plain white walls might be cheap initially but these work against the sales effort. It costs the same to spread a color as it does to paint a wall white, so a minor investment in color coordination is the least expensive way to upgrade any sales display area. In a new facility spray painting the ceiling white will make the room appear cleaner and more spacious. Doing this in black

lowers the ceiling height while hiding ductwork, conduits, bar joists and other unsightly utilities.

A good compromise is to use a multicolor paint such as Sherwin-Williams “Multispec” that can be rolled or sprayed to provide a nice appearance while hiding all the flaws. These finishes use a water based pastel or light background with gels of color forming dots to disguise all the joints and surfaces. Generally they are applied with a High Volume, Low Pressure (HVLP) spray system which minimizes over spray and masking requirements. Many fast food and retail stores use this finish to good effect. Properly selected and applied to walls they are very durable and will make products such as tools stand out while the background disappears.

Accent colors can pick up on any of the droplet tones and be applied to moldings or even a simple “ribbon” of 1.5” x 4” expanded foam blocks applied around the top of the wall displays, door jambs and other millwork. Painting doors, columns and other features with the same color can turn an eye sore into a design element to help break up the space visually.

Fastener Distributors know that the sales counter is the only place where their customers receive respect and the answers they need.

Wall Displays

The choice for hanging wall displays used to be limited to pegboard. Today there are a multitude of alternatives. “Slat wall” is the most popular and 4' x 8' sheets are available as unfinished, primed, painted or even covered with laminate. You probably have seen this in use on walls and free standing displays at retail stores. There are also “Grid Wall” systems that use ?” steel wire welded into a 2” x 2” pattern. These are especially effective when used as dividers or free standing displays with product on both sides. Gold, black and white powder coat finishes are readily available as well as plated metal.



SINCE 1963

METRIC & MULTISTANDARD COMPONENTS CORP.

The Distributor's Master Stocking Metric Resource

**FASTENERS
WRENCHES**

**FITTINGS
TUBING**

**CUTTING TOOLS
MEASURING TOOLS**

**ASSORTMENTS & SETS
SPECIALTY ITEMS**

The #1 Distributor Program
VOLUMETRICSSM
Volume Savings,
Private Brand Labeling & more!
Only for Distributors
CALL NOW!



www.METRICMCC.com

888-966-6622

NEW YORK
800-431-2792

GEORGIA
800-444-9560

ILLINOIS
800-221-4469

TEXAS
800-527-5177

NEVADA
800-786-4599



ISO 9001:2008 CERTIFIED

GLOBAL
FASTENERNEWS.COM

By John Wolz
editor@globalfastenernews.com



BOEING: LEAN MANUFACTURING KEY TO FASTENER PROFITS

The Boeing Company executive in charge of the 635 million fasteners the airplane maker is projected to use in 2012 isn't just overseeing paperwork. John Byrne has toured most of the fastener manufacturing facilities Boeing buys from.



"There are very few I haven't been in," the director of common commodities and supplier management for Boeing commercial airplanes noted.

And what has Byrne seen in fastener plants? Opportunities for lean manufacturing, he said in an interview with *GlobalFastenerNews.com* at Boeing's Everett, WA, facilities north of Seattle.

The first 16 years of Byrne's 24-year Boeing career were spent in plant operations, where he found "ample opportunity" for the aerospace giant to cut costs. There are very few industries that have maximized lean manufacturing opportunities, Byrne believes.

Byrne cited the transition of the Boeing 737 production to a moving line, which jumped from 28 planes a month to the current level of 31.5 — increasing to 38 in 2013. That production increase was "yielded from just good, solid, lean manufacturing applications," Byrne declared.

Boeing wants suppliers to make "appropriate profit margins," but Byrne expects fastener manufacturers to gain through lean manufacturing rather than price increases to Boeing.

Byrne said Boeing recognizes the problem of metal price volatility and other costs to the fastener manufacturer and will work with them on "variable pricing solutions."

Boeing can help level some of those variables, he added. As a major buyer of titanium and other metals, Boeing has some advantages in the market they can share with suppliers.

Byrne emphasized that Boeing knows the difference between cost and price. "Cost is not the price," he said in noting the importance of "total value" rather than "low cost."

However, cost is "one of the key contributors to value." Beyond buying the fasteners, the total cost includes the assembly cost, he added.


In 2009, Chicago-headquartered Boeing revenue totaled \$68.3 billion and at the beginning of 2010 the company had a backlog of orders totaling \$316 billion. There are not likely to be many suppliers of highly engineered fasteners to Boeing. The multiple engineering requirements for aerospace fasteners "tend to place constraints on how wide a supplier base you can have," Byrne explained.

Byrne's staff of 30 conducts a "rigorous qualifying process, which reduces the number of suppliers." For fasteners and other parts, Boeing looks at a long product life cycle, Byrne told *GlobalFastenerNews.com*. The 737 short-range twinjet created a new market when it went into production in 1967. The Next Generation 737 took its first flight in 1997. In 2007 — 40 years after the first 737 — Boeing celebrated the 7,000th order for the plane.

"Boeing wants to continue to simplify fastening systems, while maintaining performance," Byrne said of the future of fasteners.

Every ounce of weight on any airplane requires more fuel on every flight. "Managing weight is a tough challenge," Byrne acknowledged.

The new Dreamliner 787 is a prime example. The Dreamliner will use 20% less fuel than similarly sized airplanes due to half of the plane's primary structure being constructed from composite materials. A one-piece carbon fiber reinforced plastic fuselage section replaces 1,500 aluminum sheets and 50,000 fasteners.

Beyond the pricing and scheduling demands, Byrne obviously appreciates what goes into Boeing airplanes. "Very few people appreciate the amount of engineering in fastening solutions," Byrne pointed out. "There are a lot of people who think just 'nuts and bolts'." The engineering of tolerances is "pretty amazing engineering." 



The full Boeing interview is available on the Article Store at GlobalFastenerNews.com

BUILD YOUR REPUTATION FOR QUALITY ON THE STRENGTH OF FORD 410 STAINLESS STEEL SCREWS.



410 STAINLESS STEEL SCREWS

**SHEET METAL • SELF-DRILLERS
THREAD CUTTERS • SELF-PIERCING**

When common screws just won't do, turn to the strength of Ford's 410 stainless steel screws.

Discover a range of 410 stainless steel screws to size up any application perfectly with every kind of 410 stainless steel screw imaginable at your fingertips for immediate delivery.

For over 40 years, with 25 years of manufacturing and selling experience, Ford can engineer and produce fasteners to any requirement.

Our stainless reputation for long-lasting quality is built on the strength of versatility in our superior line of Ford 410 stainless steel screws.



Ford Fasteners, Inc.

110 SOUTH NEWMAN ST., HACKENSACK, NJ 07601
201-487-3151 • FAX: 201-487-1919 • www.fordfasteners.com

NEW JERSEY / ATLANTA / DALLAS

CALL FORD FOR 410 • 1-800-272-3673

Manufacturing at Speed in Indianapolis



Accurate's story begins in Plainview, NY in 1987, and takes us to Indianapolis, Indiana, the heartland of America, where today the company makes its home. During this 24-year journey, the company evolved from a distributor into a full-fledged manufacturer, navigated the sweeping changes in the industrial and fastener marketplace, and weathered the great recession of 2008-2009.

History

Accurate Manufactured Products Group (AMPG) started out in 1987 as a Master Distributor of Measuring Tools, Industrial items and Fasteners when two employees of the then privately-held MSC Industrial Supply decided to go out on their own, forming Precision Industries.

Ira Friedman came from the Measuring Tool business with Mitutoyo, and Matt Goldberg from Tower Fasteners, a large fastener house located in Plainview, New York.

While working together at MSC, they identified an opportunity to manufacture many of the accessory type items for machine tools, measuring tools, and small volume fastener items, which prior to that time came mainly from overseas. As business branched out to include more and more fastener items, Larry Pearl joined Precision, adding his 15 years of fastener experience.

In 1991, after four years of growth with Precision Industries Inc., Ira Friedman was recruited by the LS Starret Company, where he still works today. Matt and Larry continued without him for a few months, then split the business into two parts—Larry took the fastener distribution business and started Pearl Technical Sales, which is still going strong, while Matt started Accurate Manufactured Products Group, Inc. to continue the accessories business, partnering with Richard Jacobs, a close business associate who had printed the Precision catalogs.

Having weathered the recessions of the early 90's and 2000's, and the "Great Recession" of 2008-2009, Accurate re-established its' growth curve, and continues to add new machine tools and additional product lines to its core business.

Company Organization

"Less is more. The less we spend on office administration, the more competitive we can be for our distributor customers" Linda Fry—Vice President of Operations and Controller.

Accurate has one centrally located manufacturing plant in Indianapolis, Indiana. In their quest to hold the line on expenses, and be as competitive



Sex bolts and shoulder bolts machined in our Indianapolis facility.



Accurate's Sales, Marketing, Purchasing, and Administration Staff

as they can, this location was chosen based on its' central location, low real estate costs, skilled manufacturing base, and business friendly environment. In 2004, the company made the move from New York to Indianapolis.

Of the 32 full time employees, there are only three in administration, and two on the phones. The rest are involved in manufacturing and distributing the products. This facilitates a price structure that allows our distributors to be successful with their customer base. Only when they earn their customers business can we get an order.

Technology

Technology plays a huge role in Accurate's company structure. But becoming cutting-edge has not been easy, which is certain to strike a chord with many other manufacturing and distribution companies in the fastener field.

From the beginning, Accurate relied on FASPAC software to run the business, since most items were purchased outside, and then shipped in for the secondary operations of heat treating, plating, etc.

After FASPAC was purchased by a larger company, we moved over to Computer Insights—The Business Edge. In 2003, The Business Edge software was a huge step up from the FASPAC system, and it allowed Accurate to grow without increasing administrative head count. It also had many other advantages, especially the ability to import and export data into Excel easily, accurately, and quickly. At that time, this easy transfer of information was not available in most other software systems.

As manufacturing output increased, Accurate went from a 60/40 split (60% of products were purchased outside, while 40% were made in our shop), to an 80/20 mix—80% of products were now made internally, with only our Cold Headed and Stamped products purchased outside.

In 2008, The Business Edge didn't have a manufacturing module that worked with our methods, so on the advice of our SAP trained IT Manager, we switched to a very large ERP system, which had increased complexity, capabilities, and of course, increased cost.

That switch in 2008 proved to be extremely detrimental to the business. This new system, while handling most of our manufacturing requirements quite well, lacked almost everything on the distribution side. And unlike the Business Edge, it demanded more employees to make it work. And it took more time to do everything. The small staff at Accurate quickly became overwhelmed in the customer service area, since even the simplest request for delivery information became a time consuming task. While we weren't IT experts, we knew that this ERP system wasn't the complete answer we were looking for to run our business.



Partial shot of Finished Goods Inventory – part of 14,000 SKU's in Stock



Accurate
Manufactured
Products
Group

Continued from Page 16

To help us solve this problem, Accurate enlisted the aid of the Definity Partners® Group, led by their technology group lytelTup! located in Cincinnati, Ohio. lytelTup's ability to understand the complex business processes associated with manufacturing and distribution, and the integration of these processes through technology, is helping Accurate to streamline their business execution system. In doing so, Accurate will be positioned to retrieve real-time information to make rapid business decisions in order to grow their business without sacrificing service levels to their current customer base.

The first step was to re-install Computer Insights The Business Edge, which in the past three years has added features that fully integrate the manufacturing side into the distribution package.

This finally provided us with an integrated platform that allows us to schedule our manufacturing floor, and the ability to give accurate real time answers to our customers on all 14000 SKU's in our system.

Products

"The more items we can offer in each specialty type commodity that we manufacture increases the solutions that our distributor partners can offer their end users" Alex Goldberg—Vice President Sales.



Accurate's All-Star Manufacturing Team

Ninety eight percent of the products that AMPG manufactures and distributes are sold through distributors of some type. Certain "made to print" specialty products (mostly in the architectural hardware field) are sold directly to the end user.

Of the 14,000 SKU's that AMPG stocks, 85% are in the fastener field, 10% in Measuring Tools, 2% in Machine Tool Accessories, and 3% in Power Transmission.

Manufacturing Capabilities

Marty Collins—Lead Man Manufacturing: "With the addition of updated tooling and acquiring new machinery we have been able to reduce a great amount of secondary operations and increase the amount of unattended machine operation as well as make our jobs easier in manufacturing. This allows us to reduce our costs which can go back into the development of new products, machinery and continuous process improvement."



Our newest line of products is a wide range of glass panel and signage hardware that requires precise machining and high quality finishing.

Continued on Page 20

The BUSINESS EDGE 2.0



more
simple • focused • effective

Now with Real Time Supply Chain Integration



Computer Insights Inc and Brighton-Best International introduce the

Brighton-Best Connection

Computer Insights Inc • www.ci-inc.com • 800.539.1233



Milling Centers – (2) Horizontal Double Pallet 400MM CNC Milling Machines from Mazak and Haas

The move to Indianapolis brought Accurate into contact with a treasure trove of young and dedicated machinists. While in New York, we were mostly a traditional machine shop, with parts starting on the screw machines, and being finished by hand on the secondary machines.

In Indianapolis, we found people with a much more advanced skill set, which allowed us to purchase far more complicated machine tools that produced parts faster, more accurately, and were capable of running unattended.

Capital Equipment Sales came in, and designed a manufacturing plan that built on the current Star Swiss Lathes we owned, but increased the complexity and capabilities of each machine. The Star Swiss Lathes deliver fantastic up time, while



Star SB16 16MM CNC Swiss Lathe for Small Measuring Tool Probes

being able to manufacture complete parts in one operation.

There are now four CNC Lathes that run 24/7, with over 70% of those hours unattended. All of our Machinists can engineer, program, and run all of the different CNC Controls in the shop. We have two main controls—the Fanuc CNC Swiss Lathe Control

A selection of the small-run custom specials machined on our CNC Lathes. Custom order forms available on Accurate's web site make requesting a quote simple.



Continued on Page 22

S&M Retaining Rings

AUTOMOTIVE MILITARY INDUSTRIAL AEROSPACE



Your Retaining Ring Manufacturer

- Aggressive Pricing • Guaranteed Traceability •
- DFARS Compliant • Full Military Certification •



Made in USA

**Thanks To Our Customers
We Look Forward to Serving
You for Many Years!**



1-866-79-RINGS
www.smretainingrings.com



Secondary CNC Milling, Drilling, and Slotting Machine

for the Stars, and the Mazatrol Control for our Horizontal Milling Center and our Super Quick Turn Lathe. Another Star SR-32 Swiss Lathe is being delivered in a few months.

Our manufacturing staff has become so successful in "bullet-proofing" jobs for unattended running, that we have found that we can compete with India and China on price, while producing a technically superior product right here in Indiana.

Our Shoulder Bolts in 303 and 316 Stainless Steel are a case in point.

These parts come off our machines complete. Even though the Swiss Lathe is not as fast as a header or traditional screw machine, the fact that we go from bar to a completely finished part allows our pricing to be competitive.



Machining large chucked parts on a TL-2 Lathe

We single point the threads in the machine, which produces superior concentricity over a faster thread rolling secondary operation. We broach the drive in the sub spindle at the same time that the main spindle forms the next part, saving time and money here. We produce a clean hex broach, without any folded down chips in the drive, which would not allow the bolt to be used in any food service application.

We are able to go nine inches long on the shoulder, and still produce a perfectly concentric part since the Swiss Lathe performs all the cutting operations at the collet face, with perfect support.

Product Concentrations

Sex Bolts

Sex Bolts are the generic industry term for male and female mating fasteners. Accurate offers the widest range of product, sizes, and materials in the industrial world. AMPG is committed to an ever expanding line of useful and innovative mating solutions, available from a stocking manufacturer.



Our **Combo Head** system is the largest variety of internal thread fasteners in the world. Available off the shelf in both Steel Zinc and 18-8 Stainless Steel, we stock from 3/16" diameter Barrel by 3/8" length, all the way up to 3/8" Barrel diameter by 1" length.

Binding Posts were originally developed to bind catalogs together, but have since found many uses in other industrial applications. Our line is available in plain Aluminum, Aluminum with Black Anodizing, 18-8 Stainless Steel, Copper, Steel Zinc, Plastics, and Commercial Brass.

TamperProof Sex Bolts

We have a large line of **6 Lobe (Star Drive) with Pin**, in 18-8 Stainless Steel, in 1/4" and 5/16" diameters. Our new Swiss Lathes have the capability to put the 6 lobe with pin drive in specials, so we are expanding our line into 3/8", 1/2", and 3/4" diameter barrels.



KEN FORGING

*Service is our
Strength
Quality is our
Commitment*



Forged Industrial Hardware



Carbon • Alloy • Stainless
**Eyebolts • Nut Eyebolts
Turnbuckles & Fittings**

- Rod Ends
- Eye Nuts
- Pad Eyes
- Strap Clamps
- T-Slot Nuts
- Set-Up Wedges
- C-Clamps & Screws
- D-Rings & Clips
- Swivel Hoist Rings
- Custom Forgings -
Up to 200 lbs.

Same Day /Next Day Shipping



*All Products are
Proudly Made in USA!*

Toll-Free: 1-888-KEN-FORGING (1-888-536-3674)
www.KenForging.com • Phone: 440-993-8091 • Fax: 440-992-0360



Bart Basi

Dr. Bart A. Basi is an expert on closely-held enterprises. He is an attorney, a Certified Public Accountant, and President of The Center for Financial, Legal & Tax Planning, Inc. He is a member of the American Bar Association's Tax Committee on Closely-Held Businesses.

SELLING STOCK VERSUS SELLING ASSETS AND THE TAX MINIMIZATION ANALYSIS

Many business owners contemplate selling their businesses to start their retirement or to transition into another business. Many issues come to mind when considering selling a business. Among them are: how much is my business worth, who will buy it, and how much will I be left with once all of the taxes are paid? These valid considerations are extremely important when selling a business because the business owner is selling an asset that is worth as much or more than his or her house.

What makes selling a business particularly difficult is the fact that business sales are nearly invisible in the market. Consider this, look down the block where you live and elsewhere. How many for sale signs do you see and how much would you expect each house you see to sell for? Typically, people have an excellent idea and knowledge of the information and tax consequences concerning buying and selling houses, cars, furniture, vacation properties, stocks, bonds, etc. However, buying and selling a business is a different story!

Try the same action. Look at a business park or office building. How many businesses in the park or building are for sale and what would you expect to pay for the businesses. Chances are when you make this observation, you will not see one business for sale, know the selling price, how to arrive at a reasonable price, or what the tax consequences of the sale are. That is why it is important to thoroughly be aware of the consequences of the sale before selling a business.

This article will discuss the tax consequences of

selling a business. The tax aspects of selling a business are as important as the asking price of the business itself! Among the tax considerations, whether you sell stock or assets of the company is an important concept to know and be familiar with. As a rule asset sales generally tend to result in more tax while stock sales will usually result in fewer taxes due for the seller.

Asset Sales

Many sales of closely held businesses are asset sales. An asset sale, in this context, is a sale of a business by means of selling substantially all or all of the assets of the business. Assets include tangible and intangible, intellectual property, physical property, inventory, goodwill, real estate, land, equipment, furniture, fixtures, and anything else that would be considered to belong to the company.

Asset sales, as mentioned above, tend to give rise to higher tax liabilities to the seller than selling the stock of the company. On the other hand, to the buyer, an asset sale means increased tax benefits. The buyer buys the assets at a higher basis than what he or she would buy in a stock sale. Since asset sales result in higher tax liability for the seller and enhanced tax benefits for the buyer, it is common practice for the seller to ask for a higher price to compensate for the higher taxes.

Asset sales tend to give rise to higher tax liabilities to the seller than selling the stock of the company.

World Class Here at Home!

- ✓ HIGH QUALITY
- ✓ ISO 9002 CERTIFIED
- ✓ AGGRESSIVELY PRICED
- ✓ RAPID DELIVERY
- ✓ BEST OF ALL –
MADE IN THE U.S.A.



Proudly manufactured
in the U.S.A.

IF you've ever experienced problems with overseas sources or ISO compliance, you're not alone. We've all heard the horror stories that could have been avoided by ordering from a quality conscious, certified American manufacturer like Alpha Grainger Manufacturing.

You won't find a commitment to quality and customer satisfaction like Alpha Grainger's elsewhere on the planet. Achieving this level of satisfaction has not been simple. We have designed our own customized computer software and machine tools to create a one-of-a-kind, world-class manufacturing facility here in Massachusetts.

Long recognized as a leading producer of customized fasteners and hardware, Alpha Grainger Manufacturing also stocks a wide array of standard parts that are ready to ship and priced competitively.

Why search the world? Since 1973, Alpha Grainger has been providing the fastener industry with what it needs – consistently superior quality and competitive pricing.

[508] 520-4005
Fax: (508) 520-4185 • www.agmi.com

Captive Panel Screws



Connector Hardware



Shoulder and Thumb Screws



Standoffs



**ALPHA
GRAINGER**
MANUFACTURING, INC.



Jim Truesdell

James Truesdell is president of Brauer Supply Company, a distributor of specialty fasteners, insulation, air filtration, and air conditioning with headquarters in St. Louis. Mr. Truesdell is adjunct professor at Saint Louis University and Webster University. An attorney and frequently published writer, he is the author of "Total Quality Management: Reports From the Front Lines".

BUSINESS COMES TOGETHER TO FIGHT CRIPPLING REGULATIONS

It would seem that, with the November 2010 election results, the threat of a massive legislative assault on business has receded. Indeed, the Administration has gone to great lengths to appear in synch with the needs of businesses large and small. The President has replaced some of his inner circle of advisors with those who may be a bit more even-handed when it comes to the role of business as a key to any economic recovery.

The problem is that new rules and regulations can still come down through the countless government agencies which have been empowered to make law setting standards and controlling conduct of businesses large and small. These agencies are past the point of needing congressional stamps of approval and are often staffed with those who philosophically view business enterprises and the entrepreneurs who run them as exploiters of workers and despoilers of the environment. Agencies often take on a life of their own and build their own power through overreaching regulations and harsh enforcement. They operate "under the radar" and can overwhelm the resources of small businesses who must figure out how best to comply with their edicts.

Recognizing this, the Coalition for a Democratic Workforce, the group which was organized to oppose the notorious "card check" legislation (fortunately now sidetracked), has redefined its mission to focus on fighting regulations which take away the rights of business people to manage their own workplaces.

With the resources of numerous trade associations such as the U.S. Chamber of Commerce, the National Federation of Independent Businesses, the National Association of Wholesaler-Distributors and numerous manufacturer and commodity line associations, this Coalition has responded to the call of House Speaker John Boehner to provide evidence and information for oversight hearings designed to ensure that government agencies are spending taxpayer money wisely. With the new House majority, Boehner will coordinate committee oversight and planning and strategy. They will be packaging findings of the planned hearings

for bills designed to reverse momentum on agency rules where they are found to be counter-productive to the economic recovery. Ultimately these findings will be coordinated with governors to help fight regulation on the state level.

From a legislative standpoint there will be moves to strengthen and expand the Small Business Regulatory Enforcement and Flexibility Act to expand into areas and agencies affecting small business. The existing law provides safeguards and checkpoints for identifying and putting restrictions on adverse impacts of proposed regulations.

In February, testimony began in the House Committee on the Judiciary Subcommittee on Courts, Commercial and Administrative Law. The NFIB's Small Business Legal Center representative argued that

Agencies often take on a life of their own and build their own power through overreaching regulations and harsh enforcement.



**Unmatched
Quality.**

**Innovative
Services.**

It's not enough for us to meet your needs with speed and accuracy. What really matters is that we deliver the highest quality products possible. Every piece we sell or manufacture is passed through an advanced computerized quality control system, verifying both the consistency and reliability of every rivet.

We don't stop here, however. Our quality control measures go beyond the industry standard to include the coating on fasteners. Using our Salt Fog Chamber, we are able to create an accelerated corrosive environment to accurately evaluate a part's resistance to rust. Our quality standards have stood the test of time for four generations – and we're keeping it that way.



**Industrial
Rivet &
Fastener Co.**

1-800-BUY-RIVET
1-800-289-7483
www.rivet.com

FASTAR

THE FIRST CHOICE IN PINS

COILED PINS



ASME B18.8.2	MS51923
ASME B18.8.3M	MS51987
ISO 8748, 8750, 8751	NAS1407
MS39086	NAS561

SLOTTED PINS



ASME B18.8.2	MS16562
ASME B18.8.4M	ISO 8752
MS171431-171790	NAS561

DOWEL PINS



ASME B18.8.2	MS9390
MS16555	M21143/1
MS16556	M21143/2
MS9105	

GROOVED PINS



MS35671	MS35672
MS35674	MS35675
MS35677	MS35678
MS51605	MS51606

COTTER PINS



ASME B18.8.1	MS9245
MS24665	

FASTAR INC Spook Rock Industrial Park

2 Spook Rock Rd, #E-309, PO Box 929, Tallman, NY 10982-0929

Tel: (845) 369-7990, Fax: (845) 369-7989 Sales: (888) 327-8275

email: fastar@optonline.net web: www.fastar.com

DISTRIBUTOR NEWS

Alfa Tools is pleased to offer their ScrewTech® HK10530 30 Piece Inch and Metric Hex-L Key Set. This set includes 15 Long Arm Inch Size Hex-L Keys from .028" to 3/8" and 15 Short Arm Metric Hex-L Keys from 0.7mm to 10.0mm. Each L Key is manufactured from High Quality, Industrial Grade Alloy Tool Steel with a Black Finish to resist rust and corrosion. The Plastic Index Storage Case is marked with each individual size to keep the Keys clean and organized for years of use in Industrial, Maintenance and Repair applications.



This set complements Alfa Tools' current comprehensive ScrewTech® series of Fastener Drive Tools that include Screwdriver Insert Bits, Nut Drivers, Fixed Blade and Quick Change Screwdrivers. The Screw-Tech® series is one component of the Alfa Tools 25,000 SKU product line of Cutting Tools, Power Tool Accessories, Abrasives and Chemical products sold exclusively through a network of Industrial and Fastener Supply Distributors.

For more information, visit Alfa Tools at their website: www.alfatools.com.

SUPERIOR

WASHER & GASKET CORP.

All Product Meet ISO-9001 Requirements

“With The Largest, Most Comprehensive Inventory In The Industry, We Offer Just-in-time Production on all Washer Products Fabricated in All Types of Material....From Aluminum to Titanium!”

STANDARD WASHERS

To source specify,
or request for quote...



[CLICK HERE](#)

ONE AND THREE WAVE WASHERS

To source specify,
or request for quote...



[CLICK HERE](#)

BELLEVILLE WASHERS

To source specify,
or request for quote...



[CLICK HERE](#)

SPECIAL FLATS WASHERS

To source specify,
or request for quote...



[CLICK HERE](#)

MILITARY WASHERS

To source specify,
or request for quote...



[CLICK HERE](#)

ODD SHAPE WASHERS, SHIMS

To source specify,
or request for quote...



[CLICK HERE](#)

Visit our website and click on any of the 6 Categories above. You will be able to view the full line of items by part number or size. With over 70,000 special sizes in stock, Superior will ship stock items out the same day if your order is placed before 2:00 PM EST.

With Over 100 high speed power presses, Superior now offers SPD, Superior Premium Delivery.

We now have the ability to produce those special washers with a 5 to 7 day turn around without affecting our normal scheduling.

Our in-plant machine shops will custom make a die to your specification, if it's not in our inventory of thousands of dies.



South Carolina:
662 Bryant Boulevard
Rock Hill, SC 29732
Tel: (803) 366-3250
Fax: (803) 366-3511

New York:
170 Adams Avenue
Hauppauge, NY 11788
Tel: (631) 273-8282
Fax: (631) 273-8088

www.superiorwasher.com • e-mail: swg@superiorwasher.com



Applied Bolting Technology

1413 Rockingham Road Bellows Falls, Vermont 05101

Tel: 1-800-552-1999

Email: info@appliedbolting.com

Website: www.appliedbolting.com

APPLIED BOLTING ANNOUNCES NEW TRAINING AND TROUBLESHOOTING VIDEOS

Over the past 16 years, Applied Bolting has sold tens of millions of Squirter® DTIs. Once you use them, you're hooked. First-time users are amazed by how easily and consistently Squirters® guarantee minimum bolt tension. My favorite comment from a crusty old iron worker sums it up nicely: "That's like cheating!" he said. We are penetrating new markets all around the world, including wind turbines.

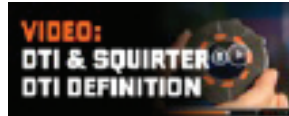
Our customers know the benefits: faster installation and inspection of high quality structural joints. Independent research shows Squirter® DTIs consistently outperform other tensioning techniques. A Florida DOT study shows Squirters® saved over \$1 per bolt in a project after recovering the cost of the Squirter® when compared to Turn-of-Nut.

Naturally, many questions arise when engineers and erectors first consider using Squirters®, and iron workers always do a better job when trained properly. We travel extensively to communicate the benefits of using Squirters® and train new users. We love interacting with our customers, and we are serious about continuous improvement. We listen closely to their suggestions for ways to improve our product. We are always looking for more efficient processes.

To improve our customer experience, we recently rolled out a series of new videos about Squirter® DTIs. The videos were produced by Powderhouse Productions, the same outfit that produces videos for "Build It Bigger" on the Discovery Channel. They are available on our website, or via youtube and vimeo. Of course, we still will hit the road if questions remain unanswered.

New to Squirters®?

Three of the videos are geared to the growing audience of engineers and inspectors who are unfamiliar with Squirter® DTIs or are using them for the first time. Powderhouse did a great job producing these videos. In about 10 minutes, you can learn what is unique about Squirter® DTIs and see the benefits of using them. And it's not just us blowing our horn. You will hear field experiences from engineers, foremen and inspectors who know and love Squirters®.



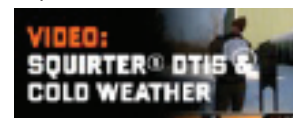
Need More Basic Information?

We often get questions from the field that start with, "What torque should I use with your Squirters®?" Answering this question tactfully requires some diplomacy. The question usually indicates that the caller isn't aware of how variable the relationship between torque and tension is. The engineer who specified Squirter® DTIs obviously has seen the light, but the guys in the field are sometimes still in the dark.

That's why when we do our field clinics, we always start with the Torque/Tension demonstration. We literally can see "the lights go on" in the attendees when we compare the tensions achieved with a dry fastener assembly to one that has been lubricated. So, we developed a Torque/Tension video of the demonstration. If there's any doubt in your mind that bolt tension can vary $\pm 30\%$ when using torque, check out the "Torque Is Not Tension" video.



There also is a misconception that Squirter® DTIs are temperature sensitive. We know they aren't; they've been used successfully at -30°F in Fort MacMurray, Alberta and at 140°F in Dubai, UAE. But we also know that seeing is believing. During a recent cold spell here in Vermont, we videoed a test of Squirters® at 0°F . If you have any questions about temperature sensitivity, check out the "Squirter® DTIs & Cold Weather" video.



please turn to page 172

Make it **Real**

EZ *Real People. Real Service. Real Quality.*



When you call **EZ Sockets**, you get a real person. And that's just the beginning of your rewarding purchasing experience. From our personal customer service to our high quality, lot traceable products; from our low prices to our signature packaging, we make your life **EZer**.

And nowadays, we could all use a little EZ.



EZ Sockets, Inc.

HEADQUARTERS/WAREHOUSE

5 Cornell Parkway, Springfield, NJ 07081

(973) 376-5605

(800) 631-7833

Fax (973) 376-7130

e-mail: ezsockets@juno.com

www.ezsockets.com

Commerce, CA

(800) 456-2228

Fax (214) 630-1274

Dallas, TX

(800) 456-2228

Fax (214) 630-1274

Portland, OR

(800) 456-2228

Fax (214) 630-1274

Elk Grove Village, IL

(800) 631-7833

Fax (973) 376-7130

Doraville, GA

(800) 631-7833

Fax (973) 376-7130



SCREW AND SUPPLY INC

Not Your Ordinary Screw

WE STOCK IT SO YOU CAN LOCK IT!

TAMPER-RESISTANT SECURITY SCREWS
ALWAYS IN STOCK
IMMEDIATE SHIPMENT
PROUDLY MADE IN THE USA

SCREW & SUPPLY INC
SECURITY FASTENER DIVISION
DON'T SETTLE FOR ANYTHING LESS!

1712 Church Street, Holbrook, NY 11741
 Toll Free: 800-223-1316 or 631-567-2900 Fax: 631-567-3057
 Email: sales@screwssupply.com Web: www.screwssupply.com

DISTRIBUTOR NEWS

The Auto Bolt Company is GROWING and expanding our Sales coverage, we are pleased to announce the addition of 3 Manufacturing Reps effective Feb 1, 2011.

John Hanba - Hanover Sales in Livonia MI will be serving the State of Michigan for Auto Bolt.

Guy Perkins - G.L. Perkins & Associates, LLC will service the States of Kentucky, Tennessee, Alabama and Georgia.

Bill Fauss - Fauss & Associates Inc. will service the States of Missouri, Kansas and Missouri.

Auto Bolt is a domestic cold heading manufacturer that specializes in customer friendly production runs combined with an excellent customer service experience.

Auto Bolt can be contacted at: 4619 Perkins Ave, Cleveland, Ohio 44103. Tel: 800-988-2658, Fax: 216-881-3918 or website: www.autobolt.net.

* * *

Dependable Acme Threaded Products Inc., introduces Acme Threaded screws and nuts.

When formulated prior to 1895, ACME threads were intended to replace square thread and a variety of threads of other forms used chiefly for the purpose of transversing motions on machine tools etc. ACME threads are now extensively used for a variety of purposes, valve stems, feed screws, carriage-run screws, jack screws and similar applications because they are superior at generating power for motion.

Dependable ACME, with 50 years of threading experience, has from stock ACME threaded rods and nuts from 3/8" to 2 1/2" diameter. Hex nuts are from stock and we can also furnish custom mating parts from various materials - steel, brass, bronze, stainless and 4140 annealed. We stock all standard sizes along with many non-standard sizes. Left handed threads are also available. Most orders are shipped same day via UPS.

We are also able to custom manufacture to your specification. We offer CUT thread ACME screws in low carbon steel, 4140 heat treated allow and stainless steel.

Contact us for your next ACME application. Tel: 516.338.4700, Fax: 516.997.5464, email at depacme@aol.com or visit our website at www.dependableacme.com.

VMI
Programs
Are About to Change
FOREVER

● **REAL TIME** ● **REAL ACCURATE** ● **REAL SAVINGS**

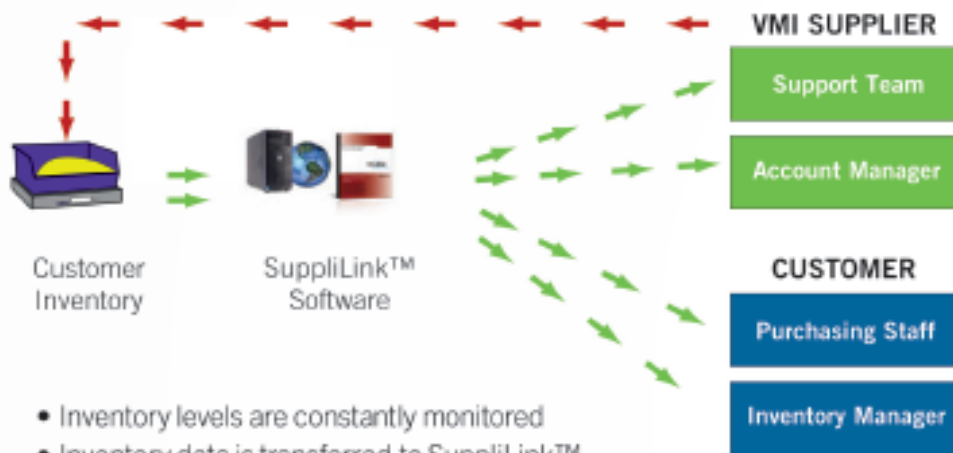


What is Visible Inventory?

Visible Inventory is a system that AUTOMATES the inventory management process. Using piece weight, a VI sensor calculates how many parts are in each bin location. SuppliLink™ software takes the sensor information and converts it into actions, such as sending replenishment e-mails to vendors.

Taking the M out of VMI +

INVENTORY AUTOMATION SYSTEM THAT TAKES CONTROL OF YOUR PROGRAM



- Inventory levels are constantly monitored
- Inventory data is transferred to SuppliLink™
- Inventory changes are continuously monitored
- SuppliLink™ determines when a replenishment level has been reached
- E-mails are sent to the support team
- Changes are recorded in a transaction log

How does Visible Inventory change a VMI program?

Visible Inventory constantly monitors inventory, eliminating the need to manually inspect each part location. SuppliLink™ determines when a part has reached a replenishment limit and notifies, via e-mail, the supplier. The guess work of a traditional VMI program is eliminated.



SuppliLink™ software keeps you in touch with your inventory

SuppliLink™ keeps you in touch with your inventory wherever you are. With Visible Inventory's patent pending system, you can view your inventory from any global location at any time. Up to the minute inventory changes are recorded and the SuppliLink™ data screen instantly refreshes to show the new inventory level. When changes in inventory cross one of the four preset limits, a notification can be sent to a cell phone, PDA, or transmitted via e-mail.

Part Number	Location	Part Status	Current Level	Reorder Level	Critical Level	Max Level	Supplier	Part Description	Supplier Part Number
12345678	Cop. Store	OK	20	10	5	30	Member Foods Co	Member's special butter cup icecream	
12345679	Cop. Store	Inventory Mgt	75	50	10	100	20 Supply Corporation	20 Supply Corporation	201234
12345680	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201235
12345681	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201236
12345682	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201237
12345683	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201238
12345684	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201239
12345685	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201240
12345686	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201241
12345687	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201242
12345688	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201243
12345689	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201244
12345690	Cop. Store	OK	10	5	2	15	20 Supply Corporation	20 Supply Corporation	201245

Color coded data enables fast inventory status checks. Data can be filtered to show inventory for a specific program, warehouse, or other attributes. SuppliLink™ shows both customer and VMI supplier the same inventory data, putting both on the same page.

PRODUCTS



iBin

Capacity: 0 - 30 pounds
 Dimensions: 5" x 14"
 11" x 12"



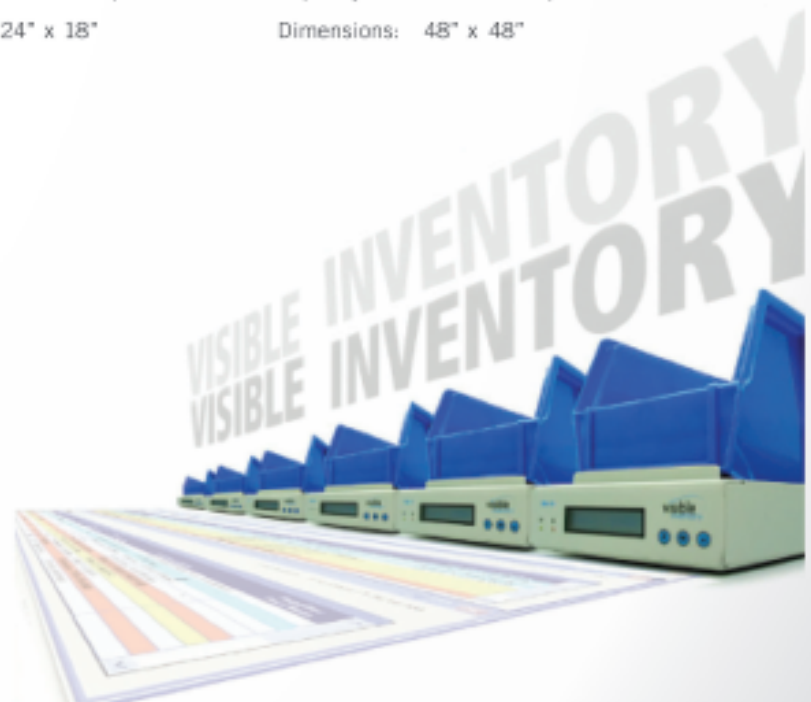
iShelf

Capacity: 0 - 300 pounds
 Dimensions: 24" x 18"



iPallet

Capacity: 0 - 5000 pounds
 Dimensions: 48" x 48"



**Find Out How
Visible Inventory
Can Change Your
VMI FOREVER**

Call **(603) 894.5858** Today For More Information

sales@visibleinventory.com • www.visibleinventory.com

*TO DELIVER
IN RIGHT CONDITION*



SINCE 1988

www.zonbix.com.tw

Zonbix Enterprise Co., Ltd.

No.66, Lane 18, Jong-Hwua St., Hu-Nei, Kaohsiung, 82943, Taiwan

Tel: 886-7-6994364 Fax: 886-7-6994318 raymond@zonbix.com.tw bsales@zonbix.com.tw



FAST ACCURATE PACKAGING

POLYBAGGING

CARTONS
POP BOXES
ASSEMBLY
CLAMSHELL
LABELING / LABELS (BARCODES)
DROP SHIPPING
WAREHOUSING



FASTENERS

HARDWARE PRODUCTS
ELECTRICAL
CRAFT PRODUCTS
MEDICAL



MIL-STD-2073 PACKAGING

MIL-STD-129 LABELING
ANTI-STATIC BAGS
KRAFT BAGS
FOIL BAGS
WAWF
RFID
VSM



*The best quality packaging services
for the Fastener Industry*



58 Clinton Road Unit B Fairfield, NJ 07004 Phone: 973-882-1711 Fax: 973-882-1742 Email: npackaging@aol.com

www.nationwidepackaging.com



Allan Steinbock

Allan Steinbock is Vice President of Superbolt[®], Inc. and has been with the company since 1984. He has a Bachelor of Science Degree in Mechanical Engineering from the University of Pittsburgh and is a member of SME and other industry specific organizations. Allan has consulted on thousands of bolting projects and has designed products for a broad range of industries.

KEEPING IT TOGETHER WITH SUPERBOLT[®]

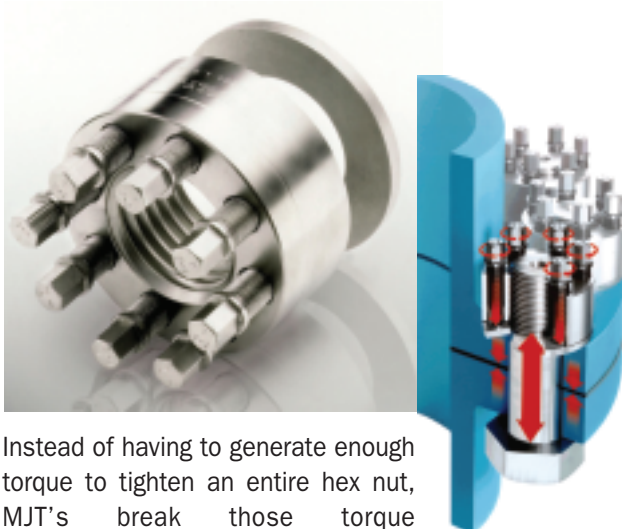
Tackle those challenging bolting applications with Multi-Jackbolt Tensioners



Critical large-diameter bolting applications have traditionally been difficult to safely and accurately tighten. The problem is that while the strength of a fastener increases with the square of its diameter, the torque required for tightening increases at an even greater rate – to the third power. Because of this, standard nuts and bolts larger than an inch in diameter cannot be effectively tightened with hand tools.

Various methods have been introduced to handle this problem – stud heaters, hydraulic wrenches and nuts, and hydraulic tensioning. Depending on the application, these can be used with success, but these methods present some of their own challenges and may not be effective in certain circumstances.

Another solution to the inherent challenges of large-diameter bolting is the Multi-Jackbolt Tensioner (MJT).




Instead of having to generate enough torque to tighten an entire hex nut, MJT's break those torque requirements down by utilizing a series of hardened jackbolts threaded through the body of a round tensioner. This enables the user to generate the needed

clamping load while using only hand or air tools for installation and removal.

This is a huge advantage in that you no longer need cumbersome or expensive tooling to bolt the joint. Worker safety is greatly increased, and also MJT's boast an accuracy of +/- 5% when calibrated torque wrenches are used. Time savings is another advantage of MJTs. Even though MJT's have several jackbolts to tighten on each tensioner, they have reduced installation times compared to other methods. The use of air tools also greatly speeds up the tightening process, and in many applications multiple workers can be used. Here's how they work:

To install, you first place the hardened washer over the stud or bolt and then thread the tensioner on, hand tight. With simple hand tools, the jackbolts are tightened uniformly. Turning the jackbolts creates a thrusting of the nut body away from the washer surface, creating bolt tension and imparting a stretch on the main thread. MJT's flex slightly, adding elasticity to the system which helps keep the joint tight, even when there are temperature changes and fluctuating loads. Common problems such as stud seizure and thread galling are greatly reduced as MJT's are loaded in pure tension.

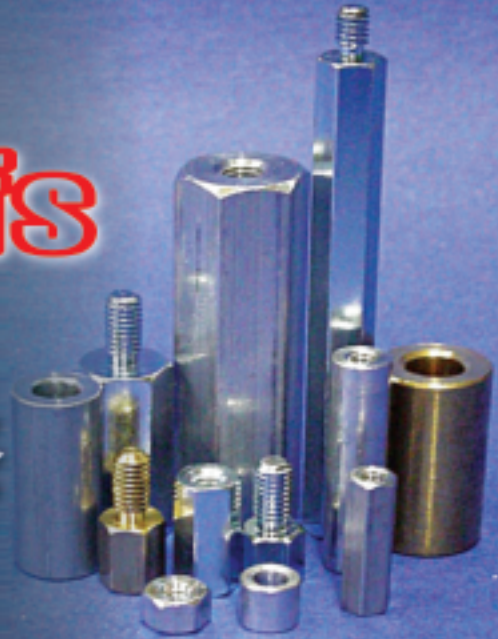


Every application is different, and it is important to find the right solution for your particular needs. Multi-Jackbolt Tensioners offer a bolting alternative that may be an ideal fit for your machinery. For more information please visit www.superbolt.com. 

Spacers & Standoffs

- We Manufacture HEX and ROUNDS 3/16 to 5/8 diameter
- STANDOFFS in Brass, Aluminum Steel & Stainless Steel

NOW AVAILABLE!
Call us for our Product Catalog



W.J. ROBERTS COMPANY INC

www.wjroberts.com

181 Central Street, PO Box 1146T, Sangus, MA 01906
Tel: 781.223.8176 Fax: 781.231.1456



KEY BELLEVILLES, INC.

We are the largest Disc Spring Manufacturer!

- *Complete size range from .236" to 36" O.D. & 3" Thick*
- *Largest Raw Material and Finished Inventory in the World*
- *We manufacture Metric Parts to DIN Specs*
- *Complete Line of Stainless and Inconel Parts*
- *10,000 Different Sizes in Stock*

Call toll free from anywhere in the U.S. and Canada at:

Phone: 1-800-245-3600 • Fax: 1-800-847-1672

Key Bellevilles, Inc.

100 Key Lane • Leechburg, PA 15656-9531 U.S.A.

Phone: 724-295-5111 • Fax: 724-295-2570

www.keybellevilles.com • e-mail: sales@keybellevilles.com

*Visit Our Website
or Call for a FREE
Engineering CD*



Porteous Fastener Company

1040 Watson Center Rd, Carson, CA 90745

Tel: 877-428-9732 Fax: 310-835-0415

Email: info@porteousfastener.com

Web: www.porteousfastener.com



HOW SECURE IS MY SUPPLY CHAIN?

Recent events in the fastener industry have us asking that question. I am sure that no one in our industry envisioned that a major importer would simply go out of business. A more plausible scenario would be an acquisition or merger, but not this kind of disruption to the supply chain. Distributors, looking to solidify their supply chain, need to consider who they trust to not only be here tomorrow but also offer them the products and services they need to compete in today's marketplace.

Porteous Fastener Company was founded in 1966, by Bud Porteous, in Los Angeles California. Since then we have grown by acquisition and organic expansion into the largest Master Distributor of steel fasteners in the United States. PFC acquired Joe Fuller's operation in Dallas, followed shortly thereafter by International Fasteners and then Sun West, Globe-Allied and EK Fasteners. Additionally, we opened new distribution centers in the Midwest and Northeast in order to create a national footprint that is capable of delivering product to virtually every distributor in the US the next day. We also operate a facility in Vancouver, British Columbia with the idea replicating our success throughout Canada.

Who Is Your Best Supply Chain Partner?

A supply chain partner should be able to provide an array of products and services that can be combined to provide you, the distributor, with the most cost effective solution. You need to choose a partner that you can trust and whose philosophy and corporate culture matches yours. Porteous Fastener Company has the expertise, experience and reputation to provide the full range of quality products and services you need. You can always be assured that we stand behind the products we sell.

Day to Day Business

Our network of Regional Distribution Centers and Warehouses offers access to 30,000 SKU'S overnight. We have invested in inventory management software to ensure high fill rates, inventory accuracy and virtual error free shipping. PFC stocks one of the most complete lines in the industry, not just the "A" items that are most commonly used. When you need a 9/16-18 x 2 1/4 grade 5 cap screw, and you need it today, we have both bulk and package options to choose from. Our warehouse is an extension of yours and our logistics network allows us to transfer material quickly and cost effectively when needed. We promote First Class Service and make the extra effort to fulfill that promise everyday.


Mill Direct / Stock and Release

PFC has been importing fasteners since 1966. We have followed the production of fasteners from Japan to Taiwan then to China and now to new emerging countries. Our Purchasing and Mill Supply team has over 100 years combined experience developing suppliers and relationships both domestically and in Asia. Our logistics and buying power allows us to move full and less-than containers of standards and specials quickly and efficiently through our distribution network. We can route containers direct to you or through the nearest PFC facility to ensure we provide the most cost effective solution. We can also stock standards and specials for you and release that product in smaller quantities to help manage inventory turns and cash flow. Our A2LA and ISO accredited testing labs ensure the highest quality standards of the products we sell. Whatever level of service you require PFC can provide it.

Technology / EDI

We can support any level of e-commerce required by our distributors. From basic web services to fully integrated computer systems PFC has a solution. A distributor can check stock, place orders, track shipments, retrieve certifications and more through our website at www.porteousfastener.com or our desktop application Direct Connect. PFC has partnered with software provider INxSQL to provide a fully integrated supply chain solution and seamless integration between you and PFC. We have also integrated with other software packages using our SDK (software development kit) to provide the same seamless integration with our partners.

People

It is all about people and their relationships and dedication to providing our distributors with First Class Service. Our sales team, both inside and outside are committed to working to help you build your business and become more profitable. Our operations people support them by ensuring orders are picked, packed and shipped accurately and on time. We are a company of people focused on long-term relationships / friendships with our customers. It is our job to ensure that everything is handled smoothly and that we take care of our partners. We strive to rise above your expectations and raise the bar within our industry. People buy from People.....They Trust! 

The Puzzle is Complete

PFC is your supply chain partner.

Technology
Complete Line
Logistics Network

Experienced People
Bulk & Packaged
Quality Product

Family Owned
16 Locations
Trusted Partners



PFC Direct Connect
connecting our company to yours

PFC Mill Division
GLOBAL SUPPLY SOLUTIONS



U.S. ANCHOR

PFC Proffered Drywall
Preferred by professionals



www.porteousfastener.com

email: info@porteousfastener.com

Send us an email to request a copy of our book: 40 Years of First Class Service



DISTRIBUTOR NEWS

**BIG
Equipment
LARGE
Locknuts...**



...not child's play!

**Aztech
Locknut
Company**

*High Performance
Locknuts for 33 Years*



www.aztechlocknut.com

AZ Lifting Hardware (AZLH) is proud to announce it has teamed up with Cook Industrial Sales to represent them in the states of Kansas, Missouri and Nebraska.

Steve Malone, owner of Cook Industrial Sales, brings with him many years of fastener and industrial related product experience.

"Steve Malone was highly recommended as one who takes customer service and his business seriously. We were not looking for someone to hold hands with our current customers, we needed someone to help us grow and we felt Steve was a perfect fit." noted Chuck Smith, president of AZLH. "Our service and capabilities go well beyond the products in our catalog and we want to insure the distributors in this area have a better awareness of how we can help." To learn more about AZLH or the other fine companies represented by Cook Industrial Sales contact Steve at 913-780-5310 or via e-mail at cookindustrial@comcast.net.

AZ Lifting Hardware is a wholesale distributor of globally produced industrial lifting hardware and related wire and chain hardware serving the fastener distribution and industrial supply markets.

For more information visit www.azliftinghardware.com, or write to them at: 7150 W. Roosevelt St. Ste C101, Phoenix, AZ 85043. Ph: 888-936-1466, Fax: 623-936-8909.

IDEAL FASTENERS INC.



ISO 9001: 2000 and AS9100 REV.B Certified

Licensed Manufacturer of
Torx® Drive • Torx Plus® • Torq Set®

Manufacturer of Socket Head Cap Screws



Administration Building

3850 East Miraloma Avenue
Anaheim, CA 92806 USA

Production Building

3860 East Miraloma Avenue
Anaheim, CA 92806 USA

Give Us A Call Today!

toll free: 800.821.8540
tel: 714.630.7840
fax: 714.632.3829

**We sell only
our own products!
Manufactured
in Anaheim, CA**



Representative for New York & New Jersey:

Smith Associates Inc. tel: 973.625.4077 • fax: 973.625.7330 • email: smithfast@aol.com

www.idealfasteners.com



128.7 mm

376.2 mm

198 mm

277.2 mm

59.4 mm

149.5 mm

178.2 mm

168.29 mm

BRIGHTON-BEST CONNECTION - A COMPLETE SUCCESS

Dennis Cowhey, CEO of Computer Insights, Inc. reports that more than a third of their clients have already installed and are actively using the Brighton-Best Connection. More new clients are being added every week.

Decatur Bolt Explains Impact



Larry Sandifer, President of Decatur Bolt reported on his

experience with the BBI Connection. He said, "I admit, I had high expectations before using the new Brighton-Best Connection feature available exclusively through The BUSINESS EDGE, but immediately after using the

feature, it was apparent that it not only met but exceeded many of my expectations. In today's market place it's definitely an advantage being able to quote a customer price, availability and lead-time in a matter, literally, of seconds instead of the minutes or, in some cases, hours spent making phone calls, faxing RFQs or thumbing through a bulky catalog. Although many of our vendors now have an online presence and offer ecommerce sites, the Brighton-Best Connection feature takes that one step further. "

Seamless Integration

"What I have been most impressed with is how Brighton-Best's catalog and inventory has been integrated, almost seamlessly, with our catalog through The BUSINESS EDGE. I've also been impressed with how easy the feature is to use. We can now look up a part in The BUSINESS EDGE using our own product code or description and can instantly view such pertinent information as Brighton-Best's stocking locations, bulk and package quantities, and the prices for each.

He went on to say, "On the purchasing side, the Brighton-Best Connection feature makes ordering almost as easy as quoting. I no longer need to build the PO in our system, log onto Brighton-Best's ecommerce site, enter my username and password, start to build my PO online, part by part, update all my pricing and then go through the steps of submitting the order. With the Brighton-Best Connection feature all I have to do is enter the parts and quantities into my Brighton Best purchase order and then decide which of Brighton's locations to ship from. All pricing is automatically updated at the time of PO entry. I use a function key to review my order, make any last minute changes that need to be made before finally using another function key to submit my order. My order is then sent directly from The BUSINESS EDGE to our local Brighton-Best branch for processing.



It's a Home Run

"Overall, we are very happy with the Brighton Best connection through The Business Edge and are looking forward to using it to its full potential. Computer Insights has hit a home run with this new feature!"

How it Works


Denny Cowhey explained how it works. "The process is simple, once a client signs up for the Brighton-Best Connection, we take the part of their inventory that Brighton-Best International (BBI) could sell them. Then we have Brighton-Best International (BBI) apply the Brighton-Best part numbers to it. Then we install the new software that includes the Brighton-Best Connection. Finally, we add the BBI part numbers to the clients system and we train them on how to use the new features of the Brighton-Best Connection. Clients can easily add more BBI part numbers on the fly as they add new products to their inventory."

"It's quick and easy and it provides substantial benefits for everyone involved. Most of our clients are using the Brighton-Best website to place their orders. The website gives Brighton-Best customers easy access to price and availability information and allows the customers to place their orders online. If the customer places an order using the website they receive a 5% discount and that makes it even more attractive to do business with Brighton-Best on the web. The only drawback is that it requires double entry, that is, it is necessary to enter the information into the customer's in-house system and then enter it again into the web. This presents an opportunity for errors and it also means double work."

Best of Both Worlds

That's where the Brighton-Best Connection comes in. With the Brighton-Best Connection, our clients have the best of both worlds. They have the convenience of immediate access to information on the Brighton-Best site and they eliminate the need for double entry. They still get their 5% discount. It makes purchasing items from Brighton-Best very convenient. Our clients can be in the middle of a quote or sales order and with one click get to the information that's available on the web on the BBI website."

Brighton-Best International, Inc. can be reached at 5855 Obispo Ave, Long Beach, CA 90805. Tel: 1.800.275.0050, E-mail sales@brightonbest.com and website: www.brightonbest.com.

Computer Insights, Inc. can be reached at 108 Third Street, Bloomingdale, IL 60108. Tel: 1.800.539.1233, E-mail sales@ci-inc.com and web: www.ci-inc.com. 

Your reliable option for FORMED SPRING STEEL FASTENERS



U-CLIPS



U-NUTS



J-NUTS



SPECIALS



TWIN NUTS



FLAT NUTS

- DIRECT COMPETITOR MATCHES
- DISCONTINUED ITEMS!
- FACTORY DIRECT PRICES
- MANY IN-STOCK ITEMS
- SHORT LEAD TIMES
- ON TIME OR B4 DELIVERY

e-quality-fast →[®] brand

Your *e*-conomical Source for *qual*-ity Fasteners and *fast* → Delivery

405 Production Drive • South Elgin, Illinois 60177

Toll Free: 888-NUTS-R-US (888-688-7787)

Fax: 847-695-6336

On Line: www.e-quality-fast.com

E-mail: sales@e-quality-fast.com



SMALLEY, the Spirolox Retaining Ring and Wave Spring design and manufacturing **SPECIALISTS!**

THE #1 DISTRIBUTOR SOURCE FOR: Spirolox Retaining Rings

50 YEARS of expertise, exclusively manufacturing Spirolox Retaining Rings and Smalley Wave Springs



FINISHED PARTS WAREHOUSE



ON SITE MANUFACTURING AND DESIGN FACILITY



RAW MATERIALS WAREHOUSE

Smalley manufacturing, design, and customer service facilities are 100% dedicated to continuing our reputation as the #1 global source for Spirolox spiral retaining rings and wave spring products

STAINLESS STEEL FROM STOCK

- Available from stock in 302 and 316 stainless steel
- 5,000 stock retaining rings; 1/4" to 16" diameters
- No-Tooling Costs™ on specials; .200" to 90" diameters
- Constant Section Rings now available from stock; .375" to 10"

COMPATIBLE WITH STAMPED RETAINING RING GROOVES

- Easy to assemble and remove
- No Ears To Interfere with mating components
- Immediate design support by engineers experienced in Spirolox ring applications

Distributors' Source

- Free Samples Immediately
- Timely Delivery Guaranteed
- Free Design Assistance to "Support Your Customers"



www.smalley.com/getcatalog • info@smalley.com
Lake Zurich, IL • 847.719.5900 • Fax: 847.719.5999

NATIONAL INDUSTRIAL FASTENER & MILL SUPPLY EXPO - EAST

COLUMBUS FASTENER EXPO GROWING: REGISTER TODAY!

34 North High Street • New Albany, OH 43054 • Phone 614-895-1279 • Fax 614-895-3466 • www.fastenershow.com

A number of new companies have recently joined the National Industrial Fastener & Mill Supply Expo scheduled for April 26-27, 2011 at the Greater Columbus Convention Center, Columbus, Ohio, reports Expo Management.

"There has been a lot of interest and a number of new contracts received lately. We are also seeing positive effects from the addition of mill supplies to the Expo. We are expecting to sell-out the Expo at 70 booths by show time", says the Expo's General Manager, Susan Hurley.

Exhibiting Companies

(as of March 16, 2011):

Activant Solutions Inc.
All America Threaded Products, Inc.
American Fastener Journal
Atlanta Rod & Mfg. Co., Inc.
Boshilong North America, Inc.
Brighton Best International
Brikksen
Brilliant Abrasives
China Fastener Info
Chite Enterprises Co Ltd
Christlynn Threaded Inserts
Cold Heading Company
Computer Insights, Inc.
Coronet Parts Mfg., Co.
Distributor's Link Magazine
Dynacast Industrial Products
Edward W Daniel LLC
E-Z Lok
Fall River Mfg. Co., Inc.
Fascomp Electronic Hardware
Fastener Technology International
Fastener World, Inc.
Fidelis Fasteners
Filrox Industrial Co., Ltd.
Garland Manufacturing



Granite Industries
Holbrook Mfg., Inc.
Ideal Clamp Products, Inc.
Industrial Rivet & Fastener Co.
INxSQL Software
Ken Forging Inc.
Lindstrom Metric LLC
Mercury Hardware LLC
Metric & Multistandard Components Corp.
Metric Fasteners Corporation
Mubea Inc
Northwest Hydra-Line
Perfect Lock Bolt America, Inc.
Premier Box
Prospect Fastener Corp
RS Technologies, a div. PCB
Load and Torque
S & M Retaining Rings
Sarjo's Faskit Fastener Assortments
Shanghai Recky International Trading Co., Ltd.
Soon Port International Co., Ltd.
Star Stainless Screw Co.
Stratosphere Quality LLC
Strut Support Systems
Tapco Inc
Ultra Green Systems
WJ Roberts Co Inc.
Yellow Woods & Roads Less Traveled Co.

Strong Industry Information & Education Program Offered

The all-day Conference program on Tuesday, April 26 includes: "Understanding the Bolted Joint" and a Fastener Technology Workshop scheduled for 8:30 a.m. to 4:30 p.m. Both of these programs are offered by the Fastener Training Institute; a free program on "Current Market Overview: Domestic and Overseas" presented by Rob Lucas of Fidelis Fasteners, Ltd. from 2:00 p.m. to 3:00 p.m.; and a meeting of Women in the Fastener Industry (WIFI) from 4:30 p.m. to 5:30 p.m., Tuesday, April 26.

please turn to page 161

W A S H E R S

Metal Stampings • Specialty Fasteners



MW Industries: Call or Click Today!

- Over 30 years of experience
- Guaranteed traceability
- 1 ton to 500 ton capacity
- One of a kind & large quantities
- On-time delivery, even rush orders
- Request quotes online
- sales@mwindustries.com
- Extensive online photo gallery
- Download brochure/newsletter
- View videos



2400 Farrell • Houston, Texas 77073
Tel 281-233-0448 • Fax 281-233-0449
Toll Free 800-875-3510

sales@mwindustries.com
www.mwindustries.com





Joe Dysart

Joe Dysart is an Internet speaker and business consultant based in Thousand Oaks, California. A journalist for 20 years, his articles have appeared in more than 40 publications, including *The New York Times* and *The Financial Times of London*. During the past decade, his work has focused exclusively on ecommerce. Voice: (631) 256-6602; web: www.joedysart.com; email: joe@joedysart.com.

CAUGHT LOOKING: PRIVACY ADVOCATES DEAL FASTENER MARKETING A BLOW WITH 'DO-NOT-TRACK'

Fastener Distributors that rely heavily on Web marketing are in for a rude awakening in the coming year, as privacy advocates begin crippling their ability to track visitor activity on their own Web sites, as well as across the Internet.

In practice, the backlash against visitor tracking – commonly known as 'Do-Not-Track' – is expected to make it tougher for fastener marketers to monitor which visitors are using their Web sites, and how they're using it.

Such data is critical to the Web analytics programs currently running on virtually all commercial Web sites of any consequence, which slice-and-dice visitor info to continually make Web sites more user friendly and more effective.

In addition, the backlash is also expected to make it more difficult for fastener distributors and manufacturers to advertise on other Web sites, as Do-Not-Track features on newer browsers make it impossible for advertisers to target ads based on an individual's Web use.

For years, visitor tracking has been regarded with mixed feelings by Web users, who are often at once charmed – and creeped-out – by a Web site's ability to serve up content and ads specific to their interests, even if it is the first time they have visited the Web site.

Ironically, one of the greatest blows to visitor tracking

will come from Microsoft, which is now offering a powerful Do-Not-Track feature with Internet Explorer 9.

"Tracking Protection' in IE9 puts people in control of what data is being shared as they move around the Web," says Dean Hachamovitch, a vice president and head of Internet Explorer development at Microsoft. "It does this by enabling consumers to indicate what Websites they'd prefer to not exchange information with."

Simultaneously, all visitor tracking will also be under attack from the Federal Trade Commission, which released a report in December (www.ftc.gov), advocating the use of Do-Not-Track technology Web-wide. The agency is currently soliciting industry comment to determine how such a technology can be best implemented.

"The FTC has been calling on industry to implement innovations," since 2008, says David Vladeck, director of the FTC's Bureau of Consumer Protection. "Although there have been developments in this area – an effective mechanism has yet to be implemented on an industry-wide basis."

One of the reasons the FTC has been so tenacious about visitor tracking is that few Web users realize just how pervasive the monitoring has become. A visit to a single fastener Web site, for

example, can actually trigger tracking by several other companies. One company may have an ad running on



In a trend-shifting move, Microsoft announced plans to include powerful anti-tracking technology with the next version of its browser, Internet Explorer 9.



In its December report, the FTC expressed frustration over what it sees as industry foot-dragging on Web privacy.



Mozilla, the makers of Firefox, are also strong advocates of Web surfing privacy.

TAKE A CLOSER LOOK



 **DEPENDABILITY**

 **AFFORDABILITY**

 **CONVENIENCE**

 **QUALITY**



**INTERNATIONAL
FASTENING SYSTEMS**

 **SERVICE**



- RIVET-NUTS
- HAND TOOLS
- POWER TOOLS
- BULBEX RIVETS
- MULTIGRIP RIVETS
- OPEN END RIVETS
- CLOSED END RIVETS





Ralph S. Shoberg

Ralph S. Shoberg is the Technical Director of PCB Load & Torque, Inc., a manufacturer of load cells, torque transducers, and fastening technology measurement equipment. Shoberg has 30 years experience in test, measurement, and control of the threaded fastener tightening process. He has been granted numerous U.S. and international patents for transducer and instrumentation inventions. Shoberg helped create the first electronic strain-gage transducer based monitor and control system for automated fastener assembly. He is a frequent lecturer on the design and analysis of bolted joints, has contributed to a number of threaded fastener handbooks, and is a frequent contributor to fastener industry-based periodicals.

TIGHTENING STRATEGIES FOR BOLTED JOINTS

Methods for Controlling and Analyzing Tightening

1. Overview

Fastener engineering and the mechanical testing of threaded fasteners and bolted joints are important specialties within the field of mechanical engineering that require a thorough program of testing and analysis. These efforts must begin with an understanding of the behavior of individual fasteners. A proper overview recognizes the complex interaction of the material properties of the fastener, clamped components, and internally threaded components, as well as the influence of coatings, lubricants, and adhesives on the performance of fasteners in bolted joints. The test methods and procedures that yield the most informative data will test the threaded fastener in the same manner in which it is actually installed.

Test methods have been established and published for mechanical properties such as hardness, tensile strength, and torsional strength as well as corrosion and hydrogen embrittlement. These methods provide the baseline information necessary for proper interpretation of the friction coefficient, torque-tension, and angular ductility testing methods that are used for complete evaluation of bolted joints.

Combining basic material strengths and friction coefficient information has led to development of a powerful method called Torque-Angle Signature Analysis. This method provides valuable information on joint strength and performance when applied to testing fasteners in bolted joints. By careful review of an applied torque vs. angle-of-turn plot, signature analysis can be used to evaluate bolted joints for loss of preload due to settling, creep and relaxation, or vibration and dynamic loading. In addition, joint strength problems such as thread strip and embedment of bearing surfaces and material yield within the bolted joint are easily identified.

There are many factors that must be considered when establishing a threaded fastener bolted joint analysis program. Included here are some methods for modeling the joint, experimental testing of components and assemblies, and procedures for conducting post-assembly audits.

The basic torque-angle signature is used as a starting point for all analysis. As a first example, it can

be used to illustrate the influence of underhead and thread friction on the tightening process. An increase in friction, in either the thread or underhead regions, results in a proportional increase in the slope of the torque-angle signature. The study of the slope of the elastic tightening zone is an important element in analyzing the performance of threaded fasteners in bolted joints.

To apply torque-angle signature analysis, a torque-angle transient recorder is used for measurement and curve plotting. The transient recorder can provide curves on-screen for analysis as well as print them out for detailed study. Tightening, audit and release angle signatures for a given fastener can be simultaneously displayed and printed.

2. Classical Design Concepts: Modeling the Tightening Process

When developing a testing program to correlate the design of a bolted joint and the actual assembly, it is necessary to document the relationship between torque and turn in the development of tension. Before you can gain control of a tightening process, you must become familiar with what actually happens when the fastener is tightened. The process of tightening a fastener involves turning, advance of the lead screw, and torque, or turning moment, so that preload, or tension, is produced in the fastener. The desired result is a clamping force that holds the components together. A torque vs. angle signature correlated to the clamp force vs. angle plot offers the best model that can be used to explain this process. The most general model of the torque-turn signature for the fastener tightening process has four distinct zones as illustrated in Figure 1.

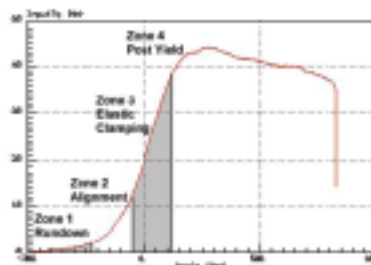


Figure 1. Four Zones of Torque-Angle Tightening

ALL THE TOP MANUFACTURERS. ALL AT BOTTOM PRICES.

Factory Authorized Distributor

 Speed Fastening Systems Experts Huge Inventory • Briv • Chobert • Ribs crew • Autronic • Avlug Tooling Experts • Parts • Service • Automate	     	     	 Cold Thread Tangles® and Tagged Inserts and Tools  The finest electric prewelder tool	     	      	
--	--	--	---	--	---	---

A leader in the engineered fastener industry since 1962

Millions in Stock • Lowest Prices • Next Day Delivery • Same Day Quotes

Installation Tools Sales & Repair • Application, Engineering & Installation Experts



263 Park Avenue
Garden City Park, NY 11040
Email: info@bayfastening.com

Local: 516-294-4100
Toll Free: 800-718-8818
Fax: 516-294-3448



www.bayfastening.com | www.bayrivet.com

RIVETS

HUGE INVENTORY

Aerospace & Commercial
From 1/16" to 1-1/2" Diameter!



- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none"> • Tubular Rivets • Blind Rivets • Solid Rivets • Drive Rivets • POP®, Avdel® & Southco® | <ul style="list-style-type: none"> • Split Rivets • Belt Rivets • Binder Rivets • Tanners Rivets • Brake & Clutch Rivets | <ul style="list-style-type: none"> • Rivet Caps • Rivet-Nuts • Speed Fastening® • Blind & Press-In Threaded Inserts • Self-Clinching Captive® Fasteners | <ul style="list-style-type: none"> • Back-Up Washers • AN, MS, NAS, LS, BACR • Custom Rivets & Fasteners • Riveting Tools & Accessories • Riveting Machines & Tooling |
|---|---|--|--|



HANSON RIVET & SUPPLY CO.
13241 Weidner Street
Pacoima, CA 91331

SINCE 1929

www.hansonrivet.com

Please ask for Distributor Sales
1-800-RRRIVET
(800-777-4838)
FAX: 818-485-0540

Become a
Distributor for
Thread Repair

CHRISLYNN
Threaded Inserts
PRECISION

Sell to:

- *Oil fields *Mining
- *Aircraft *Automotive
- *Electronics * Marine

5 U.S. SHIPPING LOCATIONS



The Giant Solution
For
Stripped Threads



Professional Thread Repair

CHRISLYNN THREADED INSERTS

WWW.CHRISLYNNINSERTS.COM

****NO MINIMUMS****

*****SAME DAY SHIPPING*****

*MEETS MIL-SPECS *DFAR COMPLIANT
GIANT METRIC up to M64 & GIANT 8-PITCH up to 5" DIA
EXTRA FAST DELIVERIES ON SPECIALS

EMAIL : sales@chrislynninserts.com

PHONE: 800-926-1495

FAX: 888-526-4566

**LOBSTER DRAWING
AT EVERY SHOW!!**



DISTRIBUTOR NEWS

What's New at Chrislynn Threaded Inserts? Chrislynn has added another shipping warehouse in Kansas City, MO servicing their Midwestern and Western Distributors, and now offers distributors in California three day ground shipping. Chrislynn's other shipping warehouses are located in Maine, Ohio, Texas, Washington and Canada.

Just released, a new kit called the H-Kit which is a complete repair kit consisting of a HSS STI tap, hand installation tool, inserts and a drill, (a tang break off tool is also included in the smaller sizes up to 1/2").

Chrislynn also offers a **complete repair system called the Total Kit**. A set of four Master Kits, consisting of All American, All Metric, or a combination of both.

Chrislynn stocks the 3 most popular types of inserts used in oil fields, mining, original equipment manufacturing, aircraft, automotive, electronics and marine.

For over 22 years, Chrislynn has maintained an advantage over other its competitors, with extra fast deliveries on specials, price breaks for large quantities and their large inventory of Giant Metric (Up to M64), Giant 8-Pitch (Up to 5" Diameter), and Left Hand Kits and Inserts.

Chrislynn meets the Mil-Spec and are DFAR compliant.

Call 800-926-1495 or fax over your quote request to 888-526-4566 today!

For Price, Inventory and Same Day Shipment...

AVAILABLE NOW!!

**BRAND NEW! 750 page
Product Catalog**

Call for your copy today!

OPEN THIS BOX!

Call:

1-800-789-8112

LET TITAN MAKE YOUR JOB EASIER!

FAX: (912) 262-6401



Titan makes buying **PACKAGED FASTENERS** easy. You'll be impressed with our Inside Sales Staff. We take orders **YOUR WAY**. Plus, we offer a wide range of value added services including:

- Custom Packaging
- 45,000 SKU Product Line
- Low \$25.00 Min. Order
- Freight Terms
- Technical Support
- Volume Pack Discounts
- Custom Kits & Poly Bagging
- Full Line Product Catalog
- Full Lot Traceability
- Barcoded Shipping Accuracy
- Direct Import Mills
- Quality Packaging

Brunswick, Georgia
2627 Sidney Lanier Drive
Brunswick, GA 31525

Elk Grove Village, IL
2501 Lively Blvd.
Elk Grove Village, IL 60007

Cranbury, NJ
114 Melrich Road, Ste. F
Cranbury, NJ 08512

YOU FOUND IT!
SELECTION
 MANY SIZES AVAILABLE 8" OD TO .500 THICK
 ISO 9001 "2000

ALL TYPES
 MOST METALLIC & NON-METALLIC
 MATERIALS

ON HAND
 STOCKING MANUFACTURER
 SALES@WASHERWERKS.COM

FAST
 FAST QUOTATIONS & QUICK DELIVERY

QUALITY PRODUCERS
 OF WASHERS
 AND STAMPINGS

912 HIGH STREET
 MUNDOLLON, IL 60060
 FAX: (847) 566-8381

**ALL AMERICAN
 WASHER WERKS**
(847)566-9091

Why Are You Saying NO To Assortment Sales?



FAS-KIT[™] ASSORTMENTS

- ☑ US Standard
- ☑ Metric
- ☑ Stainless Steel
- ☑ Automotive

**Your Company
 Name Here!**

*Refill Packs
 Available*

- Call or Fax for Catalog & Distributor Price List.
- Over 300 Assortments to Choose From.
- Large & Small Metal Trays.
- Open Bolt Bins & Plastic Boxes.
- Same Day Shipments.

Call: 1 800 44-SARJO
FAX: 845-454-0070

FAS-KIT is a registered trade mark of Sarja Industries, Inc.



NCFA - 7737 Ellington Place • Mentor, Ohio 44060 • Phone 440-975-9503 • Fax 440-350-1676 • web: www.ncfaonline.com

NORTH COAST FASTENER ASSOCIATION

NCFA's UPCOMING "DISTRIBUTOR SOCIAL" MAY 19, 2011

It is back by popular demand!! The North Coast Fastener Association is pleased to announce that it will be holding its Distributor Social on Thursday, May 19, 2011 from 5 - 8pm at the Crowne Plaza Hotel in Independence, Ohio.

Just like last year, this event is FREE to our distributor guests (up to 5 employees, additional attendees will be \$25/pp). Enjoy hors d'oeuvres and drinks (2 drink tickets per attendee) complimentary of the fastener suppliers who support this event and the North Coast Fastener Association.

Unlike last year, we have constructed a unique way for our valued distributors to attend in-house tours of selected suppliers. A charter of tours will begin at 9am on May 19, 2011. These tours will be running all day. Distributors will have a chance to meet and greet Erieview Metal, one of the premier platers in our industry. Kerr Lakeside, a well-respected domestic manufacturer of high quality socket screw products, cold formed special products and screw machine products. Lastly, Brighton-Best International, a master importer of all things fasteners.


A catered lunch at Brighton-Best International will be

available to all. In addition, the suppliers listed on the reservation form are also available for personal meetings and/or tours. A list of contacts and representatives for these supporting companies will be sent to all registered distributors.

For planning purposes, it is extremely important that you pre-register for this event so we can appropriately identify attendees and accommodate food and refreshments accordingly. Please send the registration form back to the NCFA office by fax, email, or mail.

Come network with your valued suppliers as well as your industry peers. It is often said that once you are in the fastener industry you can never get out. If this is true, then networking with other people within the fastener industry could be one of the most important things you can do for yourself personally, as well as for your company. As the saying goes, "sometimes it's not what you know, it's who you know". So please, come join us and get to better know your fastener community.

We look forward to seeing you on May 19th and thank you for your support!

Warm Regards,
 NCFA Board 

Registration Form on page 190



ALBANY
STEEL & BRASS CORP.

1900 W. Grand Avenue, Chicago, IL 60622
Toll Free: 866•803•3890
Fax: 312•733•9887
www.albanysteel.com



From Stock!

Specialty Tapping Screws

Type "B", "F", "U", "21",
TEKS®, SWAGEFORM®

#00 Through 3/8"
Diameters to 6" Long

**We Specialize in Large
Diameters – 1/4", 5/16", 3/8"**

2500 Sizes Sold in
Convenient 100 or
1000 Packs

Thumb Screws

Cold Forged Steel
6-32 Through 3/8-16
to 3" in Length

Plain (No Shoulder) and
Shoulder Type
1/4-28 and 5/16-24

Now in Stock
Zinc Plated and Plain
Finish

Wing Nuts

Cold Forged Steel
Plain and Zinc Plated

Including 4-40, 12-24,
1/4-28, 5/16-24,
3/8-24, 1/2-20

SWAGEFORM®

High Performance Thread
Forming Screws

New Sizes Are Constantly
Being Added

Now in Stock
4-40 Through 3/8-16 to 1-1/4" Long

All Popular Head Styles Including:
Slotted Hex Washer Head, Unslotted Hex
Washer Head, Phillips Pan Head,
Slotted Pan Head, Phillips Flat Head

TEKS® is a registered trademark of ITW

SWAGEFORM® is a registered trademark of Black & Decker

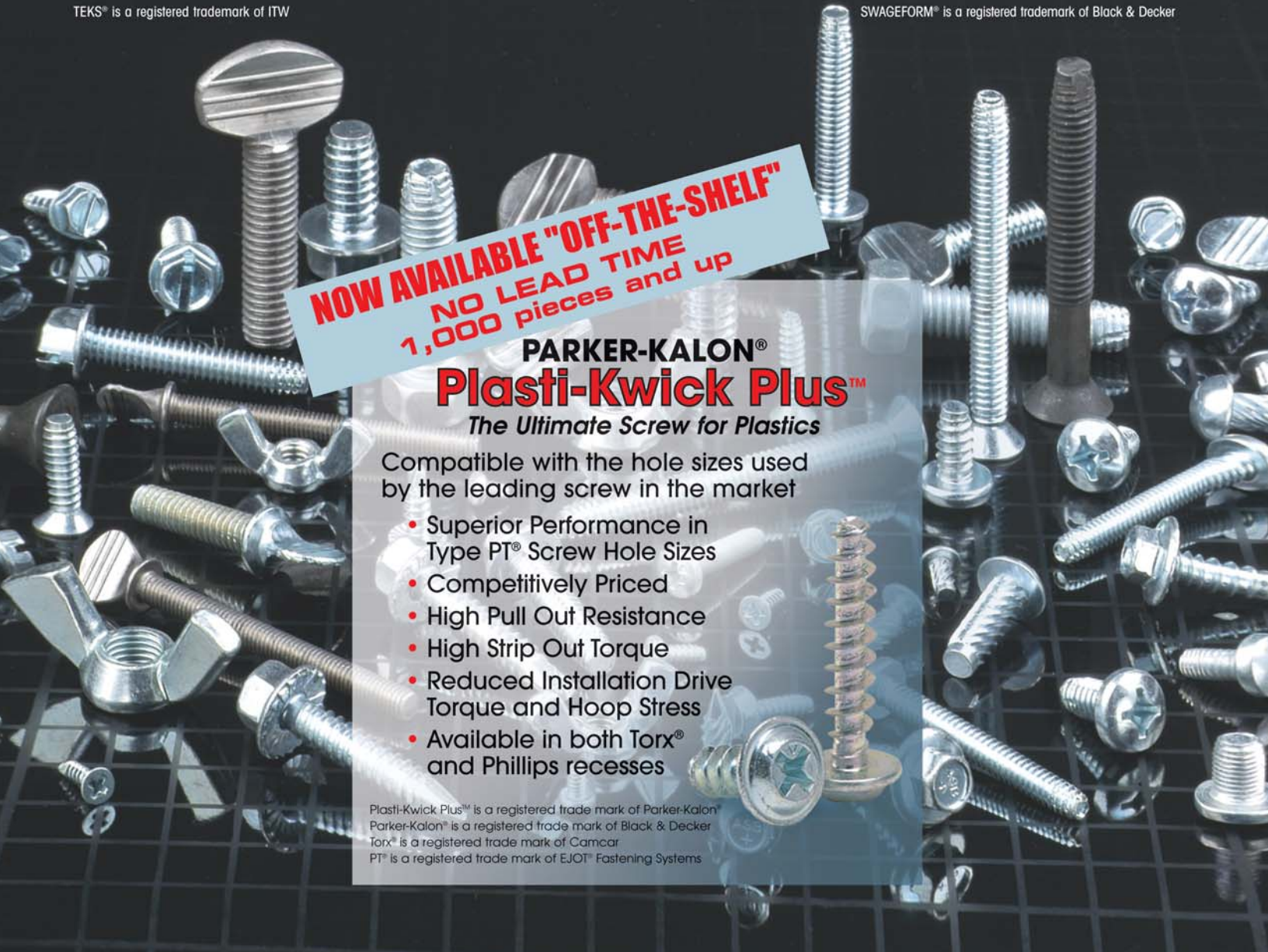
NOW AVAILABLE "OFF-THE-SHELF"
NO LEAD TIME
1,000 pieces and up

PARKER-KALON® **Plasti-Kwick Plus™** *The Ultimate Screw for Plastics*

Compatible with the hole sizes used
by the leading screw in the market

- Superior Performance in Type PT® Screw Hole Sizes
- Competitively Priced
- High Pull Out Resistance
- High Strip Out Torque
- Reduced Installation Drive Torque and Hoop Stress
- Available in both Torx® and Phillips recesses

Plasti-Kwick Plus™ is a registered trade mark of Parker-Kalon
Parker-Kalon® is a registered trade mark of Black & Decker
Torx® is a registered trade mark of Camcar
PT® is a registered trade mark of EJOT® Fastening Systems



TIGHTENING STRATEGIES FOR BOLTED JOINTS - Methods for Controlling and Analyzing Tightening *continued from page 46*

The first zone is the rundown or prevailing torque zone that occurs before the fastener or nut contacts the bearing surface. Prevailing torque, due to thread locking features such as nylon inserts or deformed threads, will show up in the rundown zone. Frictional drag on the shank or threads due to misalignment of parts, chips or foreign material in the threads as well as unintended interference due to out of tolerance threads are additional causes of prevailing torque in the rundown zone.

The second zone is the alignment or snugging zone, wherein the fastener and joint mating surfaces are drawn into alignment, or a stable, clamped condition. The nonlinear alignment zone is a complex function of the process of drawing together the mating parts, and bending of the fastener as a result of nonparallelism of the bearing surface to the fastener underhead surface. In addition to the macro effects related to alignment of parts, there are micro effects within the alignment zone. The micro effects include contact stress-induced deformations of plating and coatings as well as local surface roughness and thread deformations. These macro and micro effects are illustrated in Figure 2.

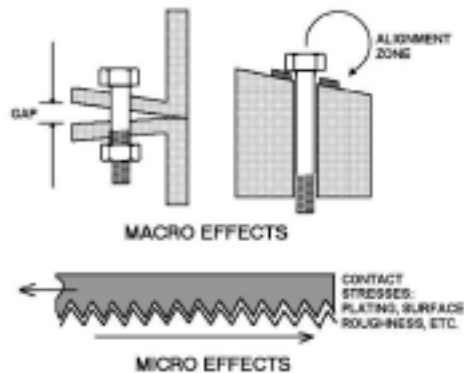


Figure 2. Macro and Micro Effects in the Alignment Zone

The third zone is the elastic clamping range, wherein the slope of the torque-angle curve is essentially constant. The elastic clamping zone torque-angle slope is a very important characteristic of each bolted joint. This slope can be projected backward to zero torque to locate the elastic origin. For joints with prevailing torque in the rundown zone, the elastic origin is located at the intersection of the prevailing torque level and the backward projection of the tangent to the elastic clamping zone. If the angle-of-turn is measured from the elastic origin to the point where torquing was stopped in the elastic clamping zone, the tension in the fastener is directly proportional to that angle-of-turn. In this elastic zone the compression of the parts and the stretching of the fastener are occurring in a linear fashion from the projected elastic origin. Even if friction between threads or in the underhead region of the fastener is varied, it still will be found that within the elastic zone, the tension generated is always proportional to the angle-of-turn from the elastic origin. The angle-of-turn from the elastic origin

to the point where the torque is removed can be multiplied by the angle-tension coefficient to estimate the tension that has been created by the tightening process.

To further illustrate the concept of the elastic origin, the torque-angle signatures in Figure 3 show the increased slope, induced by increased friction, in the elastic-tightening zone. Note that as friction increases, the torque required to bring the bolt to yield is also increased. The curves in Figure 4 show that, as friction increases, the clamp force at the yield point is reduced, while the torque that is required to reach the yield point increases. This illustrates the fact that for a given fastener size, the torque required to yield the bolt is a function of the material yield strength and the thread friction coefficient.

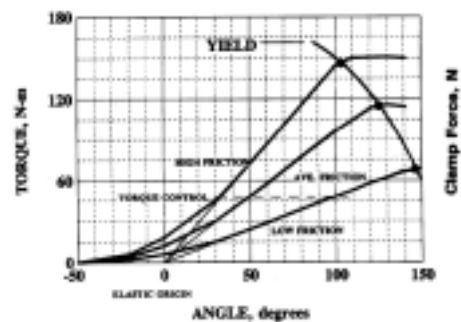


Figure 3. Friction Effects on Yield Point

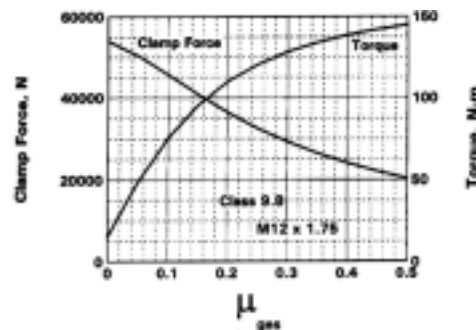


Figure 4. Friction Effects on Applied Torque and Clamping Force at Yield

The fourth zone is the post-yield zone, which begins with an inflection point at the end of the elastic clamping range. Yielding can occur in the bolt or in the joint assembly as a result of underhead embedment or as thread strip in the bolt or mating threads. This fourth zone can be due to yielding in the joint or gasket, or due to yield of the threads in the nut or clamped components or nut rather than to yield of the fastener. The yield point of the bolt can be used to approximate the angle-tension coefficient for the tightening process.

Note the yield clamp load of a torqued fastener is less than the tensile yield due to the combined tension and thread torque. Since the thread friction coefficient is unknown an initial assumption could be that the clamp load at yield torque is about 90 percent of the tensile yield load. This would be approximately correct for an average friction coefficient, μ ges, of 0.1.

Chicago Hardware & Fixture Co.

DROP FORGED PRODUCTS

- Turnbuckles
- Shackles
- Wire Rope Clips
(also malleable)
- Machinery Eye Bolts
- Eye Bolts
regular & shoulder
- Eye Nuts
- Rod Ends: *blank & machined*
- Ring Bolts
- Hooks
- Swivels
- Pad Eyes
- Yoke Ends

WIRE PRODUCTS

- "S" Hooks
- Turned Eye Bolts *(threaded)*
lag, mach. or welded
- U-Bolts *(galv. & zinc)*
rd., sq. & long tangent
- Threaded Rod

SPECIAL PRODUCTS

Manufactured to Specifications



OTHER PRODUCTS

- Alloy Steel Hoist Rings
- Wire Rope Thimbles
- Bevel Washers
- Clevis Pins
- Coupling Nuts
- Plated Steel Shapes
- Brass - rounds, flats & angles

STAINLESS & METRIC
(check availability)

- Eye Bolts & Eye Nuts
- U-Bolts
- "S" Hooks
- Wire Rope Clips
- Blank Rod Ends
- Threaded Rods

HEADQUARTERS:

Franklin Park, Illinois
(847) 455-6609

WAREHOUSE

LOCATIONS:

Chino, CA (909) 591-1099
Monroe, GA (770) 266-5600
Houston, TX (713) 664-7722

American American American
Made Owned Quality

Website: www.chicagohardware.com Email: info@chicagohardware.com

ACF Components & Fasteners, Inc.

MASTER STOCKING DISTRIBUTOR:

- | | | |
|---------|-------------------|-------|
| AVK | BIVAR | HEYCO |
| PANDUIT | RICHCO | RAF |
| 3M | SUMITOMO ELECTRIC | |



New Products: Heyco-TITE — family of straight-through liquid-tight cordgrips for flexible wire cables and cords in electrical enclosures of any kind, including NPT, metric and PG threads in straight-thru, pigtail and right angle configurations.

www.acfcom.com



NOW OPEN IN GUADALAJARA, MEXICO

Northern California Service Center
31012 Huntwood Avenue
Hayward CA 94544
United States of America
TEL: 800.487.2100
FAX: 510.471.7018

Southern California Service Center
742 Arrow Grand Circle
Covina, CA 91722
United States of America
TEL: 800.824.8576
FAX: 626.915.7065

Mexico Service Center
Camino a la Tijera No.806 - C6
Col. La Tijera
Tlajomulco de Zúñiga, Jal.
TEL: 011-52-33-3687-1951
FAX: 011-52-33-3687-1955



Jeff Thredgold

Jeff Thredgold is President of Thredgold Economic Associates, a professional speaking and economic consulting company. He is the only economist in the world to have earned the CSP (Certified Speaking Professional) designation, the highest earned designation in professional speaking, having spoken more than 1,000 times during the past 20 years. His career includes 23 years with \$100 billion banking giant KeyCorp, where he served as Senior VP and Chief Economist. He now serves as economic consultant to \$50 billion Zions Bancorporation, which has banks in 10 states.

Jeff has appeared on CNBC-TV, CNN, and is quoted regularly in the nation's financial press. He contributes to Blue Chip Financial Forecasts and the USA TODAY economic forecast surveys. Jeff has been writing a weekly economic and financial newsletter, now titled the Tea Leaf, for 33 years and he is the author of four books.

He served as an adjunct professor of finance at the University of Utah for 16 years and as President of the National Association for Business Economics Utah Chapter. He is a former member of the Economic Advisory Committee of the American Bankers Association and the Economic Policy Committee of the U.S. Chamber of Commerce.

U.S. ECONOMIC OUTLOOK - SPRING 2011

Just wondering...how does one attempt an economic and financial forecast in the wake of major uncertainties...

How will the three-legged catastrophe of a 9.0 earthquake, destructive tsunamis, and potential nuclear meltdown in Japan impact the global economy? How quickly will Japan recover?

How will political and social upheaval (including the deaths of thousands of Libyan citizens seeking freedom) in Northern Africa and the Middle East ultimately impact the global economy? What if those developments spread further across the region? Will oil supplies be disrupted more than is the case so far? When all is said and done, will oil prices be higher...or lower?

How will financial developments across southern Europe ultimately play out? Will Greece, Ireland, Spain, and Portugal restructure their massive sovereign (national) debt levels? How many additional billions of euros will the Germans and the French have to provide in order to achieve greater euro-zone financial stability?

How will the major developments above impact U.S. corporate and consumer confidence? Will each back off from more recent levels of stronger investment and spending?

How will volatile U.S. gasoline prices ultimately play out? Will the combination of factors above lead us to \$4.00 or \$5.00 per gallon...or back to \$2.75?

Will many poll-watching members of the U.S.



Above: US annual change rate for US REAL GDP.
Below: US annual average for US UNEMPLOYMENT RATE



Congress ever get serious about long-term budget deficit containment? Will they soon recognize that the spending and deficit crisis in this country is our potential earthquake, our financial tsunami? Must another financial crisis occur to finally get their attention regarding the unavoidable need to slow the future growth rate of entitlement spending?

Forecasting the future is never for the faint-hearted. Most forecasting economists hope prior forecasts are rarely revisited.

Given the nearly unprecedented list of uncertainties above, here is our view of where we are...and where we may be headed...

The American Economy

U.S. economic growth has now been positive for seven consecutive quarters. Such growth, which stalled a bit during mid-2010, is likely to continue at a moderate pace this year and next. The vibrancy of such growth will be determined by the list above.

Many forecasters, who boosted growth expectations for this year and next following the November elections and the December extension of the 2001 and 2003 tax cuts for all Americans, are now trimming those forecasts slightly because of the issues noted above, especially prospects for higher energy prices and lower confidence levels. Economic growth around a 3.0%-3.5% real (after inflation) annual rate this year and next remains the consensus view.



STELFAST® INC.

ANCHORS AWAY!



**Wedge Anchors Assembled with
Hex Nut and SAE Washer - Zinc**

Double Expansion Shields - Zinc Alloy

Drop in Anchors with Setting Tool - Zinc

Now In Stock

**Same Day Shipments
Mill Shipments**

**Stock & Released Managed Inventory
ISO/TS 16949:2002 • MBE Certified**

We stock a full-line of quality imported fasteners.

Cleveland

800-729-9779
Fax: 440-879-0044

Chicago

866-783-0161
Fax: 847-783-6651

Houston

800-473-1168
Fax: 832-200-9777

Edmonton

780-930-1957
Fax: 780-930-1754

Toronto

800-268-4723
Fax: 905-795-8696

Atlanta

877-472-0033
Fax: 404-629-0018

Dallas

866-783-5378
Fax: 817-633-1954

New Jersey

800-506-6380
Fax: 732-512-9208

Montreal

800-361-2155
Fax: 450-680-1993

Taiwan

886-7-624-5458
Fax: 886-7-624-5459

www.stelfast.com

BOLT PRODUCTS INC.

The Best in Fastener Technology
ISO 9001:2008



Just a Few of the Proven Advantages of Using




Double Tube Clamps



Light Duty Clamps



Medium Duty Clamps



Extruded Cushion Clamp



Heavy Duty Clamps

Tube Clips, Wiring Clips & Grate Clips

16725 East Johnson Drive - City of Industry, California 91745
Toll-Free: 800.423.6503 - Tel: 626.961.4401 - Fax: 626.333.1908
www.boltproducts.com

DISTRIBUTOR NEWS

Dick Gates, the former majority shareholder of **Crescent Manufacturing** from 1980 to 2005, passed away February 5, 2011 at the age of 90. Dick was a contemporary of President George H. W. Bush in World War II and at Yale University. Dick's complete obituary was reported in the "Hartford Courant."

Dick's grandfather was Frederick Taylor Gates. Frederick Taylor Gate's autobiography is titled "Chapters in My Life". Frederick was a Baptist minister in addition to being John D. Rockefeller Sr.'s confidential adviser and a philanthropist. He was from Maine, New York and was born in 1853.

The very first line of Frederick's autobiography is "Well up the sloping western side of the Valley of the Nanticoke Creek...." Frederick was born in 1853, 99 years prior to the birth of Steve Wilson, Crescent Manufacturing's owner since 2005. And Steve and Frederick are both from neighboring towns in Upstate New York!

Crescent Manufacturing can be reached at 700 George Washington Turnpike P.O. Box 1350 Burlington, CT 06013; Tel: 860-673-2591 Fax 860-673-5973 or you can visit their website at www.crescentmanufacturing.com

DISTRIBUTOR NEWS

Factory Direct Logistics, LLC - a Leading Importer of Fasteners in North America. It is with great pride that we announce the appointment of Pok Norasith to Vice President of Operations. Pok comes to FDL with over 11 years of extensive Global Sourcing Experience within the Fastener Industry. Pok will be leading FDL's Sourcing, Purchasing and Customer Experience efforts for FDL's Direct Import and Import Consulting Divisions.

For more information about products and services, Factory Direct Logistics can be reached at 10 N Martindale Rd., Suite 400, Schaumburg, IL 60173. Telephone: 630-839-9041 or visit the website at www.factory-direct-logistics.com.

Custom pre-printed labels ...made EASY

Customized Labeling

- ▶ CUSTOMIZED KIT LABELS
- ▶ PROMO LABELS
- ▶ SHIPPING & RETURN ADDRESS
- ▶ LOGO & GRAPHIC INSERTION
- ▶ BAR CODING



Solution to Bin Labeling

- ▶ CUSTOM SIZE RANGE
- ▶ IMPERIAL OR METRIC
- ▶ PRINT DIRECTLY FROM SPREADSHEET DATA
- ▶ CUSTOM FORMAT DESIGN
- ▶ POLYPROPYLENE (PLASTIC) LABELS RESIST DIRT & GREASE
- ▶ LOW MINIMUM



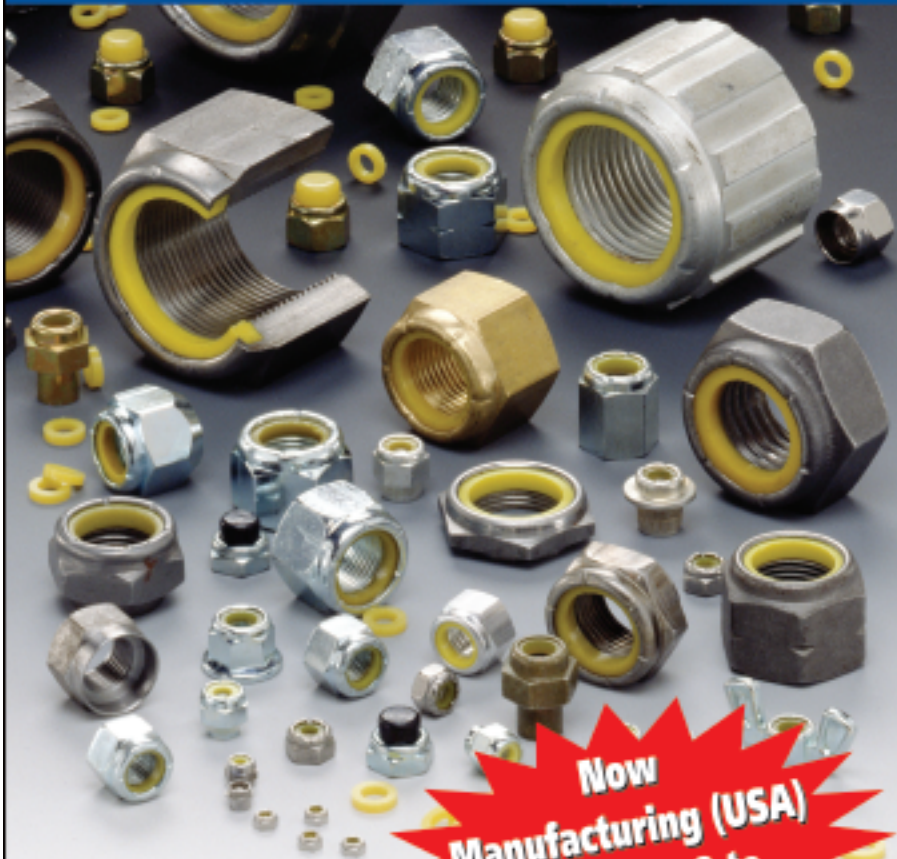
**Have your own printer and labeling software?
Don't forget to check out our blank labels and ribbons.**

- ▶ WIDE RANGE OF COLORS, MATERIAL AND SIZES
- ▶ DIRECT THERMAL LABELS IN STANDARD PAPER AND POLYPROPYLENE
- ▶ THERMAL TRANSFER LABELS IN STANDARD PAPER, POLYPROPYLENE, AND POLYESTER
- ▶ RIBBONS FOR DATAMAX, INTERMEC, ZEBRA, ELTRON, AND MOST OTHER PRINTERS



For labeling system enquiry, please visit ABLE LABEL SYSTEMS at www.ablelabelsystems.com
phone 800.348.1455 fax 509.922.4854 email sales@ablelabel.com web www.ablelabel.com

SUPPLYING LOCKNUTS ABBOTT CAN SUPPLY WHAT YOU NEED



Now
Manufacturing (USA)
Grade 5 & 8 to
MIL-DTL 45913

Hard-to-find Locknuts manufactured in our factory – deliveries starting in 4 weeks.

Quality products since 1948.

Pricing to help you get the business & archive the largest gross profit.

Manufactured in our factory or imported from our overseas partners; whatever works for you to get you the order, all with the same Abbott quality and service.

Engineering & design assistance to help you make more Locknut Sales.

Material – products produced in all materials.

Approvals – QPL, MS-AN-NAS and QSLD/QSLM standards, and major corporate approvals.

CALL DISTRIBUTOR SALES TODAY
847.777.3030

AIC
SINCE 1948 QUALITY & INTEGRITY
ABBOTT-INTERFAST CORP.

190 Abbott Drive Wheeling Illinois 60090 ■ Tel 847.459.6200
Fax 847.459.4076 ■ Website: www.abbott-interfast.com

DISTRIBUTOR NEWS

Cable Tie Express, Inc., a leading supplier for cable ties, heat shrink tubing, wire connectors, mounting bases, cable clamps and associated products, recently announced the addition of Atlas Industry Marketing to its network of Manufacturer's Agents.

Mr. Alan Lindahl, owner of Atlas Industry Marketing, covering Texas, Oklahoma, Arkansas, and Louisiana, has eight years working as a manufacturing agent and over sixteen years in the Fastener Industry brings valued experience for servicing the territory.

Char Cooper, President of Cable Tie Express, recently commented, "We welcome Alan as a valued member of the Cable Tie Express network of sales agents. Searching for potential business from our sales agents' contacts combined with our overall marketing approach only leads to increased sales for Cable Tie Express and a continually growing base of satisfied customers."

Cable Tie Express is STOCKING the full line of cable ties and associated products at our new Dallas location: 2855 Dairy Milk Lane, Dallas, Texas 75229. Hours of Service: 8am - 5pm CST.

For further information, Cable Tie Express can be reached at 888-603-1233; fax 800-695-1233; or via e-mail sales@cabletieexpress.com.

Hex Bolt Hex Nut Socket Cap Screw Lock Nut

Alloy 718 • A-286

12 Point Flange Screw Socket Cap Screw Hex Cap Screw Flat Socket Cap Screw Socket Head Shoulder Cap Screw

Alloy C-276 • AL6XN™

Full Thread Stud Bolt Hex Bolt Heavy Hex Bolt

Square Bolt Heavy Square Bolt Hex Flange

Avesta™ 2205 • Avesta™ 254SMO

T-Head Bolt Plow Bolt Oval Neck

Monel™ 400 • Monel™ K-500

Track Bolt Hex Nut Hex

Nitronic™ 50 • Nitronic™ 60

Hex Nut Twelve Flange

Inconel™ 600 • Inconel™ 625

Flange Nut Heavy Lock Hex

Inconel™ X750 • Inconel™ 800H

Lock Slotted Nut Hex

Inconel™ 800HT

Heavy Nut Hex Slotted

17-4PH • 13-8MO

Heavy Coupling Nut Hex

Waspaloy™ • Titanium

Hex Cap Screw 12 Point Flange Screw Socket Cap Screw Flat Socket Cap Screw

304 • 304B • 316 • 316B

T-Head Bolt Stud Double End Stud Hex Bolt Heavy Hex Bolt Square Bolt

330 • 347 • 422

Heavy Square Bolt Hex Bolt Twelve Point Bolt



VEGAS FASTENER MANUFACTURING

4315 W. Oquendo Road • Las Vegas, NV 89118 • www.vegasfastener.com

1-800-782-4916 • Ph: (702) 651-9222 • Fx: (702) 651-9453

Hex Bolt Hex Nut Socket Cap Screw Lock Nut



Atlantic Fasteners

49 Heywood Ave.,
West Springfield, MA 01089
Phone 1-800-800-BOLT (2658)
Fax 413-241-2184
www.atlanticfasteners.com

ATLANTIC FASTENERS AT 30 - An Employee-owned Company Comes of Age

Massachusetts-based commercial and aerospace supplier Atlantic Fasteners turns 30 this year, marking not only a key anniversary but a new chapter in the company's 30-year transformation from small, local company to distinguished national supplier.

Once a tiny, unfocused business adrift in debt, Atlantic Fasteners was purchased in 1981 by an executive intent on using big-company strategies to breathe new life into small, entrepreneurial ventures.

Today this "small venture" commands \$13 million in yearly sales and has an aerospace division that has been growing, despite recession, at an annual compounded rate of 27%.

President Tony Peterson attributes much of the company's current strength and future potential to consistent adherence to strategies put in place by its founding partner so many years ago.

Consequently, the company is marking several other important milestones that convey the company's "coming of age" and promising future. In 2011, the company reports:

The retirement of Atlantic Fasteners Founder Patrick J. O'Toole.

Pat O'Toole's Harvard MBA and high-powered career at Lestoil and Standex International prior to purchasing Atlantic Fasteners gave him a clear view of how to create a powerhouse supplier with a clear focus on quality and service for industrial markets. His early commitment to computerized inventory, barcode management and differentiated, guaranteed services sparked the creation



Atlantic Fastener founding partners: Tony Peterson, president, Carol Peters and Patrick J. O'Toole on the occasion of O'Toole's retirement as chairman from the company in December 2010.

of systems that still drive the company's growth in commercial and aerospace industries.

The 25th anniversary of service guarantees.

Atlantic Fasteners' early service guarantees have truly distinguished the company in a segment where few such assurances exist, even today. While guarantees are ubiquitous in the consumer market, few industrial companies have the

self-confidence to use them boldly and without conditional fine print, if at all. In 1986, Atlantic's first guarantee of next-day delivery, backed by the promise of a \$50 credit, demonstrated the company's expertise in inventory management and efficient processing of orders the same day received. Later, Atlantic expanded to six guarantees and increased the promise to \$100 in credit. "The systems we put in place years ago still serve to keep our focus on exceptional service," said Peterson, who as a minority partner was the primary architect of the company's guarantee program.

The 7th anniversary of Atlantic Fasteners' Aerospace.

Atlantic Fasteners' competence in documenting every aspect of its service was instrumental in the creation of its aerospace division, which moved to new quarters in West Springfield in 2010 and also maintains sales offices in Maine and Missouri. Like the company overall, the division is distinguished by higher-than-average performance, which is tracked within the industry as Defense Logistics Agency (DLA) scores.

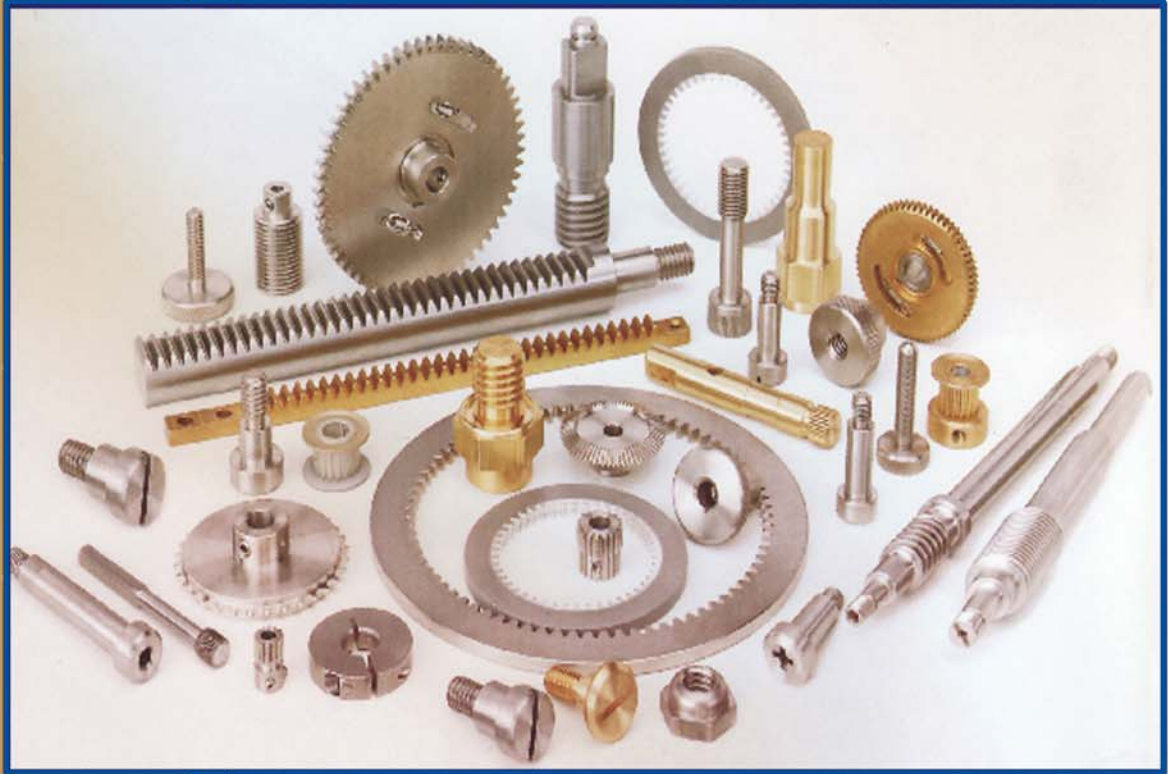
please turn to page 173

ISO CERTIFIED

**Precision
fasteners**



**Alpha
fasteners**



**Alpha
fasteners**

154 E. Merrick Rd.
Freeport, NY 11520

Ph: 516-867-6188
Fax: 516-867-6189

alphafasteners@gmail.com

See our web site at
www.alphafastenersusa.com

The "Distributor's Source" for:

- Captive & Shoulder Screws with Head Configurations:

Torx Equivalent
Phillips

Slotted
Socket

- Thumbscrews
- Standoffs
- Spacers
- Precision Gears & Racks
- Belts, Pullys & Sprockets
- Custom Parts Manufactured to Customer Specifications
- Clamps
- Shafts
- Worm & Worm Wheels
- Catalog Equivalents



3. M-Alpha Diagram Introduction

The M-Alpha (torque-angle) Diagram is a powerful tool for use in joint analysis. As shown in Figure 5, it is a straight-line projection of the tangent to the torque-angle assembly curve projected backwards from the predicted yield point through the elastic tightening point to zero torque. This tangent projection is used to locate the elastic origin. Since the M-Alpha diagrams in this discussion are taken from SR1, a bolted joint stress calculation software program based on the well known German design standard VDI 2230, we will use the terminology native to VDI in this discussion, such as M for torque from the German word Drehmoment.

In addition to the applied torque, MA, the M-Alpha Diagram has projections from the elastic origin for both the thread torque, MG, and the pitch torque, MGO (where $\dot{l} = 0$). A very useful feature of the M-Alpha Diagram is the manner in which the diagram clearly illustrates the distribution of the torque in a tightening process. With MA showing the total input torque, MG represents the thread torque that is the thread friction plus the pitch torque that creates the clamp-force. The difference between the MA and MG curves represents the underhead friction torque. The difference between the pitch torque curve, MGO, and the MG curve represents the thread friction torque.

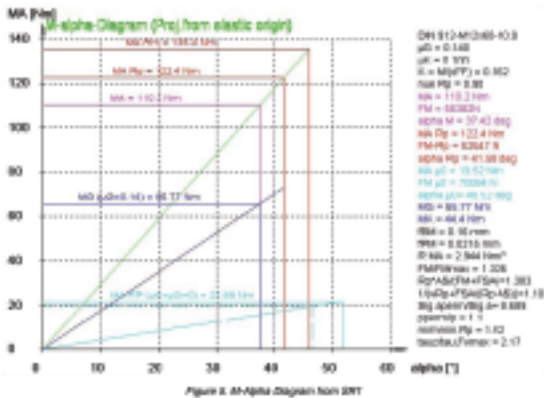


Figure 5. M-Alpha Diagram from SR1

The M-Alpha Diagram is a straight line projected from the elastic origin to the yield point. By changing the coefficients for thread friction, $\dot{l}G$, and underhead friction, $\dot{l}K$, assumed for the VDI 2230 analysis, the effect of friction on the tightening process can be clearly seen. In the M-Alpha Diagram shown in Figure 6, the torque values required to reach the assembly preload and the yield point are lower because the assumed friction coefficients are lower.

4. Strength Considerations

The clamp force and preload requirements for a bolted joint are determined by the static and dynamic loads that the assembly is expected to see in service. The bolted joint design must be completely engineered with regard to the axial (concentric), eccentric, and shear loads to which the assembly will be subjected. This is

the first step in any fastener engineering project.

After the external working loads have been defined, the necessary bolt preload can be calculated. Next, the safety factors against embedment and thread strip must be checked to insure that yielding in the bearing areas or threads will not limit the preload to less than the required amount. Safety factors for shear slip, fatigue, loss of preload, and over-elongation due to combined loads must also be evaluated.

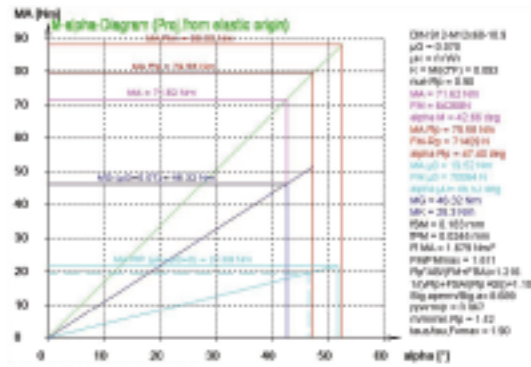


Figure 6. M-Alpha with Low Friction Coefficients

The safety factors for embedment and thread-strip are important both for the initial installation of the fastener and for long term reliability with regard to both loosening and fatigue resistance. The illustration in Figure 7 shows some of the strength factors that should be evaluated with regard to expected service loads and preload requirements.

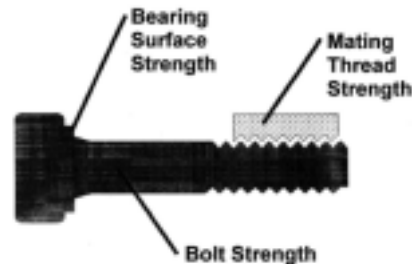


Figure 7. Clamping Force and Material Strength Considerations

5. Bolt Yield

Tightening a fastener beyond the yield point is a means of achieving the maximum preload possible for a given size and strength. This tightening method is commonly used in automotive engine assembly for connecting rod bolts, crankshaft bearing cap bolts, and engine head bolts. When bolts first replaced rivets in the construction of bridges and buildings, tightening beyond the yield point quickly proved to be a reliable method of assembly. The preload obtained by tightening beyond the yield point is proportional to the material yield strength and inversely proportional to the thread friction coefficient, $\dot{l}G$. The thread friction coefficient is important since the yield point during tightening results from combined tensile loads plus the torsional load due to the thread friction and pitch torque.

Fully Threaded Studs
Double End Studs
Single End Studs
Bent Bolts
Pins
Rail Bolts
Hanger Bolts
Dowel Screws

Diameters: 4-40 to 1/2", M4 to M12

Lengths: continuous thread to 6"
single-end & double-end to 40"
straightened & cut wire to 120"

Materials: carbon steel, stainless
aluminum, brass



HANGER BOLT & STUD CO.

Ph: 800-537-7925 Fx: 800-994-2658

E-mail: sales@hangerbolt.com

hangerbolt.com



American Imperial Screw Corp.

PO Box 234, Pomona, NY 10970

Tel: 800-431-2391 or 845-354-9100 Fax: 845-354-4377

Email: jay@discountscrews.com

Website: www.discountscrews.com

IT'S NOT HARD TO FIND HERE

You can find examples of one of the six simple machines, like the wheel, as early as 3000 B.C., but what about the inclined plane spiraling around a pole?

The Hanging Gardens of Babylon may have had a screw machine to lift up water to the gardens around 700 B.C., but this simple machine, the screw, was not seen again until around 250 B.C., when Greek

inventor Archimedes used it to make a wooden press. Yes, the screw has been around for quite a while and has been modified and refined countless times. American Imperial Screw Corp, established in 1925, whose current staff still has over 100 years combined experience in the fastener trade,

has seen its share of changes. Within its wholly owned subsidiaries of Discount Screw Corp and Elfasco Fasteners, is housed a treasure trove of hard to find fasteners, as well as the mundane nut or bolt, which enables shipments to go out the same day from stock. We take pride in the fact that we are sometimes the only source in the entire country that has a particular part in stock, and most times even in the finish requested.

American Imperial is a stocking distributor for ITW Shakeproof's push on fasteners, Push on Hats (axle caps), Push on Retaining fasteners, washer faced lock nuts, and self threading lock nuts. Discount Screw is a distributor of brand named construction fasteners. Elfasco Fasteners and American Imperial are strong in the uncommon thread pitches and


lengths, couple that with the numerous head styles and drives, add the variety of materials and finishes, and we just might have what you need in stock. If you need a different finish, a smaller quantity, or RoHS compliancy, we will do our best to accommodate those needs as well. Here you can find nuts, bolts, and screws, from 00-96 to 2 inches in diameter, in

steel, brass, and stainless steel. We also stock a large selection of non-standard washers, solid and semi tubular rivets and an expansive range of type 'B' slotted hex washer sheet metal screws.

Sources for the less than common fasteners have been diminishing in recent

years and trying to find new ones are very challenging as well as time consuming. We all use books and the internet to locate items, however, if a part description is entered outside of the parameters of the search criteria, you will get "no results found." A search engine alone may not be able to offer alternatives. Here at

American Imperial and its subsidiaries, you can use our experience to fill your order exactly as you need it, or we may be able to offer a substitute part that will fulfill your requirements.

Whether material, size, finish, or even quantity is a problem, we just might be the **Hard to Find Source.** 



AMERICAN IMPERIAL SCREW CORP

1-800-431-2391

Fax-845-354-4377

The First Call You Should Make For Hard To Find Fasteners

Over 500 million screws in stock!

Cap Screws & Tap Bolts

1/4" - 2" Diameter

Machine Screws

0 - 5/8" Diameter

0-80, 1-64, 1-72, 2-64, 2-56,
3-56, 3-48, 4-48, 4-40, 4-36
5-40, 6-40, 6-32, 8-36, 8-32

Nuts

Cap, Castle, Coupling, Finished,
Flange, K-Lock, Machine,
Panel, Slotted, Square, T-Nut,
Weld

Pins

Cotter, Dowel, Roll, Coiled

Bolts

Carriage, Hanger, Lag, Square

Drive Screws

Type U

ITW Shakeproof-SIP Push on Fasteners

Push on Hats (axle caps), Push on Retaining
Fasteners, Washer Faced Lock Nuts, and
Self Threading Lock Nuts

Rivets

Blind, Solid, Tubular

Screws

Drywall, Particle Board
Deck , Thumb, Weld,
Wing, Wood

Self Drilling, Self Piercing

Sems

Sockets

Set (Slotted & Hex),
Flat, Button, Cap

Tapping Screws - A-B

**Thread Cutting – F, 23,
25, and 1**

Thread Forming

Simpson Strong-Tie Anchors

Adhesives
Mechanical Anchors

Rapid Rivet & Fastener Corp.

From One Distributor to Another

Yes, of course we stock a large inventory of rivets - both standard and those special hard to find rivets that most suppliers don't carry.

And we do provide you a high quality, fully traceable product in accordance with your specifications; consistently meeting AS9100 and ISO9001-2000 quality requirements, and all shipped within 24 hours or sameday if required.

But at Rapid Rivet you get "**Rivets Plus.**" That is a "technical salesperson" who is trained to answer your call rather than a recording and who doesn't merely handle a sale, but actually knows the difference between a MS20426 and a NAS1330. In addition, our salespeople are available after the sale, extending service to guarantee your satisfaction.

Since 1985, our customer base has included Aerospace and Commercial OEMs and distributors, all concerned with consistent delivery of quality fasteners.

We continue to add value to our products by maintaining a fully traceable inventory, technically knowledgeable salespeople, and "RAPID" delivery of your order. Call us or visit our website to discover what we mean by "**Rivets Plus.**"

RAPID
RIVET &
FASTENER CORP.

121 Toledo St, Farmingdale, NY 11735
631 249/0400 / Fax: 631 249/0401
1 800 727/4378 www.rapidrivet.com



DISTRIBUTOR NEWS

Elgin Fastener Group has announced promotions for two members of its **Ohio Rod Products** division. Joe Johannigman has been named Accounting Manager; a six-year veteran of Ohio Rod Products and previously a Systems Administrator. He will oversee all Ohio Rod accounting functions. Mike Hughes has been named Operations Manager, after previously serving as a Sales Correspondent, Sales Supervisor, and Inside Sales Manager during his eighteen years with Ohio Rod Products. His responsibilities will include management of daily plant operations and coordination between various departments.

Part of the Elgin Fastener Group, Ohio Rod Products manufactures cold-headed and threaded long-length specialty fasteners. EFG combines four domestic industrial fastener manufacturers (Ohio Rod Products, Leland Powell Fasteners, Chandler Products, Precision Screw & Bolt) with an engineering and international procurement division (Elgin Fasteners International) and a metal finishing company (Best Metal Finishing). All of the EFG companies are ISO certified.

Contact Elgin Fastener Group at 1415 S. Benham Rd., Versailles, IN 47042; Tel: 812-689-8917; Fax: 812-689-1825 or Email info@elginfasteners.com. Visit online at www.elginfasteners.com.

* * *

Rotor Clip Company, Inc., the leading manufacturer in retaining rings, spiral rings, wave springs, hose clamps, and related products welcomes Mr. Elmar Kampmann as a Technical Sales Manager and Global Wave Spring Engineer, with over 5 years industry experience, specializing in calculation and sales of flat wire retaining rings and wave springs.

Mr. Kampmann received his Master of Mechanical Engineering from the University of Applied Science in Münster, Germany.

We are excited about this appointment and wish Mr. Kampmann success with Rotor Clip.

For more information contact Rotor Clip at 800-557-6867 or visit www.rotorclip.com.

YOUR DOMESTIC SOURCE
FOR MS PARTS

**FALL
RIVER**
WWW.FALLRIVERMFG.COM

QSLM CLASS 2 APPROVED
CAGE CODE: 1JWL5
ISO 9001:2008



MANUFACTURING STANDARDS,
SPECIALS AND MIL-SPEC FASTENERS

STAINLESS STEEL AND NON-FERROUS SCREWS BOLTS AND NUTS

PHONE 800-275-6991

FAX 508-675-8770

SEFA - PO Box 448, Elba, AL 36323 • thesefa35@gmail.com • www.theseffa.com

SOUTHEASTERN FASTENER ASSOCIATION

MARDI GRAS "SEFA STYLE" MARCH 8-10, 2011

The Southeastern Fastener Association members united in Orlando, Florida this year as the Hilton at Walt Disney World played host to this year's annual spring meeting. Since the meeting kicked off on Fat Tuesday, the theme for the event was a Mardi Gras Celebration. Many members arrived on Tuesday afternoon while the board was meeting. After the scholarship committee was finished, a group of members chose to pass on the walk across the street to Downtown Disney and instead enjoyed the food and company at Bennihana's inside the hotel.

The weather could not have been better for the golf outing on Wednesday. Played at the Ridgewood Golf & Country Club about 20 minutes from the hotel, the course was beautiful and challenging.

A special thanks to all of the golf sponsors:

Ameribolt, Inc.
Axiom Software
F.R. Male Associates
Ford Fasteners
International Fasteners Inc.
Kanebridge Corporation
Nucor Fastener
Southern Fasteners & Supply
Tennessee Galvanizing
XL Screw Corporation

The Captain's Choice format was played and the winning team happened to be the only 3 person team playing:

Bill McIntyre, Cascade Nut & Bolt
Jim Dobbs, Metric and Multistandard Components
Rich Cavoto, Metric and Multistandard Components

The Second Place team:

Donnie Shrum, Fastener Supply
Frank Male, F.R. Male Associates
Don West, Nucor Fastener
Robbie Gilchrist, Capital Marketing

The Winner of the Longest Drive:

Ted Nieman, Stelfast, Inc.

The Winner of Closest to the Pin:

Andy Cohen, Baco Enterprises

The Mardi Gras Reception and Dinner was held on

Wednesday evening. Everyone enjoyed cocktail hour poolside listening to the entertainment of Jimi Pappas, a local guitar player and musician, as the sun began to set courtesy of our wonderful Reception Sponsors:

Drillco Cutting Tools
Ford Fasteners
International Fasteners Inc
Metric and Multistandard Components
Stelfast, Inc
XL Screw Corporation

Just as dinnertime was approaching, the sunset faded and was replaced by dark clouds all around us. A few flashes of lightning and the decision was made to move our "Swamp Party" buffet inside. With the help of all members, we were safely relocated inside within 10 minutes. As we filled our plates and began sitting down to eat, the torrential downpour ensued. Thanks to the teamwork of our members, no one got soaked! The buffet offered everything from clams on the shell to the beef carving station but everyone seemed to enjoy the gator tail the best.

After dinner, the golf awards were handed out and the serious bidding began on the silent auction. A special thank you to all of our donors who donated wonderful items for our Auction and Raffle which all moneys collected goes into the Scholarship fund. Some of the highlights on the auction table included an Ipod Touch donated by Distribution One and an authentic Nascar Race Helmet signed by Tony Stewart donated by Brent Grass of International Fasteners Inc. Glenn Goins of Southern Fasteners & Supply donated a week and his condo in Myrtle beach which was auctioned off live by the wonders of Paul Skiles of Tennessee Galvanizing.

During the reception, all members got to vote once each for our SEFA Mardi Gras King and Queen. The names were all thrown in a Mardi Gras King and a Mardi Gras Queen hat to have the winner's names drawn from. Ironically, Ernie Pine, current Chairman of the Board, came up to pull the King's name out of the hat and pulled his own name! After crowned by President Joanne Bialas, our King then proceeded to pull out her name for the Queen!

please turn to page 72





K-T BOLT

MANUFACTURING CO., INC.

www.k-tbolt.com

Serving the Fastener Industry Since 1969

Manufacturing • Forging
In a Variety of Head Styles and in Most Grades of Material
Hot Dipped in Our Facilities



Heading Capacity - 1/2" to 3" Diameter
Threading to 4" Diameter
Straight, Bent & Welded Anchor Bolts to 4" Diameter

MADE IN AMERICA TO THE HIGHEST QUALITY STANDARDS AVAILABLE!

1150 Katy Fort Bend Road, Katy, TX 77493 • P.O. Box 683, Katy, TX 77492
Phone: 800.553.4521 • 281.391.2196 • Fax: 281.391.2673

RAF and DISTRIBUTION
ADVANTAGE #1



MOST KNOWLEDGEABLE SALES STAFF

Exceptional customer service assures your questions and RFQs are answered immediately so you can serve your customers better.

www.rafhdwe.com



RAF ELECTRONIC
HARDWARE

a Division of MW Industries, Inc.





Integrated Packaging & Fastener Inc.

1678 Carmen Drive, Elk Grove Village, IL 60007

Toll Free: 800-807-5510

Phone: 847-439-5730 Fax: 847-640-8894

Email: sales@integratedpack.com Web: www.integratedpack.com

“OUR QUALITY GOES IN BEFORE OUR BAGS GO OUT”

Integrated Packaging and Fastener, established in 2001, saw the need for diversified and specialized quality packaging services. With the intention of setting ourselves apart from the competition, we are pleased to be celebrating our ten year anniversary, with an expansion into a 16,000 square foot facility located in Elk Grove Village, Illinois. Our location in the main Midwest sector of all large stocking importers makes it simple to have product delivered to us, packaged and shipped directly to you. Moving freight only one-way equals a savings of both time and money for Integrated customers. In addition, we have extremely diverse package capabilities. From poly-bagging to cartons, we can handle any packaging requirements. Our sales staff in knowledgeable, friendly and always eager to go the ‘extra mile’ for you.

We are in the final stages of becoming ISO 9000-2001 certified. Our motto is and always has been “The Quality goes in, before the bag goes out”. The company does everything possible to make a difference in quality, turn around times, accuracy, and exceptional customer service. Quality is ensured using both in-line check weight inspection as well as a final inspection with each job. Our quality control levels are among the highest in the industry. Integrated Packaging realizes that quality costs less in the long run – that is why we found it necessary to house a state-of-the-art Quality Control Department right under the same roof.

Integrated Packaging works with every customer, whether small or large, to ensure their needs are understood and met. Integrated is proud of the achievements we have made, and confident that we provide consistent service along with our efficiency and accuracy. Due to the tremendous amount of growth over the last year and a half, along with doubling our space, we have begun the process of expanding the workforce in stages. Fifteen new employees have been hired, with the intention of hiring another full shift once the expansion has been completed. Our expansion should




be completed by April of 2011. The expansion will also allow us to bring in additional machinery, as well as, store customer product for future release.

We are adding four advanced high speed packaging lines, as well as two semi-automated lines that will be capable of handling our more complex components. In fact, the line can combine an endless combination of components. Our automated lines feature the state of the art Accu-Count 200 counter and the AB180 bagger, featuring the fastest and most accurate counting of products for automatic high speed packaging applications. We are always looking for technology that helps us to remain true to our stringent levels of quality standards. The machines are built with the latest sensory features available. The extreme sensitive and high density field eye

accurately detects the smallest of parts while differentiating parts from dirt or debris commonly found with bulk hardware. With our new equipment, we now have the unique capacity to combine different parts with unusual shapes and designs. Additionally, there are an unlimited number of pieces that can be combined.

Integrated Packaging and Fastener looks forward to the coming year with the current and future enhancements and additions the company is implementing. Employees play a major part in the success of this company. They are excited by the prospect of expansion and additional capabilities we can offer. The majority of the employees have been with the company since the doors first opened. We are very grateful for their service, and are pleased to still have them working here and truly appreciate their many years of great service and attention to detail. Integrated Packaging and Fastener is dedicated to maintaining our reputation as your one-stop packaging source.

For further information regarding Integrated Packaging and Fastener, please contact us at 1678 Carmen Drive, Elk Grove Village IL 60007. Phone 847.439.5739 Fax 847.640.8529 or visit us at www.integratedpack.com 

Fastener/Contract Packaging

Capabilities:

- Automated/Hand Count
- 1-25 Different Items
- Check Weight Scales
- Custom Imprints/Bar-Coding
- Custom Carton Kits
- Warehouse/Distribution Capabilities

Services:

- Quick Turn-Around
- Competitive Pricing
- Inspection Capabilities
- No Order Minimums
- Scheduled Releases/JIT
- Custom Ship Options

• Conveniently located in the Chicagoland area
enabling "drop-ship" capabilities from all local importers.

• **Your One Stop Packaging Source** •

Integrated Packaging, Inc.
1678 Carmen Drive
Elk Grove Village, IL 60007

Phone: (800) 807-5510
(847) 439-5730
Fax: (847) 640-8894
E-mail: Sales@IntegratedPack.com

"Our Quality Goes In Before Our Bags Go Out"


HOW TORQUE VALUES VARY continued from page 10

A rough surface will inhibit the required amount of work to be applied to turning the wrench while a lubricant will not provide any resistance at all. This can help larger fasteners to become tighter than without a lubricant, but will destroy smaller fasteners.

This is of extreme importance when assembling a multiple bolted joint: all the fasteners must be of the same surface finish condition. A non-plated fastener will take much more torque to tighten than a plain zinc coated fastener. The connection will be compromised if the same torque is used for all fasteners in the connection.

An average man can pull about 100 pounds without bracing himself. If he had a one foot lever, the output would be 100 lb-ft of torque. If using an 18" lever, the output would be 150 lb-ft. Using the torque values on the next page, you can see where 100 lb-ft of torque may tighten a 1/2"-13 dry Grade 8 fastener but also be close to a 5/8"-11 lubricated Grade 8 fastener. Or, 150 lb-ft with the extended lever wrench is way too much for the 1/2"-13 dry and lubricated Grade 8 fastener and will be too much for the 5/8"-11 Grade 8, but is close to the lubricated 5/8"-18 Grade 8 fastener.

As one can imagine, it becomes physically impossible to properly tighten even a 1/2" diameter Grade 8 fastener, and higher strength fasteners, by hand without using an efficient lubricant.

Ever wonder about your tire's lug nuts? 

Suggested Torque Values for Inch Fasteners..



Size	Grade 2	SAE Grade 5 120ksi		SAE Grade 8 150ksi	
		Dry	Lube	Dry	Lube
1/4"-20	5	8	5	12	7
1/4"-28	6	10	6	14	9
5/16"-18	11	17	10	25	15
5/16"-24	12	19	12	27	16
3/8"-16	20	30	19	43	27
3/8"-24	23	35	21	49	30
7/16"-14	32	50	30	70	42
7/16"-20	36	55	35	78	47
1/2"-13	50	75	45	105	63
1/2"-20	55	80	55	120	72
9/16"-12	70	110	66	155	95
9/16"-18	80	120	72	170	100
5/8"-11	100	150	90	210	125
5/8"-18	110	160	110	240	145
3/4"-10	175	260	160	375	225
3/4"-16	200	300	180	420	250
7/8"-9	170	430	260	935	360
7/8"-14	180	470	290	870	450
1"-8	250	640	395	910	545
1"-14	290	730	440	1020	615
1-1/8"-7	350	800	490	1280	770
1-1/8"-8					
1-1/8"-12	400	890	530	1440	855
1-1/4"-7	500	1120	670	1620	1100
1-1/4"-8					
1-1/4"-12	550	1240	745	2000	1200
1-3/8"-6	670	1460	875	2380	1425
1-3/8"-12	750	1660	1000	2720	1630
1-1/2"-6	870	1945	1165	3160	1900
1-1/2"-8					
1-1/2"-12	980	2200	1325	3550	2150

*All values in pound-feet.
All lubricated values are calculated using metallic anti-seize compounds on zinc plated bolts.

SEFA - PO Box 448, Elba, AL 36323 • thesefa35@gmail.com • www.theseffa.com

SOUTHEASTERN FASTENER ASSOCIATION**MARDI GRAS "SEFA STYLE" MARCH 8-10, 2011** *continued from 68*

The General Meeting began early Thursday morning with a deluxe continental breakfast for all to enjoy. After all of the Board Members were acknowledged, the board for this year was announced:

Ernie Pine, Ifastgroupe Distribution
Chairman (2nd year)

Joanne Bialas, International Fasteners Inc
President (2nd year)

Tony Nelson, Fastener Supply
1st Vice President

Jonathan Hodges, Southeastern Sales
2nd Vice President

Remaining on the board:
Jim Dobbs, Metric and Multistandard Components
Nancy Orr, ND Industries
Joe Pittman, Ameribolt, Inc.

Ted Nieman of Stelfast, Inc. is rotating off of the board after many years of service. A nomination from the floor was made by Daniel Stephens for Kerry of Edsco Fasteners.

The committee chairs reported to the membership. Tony Nelson acknowledged the new members present:
Axiom Software
Baco Enterprises
Cascade Bolt and Nut
Enthone, Inc.

New Members unable to attend: Gexpro Services and AFI Industries

Ted Nieman, chair of the scholarship committee announced that the board voted to name one Scholarship recipient each year the winner of the Em

Dattweiler Webb Scholarship. Em Webb was the Association's first woman President and was key in the founding of the scholarship program. Em passed away this past year and the association will carry her memory on in the form of her "named scholarship". Ted then announced this year's winners. Only 2 applications were received and both were awarded scholarships.

Andrew Vu, sponsored by Brighton Best Intl won the \$1000 Gilchrist Foundation Scholarship.

Ashley Nicole Setser, sponsored by Southern Fastener & Supply won the Em Webb Scholarship in the amount of \$1000.

The Association was blessed with two wonderful speakers this year. Linda Wing of Enthone, Inc. spoke in detail about electroplating and Simmi Sakhuja of Stelfast, Inc. spoke on the current conditions overseas and the educated us on all of the factors that help determine the costs of goods brought in.

In between the guest speakers, Joanne Bialas announced that the board had approved moving forward with a proposed alliance with the NFDA. Mark Lenhart, Executive Vice President of the NFDA then presented a look into the proposal and explained the current state of the NFDA and their plans to continue to move forward in a bigger and better way.

The last annual Table Top Show took place Thursday afternoon. SEFA is moving to an every other year Table Top Show in conjunction with the SWA to help relieve the many Supplier Members who attend both. The rainy day did keep some of the Distributor Members away but all in all the Mardi Gras Celebration and Annual Spring Conference was a great success and special thanks to all who came and all who help to keep the Association alive and well. ◊

SOUTHEASTERN FASTENER ASSOCIATION MARDI GRAS "SEFA STYLE" MARCH 8-10, 2011



ALFA TOOLS

7845 North Merrimac Ave.
Morton Grove, Illinois 60053
Phone: 847-470-9595
800-253-2532
Fax: 847-470-9696
888-258-6657
www.alfatools.com

For Production, Maintenance & Construction

- Cutting Tools, Abrasives, Power Tool Accessories
- Standards and Specials
- Large Inventory On Hand
- 99.5% Same Day Order Fill Rate
- Premium Industrial Quality
- Retail Packaging Available
- Exclusive Distributor Network
- Multiple Satellite Warehouses



- Drilling & Boring Tools • Threading Tools • Machining Tools • Woodworking Tools • Screwdriving Tools
- Industrial Abrasives • Concrete & Masonry Tools • Contractors Tools • Precision Measuring • ALFA Chem Products

OSSCO

BOLT & SCREW CO.

1351 Elmwood Ave.
Cranston, RI 02910
FAX (401) 461-6970
Email: sales@osscobolt.com



Just Arrived!
Special: Left Hand
Finish & Jam Nuts

WE BOX PACKAGE in
convenient LOW QUANTITIES
We have the LOWEST PRICES
and the LOWEST MINIMUMS



* \$25.⁰⁰ minimum order

Castellated Nuts
Slotted Nuts
Hi-Nuts
Square Nuts
Left Hand Nuts
Left Hand Jam Nuts
Gr. C. Prevailing Torque
Flange Nuts
Slip-on Locknuts

Centerlock Nuts
Nylon Insert Lock Nuts
Thin Nylon Insert Lock Nuts
K-Loc
Wing Nuts (Forged)
Acorn Nuts
2H Nuts
Machine Nuts

Finished Nuts
Gr. 8 Nuts
Tee Nuts
Galvanized Nuts
DIN 934-Finished Nuts
DIN 985-Nylon Stop Nuts
DIN 980-Prevailing Torque
Acme Nuts

Coupling Nuts
Cotter Pins
Gr. 8 Lock Washers
Gr. 8 Flat Washers
Fender Washers
Toggle Wings
Toggle Bolts
Plastic Anchors



Call **1-800-FOR-A-NUT**
1-800-367-2688

NATIONAL INDUSTRIAL FASTENER & MILL SUPPLY EXPO - WEST

LAS VEGAS FASTENER EXPO GOING GANGBUSTERS!

34 North High Street • New Albany, OH 43054 • Phone 614-895-1279 • Fax 614-895-3466 • www.fastenershows.com

Exhibit space sales for the National Industrial Fastener & Mill Supply Expo scheduled for October 19-21, 2011 at the Sands Expo in Las Vegas, Nevada are running far ahead of last year, reports Expo Management.

"We have already sold 600 booths to 453 companies to date and have just released the floor plan to new companies interested in joining us. These figures are way ahead of exhibit space sales at this same time last year. We are also seeing companies buying larger spaces this year and the Machinery & Tooling Section has 20 companies with a number more to come", says Susan A. Hurley, CEM, General Manager.

"We are also excited to have many new companies with us including Aerodyne Alloys, LLC; Dokka Fasteners, Inc.; Intools, Inc.; New Process Fiber Company; Prospect Engineering Works; and Schatz USA", adds Ms. Hurley.

Conference Program to Focus on Current Industry Information and Training

An all-day Conference program is being planned for Wednesday, October 19th featuring several Fastener Training Institute workshops along with presentations on current and future industry trends. The program also features one of America's leading sales trainers, Ann Marie Houghtailing, Principal of The Houghtailing Group, a boutique Sales Consulting and Business Development firm. Ms. Houghtailing has presented similar programs for the Pacific-West Fastener Association and is well known in the fastener industry. Her presentation will be "Creating a Culture of Sales and Increasing Revenue in 2011 and Beyond".

"We are delighted to have Ann Marie on our Conference program. We invite our Expo exhibitors and visitors to hear this nationally recognized Sales Trainer who has trained thousands of people, and will reveal the 5 most important steps to move towards a Culture of Sales IMMEDIATELY. This is an excellent opportunity for people to learn how to create a more dynamic sales



culture that can change the direction of their company", say Jim Bannister and Mike McGuire, the Expo's General Partners.


Party Time is Networking Time!

The always popular Welcome Reception will be held on Wednesday evening, October 19. This fun-filled party will feature complimentary wine, beer, soft drinks and tasty hors d'oeuvres and is open to all Expo exhibitors and visitors wearing a badge. Show Management is currently looking at an exciting new venue for the party at the luxurious Venetian Hotel. "We are going to make this year's Welcome

Reception one to remember", says General Manager Susan Hurley.

"North America's Largest Fastener Expo" . . . and more

The 700-plus booth Expo will be open from 9:00 a.m. to 4:00 p.m., Thursday, October 20 and from 9:00 a.m. to 1:00 p.m., Friday, October 21. The Expo will feature the latest fastener and fastener-related products and services offered by leading manufacturers and suppliers from throughout North America and around the world. The greatly expanded Machinery & Tooling Section will offer more than ever before and the addition of mill supplies such as cutting tools, drills, hand tools, plant & safety equipment and more broadens the Expo's appeal for today's multi-line distributors. "We are also excited about returning the Expo to a Wednesday through Friday format which was so popular in past years. Ending the event on Friday afternoon will allow people to stay over in Las Vegas for one or two nights and enjoy the many attractions there", says Susan Hurley, General Manager.

For additional information contact Susan Hurley, General Manager, National Industrial Fastener & Mill Supply Expo, (614) 895-1279, email info@fastenershows.com or visit the Expo website at www.fastenershows.com. 

FASTENING INNOVATIONS BY

HOLBROOK MFG.



SPECIAL SHOULDER SCREWS & BOLTS

**Multi-Die Products,
No Minimum Quantities,
Standard 4-6 Week Lead Times**

Holbrook's high-speed progressive transfer headers can produce your Multi-Die requirements from 3/16" to 1/2" diameter up to 5" in length.

Taptite II®
Taptite 2000®
Plastite®
Remform®
Remform F®
Fastite 2000®

MAThread®
MATpoint®
Torx®
TorxPlus®

ACR Phillips II®
Phillips Square-Drive®

SMALL DIAMETER SPECIALIST

**#2 & #3 Diameters,
No Minimum Quantities,
Standard 3-4 Week Lead Times**

Holbrook excels in running small diameter, short length Licensed, Special and Standard fasteners in virtually every thread/head/drive configuration. Longstanding relationships with some of the best secondary processors in the industry further the product offering virtually any heat-treat and/or plating requirement.

**QUICK QUOTE TURNAROUND...
PHONE, FAX OR EMAIL US TODAY!**

HOLBROOK MFG., INC.

288 Holbrook Drive • Wheeling, Illinois 60090 • Phone: 847-229-1999 • Fax: 847-229-0996
Email: sales@holbrookinc.com • Internet: www.holbrookinc.com

ISO9001:2008

**Holbrook is a world-class manufacturer of
Custom and Standard Fasteners geared toward
engineering products for the future.**

Taptite II®, Plastite®, Remform®, Fastite®, Taptite 2000® are registered trademarks licensed by Research Engineering & Manufacturing, Inc., Torx® and Torx Plus® are registered trademarks of Acument Intellectual Properties, LLC., ACR Phillips II®, and Phillips Square-Drive® are registered trademarks of the Phillips Screw Company. MAThread® is a registered trademark of the MAThread Incorporated, Whitmore, Lake, MI, USA.

www.FastenerExpo.cn



2011
FASTENER EXPO
SHANGHAI
上海紧固件专业展

16-18 June 2011
Shanghai Everbright Exhibition Center

- 20000 M² Exhibiting Space
- More than 500 Exhibitors
- About 850 Stand Booths
- 85% Exhibitors passed ISO 9000
- Simultaneous Events:
Auto Fastener Expo



TEL: 86-21-20233788
FAX: 86-21-61198711
E-MAIL: service@chinafastener.com

DISTRIBUTOR NEWS

Interfast Inc., a leading global aerospace and industrial fastener distributor, and China's AVIC International Zhuhai Company Limited (www.avic-intl.com) today signed a Letter of Intent to create a joint venture company in Guangdong Province that will supply specialized fasteners and hardware, fastening systems, and value-added services to the growing aerospace market in China and Asia-Pacific Rim. The agreement was signed at the same time that Interfast is in Hong Kong as part of a trade mission put on by the Ontario Ministry of Economic Development and Trade to attend the 2011 Asian Aerospace International Expo and Conference.



"We are very pleased to partner with AVIC International Zhuhai Co. on this significant initiative to create a premier fastener integrator for the Chinese aerospace market that will service the growing needs of both the domestic Chinese aerospace community, as well as international aerospace manufacturers, airlines and maintenance repair and overhaul facilities," says Peter Oleck, President, Interfast Inc. "Interfast is a leader in the supply of specialized aerospace fasteners and brings customized supply chain logistics and management programs that minimize the costs and maximize competitiveness. AVIC International Zhuhai Co. is an influential, state-owned enterprise, whose parent company (AVIC) has been in charge of China's aerospace programs related to high-quality aerospace research & development and manufacturing and has become more and more acknowledged by the global aerospace industries."

The joint venture company will be located in Zhuhai City in Guangdong Province in China.

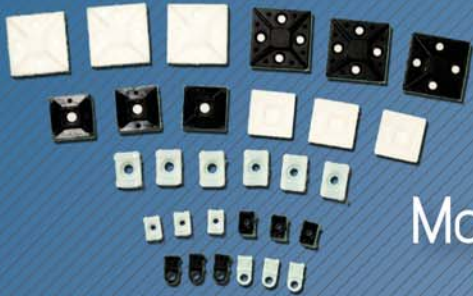
The Chinese aerospace market is growing rapidly with strong participation by both global aerospace manufacturers as well as an increasingly robust indigenous aerospace industry with its own aircraft programs. Research firm AeroStrategy recently reported that China is one of the three most popular locations for new aerospace manufacturing investments.

Interfast has worked with AVIC since 1995 and has a long history of servicing customers in China, working both with global aircraft manufacturers as well as Chinese aircraft manufacturers.

Visit www.interfast.ca for more information.



HEAT SHRINK TUBING



MOUNTING BASES



WIRE CONNECTORS



CLAMPS



CABLE TIES

15470 Endeavor Drive, Suite 100, Noblesville, IN 46060
 888.603.1233 • Fax: 800.395.1233
cabletieexpress.com • sales@cabletieexpress.com





Larry Kilham

Larry Kilham is a speaker and consultant specializing in new product development for high tech companies. He is the author of "MegaMinds: How to Create and Invent in the Age of Google," now available on Amazon Kindle. Larry and his family are successful inventors and entrepreneurs with many patents and awards. He has a master's degree from MIT and has founded three companies. To find out more about Larry's speaking and consulting, please contact him by email at lkilham@gmail.com or by phone at 505-310-7600.

TEAMS, COLLECTIVES & THE CLOUDS: TURNING AN IDEA INTO TEAMWORK VIA TECHNOLOGY

"The open society, the unrestricted access to knowledge, the unplanned and uninhibited association of men for its furtherance—these are what may make a vast, complex, ever growing, ever changing, ever more specialized and expert technological world, nevertheless a world of human community." - J. Robert Oppenheimer

The 50's and 60's was a carefree time bridging the national self-confidence after World War II with the hope coming out of the labs—big cars with tail fins, "Atoms for Peace," miracle drugs, electronics. The world at that time was ready for econometric-based economic theory but not major complexity.

World War II produced a host of challenges and eventually products that involved complexity on a scale unimaginable in the inventive times of the 19th century. The atomic bomb immediately comes to mind, but there were plenty of other big challenges. Solving these problems has led to big team research.

Creative Teams Led by a Charismatic Technical Leader

The ideas teams work on must start with seeds planted by inventors. These ideas turn into green shoots if they're encouraged to grow by a team. If success continues, management and investors take control, hoping for a big harvest.

While the initial idea or discovery of a product could have been done by one man or woman, completely characterizing the invention, analyzing a practical version as a system, and developing testing and manufacturing methods inevitably and quickly lead to the formation of a team.

The key part of a team is having a collection of people

working on the problem, starting with a charismatic scientific leader such as J. Robert Oppenheimer. He would have a prestigious board that could include a university president, scientists, industrialists, academics and military representatives. Staffing was often ad-hoc with scientists and engineers grabbed from almost anywhere handy. Shirtsleeves experimentation always was important.

The ideas teams work on must start with seeds planted by inventors. These ideas turn into green shoots if they're encouraged to grow by a team.

The Emergence of Connected Intelligence via the Web

The emergence of the Internet made physical location a much more flexible option for many participants. A leading scientist might work out of his home office in the Great

Smokey Mountains teleconferencing daily to his labs in San Diego and Cambridge.

The restraints of working on the same floor or in the same building can be relieved by Wikis (common interest Internet discussion groups). Web-based development collaboratives, mobile phone hookups and the like are all attempts to foster group creativity and informal communications.

It is important to note that all communications media can be used. It's no longer just emails, although they are still important. Video conferencing is simple and low cost. Laboratory experiments can be read and controlled from anywhere. But, perhaps most importantly, the remote scientist can access all the world's libraries through the computer clouds using Google and other search engines.

All of this began inauspiciously when Larry Page and Sergey Brin met as students at Stanford in 1995. Brin was assigned to show Page around campus. In 1996

KEN FORGING

Forged Industrial Hardware

NUT EYEBOLTS

Available in 304 & 316 Stainless Steel



- In Stock / Immediate Delivery
- No Minimums
- Plain and Shoulder Pattern
- Available Sizes:
 - Plain: 1/4" - 2" to 24" Length
 - Shoulder: 1/4" - 1-1/2" to 24" Length
- Other Materials Available in Stock:
4140, Carbon - Hot Dip Galvanized
- Modifications Available Upon Request
- Full Domestic Certification Available
Upon Request



**All Products Proudly
Made in The USA**

**Toll-Free: 888-KEN-FORGING (536-3674) • Phone: 440-993-8091 • Fax: 440-992-0360
www.KenForging.com • E-mail: sales@kenforging.com / info@kenforging.com**



TONY ENENHISE

TONY

NUCOR
FASTENER
DIVISION

NUCOR
FASTENER DIVISION

WITHOUT VALUE,
THE CUSTOMER IS ONLY LEFT WITH PRICE.

As one of America's largest fastener companies, we understand what holds our customers' businesses together. Value, it's an ever-changing equation that measures adherence to specifications, short lead times, customer service, price, and on-time delivery.

Our solution is to put together quality fasteners with world-class customer service.

Always outperforming overseas competitors by making ourselves available and accountable. Because no matter how you measure value, accountability is always the common denominator.

— | Visit nucor-fastener.com or call 1-800-955-6826 | —

It's Our Nature.[®] 

Tooling Components

www.mortonmachine.com



- Thumb Screws
- Ball Plungers
- Adjustable Clamp Levers
- Washers
- Eye Bolts
- Leveling Mounts
- Shoulder Screws
- Handles
- Spring Plungers
- Ball Clamping Screws
- Collar Nuts
- Handwheels
- Tooling Balls
- Swing Bolts
- Clamp Straps
- Stainless Steel Components

Request a new catalog that includes over 4000 parts



125 Gearhart Street, Millersburg, PA 17061
e-mail: sales@mortonmachine.com
800-441-2751 Fax 717-692-2120

MORTON MACHINE WORKS

Since **Morton Machine Works'** humble beginnings in Ferndale, Michigan nearly 70 years ago, a lot has changed in the metalworking business. One thing that hasn't changed over the years is the value of hard-working, skilled employees to a business. Morton recognizes that its company's success and achievements are directly due to two important things... employees who care about the work they do and the support of their customers.

Transition and growth have brought Morton to its current location in Central Pennsylvania. Two production facilities in Elizabethville and Millersburg, PA, provide over 37,000 square feet to produce components and fasteners in a very economical way. Their commitment to quality is reflected in their continuing improvement system certified to ISO9001:2008 standards.

Morton has invested in making sure that its "fill rate" from stock is the highest in the component industry. In addition to on the shelf standard components, turn-around time on blueprint specials can be as fast as two weeks. Sales engineers are able to work with your custom prints to provide

quotes that are both accurate and timely. Morton Machine Works has developed a reputation within the component industry as the leader in hard to find stainless steel components. Many of their standard parts are also available in 303, 304, or 316 stainless steel ...from stock.

Morton offers a full selection of ball plungers and spring plungers manufactured from steel, stainless steel, brass, and nylon. Most spring loaded devices are available in inch and metric sizes with both screw driver slots and hex drive sockets. There are many variables to consider when choosing a spring loaded device. The material used for the threaded body, nose material, internal spring tension, and the end drive mechanism are all options that must be considered when designing spring loaded plungers.

Morton is also well known as a leading supplier of Adjustable Clamping Levers. These



adjustable handles have an internal ratchet system that make them perfect for applications in confined clamping areas or when specific handle location is critical. Adjustable Clamping Levers are manufactured in two styles... with internal threads or with a projected screw. The handles are available in steel, stainless steel, and plastic. The internal threads and projecting screw are made from steel and stainless steel and offered in most inch and metric sizes. These clamping levers, also commonly referred to as Adjustable Handles, are used widely on original equipment and on common work holding applications. They are also a great solution for elbow joints where handle positioning is important. The handle design provides increased clamping torque as compared to common hand knobs or fixture nuts.

Morton Machine Works has just completed its 23rd edition product catalog. They are continually striving to meet and exceed customer expectations! Give Morton a call on your next tooling component requirement.

LOCKNUTS



By
Lok-Mor[®]
 American Made Quality

STANDARDS & SPECIALS • SPECIAL LIGHT OR HEAVY TORQUES

American, Standard and Metric • Plain, Zinc, Cadmium, & Other Platings
 Steel Grades 2, 5 & 8, Stainless Steel, Monel, Brass, Bronze,
 Aluminum Alloys & Other Materials

- Anco[®]
- Dura Flex[®] Lock
- Dome Flex[™] Lock
- Nylon Insert
- 360[®] Dome Lock
- Dome Top Lock
- Top Lock
- Hex-Loc[®] Reversible
- Collar Lock
- Key-Loc[™]
- Oval Lock
- 360[®] Reversible Top Lock
- Twin Spin Serrated
- Free Spinning Seal Lock
- Drake[™] Lock
- Marsden Type Lock
- Columbian
- Nylon Pellet

Lok-Mor, Inc.



Servicing the U.S.,
 Canada, Mexico &
 Overseas Markets
1-800-843-7230
www.lok-mor.com



661 Airport Drive • Mansfield, Texas • 817-477-0232 • Fax 817-453-2923



Anco[®]



New

Dome Flex[™]



New

360[®] Dome



Tri-Loc[®]



Collar Lock



Oval Lock



Twin Spin
Serrated



Drake[™]



Columbian



Dura-Flex[®]



Nylon Insert



Dome
Top Lock



New

Key-Loc[™]



Hex-Loc[®]
Reversible



360[®]
Reversible
top lock



Free Spinning
Seal Lock



Marsden
Type



Nylon Pellet



AZ Lifting Hardware, LLC

7150 W. Roosevelt St Ste. C-101, Phoenix, AZ 85043

Phone: 888-936-1466 Fax: 623-936-8909

Email: sales@azliftinghardware.com Web: www.azliftinghardware.com

AZ LIFTING HARDWARE - Not Just Another Importer...

During one of the worst economies this country has experienced, AZ Lifting Hardware opened its doors in 2006 and has never looked back. AZLH is a wholesale distributor of industrial lifting hardware such as eye bolts, turnbuckles, shackles and related products in both carbon and stainless steels. Their diverse product mix naturally pulls them into the wire and rigging industry, but their primary focus is working directly with fastener and industrial supply distributors throughout the US, Canada and Mexico.

"It wasn't easy starting this Company from scratch, particularly in a commodity business, but we knew there was a niche to be filled. Distributors need good supplier partners; we know the business and we intend to always provide more than the next guy." Says Chuck Smith, president. "Our goals are pretty simple; have the answers, get the RFQs back fast, and ship when we say we're going to ship. Sourcing is tedious work and we aren't trying to be everything to everybody, but we want to make it easier for our customers to do business. And when we can't help, we'll tell them who can." That outlook has been the driving force behind the rapid growth this Company has experienced.


From an initial 4000 foot facility AZLH recently completed a third move into a new 10,000 ft. facility located in the West Valley of Phoenix. The additional space provides for better inventory management of current product lines, improves the flow of order processing, and accommodates new product expansion into Grade 70 Transport Chain and corresponding components, as well as Adjustable Yoke Ends. These new product lines are scheduled for availability in the third and fourth quarters of 2011.

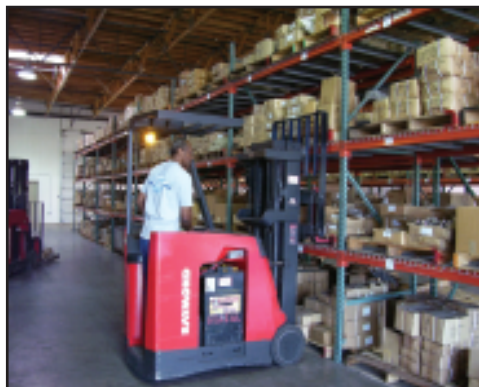
Producing eye bolt Specials is also a big part of the

AZLH mix. Maintaining an inventory of forgings from 1/4" through 1 1/2" diameters provides a full range of production capability to cut and thread to most any specification. Threading includes inch and metric in both coarse and fine thread pitches. They will also take care of outside services such as galvanizing, plating and black oxidizing providing a complete package for their customers. Shank lengths to 24" are available for plain pattern diameters 5/8 and up. Turnaround time is only five business days for most jobs, and only ten days if secondary services are required.

If you've worked with the AZLH team you've come to appreciate the personalized service they provide. If you haven't, with your very first call you will sense the difference. This Company, only five years young, has taken advantage of global sourcing to offer a lower cost product without sacrificing quality, and producing Specials puts them on an equal playing field with the domestic manufacturers. Their plan is simple, help distributors meet the constant pressure from their customers to bring costs down. Working closely with their customers is what makes this Company a great business partner. Smith comments further, "We don't sell direct. We believe distributors can sell more of our products to more people than

what we can. Those few opportunities where we might be able to sell direct will not equal the result of a good working relationship with our distributors. We want to be a "vendor partner", building businesses together." Unique? It shouldn't be!

For a catalog or more information about AZ Lifting Hardware you can contact them through their web site www.azliftinghardware.com, by phone at 888-936-1466 or e-mail at sales@azliftinghardware.com. 



AZ Lifting Hardware's Headquarters [top] and expansive warehouse facilities [bottom].



AZ LIFTING HARDWARE

STOCK PRODUCTS
EYE BOLTS
TURNBUCKLES
SHACKLES/HOOKS
CHAIN HARDWARE
STAINLESS STEEL

SPECIAL SERVICES
MACHINING:
THREADING/DRILLING/TAPPING
PRODUCT MODIFICATION
EYE BOLT SPECIALS
FINISHES:
PLATING/GALVANIZING/BLACK OXIDE



L I N K I N G
GLOBAL SOURCING WITH DOMESTIC STANDARDS
A UNIQUE COMBINATION

7150 W. ROOSEVELT ST. SUITE C 101 PHOENIX ARIZONA 85043

PHONE: 1.888.936.1466



WWW.AZLIFTINGHARDWARE.COM



FAX: 623.936.8909

TIGHTENING STRATEGIES FOR BOLTED JOINTS - Methods for Controlling and Analyzing Tightening *continued from page 62*

After the yield load is reached, the clamping force will continue to increase in proportion to the increase in torque. In the elastic tightening zone, tension is proportional to the angle-of-turn from the elastic origin located on the torque-angle signature. When tightening beyond the yield point, the clamp force can be estimated by the procedure illustrated in Figure 8.

The tangent line to the elastic straight-line tightening section of the signature is projected beyond the yield point and the final torque value is projected to the tangent line. The angle-of-turn from the elastic origin to the intercept of the backward projection from the final torque to the tangent line can be used to estimate the tension. This procedure can be seen as related to the strain-hardening phenomena observed when working materials beyond the yield point.

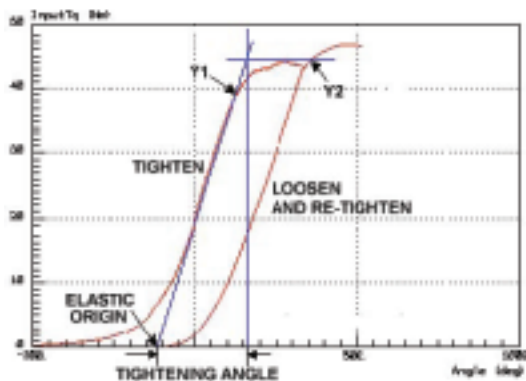


Figure 8. Bolt Yield

After the material is first loaded beyond yield, Y1, the yield point is found to be at a higher level, Y2, on the next tightening cycle. After yielding, when the load is released, the release curve is offset and parallel to the elastic tightening curve.

6. Thread Strip

In general, a properly designed bolted joint will not fail by stripping of the threads either during installation or if the assembly is overloaded in tension. As a matter of good design practice, failure should always be due to fracture of the bolt.

The thread stripping areas for internal and external threads can be approximately calculated using the formulas expressed in Equations 1 and 2. The geometric configurations that define the formulas are shown in Figure 9.

$$AS_B = \pi \left(\frac{d_1}{P} \right) L_e [0.5P + 0.577(d_2 - d_1)] \quad (1)$$

where:

- AS_B = Stress area of the bolt
- L_e = Effective grip length of the fastener
- d_2 = Pitch diameter
- d_3 = Root diameter

$$AS_N = \pi \left(\frac{D_1}{P} \right) L_e [0.5P + 0.577(D_1 - D_2)] \quad (2)$$

where:

- AS_N = Stress area of the nut
- L_e = Effective grip length of the fastener
- D_2 = Pitch diameter
- D_3 = Root diameter

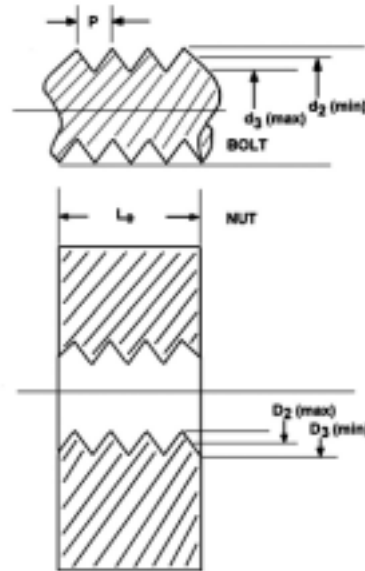


Figure 9. Thread Stripping Areas

Assuming that the maximum shear strength of the bolt material equals half of the tensile strength (ductile material, maximum shear stress failure mode), the bolt load to strip the threads can be estimated by multiplying the calculated shear area times the shear strength of the bolt or nut. This is a simplified calculation that assumes that the loading is uniformly distributed on all engaged threads. In actual practice, due to the elastic coupling between threads, the first engaged thread carries a higher than average load while remaining threads carry progressively lower loads as the load is transferred between the bolt and nut, or internally threaded hole.

When evaluating a bolted joint torque-angle assembly signature, the onset of thread stripping appears as a "yield point," or change of slope in the elastic portion of the tightening curve. Refer to Figure 10 that illustrates this phenomenon. The thread strip signature is similar to the signature for embedment of the fastener into the bearing surface. Both embedment (refer to Section 7) and thread strip lead to creep of materials within the loaded surface areas of the assembly. Over a period of time, embedment and excessive thread stripping loads cause loss of preload as the high stress regions relax and redistribute the loads.

“Powers Packaged Fastener Program Gives Me A Real Competitive Edge!”

“I switched to Powers’ Packaged Screw Fastening Line because I wanted to sell my existing customers the “total package”; they were already buying Powers’ line of fasteners from me, since Powers has the most code approved products in the industry. When you add in the engineering they do to ensure the products get specified, prompt delivery from local warehouses across the U.S., great colorful packaging that helps move the product, and the integrity of the Powers name on everything, it was an easy decision to switch to Powers Packaged Fasteners”.

Andy Marker
President
L.W. Meyer

Powers Packaged Fastener Line is a comprehensive offering of screws, bolts, nuts, washers and specialty items. As an ISO 9001 certified company, Powers features product quality assurances and testing procedures, both in-house at a state-of-the-art facility in Brewster, NY, as well as with third party laboratories. As new products continue through the stringent testing process and are approved, they are added to local warehouses where the knowledgeable sales staff assists customers in selecting the right fasteners for the job. Convenient boxes and jars keep products organized and ready at hand, and bulk packaging is also available upon request. Visit www.powers.com to learn about all the advantages of the Packaged Screw Fastening Line.



Powers
FASTENERS

Powers Fasteners
2 Powers Lane
Brewster, NY 10509

www.powers.com
P: (914) 235-6300
F: (914) 576-6483

(440) 546-0304 Fax (440) 546-0306



Large selection of
light duty car & truck
Wheel Nuts



info@glparts.com www.glparts.com

Solon Belleville Springs®
Solon Flange Washers®
Solon Disc Springs®

**Buyer's
Choice**



www.solonmfg.com



SOLON 800-323-9717
MANUFACTURING CO. 440-286-7149
Belleville Springs and Industrial Controls Chardon, Ohio

DISTRIBUTOR NEWS

The Women in the Fastener Industry (WIFI) will have a 4-woman panel for the June 15 meeting at the **Fastener Tech Show 2011**.

Becky Moujournos is President and Owner of American Fasteners and Components and has recently become the President of the Midwest Fastener Association; Kimberly Kaindl is Director of PR and Marketing for Aztech Locknut; Julee Mortensen is with Fastener by Design in sales and Ruth Dowling is Vice President of Materials with Heads and Threads.

These 4 women bring a lot to the table in the way of experience, involvement and history in the Fastener Industry. We will have networking session after our panel discussion.

WIFI meeting at Fastener Tech '11 will be from 8 am to 10 am, June 15, 2011.

* * *

To remember the life of Edith Cameron, a pioneering woman in the fastener industry, the Edith Cameron Scholarship Fund has been created by **WIFI (Women in the Fastener Industry)** to provide educational opportunities and trade show experience to women in the fastener industry.

Edith Cameron's life and career dates back to Franklin D. Roosevelt's term in office. During WWII she played a key role in the metals industry, and was cleared to work on the Manhattan Project, the U.S. government's top-secret program to develop the atomic bomb. During this time, Cameron was put in charge of the national nickel allocation. Known to those in the industry as a character and an extraordinary person, Edith Cameron was inducted into the Fastener Hall of Fame.

"We will always think of Edith as a role model, trail blazer, and a true fastener woman," said Pam Berry Warren, a founder of WIFI, and co-owner of Advance Components. "We are pleased to establish this fund in her honor."

To celebrate Edith's life donation checks can be made to Women in the Fastener Industry (Edith Cameron Scholarship Fund) and mail to: *Mary Lou Aderman, The Aderman Co., Inc., P.O. Box 2571, Naperville, IL 60567-2571.*

Memo to Purchasing

REGARDING: **SPECIALS** and **NON-STANDARDS**

Eastwood Manufacturing can supply any type of fastener in any type of material normally in three weeks or less.

SPECIFICATIONS: All ASTM, SAE, ISO METRIC, most Military and Federal including Mil-S-1222

CAPABILITIES: #5 through 3" diameter
Bolts, Nuts, Studs, Screws, Sockets, Pins and Washers

MATERIALS: All materials are available

We have made parts from the following within the last year:

Stainless Steel

302

303

304

304L

309

310

316

316L

317

317L

321

330

347

410

416

420

422

430

431

440

501

17-4 PH

Alloy 20

Nitronic 60

AL6XN

904L

254 SMO

2205

304 SH

316 SH

Nickel Alloys

Nickel 200

Inconel

Incoloy

Monel 400

Monel 405

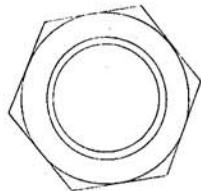
Monel 500

Hastelloy

Waspaloy

MP35N

Alloy Steels (various grades) • Carbon Steel • PVC, Teflon
Aluminum • Titanium • Zirconium • Tantalum



EASTWOOD MANUFACTURING
6825 Breen Street • Houston, TX 77086
(281) 447-0081 • FAX (281) 447-0098

Fastener Specialists

PWFA - 10842 Noel Street, #107 • Los Alamitos, CA 90720 • 714-484-4747 • Fax 562-684-0695 • www.pac-west.org

PACIFIC-WEST FASTENER ASSOCIATION

PAC-WEST ANNOUNCES SECOND MEL KIRSNER MEMORIAL GOLF OUTING

As an integral part of the fastener community during his life, Mel Kirsner earned the respect and admiration of everyone involved in the fastener industry. Mel started in the industry in 1958 and founded Pell Mell Supply in 1963. During his career he was also a partner in Fresno Bolt, Nevada Bolt & Nut, Non Ferrous Manufacturing, Bolt & Nut Export, Action Value & Fitting and Centennial Fastener.


As a founding member of the Western Association of Fastener Distributors, Mel valued not only traditional education but also the shared knowledge and experience of those around him. Mel's love of history and respect for those who came before lead him to an impressive collection of artifacts and memorabilia. In 2000 the collection had grown so vast Mel decided to share it with everyone and opened Mel's Fastener Museum. Heartbreakingly the 2003 wild fires in Julian, CA destroyed the museum and the collection was lost forever.



Upon his death Mel performed one more act of generosity for everyone in the fastener industry. In his will he left a generous endowment to what is now the Pacific-West Fastener Association scholarship program. The association now holds an annual golf outing in Mel's name to benefit this program.

On Friday, May 6, 2011 the Pacific-West Fastener Association will hold the second Mel Kirsner Memorial Golf Outing at Westridge Golf Club in La Habra CA.

To register or become a golf sponsor visit the association's web site, www.pac-west.org. Keep the Kirsner name alive in the fastener industry!

For more information about Pac-West and its activities, contact Vickie Lester, CAE, executive director, 10842 Noel Street, Los Alamitos CA 90720, phone 877-606-5232, fax 877-607-5232, email info@pac-west.org or visit www.pac-west.org. 

NAW - 1325 G. Street, N.W., Washington, DC 20005 • Tel: 202.872.0885 • Fax: 202.785.0586 • www.naw.org

NATIONAL ASSOCIATION OF WHOLESALER-DISTRIBUTORS

N.A.W. ELECTS 2011 OFFICERS *Dennis Hatchell of Alex Lee Inc. Takes Helm as NAW Chairman*

Members of the National Association of Wholesaler-Distributors (NAW), during the association's Executive Summit in Washington, DC, this week, elected as **Chairman of the NAW Board of Directors Dennis Hatchell** of Alex Lee Inc., headquartered in Winston-Salem, NC.

Mr. Hatchell succeeds Robert Taylor of Do it Best Corp., headquartered in Ft. Wayne, IN. Mr. Taylor will remain active on the NAW Board as Immediate Past Chairman.

Says Mr. Hatchell of his new post, "Alex Lee has been an NAW member for several years and we've benefited greatly from the many products and services that NAW offers. It is my honor to be elected to serve NAW as its new Chairman. I look forward to working with NAW in 2011 and contributing to its ongoing vital work for our industry." Alex Lee Inc. is also a member of the Food Marketing Institute, the International Foodservice Distributors Association, and the Global Market Development Center.

The following wholesale distribution industry leaders also were elected as NAW Officers for 2011:

Chairman-Elect Mark Kramer

Laird Plastics, Boca Raton, FL

Laird Plastics is also a member of the International Association of Plastics Distribution.

First Vice Chairman, Roy Vallee

Avnet Inc., Phoenix, AZ

Second Vice Chairman, Patrick Larmon

Bunzl Distribution USA Inc., St. Louis, MO

Bunzl Distribution USA Inc. is also a member of the International Sanitary Supply Association and the NPTA Alliance.


Secretary, Dan Blaylock

Adams-Burch Inc., Landover, MD

Adams-Burch Inc. is also a member of the Foodservice Equipment Distributors Association, the International Sanitary Supply Association, and the NPTA Alliance.

Dirk Van Dongen

National Association of Wholesaler-Distributors, Washington, DC

Completing the 2011 NAW Board of Directors are Chairman of the NAW Association Executives Council (AEC), David Cotter of the Textile Care Allied Trades Association; Chairman-Elect of the AEC, Mark Allen of the International Foodservice Distributors Association; and Past Chairman of the AEC, Joseph Thompson, Jr. of Thompson Management Associates, LLC, an association management company that manages The Association for Hose & Accessories Distribution, the International Sealing Distribution Association, the Security Hardware Distributors Association, The FPDA Motion & Control Network, and the Wholesale Florist & Florist Supplier Association. 

Premium-quality fasteners for every construction need.

STRONG-POINT[®]

Get the Point. Strong-Point.



For the really important jobs, don't settle for anything less than Strong-Point fasteners – the brand construction professionals trust.



INTERCORP 
www.strong-point.net

Los Angeles 800.762.2004
Dallas 800.558.7222

Chicago 800.533.9669
Portland 800.434.5606

Atlanta 800.822.9690
Houston 800.558.7222



Cable Tie Express, Inc.

15470 Endeavor Drive, Noblesville, IN 46060

888-603-1233 - Fax 800-395-1233

Email: sales@cabletieexpress.com

Website: www.cabletieexpress.com

CABLE TIES 101

Do you get excited about Cable Ties? If you have ever met my business partner Char Cooper, then you know when the subject turns to cable ties, she gets excited and is all smiles. Although Char and I have sold "steel" fasteners in past years, we have really enjoyed selling "plastic" cable ties and associated wire management products the last 18 years.

Each of us in the fastener industry instinctively understands the differences between steel and plastic products. But there are aspects of Nylon 66, the material used in the manufacturing of cable ties that should be considered when quoting, purchasing, and storing Nylon 66 product.

The basic function of a cable tie is to strap, bundle or secure wires, tubing, and a host of other products. When you think of cable tie applications, your thoughts may turn to non-critical applications. All of us have seen cable ties behind our desks bundling wires or at gas stations holding up advertisements for various products. There are also critical applications for ties such as the bundling of wire harnesses used in the aerospace, appliance, and a host of other industries.

Whatever the application, it is important to be aware of the basic characteristics of the Nylon 66 material used in cable ties that impact their performance. There are other "plastics" used for extreme or unique environmental cable tie applications but most cable ties you will be asked to provide will be manufactured with Nylon 66 material.

Nylon cable ties are injection molded parts and can be manufactured in high volumes, economically, and with consistent quality. Nylon also has a high strength to weight ratio in addition to its excellent non-corrosive



[ABOVE] Tony Van Hoozer and Char Cooper, Owners
[BELOW] The Cable Tie Express Team (left to right),
Jacob Rissot, Jeanne Wise, Brooklyn Hanson,
Alyssa Arnett, and Doug Andrews



characteristics. Nylon cable ties can be installed with or without special equipment, quickly, consistently, and efficiently. Although a variety of manual and automatic setting tools are available, most cable ties are set without the use of tools. After cinching the tie, the remaining strap or tail is usually removed with a standard pair of cutters.

It Is "In The Bag"

Cable ties are bagged in standard quantities of 50, 100, or 1000 pieces per bag. However, cable ties are sealed in bags for more than convenience. Nylon 66 is a Hygroscopic material that tends to absorb or lose moisture

depending on the environmental conditions. With Nylon 66 cable ties, this can impact performance. As a cable tie's moisture content changes, its strength and ductility varies.

As noted earlier, cable ties are manufactured by an injection molding process. A cable tie right off the injection molding machine can be referred to as "dry-as-molded". At this point a tie is at its strongest but most brittle stage. Manufacturers must improve its ductility in order for the tie to clamp consistently and eliminate breakage during the setting process. They do so by adding a specific amount of moisture to each bag of cable ties before sealing. Ductility is increased with a minimal loss of strength. By the time our customers receive their cable ties, all moisture has been absorbed and the product is ready for use - ductile and yet strong. In an effort to maximize the overall performance of all nylon cable ties when being installed in extreme cold and dry winter conditions, we are working with our supplier and testing has begun on a modified Nylon 6/6 blend.

please turn to page 157

OUT OF THE AMERICAN WEST...

MAR-BRO LEADS THE WAY IN STANDARD & SPECIAL SCREWS

MAR-BRO MANUFACTURING INC., WITH 30 YEARS OF COLD HEADING EXCELLENCE IS PROUD TO ANNOUNCE THE NEW PRODUCTION OF MILITARY STANDARDS, M.S. AND N.A.S. SOCKET HEAD PRODUCTS WITH FULL TEST REPORTS AT NO ADDITIONAL CHARGE. ALL MATERIAL WILL BE D.F.A.R.S. COMPLIANT.

ASK ABOUT OUR WIDE RANGE OF PRODUCTS INCLUDING:

NEW PRODUCTS

**HEX FLANGE SCREWS
12 POINT FLANGE SCREWS
PENTA FLANGE BOLTS
HEX HEAD CAP SCREWS**

SIZE RANGE

**INCH AND METRIC
#00-5/8 DIAMETER
M1.6-M16 DIAMETER
LENGTH UP TO 8"**

NEW MATERIALS

**I N C O N E L [®]
A 2 8 6 & 1 7 - 4 P H
1 8 8 S T A I N L E S S , 1 2 5 K S I M I N .
A S T M A 1 9 3 C L . 1 & C L . 2**



**M A R - B R O M A N U F A C T U R I N G I N C .
5 7 1 7 W . W A S H I N G T O N P H O E N I X , A Z . 8 5 0 4 3
T E L : (6 0 2) 2 7 8 - 8 1 9 7 F A X : (6 0 2) 2 6 9 - 1 2 3 5**



**ACCREDITED
TESTING CERT #1272.01**

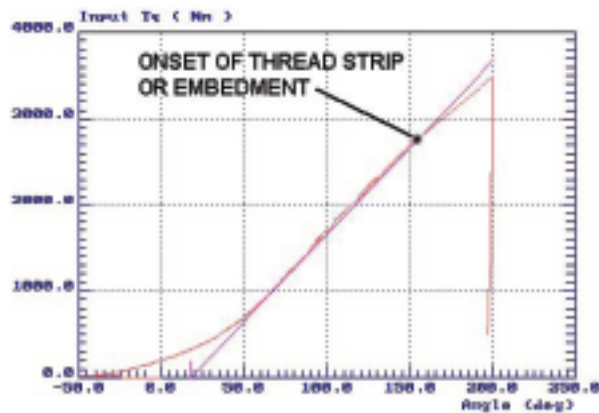


Figure 10. Test Plot of Fastener with Stripped Threads

In service, thread strip failure can be progressive in nature, gradually transferring the load from thread to thread. Loss of preload due to thread strip can occur over many hours or days and is cause of fastener loosening that is often difficult to diagnose.

7. Embedment or Loss of Preload

The release angle method has been successfully used to study fastener-loosening problems. The basic procedure involves recording and analysis of the torque-angle signatures for tightening and then loosening the fasteners that are to be tested.

First the torque-angle-tightening curve is plotted, the elastic origin is located, and the amount of angle of turn from the elastic origin is determined. After the assembly has been allowed to relax, for example, to sit overnight or run on a dynamic field test, the fastener is loosened and the loosening curve is analyzed. The release angle is determined, compared to the tightening angle, and if not equal, evaluated to see how much tension was lost by relaxation or loosening.

In one release angle study, a fastener had a tightening angle of 120 degrees. After 10-12 hours, the release angle was 20 degrees. The manufacturer was already aware there was a major problem because the parts were literally falling apart somewhere between the assembly factory and the auto plant where they were delivered for final assembly in vehicles. The signature analysis study showed that creep or relaxation in the threads was causing an approximately 80 percent loss in clamp force over a 12-hour period. The release angle method provided a quantitative answer as to the amount of clamp force lost, and clearly showed that the parts needed to be redesigned.

The release angle method is particularly valuable for studying short grip length fasteners holding composite or plastic parts. These parts are generally too small to allow for use of strain gages or ultrasonic stretch measurements to confirm fastener preload.

For these applications, a torque-angle signature curve for tightening is recorded, then the parts are put in an environmental chamber and load/temperature cycled.

Following the test load cycle the release angle

signature is recorded. Analysis of the release-angle signature in comparison to the tightening signature is used to directly estimate the percentage of initial of clamp load lost due to embedment or creep of the plastic part in response to applied loads or temperature cycles. By changing geometric shapes and washer size, the effects can be quantitatively measured and compared. Refer to Section 10 for details on the M-Alpha audit method that can be used along with the release angle method to help audit relative fastener tension values.

8. Estimating the Angle-Tension Coefficient

A number of different methods can be used to determining the angle-tension coefficient for the bolted joint. A basic assumption is that as the fastener is turned to develop preload in the joint, the fastener stretches and the clamped parts compress elastically according to the effective spring rates of the fastener and the clamped parts. After the angle-tension coefficient is determined for elastic clamping through analysis of the torque-angle signature, it is relatively easy to estimate the tension achieved when tightening beyond the bolt yield point.

The angle-tension coefficient for each bolted joint must be determined in order to establish the control parameters for torque-angle-tension control. By shutting off the assembly tool at a specified angle-of-turn after the threshold torque is attained, the scatter in achieved tension will be much less than the scatter observed for the same fasteners tightened with torque-only control. For this process to work reliably, it is necessary that the threshold torque level for starting angle counting be set at a level which is above the alignment zone of the tightening process. The curves in Figure 11 show how the process control limits are determined to achieve torque-turn-tension control for an application.

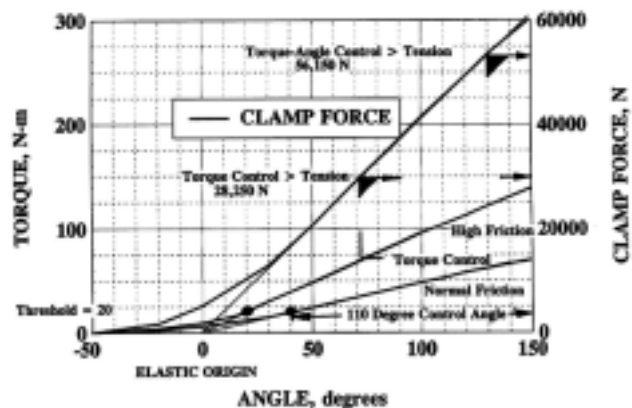


Figure 11. Torque-Turn-Tension Control Principles

After the installation process has been defined and implemented, methods must be specified to audit the results in order to verify that the process has achieved the desired fastener preload. Process audit procedures including the Release Angle measurement method and hand torque breakaway audits are presented later.

ZIP

MACHINE TOOL ACCESSORIES

"T" SLOT BOLTS, HEX NUTS, WASHERS, "T" SLOT NUTS, STUDS, WEDGES,
STEP BLOCKS, EXTENSION NUTS, CLAMPS, FLANGED HEX NUTS, EYE BOLTS

Essential Components for Speeding Up Production • Save Time and Delay

CARRIED IN STOCK • IMMEDIATE DELIVERY • NO MINIMUM • QUANTITY DISCOUNTS

ZIP MACHINE TABLE "T" SLOT BOLTS

FORGED FROM
C-1045 STEEL
CLASS 3 N.C.
FULL SMOOTH CUT THREADS
1" - 30" LENGTHS



3/8" - 1" DIA.

ESPECIALLY MADE
FOR MACHINE TOOL
TABLES. CANNOT
TWIST OR JAM
IN SLOTS.

GEORGE H. SELTZER & CO.

P.O. Box 26 • FOLSOM, PA 19033 • (610) 532-2322 • FAX (610) 532-3024 • www.zipbolts.com

TOLL FREE 1-800-445-4101 TOLL FREE 1-800-445-4101 TOLL FREE 1-800-445-4101

Serving Distributors with Quality, Service & Price For Over 70 Years

ALL SIZES AVAILABLE

Most sizes in stock for immediate shipment

100% Guarantee on all shipments



ACORN NUTS

High & Low Crown Acorn Nuts,
Hex Nuts, Panel Nuts, Jam Nuts,
Coupling Nuts, Special Nuts

Materials

Steel, Stainless Steel, Aluminum, Brass

1/4" - 12"

Special Sizes Made To Order

(Large & Oversized Nuts and Bolts Now Available)

Buy Direct and Save!

Made in America

Rippa Products, Inc.

4527 Renaissance Rd.

Calumet, MI 49913

Phone (906)337-0010 Fax (906)337-0505



Ford Saeks

Ford Saeks is a business growth expert who specializes in helping businesses find, attract and keep their customers through innovative integrated marketing and social media campaigns. He is a renowned keynote speaker, author, successful entrepreneur, and CEO of Prime Concepts Group Inc.

Learn more about Ford Saeks and his profit-producing resources at www.ProfitRichResults.com and www.PrimeConcepts.com

The Future of Your Business is in Your Hands... USING THE POWER OF SMARTPHONES TO GROW YOUR BUSINESS

If someone had told Alexander Graham Bell that one day his invention would evolve into a device that could turn your lights on and off, he would have taken your temperature with a mercury thermometer, which incidentally, in 1876, hadn't changed much in over 100 years.

Remember when cell phones first emerged? Chances are, you were just as cynical as Mr. Bell. You probably made that first call with a furrowed brow, skeptical to the possibility it promised. You were certain that your call wouldn't connect, or at the very least your voice would be overridden by static. Like the rest of us, your bulky cordless phone had conditioned you to only walk within a certain "range" to avoid disconnect. Then you made that first call... from an oversized bag-type cell phone and shazam... how cool was it to have the umbilical cord of your landline cut and the freedom to connect anywhere in cell phone range?

What started as a must-have device that didn't tie you down has now morphed into a texting, tweeting, multi-tasking productivity and entertainment gadget that offers a wide range of possibilities for you and your business.

The lightning-speed advancement of the Smartphone has left many companies scrambling to keep up with the technology and new opportunities. According to ComScore, there are 45 million Smartphones now active in the U.S. alone. Like social media, they are the new wave of communication and the only place they are going is into the hands of more and more consumers.

So, how can you capitalize on the growing popularity of this new technology? Here are four things you can start doing today related to Smartphone technology to increase brand awareness, build relationships and grow your business:

1. Text Message Advertising
2. Create a Smartphone App

3. Make your website Smartphone compatible
4. Engage mobile customers through social networks

Text Message Advertising

More people now use their mobile phones for texting, rather than making a phone call. Plus, most users have it attached to their hip; figuratively speaking. Imagine the impact of advertising to your target market via SMS (Short Message Service) text message; you have the opportunity to get their attention... anytime, anywhere. Smart marketers get creative with these campaigns and often include a chance for the recipient to win something by responding to the text. Other ideas include mobile coupons, event invitations, mobile alerts, and special promotions.

SMS text marketing works for virtually any industry, is relatively inexpensive, and allows businesses to create highly targeted campaigns. The first step in launching a text-messaging campaign is to find a company that provides subscriber lists and can distribute your ads. Search your favorite search engine for "mobile marketing", "SMS Text Marketing" or "SMS Advertising" and you'll get plenty of options.

Create a Smartphone App

Like most things, Smartphone apps have been created to solve a problem, increase productivity, offer an intrinsic benefit, or for pure entertainment. Apple's iPhone store alone has more than 150,000 apps available for download and users have downloaded more than 3 billion apps. The HTC and Motorola Droid, a.k.a, Android phones, also have millions of users and offer thousands of apps.

You don't need to be a member of the geek squad to capitalize on this trend; all you need is an idea for an app; there are plenty of companies who can help you develop an app for your idea for you to sell or offer for free.



Nothing Complex About Flexibility

FLEXTOP® LOCKNUTS

If you need a flexible solution to keep your threaded fastener tight, Flextop® Locknuts are the answer. This proven design is the ultimate all-metal locknut with the highest resistance to loosening of any reusable, one-piece nut.

- available from stock
- sizes #5 to 1½"
- full height/thin height
- steel/stainless steel
- reusability per mil-N-25027

LOCKNUT TECHNOLOGY INC.

351 S. Lombard Road • Addison, Illinois 60101
630.628.5330 • Fax 630.628.5331
Email: robert.motz@locknuttechnology.com



DISTRIBUTOR NEWS

Porteous Fastener Company is proud to announce Bruce Darling is back in the saddle!

After a short semi-retirement (1 year of working 32 hours a week), Bruce Darling is back at PFC, returning to his position as Vice President-Materials Management. Bruce has been active in the fastener industry for over 43 years. His career began with BOSCO Fastening Service Center in Dallas, Texas. Twenty years later he joined Porteous Fastener Company and moved his family to California. He made over 35 trips to the orient and has made over 1500 visits to more than 400 factories or trading companies. The visits have taken him to Canada, China, India, Japan, Korea, Malaysia, Mexico, Singapore, Taiwan, Thailand, Vietnam and manufacturers in the USA.

Bruce has spoken at 25 regional fastener association meetings, 6 appearances as a

speaker to the NIFS conventions in Las Vegas and Columbus and one to the TIFI convention in Kaohsiung. He was honored in 2006 to be inducted into the National Industrial Fastener Show "Fastener Hall of Fame".

Bruce is not sure what the future holds, but just having returned from a two day trip to Carson, he knows it will happen fast. There is a lot of work to do and it's exciting to again be on the "A" team. Bruce says he looks forward to seeing and talking to many of his vendors and industry friends again.

Founded in 1966, Porteous Fastener Company is the largest privately held importer/master distributor of construction and industrial fasteners in the country, selling only to distributors.

For more information about PFC, please visit www.porteousfastener.com or send us an email to info@porteousfastener.com.



Jim Bain

James S. Bain, MBA, is an author, speaker, consultant, and coach. He is the founder of the Falcon Performance Institute, a consulting and corporate training firm focused on productive performance. Look for Jim's soon to be published book, "Never Pass on a Chance to P- A Roadmap to Peace in Your Life." To hire Jim or find out more about the Falcon Performance Institute, please visit www.fpiteam.com or call 352-854-4015.

WHERE IS THE MONEY? (psst...the government has it!)

Success in business is all about finding the money. In today's economy, the private sector is reeling, but governments, both federal and state, seem to have money to spend and the desire to do so. The problem is that being a contractor or vendor to the government is a tough club to join. If you jump through the right hoops, and if you qualify, there are plenty of opportunities, but dealing with the bureaucracy can be a mind blowing experience.

In the fiscal year 2008, the federal government spent \$550 billion for contracted goods and services. That's a lot of money! Twenty three percent (23%) went to small businesses. In fact, the federal government is the largest single buyer of goods and services in the U.S. The bottom line is that governments have money to spend. In addition to the more traditional "annual contracting process," special programs such as the American Recovery and Reinvestment Act (ARRA or the Stimulus Program) are pumping huge sums of money into the American economy. And, because not every business is qualified, the field can be a little less crowded. It sounds like a great place to do business, and it can be. But, beware! It isn't for everyone.

To get started working with government follow these basic steps:

1. Get qualified. If your business qualifies for one of the many socio-economic disadvantaged business programs such as the Minority Business Enterprise

(MBE), the Women Business Enterprise (WBE), or the Disabled Veteran Owned Enterprise, you should certainly seek those designations. The numerous set-aside programs especially for those groups can give you a huge leg up with competing for contracts. If you aren't one of these special groups, you must still get qualified. Start by getting registered with the Central Contracting Registry or CCR. Then get entered in the Dynamic Small Business Search guide. Finally, go to the Fed Biz Opps web-site at www.FBO.gov to search for those



opportunities that best match your goods and services. All of these contacts can be made through either the Small Business Administration (www.sba.gov) or the General Services Administration (www.gsa.gov).

2. Be patient. As compared to the private sector, government agencies have many more rules to follow and levels of approval before any decision can be made. Remember that the government has the extraordinary challenge of

dealing with the change of leadership that occurs every four or eight years.

Imagine a huge company in the private sector that has not only a new CEO every four years, but a completely new executive group with new ideas, new agenda, and the desire to make their mark.

3. Become familiar with the cultural differences in government. Unlike the private sector where the budget is a guideline, government decisions on spending are restricted by an intricate budgeting process. If the government can't afford something in this fiscal year,

ZnCoat™

NEW Plating Alternative

ZnCoat takes surface treatment to the next level of performance and quality

- Offers 4x improvement in corrosion resistance vs. commercial zinc/trivalent plating
- Does not promote hydrogen embrittlement
- Is RoHS and REACH compliant
- Offers improved bi-metallic corrosion protection
- Thin coating - compatible with standard thread allowances
- Licensed process for consistent quality
- All of these features at **no extra cost**

ASTM B117 Salt Spray
Test Comparison

ZnCoat @ 240 Hours SST



Zinc Plating @ 72 Hours SST



Exclusively Available Through:

CURTIS Metal Finishing Company

Sterling Heights, Michigan • Machesney Park, Illinois

Contact Brian Lowry @ (586) 939-2850 or brianl@curtismet.com

info@ZnCoat.com

ZnCoat.com



ZnCoat™ is a pending trademark application of NOF Metal Coatings North America Inc.

SOUTHEASTERN FASTENER ASSOCIATION MARDI GRAS "SEFA STYLE" MARCH 8-10, 2011



METRIC & BRITISH HARDWARE

Make British Metrics your source for Super Duplex, BSW, BSF and Metric Fasteners, Hydraulics, Pneumatics, Seals, O-rings, Electrical Adaptors, Hazardous Duty Glands

Call for hard to find European and non-standard items.

Now shipping our 1300+ page fittings catalog



P.O. Box 399 • 150 Airport Drive, Unit #6 • Westminster, MD 21157
Phone 410-857-3990 • Fax 410-857-3766 • www.britishmetrics.com
Call Toll-Free For a Free Catalog

1-800-762-5134



British Metrics

P.O. Box 399, 150 Airport Drive, Unit #6, Westminster, MD 21157
Tel: 1-800-762-5134 or 410-857-3990 Fax 410-857-3766
www.britishmetrics.com

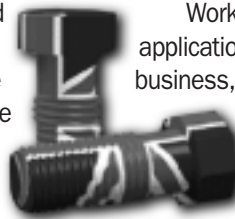
BRITISH METRICS OWNER RETIRES...

British Metrics, which has been owned and operated in the US since 1987, is now under new ownership.

Previous Owner, Martin Clark, has decided to retire and enjoy some of the finer things in life, and has sold the company to his long-term employee and right hand man, Mark Benedict.


Mark Benedict joined British Metrics in 1997 as a warehouse manager. Having 9 years in High Tech Machining and very precise quality control regimens, Mark's Quality Control Expertise and strong mechanical background soon earned Mark a promotion to General Manager, and he soon became British Metrics top Sales Person.

His mechanical and QC background helps Mark understand the customer's needs better, whether it be standard product or total custom parts that are made to order. His ability to help Engineers understand the difference between the European specs and American specs and to make the projects go a bit easier has been a great benefit for both our Customers and Suppliers.



Working throughout the years to learn the products, applications and day-to-day procedures of managing the business, made Mark a great candidate for Martin to offer the company to. So, in January 2011, new ownership was turned over to Mark Benedict and so begins a new chapter in the life of British Metrics.

British Metrics has grown from a strictly metric and British fastener house to covering all products European for the industry.

We now stock all the DIN and British fasteners as before as well as 10.9 socket heads, Oilite Bushings, power Transmission Parts, Hand Tools, O-rings and Oil seals, Taps and Dies, full line of Hydraulics and Pneumatic fittings, adaptors, tubing, BSP Pipe fittings, DIN/ISO/JIS flanges in steel and stainless steel with custom materials available, 90/10 Copper Nickel fittings and pipe for the Marine industry, Super Duplex bolts and fasteners made in the UK, and anything else that our customers need from Europe. 

FASTENER CROSSWORD PUZZLE

Test Your Knowledge!

ACROSS

1. Screw-and-washer assemblies
5. Slender wire nails with small barrel heads
10. ___ bolt
14. One worshipped in a mosque
15. At ___; haphazardly
17. Stopwatches
20. Fastener with a double hexagon top
23. Marry
24. Satellite laser ranging; abbr.
25. "___ Radio"; 1982 TV sitcom
26. Glowing coal fragment
28. Takes too much, for short
29. Surface defect
31. Exchange
34. AP's competitor
35. ___ War; noted racehorse
36. Jacuzzi
39. Clock numeral
40. ___ Premier
41. Six-sided Allen head fasteners
48. Direction indicator
49. ___ the occasion; meet a challenge
50. ___ nuts; those that durably cap open ends
54. IRS agent
55. Part of USSR
58. And so forth; abbr.
60. Plastic wrap
61. Utter
62. Have debts
63. Appoint
65. Indignation
67. Panicky
70. Enchants; draws
72. Lament; regret
75. Tidy
77. Gore and Pacino
78. Fastener surface depression
81. "I Am... ___"; Neil Diamond song
82. Female deer
84. Greek letter
86. Manny ___, once of baseball
87. Singer Eydie
88. Ponders things gloomily
90. ___ bear

91. Fastener threaded only at the end
97. Cafeteria diner's item
100. Actor Holbrook
101. Hearing organ
102. Prefix for cast or gram
103. Large Internet service provider's letters
104. ___ boom; sound-barrier breaking noise
106. Young bear
107. ___ head; fastener top style
110. Cerebral ___
112. 1962 No. 1 hit single for Tommy Roe
117. Pigeon's sound
119. Barcelona bear
120. Two types of nut accompaniments
125. Slow crawlers
126. Well-mannered
127. Sea duck
128. Japanese rice drink
129. Family car
130. Ruby and Sandra

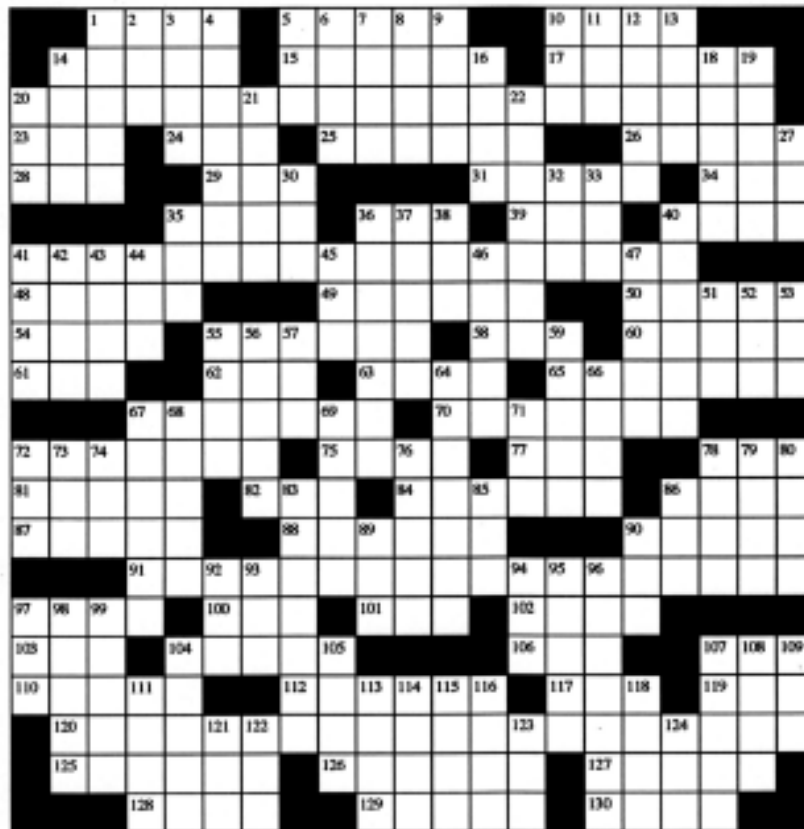
DOWN

1. Toboggans

3. Dallas hoopsters, for short
4. Clear wood finish
5. Harlem address
6. Picnic spoiler
7. ___ Domini; A. D.
8. Old pesticides
9. NYC artists' area
10. Standard; abbr.
11. It's, to a poet
12. Game show host
13. This will curl your hair
14. Stunned with wonder
16. Veal or venison
18. Refute an argument
19. Used a broom
20. Cube root of eight
21. Practical joke
22. Orange-colored fruit
27. ___ de Janeiro
30. "The Raven" poet
32. Broadcast
33. ___ fin; excess material on a fastener
35. Do a lawn chore
36. School subject
37. Noodles
38. Hairy as an ___
40. Acting awards
41. Sombreros & bowlers
42. Columnist Bombeck

43. Doctor's negative
44. Family member
45. Prefix for angle or cycle
46. ___ structural rivets
47. Squander
51. ___ pro nobis; pray for us
52. Dustcloth
53. WNW plus 90°
55. Fly high
56. Possessed
57. 11/11 honoree
59. Was able to
64. Toro's opponent
66. ___ Major; Great Bear constellation
67. Like a poor excuse
68. Roper's event
69. Still; sluggish
71. Blood analysis site
72. Use a shovel
73. That, in Spain
74. Golf hole average
76. Island greeting
78. "The Sport of Kings"
79. European lang.
80. Small pie
83. Tapering pillar
85. East Lansing univ.
86. Crowd
89. Suffix for a carbohydrate

90. ___-load; residual in a blind rivet after setting
92. Actress Margaret
93. Okla.'s neighbor
94. Maj.'s superior
95. Playing card
96. Nudged
97. ___ bolts
98. Highways
99. ___ wrench
104. Middle East nation
105. Fellow
107. Flag holders
108. Study of the stars & planets; abbr.
109. Denials
111. Spanish Mmes.
113. Baseball's Slaughter
114. Just sitting there
115. ___-back; relaxed
116. Dog in "The Thin Man"
118. Off-Broadway award
121. Sort; variety
122. TV drama series
123. Barbie's beau
124. "___ to Billy Joe"



© Puzzle Features Syndicate



Tamper-Proof
Screws, Inc
Paramount, Ca

It's Good in Stock!
Over 100 Million Screws



Call: (562) 531-9340

Fax: (562) 531-2464

TORX and TORXplus Are Registered Trademarks of Camcar Textron

The Industry Leader in Security Fasteners for over 35 Years

- * TORX
- * TORXplus
- * Security Hex Sockets
- * DRILLED SPANNERS
- * CAMCRETE
- * ONE WAY
- * Orders received by 4:00PM PST Shipped that day
- * Available in INCH & METRIC
- * We stock over 100 million screws
- * Made in the USA
- * Complete Manufacturing Facility
- * Specials-Heading, Thread Rolling- Drilling



Tamper-Proof
Screws, Inc
Paramount, Ca

8808 Somerset Blvd. - Paramount, CA 90723

www.tamperprufscrews.com
tamperpruf90723@sbcglobal.net

WORLD HORIZONS LTDW
R
L
D

H
O
R
I
Z
O
N
S

L
T
D**Mill Shipments &
Stock and Release Programs**

Our Specialties Include:

Nylon Cable Ties
White Boxes For Repackaging
Fasteners
Anchor Products
Just To Name A Few

You can direct your inquiries to:

954.943.4254 (phone)

954.943.6662 (fax)

info@worldhorizonsinc.com (email)**SOLD TO DISTRIBUTORS ONLY****DISTRIBUTOR NEWS**

Laboratory Testing Inc. (LTI) of Hatfield, PA recently announced that three employees have become supervisors at the testing and calibration laboratory. Sherri Scheifele, Mike Hiller and Mike Sagel have assumed the new supervisory responsibilities as additional employees were hired to support the company's sales growth.



Sherri Scheifele of Coopersburg, PA has been assigned supervisory responsibilities in the Quality Assurance Department at LTI. She has been with Laboratory Testing Inc. for 20 years, and has held the position of Q.A. Specialist for the past five years. She will continue to assist with audits, maintain the quality policies and manuals, and assist customers with quality matters. Scheifele is a Certified Quality Auditor (CQA) under the American Society for Quality (ASQ).



Mike Hiller of Quakertown, PA has been with LTI since 2007 as a Field Technician in the Calibration Department. He has handled all quoting and calibration services performed in the field. With his promotion to Field Supervisor, Hiller will have the added responsibilities of supervising and training field technicians, as well as introducing electrical and temperature calibration services to customers of Laboratory Testing Inc. Hiller is a graduate of Millersville University with a B.A. degree in Technology Education and is currently attending DeSales University for his M.B.A.



Mike Sagel of Perkasio, PA joined Laboratory Testing Inc. as IT Administrator in 2008. He will continue to maintain the computer network hardware and software and the phone system, while assuming supervisory responsibilities. Sagel has a B.S. degree in Computer Information Systems Management from Delaware Valley College.

For more information visit [Laboratory Testing at www.labtesting.com](http://LaboratoryTesting.com) or contact them at sales@labtesting.com or call 800-219-9095.

DISTRIBUTOR NEWS

Fascomp, a leading Global Manufacturer of electronic hardware, has strengthened its sales efforts by appointing Kristen Cosciello as Sales Manager. Kristen brings a wealth of knowledge will work out of the Connecticut facility.



"We are so fortunate to have Kristen join us. She brings with her many years of sales, marketing and management

understanding in our marketplace, which will help to fuel our growth" – Mark Georgia, President

"I am excited to join the team here at Fascomp Electronic Hardware. Their aggressive approach to market is refreshing and exciting." – Kristen Cosciello

Fascomp's product line include Spacers, Standoffs, Handles, Jackscrews, Thumb Screws, Captive Screws, Shoulder Screws and other made to print screw machine products.

For more information or samples contact Fascomp today. Connecticut Tel: 203-720-1146 Fax: 203-720-1156; Florida Tel: 407-226-2112 Fax: 407-226-3370 or at www.fascomp.com.



NATIONAL THREADED FASTENERS, LTD.

www.flangescrews.com

phone: 440.350.1430 | fax: 440.350.1676
3705 Lane Rd. Perry, OH 44081
sales@flangescrews.com

KNOWLEDGEABLE CUSTOMER SERVICE

LARGEST INVENTORY IN NORTH AMERICA

SAME DAY / NEXT DAY SHIPPING

QUARTER KEG & PACKAGE QUANTITIES

BLANKET & MILL SHIPMENTS

VARIETY OF STOCK FINISHES

QUICK QUOTE TURN AROUND

BARCODED LABELS

LOW \$25 MINIMUM ORDER

FLANGE SCREWS

INCH

GRADE 5 HEX FLANGE SCREWS
GRADE 8 HEX FLANGE SCREWS
GRADE 5 SERRATED FLANGE SCREWS
GRADE 5 LARGE SERR FLANGE SCREWS
GRADE 2 FLANGE LAG SCREWS

METRIC

CLASS 8.8 DIN FLANGE SCREWS
CLASS 10.9 DIN FLANGE SCREWS
CLASS 10.9 JIS FLANGE SCREWS
CLASS 8.8 SERR FLANGE SCREWS

FLANGE NUTS

INCH

GRADE 5 FLANGE NUTS
GRADE 8 FLANGE NUTS
GRADE 6 FLANGE LOCKNUTS
SERRATED FLANGE LOCKNUTS
GRADE 8 SERR FLANGE LOCKNUTS
SERR LARGE FLANGE LOCKNUTS

METRIC

CLASS 10 JIS FLANGE NUTS
CLASS 10 JIS SERR FLANGE NUTS
CLASS 10 DIN FLANGE NUTS
CLASS 10 DIN FLANGE LOCKNUTS
CLASS 8 SERRATED FLANGE NUTS

THICK FLAT WASHERS

USS & SAE "NT" HARDENED
USS & SAE "NT2" HARDENED
SAE "NTX" HARDENED
EXTRA THICK FENDER WASHERS

PROUD MEMBER: NFDA, NCFA, MWFA



9. Release Angle Analysis

The complete analysis of a fastener involves looking at both the tightening and the loosening torque angle curves as the fastener is first installed and then loosened. These curves are studied initially in the elastic tightening region where the fastener has not gone beyond yield, such as the assembly torque-angle signature shown in Figure 12. When the fastener is loosened, a torque-angle-loosening signature, as shown in Figure 13, can be recorded. The release signature shows the release of the fastener stretch and also the release of the compression in the clamped parts. Analysis of this signature provides a direct method for verification of preload or tightness. First, the line tangent to the elastic release portion of the curve is projected to zero torque to locate the elastic origin. The release angle, measured from the point where loosening starts to the projected elastic origin, is a direct measure of the tension released from the bolted joint.

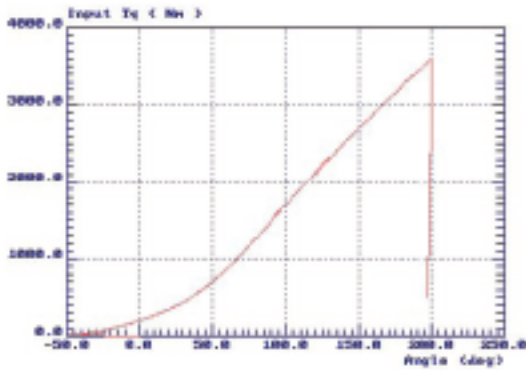


Figure 12 Torque Angle Signature

The tangent line must be drawn on the straight-line portion of the curve after the initial peak release torque due to static friction or thread-locking adhesive has been broken free. The starting point is the angle where initial loosening motion begins. The total release angle is measured from the initial loosening point to the projected elastic origin. Note that if a significant prevailing torque is present after loosening the fastener, the elastic origin must be located at the prevailing level, not zero torque.

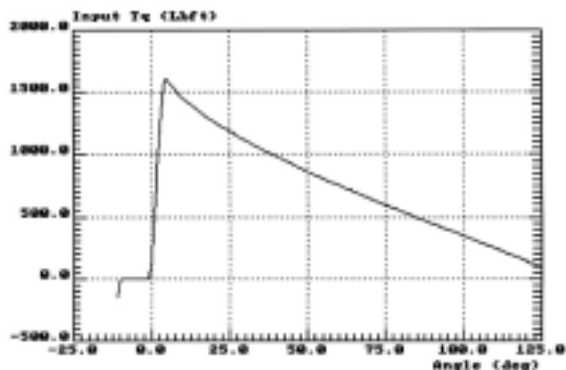


Figure 13. Loosening Torque-Angle Signature

The torque-angle signature shown in Figure 14 has been plotted as a M-Alpha Diagram with the tangent line, locating the elastic origin, drawn at 50 percent of the maximum torque to set the elastic tightening slope below the onset of embedment of the nut. The bolt is a M30 x 3.5 with strength Class 11.9. The corresponding clamp force signature, plotted as an F-Alpha (tension-angle) Diagram, confirms that the clamp force increases linearly with the angle of turn from the projected elastic origin. In the example shown in Figure 15, the elastic-tightening angle is approximately 125 degrees.

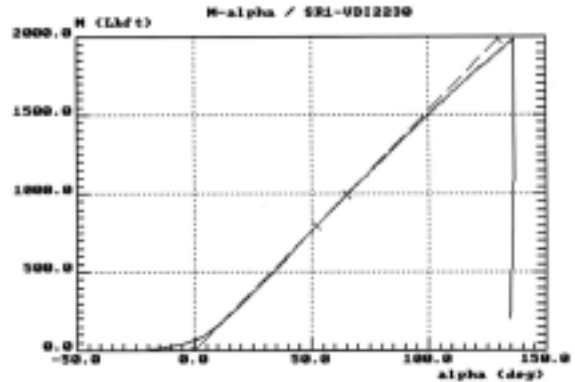


Figure 14. Torque-Angle Signature with Embedment

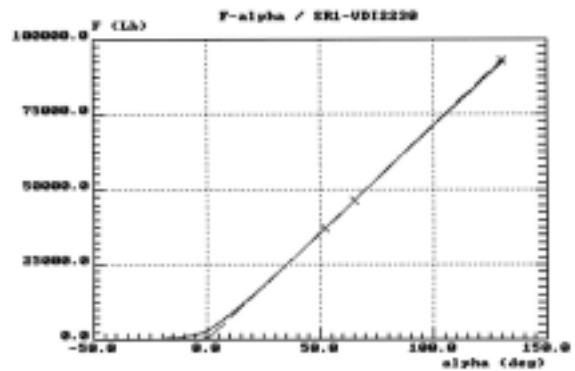


Figure 15. Clamp Force vs. Angle of Turn from Elastic Origin

Figure 13) also has a projected release angle of approximately 125 degrees. The F-Alpha Diagram (refer to Figure 15) confirms the fact that, even after embedment occurs, the clamp force increases directly in proportion to the angle of turn from the elastic origin. Similar to the analysis of added tension achieved after yield of the bolt, for embedment or thread strip, the backward projection to the extended tangent to the curve before thread strip or embedment is used to locate the effective tightening angle. Experiments with strain gage bolts or force washers, where the clamp force is measured along with the torque and angle during tightening, verify that this theory is correct for a given fastener. Figure 16 shows a release angle study performed on an automotive wheel nut. A tool with a torque and angle sensor connected to a transient recorder is used to loosen the nut, record the torque and angle values, and plot the data. The resulting printed

IDEAL SUPPLY, INC.

Illinois Branch: 11400 Kreutzer Rd., Huntley, IL 60142 Tel: 847-961-5900 Fax: 847-961-5300
 Virginia Branch: 624 Innovation Drive, Unit 101, Chesapeake, VA 23328 Tel: 757-548-8050 Fax: 757-548-8051
 Email: illidealsupply@aol.com Web: www.idealsupplyonline.com

IDEAL SUPPLY INC. IS QSLD RE-APPROVED


Ideal Supply, Inc. has recently received QSLD reapproval for Class 2 & 3 threaded fasteners by the Department of Defense. Ideal continues to expand their Monel and Stainless inventory to service their customers. They have developed into one of the nation's leading suppliers of Nickel Copper (Monel) fasteners in the US, providing commercial requirements to QQ-N-281/ QQ-N-286 and Military specifications to MIL-DTL-1222/MIL-S-1222H3, MS35311, etc. They also provide specials per print machined nuts in various materials.

Ideal's vast Monel fastener inventory is complete with full testing of each lot with finished product testing meeting the mechanical, liquid penetrant and mag particle requirements of Mil-Spec fasteners. They have implemented



a formal quality control system that meets and exceeds the requirements of MIL-I-45208A, MIL-STD45662A and inspection to MIL-STD-105E. Ideal's quality control departments provide complete product traceability for the finished product including the raw materials/heat number controlled by the lot numbers.

Their shipping department guarantees to ship stock items the same day or within 24 hours from two national locations. They are committed to providing unsurpassed service, shipping until 5pm Central and Eastern time.

Ideal looks forward to the opportunity of demonstrating their capabilities to your organization. To their loyal customers, Ideal look forward to continuing to strengthen your partnerships as they broaden their inventory to service your requirements during this economic slowdown. 



**ASTM F467/F468/MIL-S-1222H3/MIL-DTL-1222J/FF-S-86E
MS17828/MS17830**



IDEAL SUPPLY, INC.

New Corporate Office

11400 Kreutzer Road • Huntley, IL 60142

Virginia Office

624 Innovation Dr., Suite 101 • Chesapeake, VA 23320

FASTENERS

**MONEL 400, K500
SILICON BRONZE
651, 655**

**STAINLESS STEEL
304 & 316**

ILLINOIS

Ph. 847.961.5900

Fx. 847.961.5300

Email: illidealsupply@aol.com

VIRGINIA

Ph. 757.548.8050

Fx. 757.548.8051

Email: vaidealsupply@aol.com

ASTM B164/ QQ-N-281/ QQ-N-286

*****Domestic Monel/304SS/Naval Brass 464 Nuts*****

For Hex Head Caps, Socket Cap Screws, Set Screws, Flat Sockets, Machine Screws, Finished Nuts, Heavy Nuts, Jam Nuts, Flat Washers, Lock Washers, Nylon Insert L/N, Studs and Threaded Rod all to Industry Specifications.

MONEL® — Trademark of Inco Alloys



International Fastening Systems

85 Independence Drive, Taunton, MA 02780

Tel: 1-800-405-7964 Fax: 508-802-6395

Email: jglass@aceintl.com Web: www.aceintl.com


IFS - YOUR ONE-STOP RIVET SHOP!

IFS, Division of ACE International in Taunton, Massachusetts offers a wide variety of blind rivets, rivet-nuts & installation tools. Rivet styles include open end, closed end, multigrip & bulbex. Rivet-nuts are available in straight sided as well as knurled with multiple grip ranges. FAR & IFS installation tools hit the mark for reliability & competitive price points. RAC 180, KJ60 & the newly improved KJ45 are all industry standards, kept in inventory. A wide array of repair & maintenance parts are also stocked in Massachusetts with online schematics for easy identification.

In today's global market, IFS is proud to offer a smart mix of both domestic & imported rivets. It's essential to good customer service to have options whenever possible. IFS knows that excellent customer support to their



distributors carries on down the line to where the real sale is made – the customer's customer! It's the little things that make a big difference. Private labeling is available on any size box, low minimum order requirements, varied packaging quantities & styles. Bulk cases offer the best pricing advantage, but if your business is counter or consumer based a see through snap lid package is your best selling tool. Custom painting & ROHS compliance are just a few of the value adds that your customers will appreciate.

We know you have choices & so don't your customers. Our commitments to you help you keep your promises to them. Quality products, flexible packaging options, reliable tooling, & customer support are just a few reasons why IFS is the best choice by far. 

RE-EVALUATING YOUR COUNTER EFFORTS *continued from page 12*

For wall shelving heavy duty, double slotted wall standards can be integrated into a slat wall, grid wall or pegboard design to store and merchandise boxed products. These can be complemented by baskets; bins and other add on items to "tell a story" about the products available, how they are used and available accessories...in the customer's context. For example, a recessed square head fastener displayed with a mounting system can educate customers in what is required to install a vandal (and other tradesmen) resistant installation.

Keep in mind that while customers come in looking for a specific need they are often open to a useful add on. While they might be shopping for a new "variable speed drill, there is also a potential sale of expansion fasteners, concrete screws, bits, a tool box, holster and other accessories. The wall system should be designed to accommodate all these product categories in a coherent easily accessible manner. In addition, if you offer products from several competing vendors display them together by family or category, not by the vendor's name. Your wall displays should always

address the customer's needs not the vendor's advertising campaign. Vendors are not the customers.

Floor Displays

The easiest way to make a counter look like a junk shop is to use floor displays from multiple vendors with no overall plan for either placement or restocking.

Nothing looks worse than a depleted "spinner" taking up space and obstructing traffic.

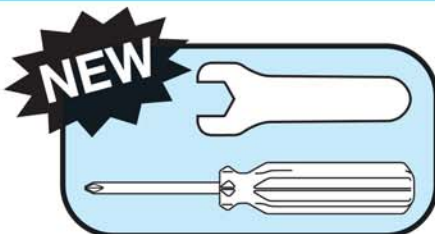
Neat, orderly rows of professional display gondolas with end caps (sections turned at right angles at the ends of each aisle) are an integral design element of a good Fastener Distributor showroom. Whenever possible run the rows so that the counter personnel can see down the aisles, make eye contact with the customers and help assist with selections.

End caps are the most important displays and should be stocked with a rotating selection of product. They should feature seasonal or special products, especially those suitable for an add on sale. Consumers are attuned to expect the end caps to emphasize special pricing or considerations. The model for this is at every

...signs are the silent salesman that describe the products, direct the customer and eliminate confusion.

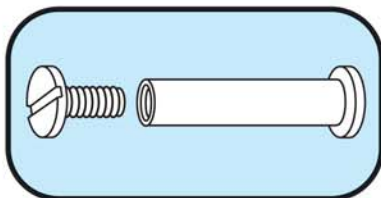
PICK A "NICHE" ... FOR BIG SAVINGS!

Huge Inventory and Wide Selection
at Guaranteed Price Savings.



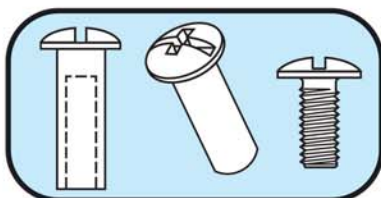
ECONOMY TOOLS (Disposable Style)

Light duty, single-use style wrenches and screwdrivers. A wide range of sizes and styles available.



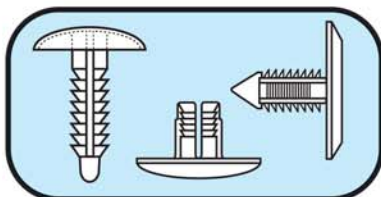
SEX SCREWS (Male & Female)

Also known as Binder Posts, Chicago Screws. 1/8" thru 6" long & extensions. Other sizes available. Aluminum, Brass & Anodized Black



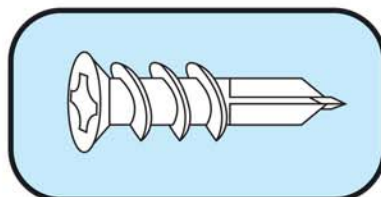
SEX BOLTS (Male & Female)

Also known as Barrel Bolts, Barrel Nuts. Combo head. 1/4" thru 2" long & extensions. Other sizes available. Steel zinc.



X-MAS TREE / RATCHET CLIPS

Nylon finned push-in fasteners. Exact matches to several manufacturers' part numbers made on our own multi-cavity tools. Special colors available.



ZIP-IT® WALL BOARD ANCHORS

Genuine USA made. Self drilling drywall anchors. #6 - #8 screw sizes available in both nylon & zinc alloy.

Lowest prices anywhere. Only \$75.00 minimum.

Call or fax for a FREE catalog, sample kits and/or manufacturers' cross reference number chart.



K INTERNATIONAL, INC.

3982 Ryan Road • Gurnee, Illinois 60031
800-323-2389 USA • Fax: 847-623-0105
www.kinter.com

NEFDA - 30 Hedgerow • Wethersfield, CT 06107 • Phone: 860-529-4539 • email: jfs3@cox.net • www.nefda.com

NEW ENGLAND FASTENER DISTRIBUTORS ASSOCIATION

DR. JEFF DIETRICH ADDRESSES NEFDA MEMBERSHIP

As part of its purpose to provide a forum for continuing education of the members NEFDA hired Dr. Jeff Dietrich a national economist to speak on the status of the economy and how it relates to the fastener industry and New England. Dr. Dietrich has spoken to NEFDA members before and was spot on with his predictions.

The seminar was held at the Sturbridge Host Hotel & Conference Center in historic Sturbridge, Mass. A traditional New England Buffet was served with butternut squash bisque soup and Boston baked pie; two New England favorites. Over 50 members attended this important event

The news Dr. Dietrich told us this time was more favorable than in 2008. Although that is not to say we do not have issues to be concerned about.

Here is some of the good news:

1. Leading indicators and capital goods orders are up.
2. Interest rates are low and consumer spending is up.
3. Company profits and global economies are growing.
4. Stimulus has been extended for 2011.

...and some of the bad news:

1. The housing market continues to decline and foreclosures are up.

2. Credit is still tight with small businesses and pricing pressures continue from both purchasing and selling.
3. The cost of doing business continues to go up with health insurance and taxes.

The US total industrial production index increased 5.9% in 2010. The US industrial production to fasteners & bolt production was up 13.5 % in 2010 and expected to rise 8.8% in 2011. As talked about above the leading indicators are up. Consumer debt is declining and personal savings is on the rise. It is my hope this all points to a growing economy and creation of more jobs. From a demographics point of view our population is growing and expected to reach 500 million. Whereas China, Europe, Japan and Russia are having negative demographics. The above is paraphrased from Dr. Dietrich's manuscript.

NEFDA has three important events this year:

1. Annual Meeting & Education Seminar April 28th - Sturbridge Host Hotel & Conference Center
2. Scholarship Golf Outing - June 2nd - Oak Ridge Golf Club - Feeding Hills, MA
3. Table Top Show - Oct 3rd - Sturbridge Host Hotel & Conference Center

NEFDA SEMINAR - FEBRUARY 3, 2011





SPIROL[®]

DISTRIBUTION

Enhance product quality,
simplify assembly and
reduce your total cost.

COILED SPRING PINS
SLOTTED SPRING PINS
INSERTS FOR PLASTICS
COMPRESSION LIMITERS
ALIGNMENT DOWELS / BUSHINGS
SPECIALTY WASHERS
PRECISION SHIMS
DISC SPRINGS
THUMB NUTS
PANEL NUTS
CAP NUTS
HEX NUTS
SPACERS



Tens of thousands
of standard parts:

- Available to ship from stock
- No tooling charges
- RoHS and DFARS compliant
- MS/NASM & NAS certified parts

Use
RAPID SEARCH
to buy these standard
products online at
SPIROL.com

P 800.321.4679
F 860.774.0487

**Over 60 years
of manufacturing
experience**

Certified to:
ISO/TS 16949:2009
ISO 9001:2008
AS 9100 Rev B
Nadcap AS7108 Chemical Processing
Nadcap AC7116/4 Nonconventional Machining

Screw Covers

Over 120 Standard Colors Available

Quick Binders

Quickly Bind Reports and More

Ark-Plas[®] Products, Inc • 165 Industry Lane • Flippin, AR 72634
Ph: 870-453-2343 • Fax: 870-453-2567 • www.ark-plas.com

DISTRIBUTOR NEWS

Innovative Components, Inc. has achieved the ISO 9001:2008 certification at its Costa Rican facility. This certifies that they are following strict process guidelines regarding the manufacturing of their products. This is the second ISO 9001:2008 Innovative Components has received. The Costa Rican factory plays a key role in Innovative Component's manufacturing strategies. The secondary factory continues to run near capacity fulfilling both high volume and low volume orders for customer's who seek a competitive advantage in the marketplace.

The requirements for ISO 9001:2008 specifies a quality management system where an organization needs to demonstrate its ability to consistently provide product that meets their customer's requirements and aims to enhance customer satisfaction through the effective application of the system, including processes for continuous improvement.

Innovative Components is headquartered at 1050 National Parkway, Schaumburg, IL 60173. Tel: 800-566-2774, web: www.knobsource.com or sales@knobsource.com.

DISTRIBUTOR NEWS

Dura-Con Fastening Systems revolutionizes fastening in the Solar Power Industry. Tested and proven for use in PV racking systems, Dura-Con™ fasteners reduce acquisition and installation costs up to 40%. Dura-Con fasteners overcome many of the problems associated with stainless steel. Galvanic corrosion in aluminum is eliminated; there is no galling during assembly, and because the fasteners drive with predictable torque-tension, the assembly achieves more reliable clamp loads. Plus there is the added strength of alloy steel. Dura-Con is available exclusively through Mudge Fasteners Inc, who offer a large selection of fasteners, fastener tools and adhesives.

For more information visit Dura-Con or Mudge Fasteners websites at www.duraconfastening.com or www.mudgefasteners.com.



Copper State Bolt & Nut Co.
Your Fastener Specialist

Domestic

Materials & Manufacturing



**MADE IN
THE U.S.A.**

800-528-4255

blanks in stock for next day delivery





Jean Kelley

Jean Kelley, president and founder of Jean Kelley Leadership Consulting is the author of "Get A Job; Keep A Job." As the sole owner of Jean Kelley Personnel for 25 years, she personally helped more than 20,000 clients enhance their careers. Coupled with her other book, "Dear Jean: What They Don't Teach You at the Water Cooler," Jean has positioned herself as America's workplace coach. For more information, please visit www.jeankelley.com.

ENHANCE YOUR PROFESSIONAL CREDIBILITY

Credibility is not something you automatically have, nor is it something you can bestow upon yourself - it's something others bestow upon you. And, like beauty, credibility is in the eye of the beholder. Therefore, in order for others to view you as credible, you have to consistently and deliberately act your way into credibility.

Unfortunately, most people don't give their credibility a second thought. They automatically assume they are credible (after all, who doubts their own credibility), yet they don't take precise measures to ensure that others view them the same way. But if you don't take active steps to enhance your credibility, others will do it for you...and you may not like the results.

There are three main components to credibility that you need to be aware of. They are your values, your behaviors, and your reputation. Use the following information to manage each of these areas and your credibility will increase.

Your Values

You acquire your values over the course of your life and they ultimately shape your expectations of others and of the world. And just as you have values that you use to judge others by, so does everyone else. The problem comes when those who are judging your credibility have different values than you. For example, some people value arguments and lively debate. So if someone values argument and you don't, it may look to you that the person is mean and likes to argue all the time, when all they're really doing is trying to encourage a lively debate. But because you have different values, that person loses credibility in your eyes for being a trouble-maker. And on the flip side, the other person may view you as weak or "wishy-washy" because you don't engage in lively debates, when in fact you simply value keeping the peace more so than arguments.

Another challenge arises when a value has degrees of alignment. For example, most people say they value accuracy. But does everything need to be 100 percent accurate, or is 80 percent accurate enough? Exactly how accurate something is can be a reflection on credibility. Therefore, you need to know what others value and to what degree they value it, as their own standards will dictate the level of credibility they bestow upon you.

Your Behaviors

Behaviors are things you choose to do. We all make thousands of choices every day, from whether to visit a sick friend in the hospital to which employee to promote or lay off. We choose whether we hold deadlines in high regard, whether we greet someone in the hall, and whether we're direct or indirect with others. The key thing to

remember is that you're judged by your outward behavior that you choose to display, not by your wonderful intentions. We all have great intentions, but most people don't follow through on them.

Some key behaviors to focus on as you attempt to boost your credibility include:

- Don't over promise. Do what you say you will do. You choose what you will and will not do every day.
- Be open about your motives behind a directive or decision. You choose what you tell people.
- Fess up to mistakes (early and always). You choose to cover things up or put them out in the open.
- Keep people's confidences. Get permission before divulging sensitive information. You choose whether or not to repeat information.
- Treat others consistently and fairly. You choose your actions toward others.
- Listen to others. You choose where you put your mental focus.

...most people don't give their credibility a second thought. They automatically assume they are credible

"The Good Guys"

Fascomp
electronic hardware

Celebrating Our
10 YEAR
ANNIVERSARY

What Sets Us Apart

- Outstanding Customer Service
- Unmatched Distributor Support
- Quick Deliveries on Special Sizes
- Attractive Prices
- Excellent Quality
- A Supplier You Can Trust
- We Produce Specials Made To Print
- Over 50,000 items in Stock
- The Most Efficient, Sophisticated
& Wide Ranging Machining
Capabilities

World's most comprehensive inventory in both English and Metric sizes

- Male-Female Standoffs
- Female Standoffs
- Male-Male Standoffs
- Spacers
- Shoulder Screws
- Captive Screws
- Thumbscrews
- Swage Standoffs and Spacers
- Handles and Ferrules
- Jackscrews

New Product Line

Fascomp now stocks a full line of
instrumentation Handles and Ferrules

Bringing Global Technology to You.



Shenzhen, China



Corporate
Orlando, FL



Naugatuck, CT

"The Good Guys"

Our commitment to you:
*"No supplier will work more
diligently for you, our customer
and partner in business."*

*The Managing Partners
Jason Bertone & Mark Georgia*

7814 Kingspointe Pkwy Orlando, FL 32819
Tel (407) 226-2112 • Fax (407) 226-3370

550 Spring Street Naugatuck, CT 06770
Tel (203) 720-1146 • Fax (203) 720-1156

VISIT US AT WWW.FASCOMP.COM

ONE TOUGH APPLICATION

★ TACOM Approved ★
★ Battle Tank Tested ★



ND INDUSTRIES VC-3 is a product of Vibra-Tite, U.S.A.
Email: products@ndindustries.com
Ph: 800.521.2663 • www.vibra-tite.com

DISTRIBUTOR NEWS

ND Technologies Group, which conducts all ND Industries research and development activities, has expanded by relocating to a newly acquired building in Troy, Michigan, across the street from its former location. The 7,600 square foot area, nearly double the former R & D footprint, provides more room for ND's chemists and technicians to develop next-generation adhesives and sealants, such as, anaerobics, epoxies, microspheres, acrylics, and surface mount technologies.

"With the expansion of our Technologies Group, ND is making the necessary investments to enhance its industry-leading product portfolio," said Mike Garofalo, ND Executive Vice President. "This, in addition to our ongoing commitments to product quality and superior customer service, maintains our leadership role in the industry."

The new ND Technologies Group building contains expanded Development, Analytical, Environmental, and Quality Control Labs, as well as an office area and meeting room with full video conferencing capability. "Each lab was specifically designed to streamline the R & D process," said

Jim Barr, ND Director of Research and Development. "This gives our talented chemists an improved ability to optimize our products."



Product development begins in the Development Lab, where innovative adhesive and sealant technologies are formulated and matured. Depending on testing requirements, material can be subjected to any number of experiments using equipment from ND's other labs. In the Analytical Lab, ND conducts prototype evaluations and current product reviews. Whether using Differential Scanning Calorimetry to determine the Glass Transition Temperature of a polymer, Fourier Transform Infrared Spectroscopy to examine material composition, or a Cone and Plate Viscometer to identify threadlocker viscosity rates, ND's chemists continually evaluate the properties of ND's wide variety of products.

Testing ND's products to simulated real world conditions is conducted in the Environmental Lab, where materials are put through a diverse assortment of tests such as Heat Aging, Salt Spray, Fluid and Cyclic Temperature.

ND Technologies Group holds testing accreditation through the American Association for Laboratory Accreditation (A2LA) in accordance with ISO/IEC standard 17025. This accreditation demonstrates ND's technical competence in performing a variety of tests on threaded fasteners, adhesives, sealants, coatings, and mastics for the automotive, aerospace, and electronic industries. To review the testing, locate ND Technologies Group at www.a2la.org.

ND Industries is an internationally known developer and supplier of high quality fastener coating products and services.

Further products and services information is available at www.ndindustries.com.

"Quality is our key to success."



**ISO 9001:2008
CERTIFIED**

- Fast Shipment
- Eye Bolts, S Hooks, U Bolts and more...
- A Variety of Finishes Available
- Custom Manufactured to Meet Your Needs

ANDROCK™
USA

Toll Free **800/397-2658**
Androck Hardware Corporation
 711 Nineteenth Street • Rockford, IL 61104 USA
 815/229-1144 • Fax 815/229-1895
www.androckhardware.com

BUSINESS COMES TOGETHER TO FIGHT CRIPPLING REGULATIONS *continued from page 26*


"Overzealous regulation is a perennial cause of concern for small business owners, and is particularly burdensome in times like these when the nation's economy remains sluggish." Center Director Karen Hamed said, "Unfortunately, the regulatory burden on small business has only grown. Reducing the regulatory burden would go a long way toward giving entrepreneurs the confidence they need to expand their workforce in a meaningful way."

An example of the spiraling rate of agency rules being proposed is the Department of Labor's current agenda where over one hundred new rules are under consideration. With the administration's ideological orientation and political indebtedness to big labor this may be a major backdoor avenue for implementing changes without having to go through a House of Representatives now controlled by Republicans.

It is to thwart just such attempts that the Coalition is intensifying its organizing and call for business input.

President Obama recently continued a presidential tradition by appearing before the United States

Chamber of Commerce. He said all of the right things about partnership with business and stated a willingness to listen and respond to business concerns. Headlines noted that the response of the business leaders present was one of measured reserve. They know that saying one thing in public does not necessarily prevent another course of action from being pursued in the bureaucratic corridors of the Federal government. Chamber leaders stressed that they were pleased with the President's commitment to addressing "outdated and unnecessary" regulations. But they expressed a desire to see more specifics. Fearing the process has lost balance as Congress has yielded power to federal agencies without proper accountability, they will be willing to work with the President to foster job growth and competitiveness.

The Coalition for a Democratic Workforce has put out the call for business people to come together to assist the House as it tries to put a lid on burgeoning government regulation. Joining this effort is important to all of us who want to bring our economy back! 

Threaded Inserts



Easy To Use Self Locking Threaded Inserts For Metal

- Repair or reinforce threads in soft metals without special drills, taps, or installation tools.
- Carbon and Stainless Steel Designs
- UNC: 4-40 to 1-8 • Metric: M3 to M20

Easy 1-2-3 Installation



Drill hole with standard drill.



Tap hole with standard tap.



Thread into hole.

Inserts For Plastic



Press-In and Ultrasonic Inserts For Plastic
Brass/Stainless • UNC/Metric • Flush/Flanged

Inserts For Hard Wood



Brass/Stainless
UNC/Metric

Inserts For Soft Wood



Flush/Flanged
UNC/Metric

Call today for more information or
FREE samples (800) 234-5613 • ezlok.com

E-Z LOK

Extensive inventories maintained at
8 regional warehouses across the country.

RE-EVALUATING YOUR COUNTER EFFORTS *continued from page 108*

grocery store where the products placed in the end cap may or may not be on sale, but always sell better than product located down the aisle.

Uniform display gondolas with easily adjustable shelves can be purchased new or used and can be ordered with a multitude of accessories. Generally for a Fastener Distributor white or a neutral color will be most complementary to a multispec or light finished wall. Slat wall, grid wall or pegboard can be integrated into the gondola design to further enhance both display and ambiance. Keep the height of these displays at 5' or less to facilitate eye contact with the customers. This will discourage theft and provide an opportunity for the staff to come out from behind the counter and work with the customer at the point of sale.

Signage

As discussed in a previous article (Winter 2011) signs are the silent salesman that describe the products, direct the customer and eliminate confusion. Banners, vertical signs, pictographic cutouts and other icons will help bring the customers to the areas that they need to visit and also remind them of things forgotten.

Any signage should be eye catching, colorful and convey an image of the products as defined by the customer's context. For example J-bolts, expansion bolts and epoxy systems can be merchandised in an area with a concrete mixer (real or a cut out) over the display. Similarly products associated with masonry work can be found under a trowel and brick symbol or sign.

Even if no other changes are made signs can be the best investment for creating a new look in the counter and showroom. Keep in mind that not all of your customers speak the same language but everyone will recognize a universal symbol. In addition, having fun with caricatures and pictures will enhance these efforts.

Lighting

Bright lights can be just as bad as having a dim room. A good counter area has uniform, glare free lighting over the entire space complemented by spotlights to highlight particular products or areas. Fluorescent lights with energy saving T-5 or T-8 lamps suspended 10' to 12' above the floor and supplemented with track or recessed lighting with LED lamps will be far superior to utilizing point sources of light. As retailers well know it's a good idea to save energy and cost but not at the expense of alienating customers.

Standard industrial shelving can be used along the walls but it will be a poor display medium unless track lights or under shelf low voltage lighting is incorporated in the design. Windows and skylights should be used sparingly because these light sources cannot be easily controlled and a fastener related showroom is a

LARGE & SPECIAL FASTENERS FAST!

- HUGE INVENTORY
- OFF THE SHELF AND QUICK
- JUST-IN-TIME DELIVERIES
- SAE OR ASTM SPECS
- STRATEGICALLY LOCATED
WAREHOUSES NATIONWIDE
- YOUR REQUIREMENTS IN-STOCK
SPECIALS OR STANDARDS
- DEPENDABLE AND TRACEABLE



CORPORATE OFFICE/MAIN WAREHOUSE

Box 2035, 2941 E. 10 Mile Road, Warren, Michigan 48090-2035
586-757-4100 / 800-882-0747 • 586-757-1555 fax • sales@darlingbolt.com

HOUSTON WAREHOUSE

1915 Turning Basin Drive, Suite #506, Houston, Texas 77029
713-673-3971 • 713-672-6642 fax

LOS ANGELES WAREHOUSE

11023 Forest Place, Santa Fe Springs, California 90670
562-946-1458 • 562-946-3268 fax

**DARLING BOLT
COMPANY**

Since 1958

(800) 882-0747

www.darlingbolt.com



Industrial Fasteners Institute
636 Oak Tree Blvd. • Independence Ohio 44131
Phone: 216.241.1482 • Fax: 216.241.5901
www.indfast.org



ASTM F1941 AND F1941M REPLACES ASTM B633 FOR ELECTROPLATING ON THREADED FASTENERS

by Joe Greenslade Director of Engineering Technology, IFI

In 1998 the American Society for Testing and Materials (ASTM) first issued ASTM F1941 entitled "Standard Specification for Electrodeposited Coatings on Threaded Fasteners (Unified Screw Threads, UN/UNR)". In January 2001 ASTM published a revised version of this standard plus a comparable standard to cover metric threaded fasteners. The new standard is ASTM F1941M-00 entitled "Standard Specification for Electrodeposited Coatings on Threaded Fasteners (Metric)".

The intent of the ASTM F16 Fastener Committee is for F1941 and F1941M to be used on all threaded fasteners. ASTM B633 is still applicable to non-threaded fasteners, but should no longer be designated for threaded fasteners.

The latest revision of these standards are dated 2007. These two standards are applicable only to threaded fasteners. These specifications cover electrodeposited zinc, cadmium, zinc cobalt alloy, zinc nickel alloy and zinc iron alloy finishes as they relate to threaded fasteners. The specification provides four minimum thickness designations ranging from .0001 to .0005 inches (3 μ m to 12 μ m) and lists five different types of chromate finishes that can be added to the electrodeposited platings to increase the plating's corrosion resistance. The standards also provide for an indication of the chromate type applied to the finish. The letter "T" is added to the end of the plating code if the finish has a trivalent (RoHS compliant) chromate instead of a hexavalent chromate. As an Example, a zinc electroplate finish with 0.0001 inch thick finish with a trivalent chromate is designated Fe/Zn 3AT. The designation for the same finish with a hexavalent chromate is Fe/Zn 3A.

ASTM F1941 and ASTM F1941M address several specific issues related to threaded fasteners that will eliminate much of the past confusion resulting from the electroplating of threaded fasteners. These important issues are: the explanation of where to test plating thickness, thread fit requirements, baking and testing for hydrogen embrittlement risk management, and corrosion resistance requirements.

Inspect Plating Thickness on "Significant Surfaces"

Many disagreements regarding plating thickness have resulted from customers measuring thickness in one location and their suppliers measuring in another.

Electrodeposited finishes do not apply uniformly on all areas of a part. Electrodeposited finishes are thicker on the part's extreme ends and on edges. Because of this natural lack of uniform deposition, it is extremely important that customers and suppliers measure plating thickness in the same locations on fasteners so that test results can be agreed up on.

ASTM F1941 and ASTM F1941M state that plating thickness must be measured on "significant surfaces". This term is defined as follows in Section 3.1.4:

Significant surface – significant surfaces are areas where the minimum thickness to be met shall be designated on the applicable drawing or by the provision of a suitably marked sample. However, if not designated, significant surfaces shall be defined as those normally visible, directly or by reflection, which are essential to the appearance or serviceability of the fastener when assembled in normal position, or which can be the source of corrosion products that deface visible surfaces on the assembled fastener. Figures 1 and 2 illustrate significant surfaces on standard externally and internally threaded fasteners.



Note: 1—Black dot (*) indicates test surface.

FIG. 1 Significant Surfaces on Externally Threaded Fasteners



Note: 1—Black dot (*) indicates test surface.

FIG. 2 Significant Surfaces on Internally Threaded Fasteners

Proper Thread Gauging Before and After Plating

Thread fit is a critical issue for threaded fasteners because over-plating threaded parts can result in components that will not assemble together.

Inch Threads: ASTM F1941 covers thread fit requirements inch threads in the following two paragraphs:

6.3.1.2 **External Threads** – Maximum coating thickness at high current density threaded tips must provide for class 3A GO acceptance gauge acceptance.

6.3.1.3 **Internal Threads** – Maximum coating thickness of internal threads must provide for class 1B, 2B, or 3B Go thread acceptance.

please turn to page 197

DISTRIBUTOR NEWS

Tapco Inc. added IFI Grade 5 No. 1 Norway Flat Countersunk Head elevator bolts to their existing product line. The Grade 5 elevator bolts have greater proof load, minimum yield strength and minimum tensile strength than traditional Grade 1 or Grade 2 bolts - allowing them to better withstand the additional forces exerted on elevator belt lap splices or other heavy-duty applications. Bolts are supplied with a distinguishing yellow zinc-plated (CR3) coating and SAE grade marking, in 14 sizes ranging from 1/4-20 x 3/4" to 3/8-16 x 2".

Tapco also supplies Grade 2 bolts in six styles: No. 1 Norway, No. 3 Eclipse (Slotted), Fanged, Pointed End Fanged, Western 3-Prong and Reference 70. Tapco inventories 15 million bolts in 53 sizes (metric and Imperial). Tapco is a major importer and distributor of elevator bolts. Tapco also manufactures a full line of elevator buckets.


For more information, contact Tapco Inc, 225 Rock Industrial Park Drive, St. Louis, MO 63044.

Tel: 314-739-9191 or 800-288-2726, Fax: 314-739-5880, Email sales@tapcoinc.com or on the web at www.tapcoinc.com.


TAPCO INC.

15 Million Elevator Bolts In Stock

Tapco offers the largest, most diverse inventory of elevator bolts in the world.




No. 1 Flat Countersunk Head




Fanged Head

SIX STYLES

No. 1 Flat Countersunk Head
Fanged Head
Pointed-End Fanged Head
No. 3 Slotted and Ribbed Head
Western 3-Prong Head
Reference 70 Head w/mating Oval Washer



Pointed-End Fanged Head




No. 3 Slotted and Ribbed Head

THREE GRADES


Grade 2, Grade 5 and 302HQ Stainless

SEVEN DIAMETERS

Imperial thread -
1/4, 5/16, 3/8 and 1/2 inch
Metric thread -
6mm, 8mm and 10mm



Western 3-Prong Head



Reference 70 Head w/mating Oval Washer

FIFTY FOUR SIZES

From 1/4 - 20 x 1/2 inch to 1/2 - 13 x 3-1/2 inch

THREE MATERIAL FINISHES

Carbon Steel, Zinc Plate and Stainless Steel

NINE PACKAGING OPTIONS

Packaged bolts - 25, 50 or 100 per box
Case quantities - 1/3, 2/3, Full and 4/3 cases
Bulk bolts in - 1/4, 1/2, 3/4 and Full kegs

Same-day shipping available

TAPCO INC. ELEVATOR BUCKETS - ELEVATOR BOLTS

225 Rock Industrial Park Drive • St. Louis, Missouri 63044 U.S.A.
+1-314-739-9191 • +1 800-AT-TAPCO (+1 800-288-2726) • Fax: +1-314-739-5880
www.tapcoinc.com

DISTRIBUTOR NEWS

Rotor Clip Inc., introduces its MST-series of Truwave™ wave springs. These single-turn metric wave springs are available in sizes from 16mm to 170mm and are ideal for short deflection applications, offering the following advantages for bearing retention:

* Overhead assembly possible * Can be installed automatically via a tapered mandrel * Even load/force with small tolerances * No radial jamming * No special size tooling cost * Self-centering in bearing bore.

Visit www.rotorclip.com for online specs, sample & quotation requests. For a copy of the 2010 catalog, email adv@rotorclip.com. For technical information email tech@rotorclip.com.





Jay Forte

Jay Forte is a speaker, consultant and nationally ranked thought leader. He applies years of research, along with his training as a CPA, working with organizations that want to successfully activate and inspire exceptional employee performance. Renowned for producing results, Jay's first book "Fire Up Your Employees and Smoke Your Competition" is due February, 2009. For information on keynotes, speaking, consulting or to see the daily "BLOGucation," visit: www.humanetricsllc.com, www.FireUpYourEmployees.com or call: 401-338-3505.

THE HUNT FOR OPPORTUNITIES

Ours is an unpredictable world. Many times, regardless of how effectively we plan, some things just fail. The dinner party that should have been great based on the planning, but the meal was a disaster. The meeting's presentation that was well prepared, but then the equipment failed. Or, a disciplined and diligent savings plan that lost nearly half of its value in today's recession. These challenging situations define our days. Some curse and yell; others see them for the opportunities they present. Inaugural Poet Maya Angelou writes, "I've learned that you can tell a lot about a person by the way he or she handles these three things: a rainy day, lost luggage, and tangled Christmas tree lights." Failures, changes and unexpected events have the ability to either destroy or advance; it is in our outlook and response that allows us to turn these failures into opportunities.

Thomas Alva Edison experienced repeated failures. His true success was not his invention of the light bulb, but rather his tenacity and outlook that believed failures were a means to gain new information and new perspectives. Our most successful employees are not those who land on their feet after every project or event; instead, they are those who have the persistence and optimism to learn from difficulty and use what they learn to re-imagine, recreate and re-experiment. They are the ones who have learned to be positive and to constantly hunt for opportunities.

Organizations that constantly hunt for opportunities, perform better, innovate more and succeed in tough times because they possess the following qualities:

1. They create, support and live a culture that teaches, inspires and encourages employees to look for the opportunity in every event.

Failures are unparalleled opportunities to reinvent

success. These organizations "celebrate extraordinary failures and punish average successes." Effort, innovation and intent are celebrated; unusual, non-conventional and non-conformist perspectives are applauded. Occasional failures show that employees are pushing performance to the edge. As Tom Peters states, "A day without a screw up is a day without enough reach." These workplaces encourage their employees to focus on the positive; they create a culture that is open, free thinking, and believes "yes we can."

Edison experienced repeated failures. His true success was not his invention of the light bulb, but rather his tenacity and outlook that believed failures were a means to gain new information and new perspectives.

2. They commit the time and effort to help employees learn their strengths and use them to develop opportunity-thinking.

Each of us has the potential to be great at certain things; we each have intrinsic talents and strengths.

Successful employees know their talents and understand that these talents help them to be naturally perceptive in certain areas; they commit to deliberative practice in developing these areas. They focus their hunt for opportunities in their talent and strengths areas, areas in which they have the greatest insight.

3. They focus on learning and actively solicit input from everyone.

Organizations that hunt for opportunities are always learning, asking great questions and are exceptional listeners. They listen to new perspectives, facts, ideas and dreams. They listen to customers, employees, vendors and strangers. They read books, blogs, periodicals, and newspapers. They read and listen to topics that may appear to be unrelated. They regularly ask, "how about," or, "what if." They assess what they hear; they consider everything. They then share what they hear with their teams to expand their hunt for opportunities.

DELTA SEC^{NDARY}

DRILLING • THREADING • CUTTING

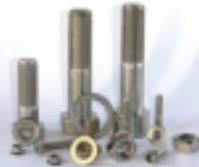
*Offering Fastener Distributors over
35 years of fastener related
machining experience...*

- **Quality Machine Shop
Serving Fastener
Distributors**
- **Small or Large
Quantities**
- **Hard to Find Items**
- **Special Prototypes**
- **CUT OFF & CHAMFER**
- **CUT THREADING**
- **CROSS DRILLING**
- **DRILLING & TAPPING**
- **TURNING**
- **MILLING**
- **SLOTING**
- **GROOVING**

DELTA SECONDARY, INC.
1000 Industrial Drive
Bensenville, Illinois 60106
Tel: 630.766.1180 Fax: 630.766.1285

EMAIL: DELTA911@MSN.COM

METRICBOLT.com
 IMPORTER & DISTRIBUTOR
 METRIC SIZED FASTENERS



*For all your metric fastener needs, large or small,
 for any special requirements, please contact Metricbolt.com*



Metricbolt.com, LLC
 14930 Corporate Rd. So. #19
 Jupiter, Florida 33478

Ph 561-630-3142
 Fax 561-691-4820
 Email mike@metricbolt.com

SELLING STOCK VERSUS SELLING ASSETS AND THE TAX MINIZATION ANALYSIS continued from page 24

Depreciation Recapture (asset sale)

When assets of the company are sold, depreciation expenses taken must be recaptured to the extent of depreciation taken or allowed. Depreciation recapture is a somewhat complicated tax concept in which the taxpayer pays ordinary taxes upon the sale of an asset to the extent of which depreciation was taken or allowed. The result is that instead of paying capital gains at a low tax rate the taxpayer will typically pay 28-35% on the sale of asset.

To illustrate the concept, imagine a machine shop that buys equipment for \$100,000. During the course of its useful life, depreciation is taken in the amount of \$100,000 against it. The equipment (purchased for \$100,000) is then sold for \$80,000 to a business buyer. At first glance many would conclude there should be no gain or it should be capital gain in nature. Unfortunately, there is gain due to depreciation recapture. In this instance, all \$80,000 of the purchase price would be subject to depreciation recapture and it would be subject to ordinary tax at 35% as opposed to the beneficial capital gains rate. The result is that the seller pays an additional \$16,000 - \$20,000 in taxes while selling the machinery for less than what he purchased it at.

Ordinary Taxes (asset sale)

Away from depreciation recapture, other ordinary gains can arise. When selling inventory and/or accounts receivable, gains made when selling these items are subject to ordinary tax. The logic being that the sale of these assets would give rise to ordinary income had they been sold any other way.

For example, a cash basis taxpayer, which most of us are, has a drawer full of receivables with a face value of \$100,000. Because the taxpayer is a cash basis taxpayer, the receivables are not previously taxed and are subject to tax liability. If the receivables are sold with the business, all \$100,000 will be subject to ordinary gain to the taxpayer.

Capital Gains (asset and stock sale)

Along with depreciation recapture and ordinary gains, capital gains also arise during asset sales. Capital gains are normally taxed at preferential rates. If the company is a C corporation, low capital gains rates do not apply. The C corporation pays capital gains at the same rate as all other income they receive.

With that said, S Corporations, LLC's, and sole proprietorships will benefit from realizing capital gains as opposed to any other gain. Any amount of money paid for an item beyond its original amount will qualify for capital gain treatment in an S corporation or LLC.

For example, a company buys \$100,000 worth of equipment, as in the first example. It then deducts \$100,000 of depreciation expenses. The company then sells the equipment for \$110,000; the result is \$100,000 in depreciation recapture (subject to ordinary income tax treatment) and \$10,000 of capital gains subject to low taxes.

Since capital gains result in lower taxes, it is best to try to justify all the capital gains as possible rather than depreciation recapture or ordinary income. While it requires specialized knowledge to justify gains as capital gains as opposed to other gains.

From Aztec Washer Company

No Fasteners Required!

**NEW**Solar Multi-Port-CT
Clay Tile Industry**P36 Saddle Washers****Master Seal®**

MASTER FLASH®

Quality & Reliability you can count on!

Sealing pipes, cables, conduit, wire, solar,
refrigeration lines, venting, etc.,.**35**
YEAR
WARRANTY**20**
YEAR
WARRANTYTo see our complete product line go to
www.aztecwasher.com13821 Danielson Street, Poway, CA 92064
1(800) WASHER 5 (927-4375) • Ph: (858) 513-4350 • Fax: (858) 513-4305

Industrial Fasteners Institute

8th Edition
Inch Fastener Standards**NEW!**Release date:
January 2011

Over 1,100 pages of fastener product standards — ASME, SAE, ASTM, and IFI.

More than 50% of the standards in the previous edition have been updated plus several new standards have been added.

For the first time this collection of standards is available either as a hard-bound book or as a digital file. See details at the IFI online store.

Book Price (USA & Canada): **\$345****Book Price** (International): **\$395****Digital Price:** **\$345**

(3 year subscription)

To place an order or find other *IFI* products,
visit our website at: <http://www.indfast.org/shop/>



Chicago Nut & Bolt

Chicago Nut & Bolt, Inc.

150 Covington Drive, Bloomingdale, IL 60108

Tel: 630-529-8600.

Email: ecarlson@cnb-inc.com

Website: www.cnb-inc.com

CHICAGO NUT & BOLT - WHERE CUSTOM FASTENERS ARE A BIG DEAL



Left to Right: Shelley Ruge (Sales Assistant)
Eric Carlson (President), John Kipp (Sales Representative) and Julia Flores (Sales Representative)

Chicago Nut & Bolt, Inc., (CNB), in business over 20 years, is an industry leader in the area of custom industrial fasteners.

Any Shape, Any Size, Any Material

In a recent interview, Eric Carlson, President, explained CNB's philosophy. He said "While we also distribute standard fasteners, our fastener supply services include fulfilling your non-standard requests, such as extra-large and extra-long sizes. We work with sizes from 1/4" to 3" in diameter, in any length up to 72". If you need a hole drilled through a part, extra thread, special body diameter, or special across the flats, that's our specialty. We can get them to you quickly because we stock blanks in every imaginable head style that can be modified per your specifications."

He continued, "Do you need a custom fastener for your project? Do they need to be on the job site in less time than it takes to order lunch for the entire crew? Look no further than CNB. Whether you need custom bolts, custom nuts or custom screws, CNB has you covered. We carry standard fasteners of course, but our reputation is built upon meeting your non-standard fastener needs."

Regardless of the complexity, send your blueprints to CNB and they will provide you with a quote and delivery commitment that meets your needs. CNB specializes in large and small custom fastener orders for entire projects ranging from 100 to 1,000,000 pieces.

CNB has supplied fasteners to significant projects. Here are just a few -

Biosphere 2

Located in Oracle, Arizona, this 3.15-acre structure was built to be an artificial, materially-enclosed full ecological system. This glass facility is elevated nearly 4,000 feet above sea level and remains the largest closed system ever created. In May 1987, Discover magazine quoted Biosphere 2 as being "the most exciting scientific project to be undertaken in the U.S. since President John F. Kennedy launched us toward the moon." CNB provided custom structural bolts for the project.



Arecibo Observatory

The World's Largest Radio Telescope. The Arecibo Observatory is a radio telescope located close to the city of Arecibo, Puerto Rico. The observatory's 1,001 foot radio telescope is the largest single-aperture telescope ever constructed. This telescope carries out three major areas of research: radio astronomy, aeronomy, and radar astronomy observations of solar system objects. Its dish is the largest curved focusing dish on Earth, giving Arecibo the largest electromagnetic-wave-gathering capacity.



"Son of Beast"

Located at King's Island in Mason, Ohio, "Son of Beast" is a record breaking wooden roller coaster. With a max speed of 78 mph, this roller coaster is the fastest wooden roller coaster in existence. Towering 218 feet above the ground, it is the tallest wooden roller coaster and the only wooden roller coaster to incorporate a loop, as seen in the image. Stretching 7,032 feet, it is the second longest wooden coaster only to its predecessor, also located at King's Island.



please turn to page 202

ALUMINUM FASTENER SUPPLY CO., INC.

TOLL FREE 1-800-526-0341

PHONE: 239-643-4551

FAX: 239-643-5795



PRODUCTS

HEX HEAD BOLTS/CAP SCREWS
TOWER BOLTS
CARRIAGE BOLTS
STADIUM SEAT BOLTS
BUS BAR BOLTS/ HEAVY
SIGN BOLTS/ POST CLIP
VPA12POINT SCREW
MACHINE SCREWS
WOOD SCREWS
SHEET METAL SCREWS
THUMB SCREWS
HEX WASHER HEAD SELF-DRILL(TEK)
SCREWS
TAMPER PROOF FASTENERS
THREADED ROD
BINDING POST AND SCREWS
FINISHED HEX NUTS
MACHINE SCREW NUTS
TAMPER PROOF NUTS
BUS BAR (HEAVY) NUTS
NYLON INSERT LOCK NUTS
WING/ACORN CAP NUTS
SQUARE/FLANGE NUTS
BEVELED WASHERS
FLAT WASHERS
LOCK WASHERS
SPECIALS OF ALL KINDS

Dear Customer,

Aluminum Fastener Supply Co. was brought into existence to fill a void in the non-ferrous fastener market.

We strongly believed that there was a need for one company to carry in stock a full line of aluminum fasteners from A to Z, along with a knowledgeable staff who knew alloys, finishes and their applications. Our sales staff both inside and out are committed on a daily basis to helping you, the customer, with your aluminum needs and at the same time, learning and keeping pace with the new advances this metal is making in the market place.

To those who we have sold before, thank you, and to those we haven't, we are looking forward to selling you in the future.

*Lori Coar, President
Aluminum Fastener Supply Co., Inc.*

**ALUMINUM FASTENERS
4297 CORPORATE SQUARE
NAPLES, FLORIDA 34104
WWW.ALUMINUMFASTENER.COM**



MWFA - P. O. Box 5, Lake Zurich, IL 60047 - Tel: 847.438.8338, 1.800.753.8338 - mwfa@ameritech.net - www.mwfa.net

MID-WEST FASTENER ASSOCIATION

MWFA NEWS



The Least You Should Know About Plating Seminar

As a prelude to the February 24th dinner meeting, the Mid-West Fastener Association presented a basic plating seminar in the afternoon. 20 attendees, from three groups, gathered for lessons from industry specialists, Matt Delawder/SWD, Bob Giomi/Morgan Ohare and Brian Christianson/South Holland Metal Finishing. They discussed basic plating information through videos, teaching and samples. There are so many issues with plating and the more expertise those dealing with customers have, the better they can service their company and customer's company.

MWFA/CMFI/AESF Meet Together

MWFA joined with Chicago Metal Finishers Institute and American Electroplaters and Surface Finishers Society on February 24th for a joint meeting. Presentations included information on the upcoming Fastener Tech '11 events, Christian Richter's (DC lobbyist) role in legislation pertinent to the industry and a presentation from Harry Moser on Illinois Reshoring Initiative and efforts to bring business back to Illinois.

The three groups share many of the same issues in the plating world so this forum offered an "Ask The Plater" session allowing interaction of the three groups. Questions were presented and answered by the many specialists in the audience. Bringing the three groups together allowed a wealth of information to be shared in one evening among over 100 attendees.

June 6th Annual Golf Outing

The 59th Annual Mid-West Fastener Golf Outing will be held at Cress Creek Country Club. This is a private club in Naperville, IL not open to public play. The event will feature a putting contest, luncheon, shot gun-best ball golf, and dinner followed by awards. We are fortunate to be invited to host this event at this outstanding private club. The invitation will provide you with details, registration and information on many opportunities for sponsorship. View the invitation and sponsorship information at the MWFA website: www.mwfa.net or contact Nancy Rich at 847-438-8338.

New Members

AFI Industries-Carol Stream, IL
Aspen Manufacturing Inc.-Addison, IL
Fasteners By Design-Bensenville, IL
GexPro Services-Irving, TX
ITW Shakeproof Industrial Products Inc.-Broadview, IL
MacDermid Inc.-Waterbury, CT

Upcoming Events


June 6th	59th Annual Golf Outing
June 13-15th	Fastener Tech '11
August 9th	Board Meeting
September 7th	Education Seminar & Networking Meeting
	Sox vs. Twins Game/Target Field
	Minneapolis, MN
September 15th	Education Seminar

MWFA Launches New Website

The MWFA has recently launched their new website and invite you to visit. The site is designed allowing visitors to navigate easily to find information they seek. The site offers new advertising opportunities. Advertising is now be open to non-members, call the MWFA office 847-438-8338 for these rates.

The biggest change is the Members Info where you will find a membership listing by product/service allowing visitors to seek companies by a category with some linking to their website. This feature, of being listed, is only open to MWFA members. Not a member? Join now (visit our Downloads on website for application) and take advantage of the many opportunities.

We have added additional e-mail addresses for your convenience, to address queries and comments. Your feedback and thoughts, regarding the MWFA, are important so feel free to drop us an e-mail at feedback@mwfa.net.

To submit news releases, articles, ads, photos or other information to be considered for publication on the website and/or newsletter, send to news@mwfa.net. To request information about the MWFA and/or upcoming events contact us at info@mwfa.net. 

9. Release Angle Analysis

The complete analysis of a fastener involves looking at both the tightening and the loosening torque angle curves as the fastener is first installed and then loosened. These curves are studied initially in the elastic tightening region where the fastener has not gone beyond yield, such as the assembly torque-angle signature shown in Figure 12. When the fastener is loosened, a torque-angle-loosening signature, as shown in Figure 13, can be recorded. The release signature shows the release of the fastener stretch and also the release of the compression in the clamped parts. Analysis of this signature provides a direct method for verification of preload or tightness. First, the line tangent to the elastic release portion of the curve is projected to zero torque to locate the elastic origin. The release angle, measured from the point where loosening starts to the projected elastic origin, is a direct measure of the tension released from the bolted joint.

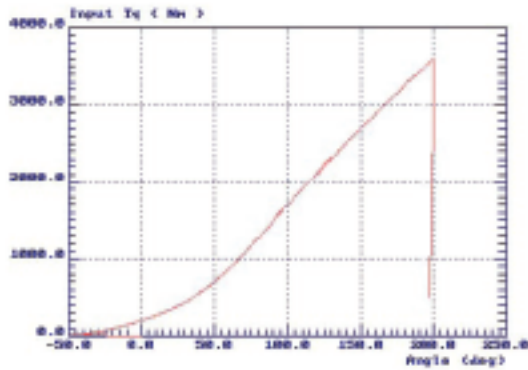


Figure 12 Torque Angle Signature

The tangent line must be drawn on the straight-line portion of the curve after the initial peak release torque due to static friction or thread-locking adhesive has been broken free. The starting point is the angle where initial loosening motion begins. The total release angle is measured from the initial loosening point to the projected elastic origin. Note that if a significant prevailing torque is present after loosening the fastener, the elastic origin must be located at the prevailing level, not zero torque.

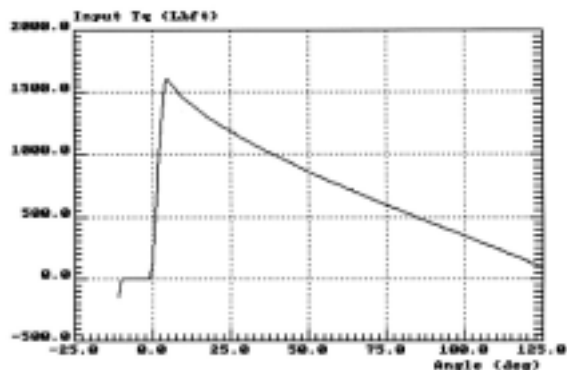


Figure 13. Loosening Torque-Angle Signature

The torque-angle signature shown in Figure 14 has been plotted as a M-Alpha Diagram with the tangent line, locating the elastic origin, drawn at 50 percent of the maximum torque to set the elastic tightening slope below the onset of embedment of the nut. The bolt is a M30 x 3.5 with strength Class 11.9. The corresponding clamp force signature, plotted as an F-Alpha (tension-angle) Diagram, confirms that the clamp force increases linearly with the angle of turn from the projected elastic origin. In the example shown in Figure 15, the elastic-tightening angle is approximately 125 degrees.

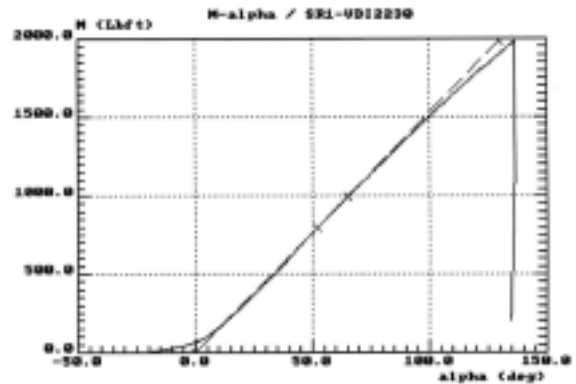


Figure 14. Torque-Angle Signature with Embedment

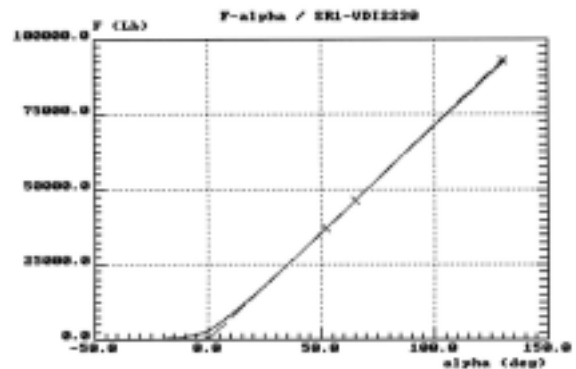


Figure 15. Clamp Force vs. Angle of Turn from Elastic Origin

Figure 13) also has a projected release angle of approximately 125 degrees. The F-Alpha Diagram (refer to Figure 15) confirms the fact that, even after embedment occurs, the clamp force increases directly in proportion to the angle of turn from the elastic origin. Similar to the analysis of added tension achieved after yield of the bolt, for embedment or thread strip, the backward projection to the extended tangent to the curve before thread strip or embedment is used to locate the effective tightening angle. Experiments with strain gage bolts or force washers, where the clamp force is measured along with the torque and angle during tightening, verify that this theory is correct for a given fastener. Figure 16 shows a release angle study performed on an automotive wheel nut. A tool with a torque and angle sensor connected to a transient recorder is used to loosen the nut, record the torque and angle values, and plot the data. The resulting printed

SCREW PRODUCTS INC.

The Ultimate Wood Screw

Screw Products, Inc.


9401 54th Ave NW, Bldg 1B
Gig Harbor, WA 98332
Tel. 877-844-8880
Fax: 253-853-8881
www.screw-products.com

NEED A DEPENDABLE, PROFESSIONAL FASTENER?

Think: Screw Products Inc!

Whether you are a distributor or end user Screw Products, Inc. is the leading professional source for high quality "Star Drive" Fasteners. Accomplish more in less time enjoying benefits such as; type 17 augers, reduced splitting, longer bit life, self counter-sinking and MUCH more! Remember "Star Drive" offers twice the torque as Philips! Your projects will be completed in less time with less effort! Screw Products, Inc. provides top quality Fasteners backed by our unsurpassed customer service. Your order will ship out the same day it's received and will always arrive on time! Screws are available in interior Multi-Purpose, ACQ Compatible and Stainless steel lengths ranging between 1-14". All backed by our Screw Products, Inc. guarantee!

Whether you are building a deck, remodeling a home or constructing a trailer bed - give us a call for ALL your fastener needs, we're happy to help!

If you are looking to become a dealer or distributor, please give us a call today toll free at 888-888-3305! 

Pros Come Here First!

Visit **SCREW-PRODUCTS.com!**

- ✪ Fence, Rail, and Fascia Screws
- ✪ Heavy Duty & Lags Screws
- ✪ Composite Deck Screws
- ✪ Hidden Deck Fasteners
- ✪ 1lb, 5lb, & Bulk Packs

Dealers
Welcome!

Call Today For A
Free Catalog!

- ✪ Cabinet, Pocket, Finish
- ✪ Standard, Finish, Trim Head
- ✪ 1" to 14" Lengths • Specialty
- ✪ Available in Stainless Steel, Exterior & Interior Use

Toll Free: **1-888-888-3305**



SCREW PRODUCTS INC.
The Ultimate Wood Screw

DISTRIBUTOR NEWS

Screw Products, Inc.'s new 10 x 2-3/4" C-Deck has been redesigned to handle even the toughest new composite boards being produced today! Our C-Decks eliminate all composite mushrooming. Saving you countless hours by avoiding pre-drilling and clean up!

This top of the line fastener, will not produce secondary lumps around the screw head leaving your project smooth & flush, complete with a professional flush finish. Milled with a trilobular design and a "Star Drive", our C-Deck starts easy and drives with less torque. Reduced splitting and snapping are also benefits of our C-Deck!

Screw Products, Inc's new C-Decks are available in ACQ Compatible e-coat or a 305 stainless steel combined with a color matched head!

Call for more information or visit us at www.screw-products.com.

Architectural Style Sex Bolts were originally designed for Door Closers and Panic Bars, but have found new life as decorative fasteners for many applications. Available from stock in many standard architectural finishes, and in many sizes, from 1/4" Barrel diameter, up to 5/8" Barrel diameter.

Special Sex Bolts

Accurate has become a leader in the design and manufacturing of internally threaded decorative fasteners. We have developed many manufacturing techniques that allow us to produce small runs at competitive pricing. Our unique mix of production machines and engineering expertise has expanded the universe for these versatile fasteners.



Shoulder Screws



We have an in-depth stock of **Shoulder Screws**, in Brass, Type 303 Stainless, and Type 316 Stainless. Sizes run from 1/8" by 1/8" to 1" by 6" shoulder diameter and length. Specials are also available and can run up to nine inches long.

Non-Standard Flat Washers

We manufacture and stock **extra thin** or **extra thick washers**, leaving the standards alone. Shims from .001 thru .020 thick. **Flat Washers** from 1/8" to 5/8" Thick. Bolt sizes from #0 thru 4". Materials include Low Carbon Steel, Medium Carbon Steel, 4140 Alloy Steel, 303 Stainless, 316 Stainless, and 400 Series Heat Treated Stainless.



Just a small portion of our non-standard washer inventory

Architectural Fixings

Accurate Manufactured Products Group has added over 1000 items to our new Architectural line of hardware. In addition to a selection of larger diameter sex bolts and oversized, tall **acorn nuts**, we've rolled out a complete product line of **stand offs**. Panel, edge and slot mount stand offs are essential components of signage and glass installation. Our **structural standoffs** are manufactured for the commercial glazing industry and can be



used for mounting glass canopies, curtain wall and glass railing and balconies. We currently stock the largest selection of sizes, finishes and materials in the United States.

In addition to our stand off line, AMPG offers stainless steel **cable infill kits**. Cable infill is ideal for applications like railing, decking and mezzanines. Our kits come in various lengths and cable diameters.

All of our hardware is 100% MADE IN USA, and will qualify for LEED Materials & Resources (MR4) credits. A decision was made to enter into this market because there was a need for aesthetically pleasing and functional hardware. When architects and design professionals know that they can add that special finished touch to their project, it makes all the difference.



ABLE LABEL SYSTEMS

LABEL PRINTERS - BARCODE SOFTWARE - FASTENER LABEL SYSTEMS

**Make your own Fastener Labels
using our Windows-based "ALWIN" Label System!**



With over 1900 Graphics, Dozens of Label Templates and a Database to Store Your Parts, You Can Create Box & Bin Labels in Seconds!

*** Windows 7 Compatible ***

Have a Great Day - God Loves You!

Phone: 877-414-5867 www.ablelabelsystems.com E-mail: sales@ablelabelsystems.com

SUBSCRIBE TO:



*Do Not Miss an Issue ...
Subscribe Now!*

* Subscription rate — \$50 per year (domestic)

Company _____ (please print)

Check One: Fastener Distributor Fastener Manufacturer Fastener Rep Other _____

Name _____

Check One: President Vice President Sales Buyer Other _____

Address _____

City _____ State _____ Zip _____

Bus. Phone _____ Fax _____

E-mail _____

- * Basic one-year subscription rate \$50.00
- Canada & Mexico \$60.00 U.S.
- Foreign \$70.00 U.S.

Cut along dotted line and return with payment in U.S. funds
(check or money order - no credit cards).
Please allow 30 days for delivery of your first issue.
Distributor's Link Magazine is published quarterly.

Cut here

Enclose payment to:
Distributor's Link Magazine
4297 Corporate Square North
Naples, Florida 34104
800-356-1639 Fax 239-643-5220



Partial View of CNC Swiss Lathe Area – (3) Star CNC Swiss Lathes with Bar Feeds – 1.250" Capacity

*Jig and Fixture
Component Items*

Component Washers
in Low Carbon Steel Case
Hardened and Black
Oxide Plated, as well
as in 18-8 Stainless and
Commercial Brass. Se-
lected styles of Jig and
Fixture component
items and **clamps**.



*Measuring Tool
Accessories*

We specialize in the design and manufacture of productivity aids for measuring tools, which allow your customers to perform measurements by attaching our products to a common measuring tool that they currently own, and which allow them to avoid purchasing a specialty tool that is very expensive, and which they probably won't use again after they finish the job they have



Mazak Nexus Quick Turn CNC Lathe – 3" Thru the Spindle Capacity, and 14.75 Diameter X 19.85 Length Chucking Capacity

in house. We also manufacture **Dial Test Indicator Tips** to fit all OEM Test Indicators, as well as thousands of Tips for Drop Dial Indicators, and **Probes** for Coordinate Measuring Machines.



Accurate
Manufactured
Products
Group



The Dealers' Source for Non-Standard Fastener Products



STRIPPER BOLTS

18-8 and Type 316 St/5t line
IN STOCK—
From 1/2" x 1/2" up to 1" x 8"
Special Sizes Run In-house
Small Quantities
Quick Turnaround

SQUARE WASHERS

2", 3", 4" Square
Steel, Stainless Steel,
Galvanized, Diamond-Plate
From Stock



BINDING POSTS

IN STOCK—up to 6" Length
Aluminum, Black Anodized,
18-8, Brass, Copper,
Steel Zinc

FLAT WASHERS

18-8, 316, 17-4, Brass,
Heat Treated Steels
Extra Thick & Extra BIG,
from #0 thru 4" Bolt Size IN STOCK



- MILLIONS IN STOCK
- Next Day Shipment
- Top Quality
- Small Quantity Orders
Our Specialty



Added \$700,000 in
brand-new machine
tools in 2010 alone

ARCHITECTURAL STYLE SEX BOLTS

IN STOCK,
All Sizes and Materials.



COMBO HEAD BARREL BOLTS

Matched Sets in 18-8, 316,
and Steel Zinc. Standards
and Specials from Stock.



THUMB SCREWS

Coarse and Fine Threads from STOCK.
Steel and Stainless Steel,
4-48, 6-48, 8-40, 1/4-28,
3/16-24, 5/16-24



8090 Woodland Drive, Indianapolis, IN 46276
Phone: 317-472-9000 • Fax: 317-472-9010

email: sales@ampg.com • website: www.accuratemfg.com



Packaging is Our Passion & Profession...

Let it be Your Potential for Profit

At Component Packaging...

- Accuracy is our Trademark
- Deadlines are our Driver
- Pricing is Always Competitive



- Automated kitting (up to 13 different parts)
- Check-weighing systems for high content accuracy
- Printed/labeled bags (including UPC codes)
- Hand Pack Division
- Shrink Wrapping
- Assembly (for diverse or larger projects)
- Centrally located in Southwestern Missouri

7931 East 24th Street • Joplin, MO 64804
www.componentpackaging.com
Contact Lori Magoulas 417-624-9395, ext. 1
email lorim@componentpackaging.com

"Whatever it Takes!"



COMPONENT PACKAGING



Accurate's Receiving, Distribution, and Packaging Staff



Delivery of one of the three new machines purchased in 2010



New (2010) AMADA Production Saw

Machine Tool Accessories

Parts for Vises and Machine Tools, plus **Work Stops** and **Chuck Accessories**. Everything that the small manual machine shop needs to achieve faster and more consistent production.



Power Transmission Accessories

A very large and complete line of **Linkages** and accessories. All items that exist between the ball joint and the control arm or lever.



Accurate
Manufactured
Products
Group

8090 Woodland Drive, Indianapolis, IN 46278

Phone: 317-472-9000 • Fax: 317-472-9010

email: sales@ampg.com • website: www accuratemfg.com

YOUR SOURCE

For Standard And Specialized Fasteners

Cotter pins, hitch pin clips, spring pins, clinch pins and more pins. Pins for industry. Pins for agriculture. Pins for OEM. Pins for every purpose and much, much more. From lock washers, D-rings, key rings and S-hooks. We offer our products in various sizes, shapes, materials and finishes. Check out our website for complete product details.

When applicable and specified, our pins conform to federal specifications. Supporting material test reports are kept on file.

As a proud USA manufacturer, we produce an extensive line of standard and specialized fasteners. Give us a call and let us show you why people have been relying on Western Wire Products since 1914.

And Let Us Give You A Hand With Customized Wire Shapes & Forms

If one of our standard parts will not meet your needs, we would be glad to give you a quote on a customized shape, stamping, or form made to your specifications.



Western Wire Products Co.
Since 1914

770 Sun Park Drive • Fenton, MO 63026 • 800-325-3770 • FAX 636-305-1119
e-mail: sales@westernwireprod.com www.westernwireprod.com





John Boe

John Boe presents a wide variety of motivational and sales-oriented keynotes and seminar programs for sales meetings and conventions. John is a nationally recognized sales trainer and business motivational speaker with an impeccable track record in the meeting industry.

To have John speak at your next event, visit www.johnboe.com or call 937-299-9001. Free Newsletter available on website.

PROSPECTING - BUILDING AN ADVOCATE ARMY

The single greatest concern facing all salespeople is prospecting for new business. As a commission salesperson, your livelihood is directly dependent on your ability to prospect effectively. Do you consistently ask for referrals? To be successful in the sales profession you need assistance from your clients in the form of referrals. Average salespeople do not invest their time nor spend their money developing clients into advocates. An advocate is a person that will go out of their way to recommend you to their friends and associates.

Obviously the more people that are saying good things about you and your company in the marketplace, the more sales you will make! I have never seen a salesperson leave the profession because they had too many qualified prospects to work at one time. Building an advocate army doesn't happen over night, but the time, money and effort required to develop advocates is certainly worth it. Most clients are initially reluctant to provide referrals and need to be encouraged and trained. Cows don't give milk; you've got to work for every drop. To become effective, advocates need to be trained and motivated. Advocates aren't born they're developed!

How do I go about finding my suitable advocates?

- Begin by creating a list of your existing advocates. Clients that have already referred prospects to you, automatically become part of your advocate army.
- Review your client list for potential advocates. Identify those clients that have purchased multiple orders or large single orders but have not yet referred a prospect to you.


After I've identified my list of advocates and potential advocates, what do I do next?

- Let your existing advocates assist you in training your potential advocates. Develop an action plan to contact your potential advocates and invite them to a breakfast or lunch along with one or two of your best advocates. This low-pressure approach is effective because you merely guide the discussion and allow your advocates to share their referral techniques.
- Stay in contact. Put your advocates on a suspense list to contact them quarterly. Consider calling or mailing them something of interest, such as an article or newsletter.

How do I train my advocates to prospect effectively?

- Teach your advocates how to approach a prospect. Be careful not to let them overeducate their referrals. Role-play the actual words you would like them to use when they introduce you. I suggest that you coach them to say what it is that you do - not how you do it. Keep it simple and short.
- Prepare them for the standard objections that they may expect to encounter from a prospect. If they are not prepared to deal with the typical objections, they will be less effective and will potentially be discouraged from future prospecting attempts.

How do I reward my advocates?

- Send them a thank you card and or call them to thank them for referring a prospect to you. Keep them informed on the status of their referrals. You must have a system in place to provide feedback to your advocates or they will not feel appreciated and will loose interest.
- Consider giving them a small gift for their involvement, such as a gift certificate to a local restaurant. 

Obviously the more people that are saying good things about you and your company in the marketplace, the more sales you will make!

Anthony Manno & Co. Inc.

Precision Fasteners And Electronic Hardware
48D Otis Street, West Babylon, NY 11704

Now Offering Military Standard Hardware
Parts available in both ROHS and DFARS Compliant
Most parts available from STOCK or with Quick Turnaround

MIL-S-1222 MIL-DTL-1222 FF-S-86

MS51575- SOCKET SHOULDER SCREW SS
MS51975- SOCKET SHOULDER SCREWS ALLOY STL CAD
MS51021- SOCKET SET SCREWS
MS16555- 416SS DOWEL PINS
MS35307- FINE THREAD HEX CAP SS
MS35308- HEX CAP SS
MS51957- PHILLIPS PAN M/S SS
MS39087- HANDLES
NAS1351- SOCKET CAPS
NAS1352- SOCKET CAPS FINE THREAD
NAS1829- HEX M/F STANDOFFS
NAS1831- HEX F/F STANDOFF

www.AnthonyManno.com

Sales@AnthonyManno.com

(Ph) 800-915-7703 (Fax) 888-505-6551

SS Fasteners
Mehta Trading Intl.

**The Complete
Stainless Steel
Fastener Source for
MILL Shipments**



**Mehta
Trading
International**

*For Competitive quotes, call us at
888-324-6974
Fax RFQ at 972-642-1244 or
e-mail corp@MehtaTL.com
Visit us at www.MehtaTL.com*

**Where Pursuit of Progress
is Endless**

shear-Loc® THE ORIGINAL
INSTANT THUMBSCREW

WWW.SHEAR-LOC.COM



CALL ABOUT LASER ENGRAVING

FREE SAMPLES

4 STYLES
INCH METRIC

CALL OVER 3000 COMBINATIONS
800-775-5668 FAX 949-768-8705

AVAILABLE IN COLORS, KITS AND A MULTITUDE OF THREAD OPTIONS

23191 PERALTA DR., LAGUNA HILLS, CA. 92653

DISTRIBUTOR NEWS

The Mid-West Fastener Association will be celebrating their 65th anniversary throughout the year including at our golf outing and show. The largest celebration will be November 10th in conjunction with our scholarship awards. This event will take place at the Rosewood Restaurant, where we also celebrated our 50th anniversary. We are compiling a list of past industry MWFA, formerly Chicago Bolt, Nut & Screw Association, members. We'd like to recognize our past presidents, board members and retirees. We hope current and past members will join us for this celebration.

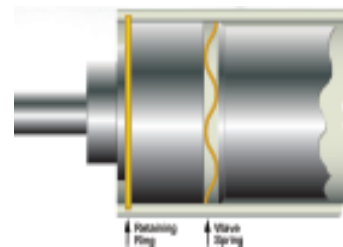
You can help us by sending us e-mails of any past presidents, board members, retirees or past members who are no longer in the industry so we can contact them and let them know of 65th anniversary plans.

Please send to Nancy at mwfa@ameritech.net or call her at 847-438-8338.

* * *

Rotor Clip Company, Inc., the leading manufacturer in retaining rings, hose clamps, and related products helps designers of fluid power assemblies cut costs and save space in their designs by combining the benefits of wave springs and traditional retaining rings.

The retaining ring fixes the cover element and eliminates the need to weld or screw down the components, making the assembly easy to



repair/service in the field.

The wave spring between one cover element and the inner tube pre-loads the inner components against each other; possible axial tolerances are always balanced so no axial play occurs.

Visit www.rotorclip.com for online retaining ring specs, sample requests and quotation requests. To request a hard copy of the 2010 catalog, email adv@rotorclip.com. For technical considerations or design questions for these and other products, email tech@rotorclip.com.

Your only
**FLANGE BOLT &
NUT COMPANY**

ASK FOR OUR LINE CARD:

NEW ITEMS

- STAINLESS STEEL FLANGE BOLTS IN METRIC and 1/2" DIAMETER

STANDARD IN STOCK ITEMS

- GRADE 5 AND 8.8 SERRATED HEX FLANGE BOLTS
- GRADE 8 AND 10.9 HEX FLANGE BOLTS
- STAINLESS STEEL 18.8 FLANGE BOLTS
- FLANGE NUTS – SERRATED, NYLON INSERT, STAINLESS STEEL, LARGE FLANGE, TOP LOCKED, AND UNLOCKED
- SPECIAL ORDER FLANGE BOLTS

We offer the largest selection, competitive pricing and on-time delivery backed by our extensive, diverse inventory with unmatched customer service!

Call or fax your order today:

ICS
FLANGE

PH: **800.231.0360**

FX: **800.586.2461**

10729 Wolf Drive, Huntley, IL 60142

www.INNOVATIVECOMPONENTSALES.com





John R. Graham

John R. Graham is president of Graham Communications, a marketing services and sales consulting firm. He writes for a variety of business publications and speaks on business, marketing and sales issues.

Contact him at 40 Oval Road, Quincy, MA 02170; 617-328-0069; jgraham@grahamcomm.com. The company's web site is grahamcomm.com.

HOW TO AVOID BEING LEFT BEHIND IN 2011

Even after three years of economic gloom, the predictions about 2011 range from optimistic to less so. In some industries, the landscape remains desperately arid, while for others, the green shoots that poked their way to the light are actually growing stronger.

Speculating about the year ahead is an interesting exercise, but one that may not have much value. What may be more useful are certain guideposts that can help point the way for a beneficial 2011.

1. Get your employment record straight.

Anyone who reviewed resumes over the last decade recognized one fact stood out like the proverbial sore thumb: job-hopping. Employees often moved from one job to the next in a matter of months, let alone a year. For many, this was the plan. While the "plan" may have brought pay hikes, it also created an interesting unintended consequence. Once the recession hit, performance became an employee's most valuable asset, not a string of jobs on a resume.

It takes time to master an understanding of a company, along with its products or services and most importantly, its customers. This is what has value to employers today.

2. Job security depends on strategic thinking.

We might also call this "goal thinking" or recognizing the objective and then pushing aside anything that doesn't bring value to reaching it.

Needless to say, strategic thinking is a rare commodity in the workplace. "Total immersion is the best way to learn a new language," says Michael Watkins of Genesis Advisers. "Immersion is important because people need significant 'soak time' in a milieu in order to build powerful mental models."

It's fun to sit around and dream up clever "stuff," whether it is a product promotion, a new smart phone app or a sales campaign. But it's something quite different to come up with solutions that contribute to making that app of value to users or a sales campaign more than a glitzy gimmick.

In effect, the ability to think strategically is significant because it focuses on the consequences of an action or an idea. And that's a valuable commodity in the workplace.

3. The necessity of technological competence.

Although society appears to place importance on technological competence, how much of a connection is there, for example, between such competence and success in school? The results of a large, recently reported survey of secondary students in England revealed the answer. It appeared that students didn't make a connection between "scholastic success and information and communication technology." In fact, the

belief in the value of such competence was low compared with the use of technology in other areas of their lives.

It seems doubtful that the workplace is very much different, particularly when a substantial percentage of those who are unemployed are technologically incompetent.

4. It's not what we do but how we think.

"There is a fundamental shift in rules from manual-based work (where you follow instructions and an increase in productivity means doing the steps faster)," blogs author Seth Godin, "to project-based (where the instructions are unknown, and visualizing outcomes and then getting things done is what counts)."

...the ability to think strategically is significant because it focuses on the consequences of an action or an idea. And that's a valuable commodity in the workplace.

WROUGHT WASHER

Special Washers & Stampings

Special Flat Washers-long & short runs

Laser Cutting/CNC Machining

Heavy Stampings up to 1/2" thick

Sems Washers

8,000,000 lbs raw material in-house

Direct Shipments
Managed Inventory



High Quality Standard Washers

F436 Structural Washers, Type 1, Type 3, Bevel

Helical Spring Locks, Regular, High Alloy, Heavy, Metric, Hi-Collar

Mil-Carb™ Washers High-Strength USS/SAE with extra thick sizes

Domestic and Import USS/SAE/Fender/Dock Washers

Auto Shims, U-Bolt, Type B Washers

REGIONAL WAREHOUSES

Milwaukee
Cleveland

Santa Ana
Scranton

Charlotte
Dallas

Tampa
Houston

TS Registered Quality System
A2LA Accredited Lab

1-800-558-5217

www.wroughtwasher.com



"Here's something important... The Distributor's Link Magazine will print in their news section, FREE of charge, any new products, services, promotions or company expansion plans, etc....I say we contact them immediately!"

MAFDA - P.O. Box 752 Swedesboro, NJ 08085 • info@mafda.us • www.mafda.us

MID-ATLANTIC FASTENER DISTRIBUTORS ASSOCIATION

MAFDA RE-ENERGIZED FOR A STRONG 2011

by Bryan Michael (BBI)

The MAFDA would first like to thank the member companies for their continued support throughout 2010. The New Year will bring fresh ideas, opportunities, and benefits to the organization.

Rick Lubker of Lubker Distribution will be heading up efforts moving in to 2011 as the new board President. Tim Bozarth (Guidon Corp.), Bryan Michael (Brighton Best Int.), and John Pohlhaus (PM Fasteners) will be serving as association Vice Presidents, with Treasurer Barbara Traum (Brighton Best Int.). Continuing in important support roles are board members- Lee Johnson (Lee Johnson Associates), Chuck Halpin (Brighton Best Int.), Bill Bankoske (Aall American Fasteners), Tricia Frey (Smith Associates), and David Myers (Coburn-Myers Fastening Systems).

The MAFDA has a full schedule of events planned for the year. To start things off we are bringing back the hugely successful Representative Symposium in April. Followed in May by the 6th Annual MAFDA Scholarship/ Golf Outing. After great reviews, we are bringing back the Continuing Education Series in September, with guest speakers to be announced at a future date. We will end the year with the Annual Organization Meeting and Holiday Party in December. Please come out and show your support of the association.


With the onset of 2011 The MAFDA will be waiving all initiation fees for new member companies in an effort to bring the association's benefits to all who are able to join!



A Letter from the President:

Working for you, the distributors, suppliers, and manufacturer representatives in the Mid-Atlantic region, the MAFDA is enthusiastically remodeling the association with an absolute commitment to providing increased value to your membership. We have started with a revamp of the association web-site, installing value added industry specific tools, added a calendar of events that provide both educational and social opportunities, and have retooled the finance area to better provide you with timely detail concerning your account, as well as to provide details specific to the finances of the association.

We know of course that none of this is important unless we have YOU on board! If you are not already a member of the association, and conduct business or reside in the Mid-Atlantic area, please consider joining and becoming part of the fastest growing fastener specific association. We want Manufactures, Manufacturer Reps, and Distributors. We strongly believe that our all-inclusive model is in the best interest of our members, and provides excellent 'face time' opportunities at all events.

The MAFDA's goal is to work for its members by providing knowledge, beneficial business insight, forums for discussion, and the all important scholarships used to further the education of industry youth. 

Sincerely,



Rick Lubker
MAFDA President

Please take a moment to visit our web site at www.mafda.us Feel free to contact any of the board members via their e-mail address listed. The site includes an application for membership and scholarship application.

CRESCENT MANUFACTURING

PROUDLY MADE IN THE USA

50 YEARS OF EXPERIENCE TO BACK OUR PRECISION PRODUCTS

QUALITY

MIL-I-45208A, MIL-STD-45662A,
ISO 9001:2008 and AS9100 CERTIFIED,
QSLM CL2A and CL3A

COMPLIANCE

DFARS, ROHS, REACH COMPLIANT &
ITAR REGISTERED

MIL SPEC FASTENERS

MS, AN AND NAS

COMMERCIAL PARTS

METRIC FASTENERS

STANDARDS ARE READILY AVAILABLE BUT
NOT LIMITED TO DIN, JIS, ISO, AND IFI (ASME)

KWIK THRED

SELF-CLINCHING STUDS

RUSH ORDER FULFILLMENT AVAILABLE

BETA/BETA-PRO

MINIATURE THREAD FORMING SCREWS

ENGINEERED SPECIALS

SIZES 00-5/16 OR M1.4-M8

POSSIBLE LENGTHS THROUGH 3 INCHES

NO JOB TOO SMALL

1M MINIMUM ON MOST ITEMS

NO JOB TOO LARGE

CAPABILITY TO PROVIDE PARTS IN THE MILLIONS

CUSTOMER SATISFACTION IS PRIORITY ONE

CHECK THE WEB FOR STOCK AVAILABILITY AND OUR MILITARY PARTS LIST

700 George Washington Turnpike, P.O. Box 1350, Burlington, CT 06013 USA
Phone: (860) 673-2591 Fax: (860) 673-5973 www.crescentmanufacturing.com

**Industrial
Rivet &
Fastener Co.**

Industrial Rivet & Fastener Company

200 Paris Avenue, Northvale, New Jersey 07647 U.S.A.

Toll Free: 800-289-7483

Tel: 201-750-1040 Fax: 201-750-1050

Web: www.rivet.com

INTRODUCING KINGSET™ RIVETING SYSTEM


Industrial Rivet & Fastener Co., a global manufacturer, distributor and importer of quality rivets and fasteners, today announced its latest product, KingSet™ - a cutting-edge, hand-held automated riveting system. Industrial Rivet's KingSet™ is the first of many in a line of new tools available and in development.

KingSet™ is ideal for use in sheet metal fabrications, including, the assembly of appliances, automotive products, electronic chassis, HVAC and solar applications. KingSet™ is fully portable - allowing for one-hand operation and can be used with multiple fasteners - a revolutionary offering in the fastener industry. "This is a major step forward and has been very well received", said Bill Goodman, President of Industrial Rivet. "Our customers have already expressed a strong interest, which has positioned KingSet™ to



become our fastest growing new product."

With an aim at simplifying assembly and reducing costs while providing a strong, reliable joint, KingSet™ has been engineered and designed for different application ranges and can adapt to varied manufacturing environments. Features and benefits of KingSet™ include auto-

feed & multi-set capabilities, quick reload and cycle times, one-touch operation, built-in MCS and an adjustable vacuum system. The KingSet™ is capable of setting 1/8", 5/32" and 3/16" breakstem blind rivets in a variety of materials and configurations. The system can be used to apply many of RivetKing®'s engineered fastening products such as Multigrip®, RiviBulb®, Rivinox®, RK-Q®, Grooved, Easy Entry and Rivex®. 

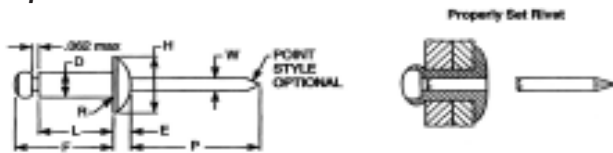


Anthony DiMaio

Anthony E. Di Maio attended Wentworth Institute and Northeastern University. In 1962 he started working with Blind Fasteners as Vice-President of Engineering & Manufacturing for two blind rivet manufacturers. He has been Chairman of the Technical Committee of the Industrial Fasteners Institute (IFI) and is still involved in the writing of IFI specifications. In 1991, he started ADM Engineering and is working with Fastener Manufacturers developing new fasteners and special machinery. He can be reached at ADM Engineering, 6 Hermon Ave., Haverhill, MA 01832; phone and fax 978-521-0277; e-mail: tdimaio@verizon.net.

HOW DIFFERENT TYPES OF BLIND RIVETS FUNCTION

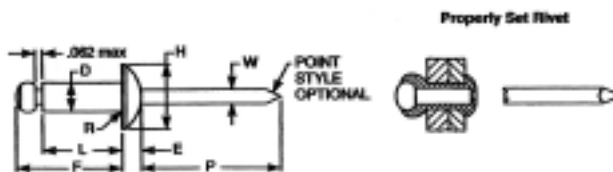
Open-End Break Pull Mandrel Blind Rivets



The mandrel is inserted into the nosepiece of a setting tool. The setting tool pulls the mandrel and drives the mandrel head into the body of the blind rivet. The mandrel head expands the barrel of the rivet body and the expanded rivet barrel then applies pressure to the work piece. The rivet body is now clamping the work pieces together. The setting tool continues to pull the mandrel until the pulling force reaches the tensile strength of the mandrel, and the mandrel will break at the break point of the mandrel located just below the mandrel head. The mandrel head is now locked in the upset end of the rivet body and the spent mandrel is discarded.

The Open End Break Pull Mandrel blind rivet are produced in five different diameters - 3/32, 1/8, 5/32, 3/16 and 1/4. The rivet bodies are produced in aluminum, copper, steel and stainless steel having dome, countersunk and large flange heads.

Structural Flush Break Pull Mandrel Self Plugging Blind Rivet



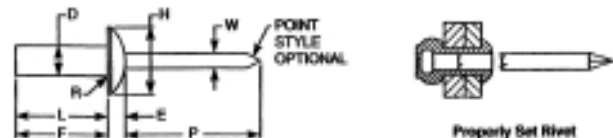
IFI SPECIFICATION No. IFI-119.

The mandrel is inserted into the nosepiece of a setting tool. The pulling of the mandrel causes the mandrel head to expand the rivet body and it is this expanded rivet body that clamps the work pieces together in the same way as the Open End Break Pull Mandrel Blind Rivet, with the exception of the position of the mandrel break point. As

shown in the above drawing, the mandrel break point is just below the outer surface of the flange of the rivet body. The interior hole of the rivet body has mandrel material in it, thus increasing the shear strength of the set rivet. Therefore, the shear strength of this blind rivet is higher than the Open End Break Pull Mandrel Blind Rivet.

The break point of the mandrel is positioned in relationship to the work thickness range of the blind rivet. These blind rivets must be used to their work thickness specifications only. If the blind rivet is used with a work thickness that is thinner than what is specified, the mandrel that remains in the rivet body will extend out beyond the flange of the rivet body. This condition is dangerous for the user of the riveted products. The higher shear value of this type of blind rivet is what makes it desirable. The blind rivet is produced in aluminum, steel, copper and stainless steel in four diameters - 1/8, 5/32, 3/16 and 1/4 with dome, large flange and countersunk head styles.

Break Mandrel Closed End Blind Rivet



IFI SPECIFICATION No. IFI-126.

The Closed End Blind Rivet has the mandrel head enclosed inside the rivet body. During the last stages of the manufacture of this blind rivet, the mandrel is inserted into the rivet body and the rivet body is compressed around the inserted mandrel. When the mandrel is pulled by the setting tool, the body material that is compressed under the head of the mandrel, will compress the rivet body against the work pieces being riveted and when the pulling force of the setting tool reaches the tensile strength of the mandrel, the mandrel will break at its break point. The mandrel is captured inside the rivet body and the spent mandrel is discarded.

Solution Industries 17830 Englewood Dr. Unit #11 Middleburg Heights, OH 44130
 Phone: 866.297.8656 Fax: 440.816.9501 Email: sales@solutionind.com Web: www.solutionind.com

SOLUTIONMAN ANNOUNCES...




"GRADE 8 HEX TAP BOLTS at the most competitive prices in the country are at Solution Industries," announces Solution Man. "We listened to your plea to increase your bottom line profit especially in today's economy and we have added 1/4 - 1" diameter thru 12" long tap bolts to accommodate any order." This amazing growth will include GR8 Shaker Screen Bolts, #3 Head Dome Plow Bolts and an assortment of GR5 & GR 8 Left-Hand Hex Nuts. We will do everything necessary to give you the advantage in today's marketplace."

Solution Industries has been the inventory leader in zinc plated socket products featuring socket, flat, button, stripper, square head set and headless set screws. Finishes include zinc, zinc yellow and zinc black in both inch and metric, supporting distributors nationwide. We offer all exotic finishes including olive drab, electroless nickel, Phos & Oil, mechanical galvanized as well as MAGNI 565. We carry a broad range of semi-standard Hex & Socket Products, and have access to over 10MM lines of excess inventory.

Solution Industries is a distributor/manufacturer with a business model designed to help and support the fastener distributor. Established to supply special and "hard to find" fasteners, we utilize over 100+ years of fastener experience to handle your toughest challenges. In a light manufacturing atmosphere, our warehouse is prepared to service all secondary sourcing requirements. Whether it is nylon patch requests, or drilled hardware, we have it all!

Allow us to handle your plating, patching or any secondary finish while giving you the option to schedule unlimited releases for the ultimate customer service.

The most powerful tie-breaker when choosing a vendor is consistency. At Solution Industries, we promise our customers the same level of first-rate service EVERY SINGLE TIME; not only do we offer solutions, you can rely on us! When choosing a vendor, reliability is the most powerful differentiator. 



Solution Industries



www.solutionind.com

GR5 & GR8 Hex Tap Bolts
 1/4"-1" diameter thru 12" length coarse/fine
GR8 Shaker Screen Bolts
#3 Head Dome Plow Bolts
#7 Head Bucket Tooth Plow Bolts
GR5 & GR8 Left-Hand Thread Hex Nuts

Zinc Plated Socket Products
 socket-button-flat

stripper-square head set screw
 RoHS ZINC/CLEAR ZINC/YELLOW
 ZINC/BLACK

**Socket & Hex Odd Length
 Specials**

DRILLED HARDWARE
 (thru head or thread)

Nylon Patched Products
 (Socket & Hex)



Wolverine Plating Corporation
...your Zinc, Zinc-Nickel & Tin-Zinc Barrel Plating Specialists

With over five decades of barrel plating experience, Wolverine Plating makes your job easier by providing industry-leading:

- *Quality: Defect-Free Parts 99.5% of the time
- *Turnaround Times: 99% of jobs completed on-time

Let us show you how Wolverine Plating is the right barrel plating provider for your company by downloading our free report:

How to Avoid Plating Services That Will Help You Lose Money

This report presents 9 key questions you should ask any plating provider...and how Wolverine Plating answers them all!

Get your copy at www.wolverineplating.com/fastener

If you are interested in submitting an RFQ, go to www.wolverineplating.com and click on Request a Quote Online.

29456 Groesbeck Hwy | Roseville, MI 48066 | (586) 771-5000



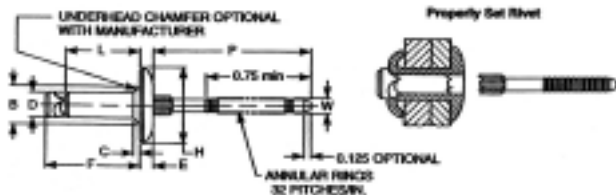

HOW DIFFERENT TYPES OF BLIND RIVETS FUNCTION
continued from page 146

The Closed End Blind Rivet is totally water tight through its center and with the application of sealant on the barrel side of the flange, will make the Closed End completely water tight between the outside diameter of the rivet body, the riveted hole and the work piece.

The Closed End Blind Rivet is used on the exterior surfaces of product that is in contact with liquid or gases. It is also used in electronic products because the mandrel head is captured in the rivet body and cannot become loose and contact electrical components and cause a short circuit.

This blind rivet is produced in four diameters - 1/8, 5/32, 3/16 and 1/4 in aluminum, steel and stainless steel with dome and countersunk head configurations.

Structural Splitting Self Plugging Pull Mandrel Blind Rivets



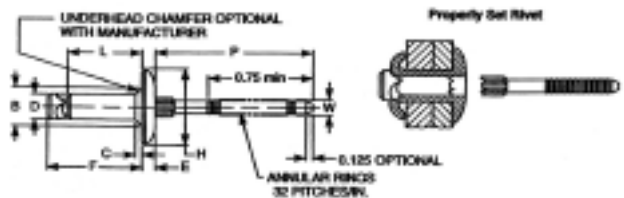
IFI SPECIFICATION No IFI-130.

Being a pull mandrel blind rivet, this blind rivet will set in the same manner as the previous rivets. The mandrel of this blind rivet is very unique. It has cutting points on the mandrel side of the mandrel head that cut and split the rivet body and the mandrel is being pulled. The mandrel break point on this mandrel is positioned in relationship to the maximum work grip range of the blind rivet. This blind rivet has a grip range tolerance of 1/16 of an inch. If this blind rivet is set in a work thickness below its minimum work thickness the remaining mandrel in the rivet body will extend outside the flange and this is not acceptable.

This blind rivet has a high shear strength because there is mandrel material left in the shear plane when the rivet is set. This is why this blind rivet is called structural.


This rivet is produced in two diameters - 3/16 and 1/4 in aluminum and steel with dome and countersunk head configurations.

Multi Grip Flush Break Pull Mandrel Self Plugging Blind Rivet



IFI SPECIFICATION No IFI-134.

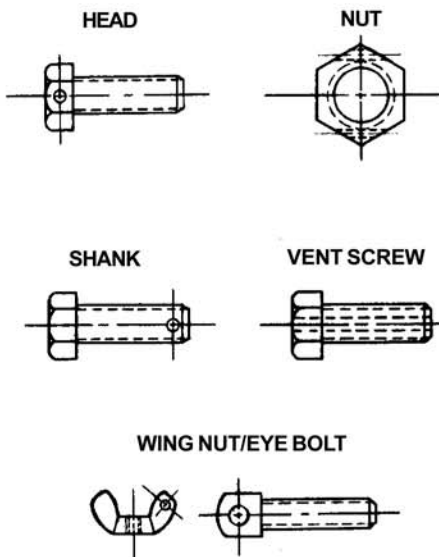
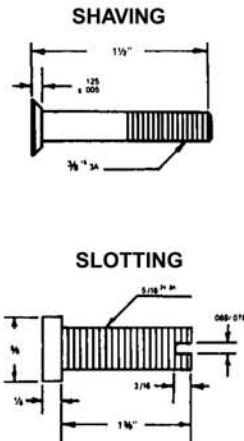
This blind rivet has a very special designed mandrel. This mandrel has an elongated head that is hollow through the center. When this blind rivet is set, the mandrel head will elongate inside the rivet body. The mandrel shank has radial grooves that give the setting tool pulling jaws a positive grip on the mandrel when the blind rivet is being set. This blind rivet has a large grip range. This wide grip range is accomplished because whatever the grip range this blind rivet is set in, the mandrel head will come to rest in the same position in the rivet body. Work thickness has no effect as to where the mandrel head will stop, when the setting tool pulls the mandrel to the tensile value of the mandrel's break point. The mandrel head will travel the same distance no matter what the work thickness is, in fact the mandrel head will travel the same distance when this blind rivet is set with no work thickness. This blind rivet also locks the remaining mandrel in the rivet body.

This blind rivet is produced in two diameters - 3/16 and 1/4 in steel, aluminum and stainless steel with dome and countersunk head styles. 



CALL ASPEN MFG.

for your
FASTENER SECONDARY NEEDS!



- *Cut-Downs*
- *Head-Shaving*
- *Milling*
- *Lathe Operations*
- *Short-Run Prototypes*
- *Secondary Machining*
 - *Slotting*
 - *Dog Pointing*
 - *Counterboring*
- *Knurling* • *Recessing*
- *Grinding* • *Threading*

DRILLING & TAPPING SERVICES:

- *Head* • *Shank*
- *Vent Screw*
- *Sockethead*
- *Fillister* • *Hex Keys*
- *Wing Nut/Eye Bolt*
- *Cross* • *Clevis Pin*

For Faster Deliveries & Better Prices

Call **ASPEN** Today!

Ph. 630-495-0922 • Fax 630-495-0924

Email aspen1mfg@earthlink.net

1001 Republic Drive • Addison, IL 60101

NEW ENGLAND FASTENER DISTRIBUTORS ASSOCIATION



IS PLEASED TO PRESENT ITS THIRD **TABLE TOP SHOW**

MONDAY, OCTOBER 3, 2011

**STURBRIDGE HOST HOTEL & CONFERENCE CENTER
366 MAIN STREET, STURBRIDGE, MA 01566**

- Table Top Exhibits
- Program Booklet
- Technical Seminars
- Business Contacts
- Complimentary Dinner
- Complimentary Parking
- Special Hotel Rates
- Hourly Raffle



SHOW SCHEDULE

Exhibitor Setup: 11 a.m. – 1 p.m.

Attendee Registration: 9 a.m.

Show Hours: 1 – 5:30 p.m.

Technical Seminars: 10 a.m. – 1 p.m.

Cocktails: 5:30 p.m.

Dinner Buffet: 6:30 – 8 p.m.

– TECHNICAL SEMINARS –

The NEFDA is seeking qualified companies or individuals to present a half-hour technical seminar on a subject that will help to educate our membership. Seminars will be held from 10:00 a.m.-1:00 p.m. The classroom is equipped with a large screen; however, it will be necessary for you to bring your laptop and projector. No microphone is necessary in the classroom because the acoustics are excellent. This option to present will be on a first come, first served basis.

Company Name: _____

Address: _____

Contact Person: _____ E-mail: _____

Topic: _____

– Advertise in the Program Booklet –

A full page ad is \$200.00, half page is \$100.00, and quarter page is \$50.00. Send camera-ready art and your check made out to NEFDA by Sept. 3, 2011 to: Joe Soja, NEFDA, 30 Hedgerow, Wethersfield, CT 06109

– Hospitality Sponsor/Raffle Sponsor –

If you would like to be a sponsor for the cocktail period the fee is \$100 per company.

I would like to be a Hospitality Sponsor (Company) _____

I would like to be a Raffle Sponsor (Gift) _____

Charges to VISA, Master Card, AMEX or Discover (circle card that applies)

Card No. _____ Expiration Date: _____

NEFDA TABLE TOP SHOW



ATTENDEE EARLY REGISTRATION FORM

Mail your registration form and check made out to NEFDA by
Sept. 3, 2011 to: Joe Soja,
NEFDA, 30 Hedgerow, Wethersfield, CT 06109
Phone: 860-436-4652 Fax: 860-436-4113 E-mail: jfs@cox.net

Company Name: _____

Address: _____

Phone/Fax: _____

Attendees:

- | | | |
|----|-------|----------|
| 1. | _____ | \$ _____ |
| 2. | _____ | \$ _____ |
| 3. | _____ | \$ _____ |
| 4. | _____ | \$ _____ |
| | Total | \$ _____ |

Charges to VISA, Master Card, AMEX or Discover (circle card that applies)

Card No. _____ Expiration Date: _____

The registration for attending this event is only \$30 in advance until Sept. 3, 2011. After this date the fee is \$35 and also at the door. Your registration fee includes complimentary parking, entrance to the entire show, and complimentary dinner buffet. Program booklet with information on all exhibits and badges will be available at the reception desk on the day of the show.

*Cancellations must be received by 8/3/11 for \$100% refunds. Cancellations received by 8/17/11 will be 50% refunded.
After 9/3/11, unfortunately, we will be unable to make any refunds.*

NEFDA TABLE TOP SHOW



EXHIBITOR REGISTRATION FORM

(DEADLINE TO EXHIBIT SEPT. 3, 2011)

Mail your registration form and check made out to NEFDA by
Sept. 3, 2011 to: Joe Soja,
NEFDA, 30 Hedgerow, Wethersfield, CT 06109
Phone: 860-436-4652 Fax: 860-436-4113 E-mail: jfs@cox.net

Company Name: _____

Address: _____

Phone/Fax: _____

Contact Name: _____

E-mail Address: _____

Company Profile for program booklet _____

Do Not Locate Us Near (Co. Names): _____

Booth Attendees: Member Nonmember Total Enclosed \$ _____

1. _____ 2. _____

Charges to VISA, Master Card, AMEX or Discover (circle card that applies)

Card No. _____ Expiration Date: _____

Your registration fee \$325.00 for NEFDA & MFDA members, and \$425.00 for non-members, includes a draped eight foot long table and sign with complimentary name, two (2) complimentary exhibitor badges, complimentary parking, and complimentary dinner buffet. You will receive confirmation in writing on your exhibitor status and instructions for the day of the show by e-mail. Please plan to arrive by 11:00 a.m. to set up your table, and plan to breakdown no earlier than 5:30 p.m.



FASTENER INDUSTRY WEBSITE DIRECTORY

For easy access to all of these websites, log on to www.linkmagazine.com and click on the ad of your choice for a direct hot LINK!

 **ABBOTT-INTERFAST CORP.**
 NYLON INSERT STOPNUTS
www.abbott-interfast.com
 email: sales@abbott-interfast.com
 Phone 847-777-3030 • Fax 847-459-4076


www.ablelabel.com

Able Label Systems, LLC
 Label Printers & Software

877.414.5867 www.ablelabelsystems.com

Accurate
 Manufactured Products Group, Inc.
 • Sex Bolts • Component Washers
www accuratemfg.com



www.acfcom.com
1-800-227-2901

Formed spring steel fasteners
www.e-equal-fast.com



Advance Components
 The Distributor's Source for Specialty Fasteners
 [P] 800-275-7772 [F] 972-242-3090
advancecomponents.com

Ajax Wire Specialty Co., Inc.
 Think Springs. Think Ajax!
 800-966-AJAX • Fax: 516-935-2334
www.ajaxwire.com

 **Albany Steel & Brass Corporation**
www.albanysteel.com
 from STOCK
 'B', 'F', 'U', '21', TEKS®, SWAGEFORM®
 Thumbscrews, Wing Nuts, Screwnails


 877-865-8237
AllAmericanFastenerShow.com

 **Quality producers of Washers and Stampings**
 847-566-9091
www.allamericanwasherwerks.com

ALFA TOOLS *The Distributors' Depot*
www.alfatools.com


 516-867-6188 • Fax 516-867-6189
www.alphafastenersusa.com


 508-520-4005 • Fax 508-520-4185
www.agmi.com

ALUMINUM FASTENER SUPPLY CO., INC.

 4297 Corporate Square
 Naples, FL 34104
 Tel: 239-643-4551
 Fax: 239-643-5795
www.aluminumfastener.com


800-431-2391
 Over 500 million screws in stock

Quality is Our Key to Success
ANDROCK
 Hardware Corporation
www.androckhardware.com

 **Anthony Manno & Company Inc.**
 Precision Fasteners And Electronic Hardware
 48d Otis St., West Babylon, NY 11704
 Quality Components, Service & Reliability
 (Ph.) 631-612-1989
 (Fax) 631-491-7133
 Sales@AnthonyManno.com
www.AnthonyManno.com

NOW STOCKING



Monel® 400 Hex Head Cap Screws

ASTM F468, MIL-DTL-1222J and MIL-S-1222H, IAM#3
Diameters 3/8" to 3/4", lengths up to and including 6", coarse threads

Monel® 400 Hex Nuts

ASTM F467, MIL-DTL-1222J and MIL-S-1222H, IAM#3
Diameters 3/8" to 3/4", coarse threads



Flat Washers & Lock Washers

Monel® 400 per MS15795 and FF-W-92B, AM#1
K500 Monel® per MS35338 and FF-W-84A, AM#4

Nylon & Vespel® Insert Locknuts

Monel® 400/405 per MS/NASM 17828, M25027/1 Series, NASM25027
300 Series SS/316 SS to MS/NASM17830, MS/NASM21044 & MS/NASM2103
Grade 8 (both Zn & Cd) to MS/NASM17829
Vespel® insert locknuts to all specifications and materials as shown above



Monel® 400 Socket Head Cap Screws

FF-S-86E, AM#4
Diameters 3/8" to 3/4", lengths up to and including 3"

Monel® 400 Flat Head Socket Cap Screws

FF-S-86E, AM#4
Diameters 3/8" to 3/4", lengths up to and including 3.5"



Don't See the Part, Size or Configuration You Need? Need a Special to Print?

CALL US TODAY AT 1-800-542-5762

Please Ask for Military Sales and Mention this Ad

FASTENER INDUSTRY WEBSITE DIRECTORY

For easy access to all of these websites, log on to www.linkmagazine.com and click on the ad of your choice for a direct hot LINK!



applied bolting
TECHNOLOGY

www.appliedbolting.com
e-mail: link@appliedbolting.com



Ark-Plas® Products, Inc.
"Expect Excellence"
Phone: 870-453-2343
Fax: 870-453-2567

www.ark-plas.com ISO 9001 CERTIFIED



AUSTIN
HARDWARE & SUPPLY, INC.
SECURING SOLUTIONS FOR YOUR BUSINESS

www.austinhardware.com



"If we don't have it, we'll help you find it."

www.azliftinghardware.com



Aztech Locknut Company

www.aztechlocknut.com



aztec washer company
when reliability counts

www.aztecwasher.com

All the Top Riveting & Fastening System Lines Under One Roof



BAY FASTENING SYSTEMS

1-800-718-8818
www.bayfastening.com

BBC Fasteners

Cold Headed Parts
Metrics Too!

www.bbcfasteners.com



"100% RoHS Compliant"
LOWEST PRICES... LARGEST INVENTORY!

Stock Thread Forming • Thread Cutting
High Low Tapping • Sheet Metal Tapping • Sems Screws

BEACON Fasteners & Components, Inc.
www.beaconfasteners.com



BIG BOLT

www.bigbolt.net



BINDER METAL PRODUCTS
INCORPORATED

www.bindermetal.com
email: sales@bindermetal.com

BOLT PRODUCTS INC.
The Best in Fastener Technology

www.boltproducts.com



BRIGHTON-BEST INTERNATIONAL

Master Distributor/Importer for all your Fastener needs. Best Quality, Service, Value since 1925.

www.brightonbest.com



BRITISH METRICS
A DIVISION OF SCOTTISH IMPORTS LTD.

Metric & British Hardware
www.britishmetrics.com



CHRISLYNN
HELICAL INSERTS
PRECISION

Professional Thread Repair Kits
800-926-1495
www.chrislynninserts.com



Capital Marketing™

Sales and Marketing from a Premier Agency
www.capital-marketing.com

YOUR AD HERE!
Claim your FREE Website Ad Listing when you advertise with Link Magazine



CABLE TIE EXPRESS
Tying Service to Quality

www.cabletieexpress.com



COMPONENT PACKAGING

We treat your packaging as if you were our only customer!

www.componentpackaging.com



Computer Insights, Inc

www.ci-inc.com

simple • focused • effective



Copper State

Pre-headed and square bolts

www.copperstate.com

DISTRIBUTOR NEWS

Great Lakes Parts has added a complete line of Wheel Nuts for aluminum wheels - covering several hundred new applications. Bill Melchior, President of Great Lakes Parts announces that they now offer wheel nuts for Automotive, Light Duty Trucks, Vans, SUV's and most Heavy Duty Truck and Trailer applications.



Great Lakes now carries over 3 million parts in stock consisting of hundreds of different sizes and styles of wheel nuts – to fit almost every Steel and Aluminum Wheel.

State-of-the-art manufacturing facilities allow Great Lakes to produce almost any configuration of wheel nuts including two-piece – free spinning flange wheel nuts for Bus, Truck and Trailer applications.

Located in Cleveland Ohio, Great Lakes is centrally positioned to offer 2 day service to most of the United States – from their huge “in-house” inventory.

For further information, contact Great Lakes Parts, Inc., 130 Ken Mar Dr, Cleveland, Ohio 44147; phone 440-546-0304; fax 440-546-0306; or visit their website for a complete catalog at www.GLParts.com.

Large Diameter 12 Points, Socket Heads,
Flange Bolts, High Heads

Hot Heading,
Warm Forging,
Cold Heading, CNC,
In House Testing

Manufacturing
For 50 Years
And Growing

BBC FASTENERS, INC.
4210 Shirley Lane, ALSIP, IL 60803
PH 708-597-9100 800-323-1347 FAX 708-597-0423
www.bbcfasteners.com e-mail: BBCFAST@aol.com

DISTRIBUTOR NEWS

BBC Fasteners has completed another addition for its production of cold-headed products and inventory of domestic raw material. Our customers who require DFAR compliant material will benefit from quicker deliveries on cold-headed standard and specialty bolts from 3/8"-1 1/4" (M10-M30) to 9 1/2" in length.

Domestic A325s and A449s, galvanized or weathering, along with A490s have been an important product line for more than 50 years.

BBC can be contacted at 800-323-1347 or bbcfast@aol.com.

FASTENER INDUSTRY WEBSITE DIRECTORY

For easy access to all of these websites, log on to www.linkmagazine.com and click on the ad of your choice for a direct hot LINK!

• Steel Forgings • Wire Forms



Chicago Hardware & Fixture Company

www.chicagohardware.com



Storage Systems

sales@craftline.us
www.craftline.us



CRESCENT MANUFACTURING

PROUDLY MADE IN THE USA

www.crescentmanufacturing.com

CTG International

Your Mill Direct Fastener Source

www.ctgintl.com
email: ctgintl@ctgintl.com

CURTIS

Metal Finishing Company

Sterling Heights, Michigan • Machesney Park, Illinois

Contact Brian Lowry @ (586) 939-2850 or brianl@curtismetal.com

info@ZnCoat.com ZnCoat.com

DARLING DB BOLT CO.

www.darlingbolt.com
E-mail: sales@darlingbolt.com



Distribution Software

www.ddisys.com

DISTRIBUTION One

Distribution Software for Wholesale Distributors

www.distone.com



Eastwood Manufacturing

Specials and Non-Standards

www.boltman.com



Elgin Fastener Group

www.elginfasteners.com



Wire Rope, Cable, Chain & Hardware

1-800-458-6659
www.elitesalesinc.com

Empire Fasteners, Inc.

Drilled Fillister Specialists

800-598-5212
www.EmpireFastenersInc.com

E-Z LOK

Visit our website today. Complete list of Thread Inserts/sizes, repair kits. Request free samples-catalog.

www.ezlok.com

E Z Sockets, Inc.

800-631-7833 • Fax 973-376-7130
e-mail: ezsockets@juno.com
www.ezsockets.com



800-275-6991 / Fax 508-675-8770

WWW.FALLRIVERMFG.COM

Manufacturers of stainless steel and non-ferrous screws bolts and nuts



Standoffs Spacers Jackscrews Shoulder Screws Thumb Screws Captive Screws Swages

(Tel) 407-226-2112 (Fax) 407-226-3370
www.fascomp.com

For PINS the first choice is:

FASTAR

888-FASTAR5 • Fax 845-369-7989
www.fastar.com

YOUR AD HERE!

Claim your FREE Website Ad Listing when you advertise with Link Magazine

FASTENER SPECIALTIES MANUFACTURING



www.fastenerspecialties.com

FORD FASTENERS, INC.

The #1 source for 410ss screws

www.fordfasteners.com

Riveting Solutions

GAGE BILT

www.gagebilt.com
solutions@gagebilt.com

GAGE BILT



Blind Rivet, Blind Bolt, Lockbolt Industrial Installation Tools

GAGE BILT has been manufacturing blind rivet, blind bolt and lockbolt tools since 1956. If you are installing a 1/8" CherryMAX® rivet in an airplane wing or a 7/8" Huck® high-strength lockbolt in a railcar, GAGE BILT has a "Made in the U.S.A." tool for you.



GAGE BILT designs and manufactures tools in its 25,000 sq. ft. plant, 40 minutes north of Detroit.

Please visit our website, e-mail or call us at:

www.gagebilt.com

solutions@gagebilt.com

586-226-1500

GAGE BILT

GAGE BILT Inc.

44766 Centre Ct. Clinton Twp. MI 48038
TEL (586) 226-1500 - FAX (586) 226-1505

Made in USA



CherryMax® is a registered trademark of Cherry Aerospace Fasteners. Huck® is a registered trademark of Alcoa Fastening Systems. ©2004

CABLE TIES 101 *continued from page 92*

Care and Handling of Cable Ties

Here are three simple rules for maintaining your cable tie inventory:

1. High inventory turns. Purchase the smallest manageable quantity to satisfy customer demand. Cable Tie Express can help you increase your turn rate in a variety of ways – blanket orders, JIT shipments, drop shipments to your customer's dock (we sell distribution only).

2. First In First Out. Cable Tie Express is available to discuss how your product can remain fresh through lot control. We have trained several of our customer's staff on the best methods of storage and shipping.


3. Educate your customers. Cable Tie Express can assist by providing the necessary information through seminars, literature, and direct support in the field to achieve this valued goal.

We will leave you with this final note from Char.



Cable Tie Express offers a variety of cable ties to meet application requirements

"Cable Tie Express is truly committed to helping our customers be successful. From our highly professional inside sales staff and our qualified outside sales agents, eager to field your questions with informative answers and solid data to personally providing product and application training in our seminars, we support our distributor partners from the 'knowledge is power' point of view. This additional support we provide is really the icing on the cake. It truly adds that something extra in addition to the quality products and unparalleled service levels we provide our customers."

This quick review has touched upon some of the most basic aspects to be considered when quoting, purchasing, and storing cable ties and we hope it has been of value. If you wish further information or would like to continue the conversation, please contact us any time. 

FASTENER INDUSTRY WEBSITE DIRECTORY

For easy access to all of these websites, log on to www.linkmagazine.com and click on the ad of your choice for a direct hot LINK!

ZIP
Machine Tool Accessories
GEORGE H. SELTZER & CO.
800-445-4101 • Fax 610-532-3024
www.zipbolts.com

GLOBAL
FASTENER NEWS.COM

GLP
Great Lakes Parts, Inc.
440-546-0304 • www.glparts.com

YOUR AD HERE!
Claim your **FREE Website Ad Listing** when you advertise with Link Magazine

QUALITY SERVICE
GREENSLADE
ISO-17025
"Quality Service for your Quality Department"

Hanger Bolt & Stud Co.
1-800-537-7925
www.hangerbolt.com
e-mail: hbs@hangerbolt.com


HANSON RIVET & SUPPLY CO.
866-61-RIVET
(866-617-4838)
www.hansonrivet.com

HI-TECH
FASTENER CORP.
800-858-7341
www.hi-techfastener.com

LINK
THE NATIONAL MAGAZINE FOR FASTENER DISTRIBUTORS
See the new online magazine at
www.linkmagazine.com


HOLBROOK MFG., INC.
Standard & Special Fasteners
Phone 847-229-1999
Fax 847-229-0996
www.holbrookinc.com

IDEAL
FASTENERS
INC.
www.idealfasteners.com

IDEAL SUPPLY, INC.
Aluminum, Brass, Monel, Silicon Bronze, Stainless, Titanium Fasteners

Corporate Office: Ph.847-961-5900, Fax 847-961-5300, Email: illidealsupply@aol.com
Branch Office: Ph. 757-548-8050, Fax 757-548-8051, vaidealsupply@aol.com


www.imperialrivet.com
e-mail: sales@imperialrivet.com

Industrial Rivet & Fastener Co., Inc.

200 Paris Ave
Northvale, NJ 07647
(201) 750-1040
Fax (201) 750-1050
Toll Free (800) 289-7483
www.rivet.com

ICS Flange
Quality Customer Service
1-800-231-0360
www.innovativecomponentsales.com

Integrated Packaging Inc.
Contract Packaging - Fastener/Hardware Kits
1.800.807.5510
www.integratedpack.com
jill@integratedpack.com
"Our Quality Goes In Before Our Bags Go Out"

INTERCORP 
Premium Quality Construction Fasteners
www.strong-point.net


INTERNATIONAL FASTENING SYSTEMS
Email: jglass@aceintl.com Web: www.aceintl.com


J.T.D. STAMPING CO., Inc.
www.jtdstamping.com

KEN FORGING
Leader in the Eyebolt Industry
1-888-536-3674 • Fax 440-992-0360
www.kenforging.com

KEY BELLEVILLES, INC. 
www.keybellevilles.com
email: sales@keybellevilles.com

DISTRIBUTOR NEWS

PennEngineering® has appointed LillyAnna Penn to the position of Global Product Manager with responsibility for the Company's assembled line of products. Penn will develop and drive short- and long-term strategy for the continued growth of the Company's multi-component fastener lines, including PEM® brand panel fasteners.

Penn most recently served as Strategic Accounts Marketing Manager for Ingersoll Rand.

Headquartered in Danboro, PA, USA, PennEngineering operates numerous fastener manufacturing facilities and key sales offices in North America, Europe, and Asia and is supported by a worldwide network of authorized engineering representatives and distributors.

Contact Leon M. Attarian, PennEngineering®, 5190 Old Easton Road, Danboro, PA 18916 USA. Phones: 800-237-4736 (toll-free in the U.S.) and 215-766-8853; Fax: 215-766-0143. Web site: www.pemnet.com

* * *

Precision Specialties, LLC is awarded "Distributor of the Year". Precision Specialties, LLC is an ISO certified distributor of AVK threaded inserts and tools, Oetiker clamps, Tinnerman Palnut products, and other specialty fasteners including retaining rings, Belleville springs and spring washers.



Headquartered in Collierville, Tennessee, with a sales office in Chicago, Illinois, Precision Specialties has continued to grow and add to its product line. Extension springs have been added to serve our growing base of customers says Scott Low. "We are a value added distributor" says Roger Szafranski. "We increase customers' cash flow with reliable service and we only distribute the best quality products." You can trust you are getting quality from Precision Specialties. We don't handle a line of quality and a line of "knock offs" says Scott Low.

Call us at 901-854-5640 or email us at sales@precspec.com.

CAPITAL MARKETING



Sales and Marketing From a Premier Agency

Covering North Carolina, South Carolina, and Virginia

Call Robbie Gilchrist

(336) 884-1704

info@capital-marketing.com • Fax (336) 884-1778



Capital Marketing is headed by Robbie Gilchrist, a 30-year veteran of the fastener business and a lifetime member of NFDA—the National Fastener Distributors Association.

Call Robbie today to discuss persuasive, energetic representation for your company.

Capital Marketing
www.capital-marketing.com

UMETA OF AMERICA INC.

The complete lubrication equipment,
fittings & accessories line.



Umeta is your source for over 1,400 grease fittings in standard or non-standard sizes, as well as custom-designed fittings according to your specifications. Fittings available in zinc plated industry grade steel, stainless steel, and brass. Made in Germany for over 75 years. OEM quality and ISO 9001 certified.

Toll Free: **800-595-5747**

147 Bluewing Lane • Mooresville, NC 28117

Phone: 704-799-1840 • Fax: 704-799-1923

e-mail: umetausa@aol.com • web: www.umetausa.com



FASTENER INDUSTRY WEBSITE DIRECTORY

For easy access to all of these websites, log on to www.linkmagazine.com and click on the ad of your choice for a direct hot LINK!

See the new online magazine at
www.linkmagazine.com

X-MAS TREE PUSH-IN FASTENERS

K-International, Inc.
 1-800-323-2389 USA
 847-623-2304 IL
 847-623-0105 FAX
www.kinter.com
 -Nylon-

K-T BOLT
MANUFACTURING CO., INC.

Manufacturing & Forging Since 1969
 HD Capacity 1/2 - 3" dia.
 Threading to 4" dia.
www.k-tbolt.com • 800-553-4521

LOCKNUT TECHNOLOGY

Our name says it all.
www.locknuttechnology.com

Lok-Mor,® Inc.

Locknuts
 Standards and Specials
www.lok-mor.com
 1-800-843-7230

MARKSMEN
 MANUFACTURING CORPORATION

www.marksmenmfg.com

Mehta Trading International

*The Complete Stainless Steel
 Fastener Source*

www.Mehtati.com
 e-mail: Corp@Mehtati.com

**Metric & Multistandard
 Components Corp.**

Fasteners • Cutting Tools • Measuring Tools
www.metricmcc.com

METRICBOLT.com
 IMPORTER & DISTRIBUTOR
 METRIC SIZED FASTENERS

Tel 561-630-3142 • Fax 561-691-4820
www.metricbolt.com
 email: sales@metricbolt.com

micro plastics, inc.

Registered to ISO 9002
 Certificate No. A2659

email: mpsales@microplastics.com
 Web Site: www.microplastics.com

MORTON
 machine works

125 Gearhart Street, Millersburg, PA 17061
 e-mail: sales@mortonmachine.com
800-441-2751 Fax **717-692-2120**
www.mortonmachine.com

mw
 INDUSTRIES, INC.

Manufacturer of custom washers,
 fasteners & metal stampings.
www.mwindustries.com

**National Threaded
 Fasteners Ltd.**

888-480-9841
 email: sales@flangescrews.com
www.flangescrews.com

**National
 Standard Parts**

800-874-6813 • Fax 850-456-5376
www.nspa.com
 e-mail: info@nationalstandardparts.com

**Nationwide
 Packaging Services, Inc.**

Commercial & Military Packaging Specialists
www.nationwidepackaging.com
 Ph. 973-882-1711 • Fax 973-882-1742

ND
 INDUSTRIES

Advanced Adhesive and Sealant Technologies
www.ndindustries.com • phone: 1-800-471-5000

YOUR AD HERE!

Claim your **FREE Website Ad Listing**
 when you advertise with Link Magazine

ISO9001-2000 QSLM Level 3/2

NORTH EAST FASTENERS CORPORATION

A Tradition of Precision

Tel: 860-589-3242 Fax: 860-589-6969
www.NEF1.com Email: NEF@NEF1.com

NOVA

Complete Stocking Inventory
 Of All Commercial Fasteners

www.novafasteners.com
 e-mail: info@novafasteners.com

NUCOR
 FASTENER DIVISION

P.O. Box 6100 • St. Joe, IN 46785
 Phone (800) 955-6826
www.nucor-fastener.com

PAC FAS

Full Line Supplier of Packaged Fasteners
 & Accessories for Resale Since 1964

Phone 1-800-444-5834
www.pacfas.com

SOLUTIONS. PARTNERSHIPS. POSSIBILITIES.



Austin Hardware The Right Call Every Time.



For ALL of your FASTENER needs, including Vendor Managed Inventory Programs, call us today.

AUSTIN
HARDWARE & SUPPLY, INC.
SECURING SOLUTIONS FOR YOUR BUSINESS



www.austinhardware.com



California
800.821.3520

Georgia
800.821.1664

Indiana
800.220.8118

Missouri
800.821.3520

Pennsylvania
800.634.4293

Texas
800.527.5640

Wisconsin
800.220.8118

NATIONAL INDUSTRIAL FASTENER & MILL SUPPLY EXPO - EAST

COLUMBUS FASTENER SHOW GROWING *continued from 42*

MFC Warehouse Tour Open to Fastener Distributors

A special feature this year is a tour of Metric Fastener Corporation's Columbus warehouse from 1:30 p.m. to 4:00 p.m. on Tuesday, April 26. Visitors will see MFC's new, 60,000 sq. ft., state-of-the-art facility and learn about MFC's selection of over 50,000 metric fasteners and 10,000 carbon and stainless steel metric fasteners which are immediately available from this location. The tour is free to the first 50 fastener distributors who sign up and includes complimentary roundtrip bus transportation from the Greater Columbus Convention Center and refreshments hosted by MFC.

Party Time is Networking Time

The Expo's Welcome Reception is scheduled for 5:30 – 6:30 p.m., Tuesday, April 26 in the Greater Columbus Convention Center. This always popular and well attended event will offer complimentary drinks and hors d' oeuvres to all registered Expo exhibitors and visitors wearing their badge.


Expo Features Latest Fastener and Industrial Supply Products & Services

The one day Expo will be open from 9:00 a.m. to 4:00 p.m., Wednesday, April 27 featuring the latest fastener and industrial supply products & services offered by leading manufacturers from throughout the USA and several foreign countries.

Special Expo Rates Offered by Convention Center Hotels

Hotel reservations are available at the adjoining Drury Inn & Suites, (614) 221-7008, and the Hyatt Regency Columbus, (614) 463-1234. Simply mention the National Industrial Fastener & Mill Supply Expo to receive the special Expo rates.

Online Registration

Expo visitors can register online at www.fastenershows.com. It is easy, fast and secure. For more information contact National Industrial Fastener & Mill Supply Expo/East, (614) 895-1279, email info@fastenershows.com or visit our website at www.fastenershows.com. 



FASTENER INDUSTRY WEBSITE DIRECTORY

For easy access to all of these websites, log on to www.linkmagazine.com and click on the ad of your choice for a direct hot LINK!



PACIFIC WAREHOUSE SALES
www.pacificwarehousesales.com



PFC
 FIRST CLASS SERVICE
www.porteousfastener.com



Powers FASTENERS
 Powers Packaged Fasteners
 Now Available!
www.powers.com



R&R ENGINEERING CO.
 800-979-1921 • Fax 800-345-9583
www.randengineering.com



RAF ELECTRONIC HARDWARE
 a Division of MW Industries, Inc
www.rafhdwe.com
 203-888-2133 • info@rafhdwe.com



RAPID RIVET & FASTENER CORP.
 121 Toledo St, Farmingdale, NY 11735
 631 249/0400 / Fax: 631 249/0401
 1 800 727/4378 www.rapidrivet.com

YOUR AD HERE!
 Claim your FREE Website Ad Listing
 when you advertise with Link Magazine

W.J. Roberts Co., Inc.
 Spacers and Standoffs
 Phone: 781-233-8176
www.wjroberts.com

ROTOR CLIP COMPANY, INC.
 Retaining Rings • Wave Springs
 Spiral Rings • Hose Clamps



800-557-6867 • 1-732-469-7333
www.rotorclip.com • sales@rotorclip.com



S&M Retaining Rings
 Ph. 866-79-RINGS • Fax 973-383-6529
www.smrings.com

SCREW PRODUCTS INC.
 The Ultimate Wood Screw
 Visit [SCREW-PRODUCTS.com!](http://SCREW-PRODUCTS.com)



SCREW AND SUPPLY INC.
 Tamper-resistant screws
www.screwsupply.com
 email: sales@screwsupply.com

SEASTROM
 Quality, Experience, Reliability
 Made in the U.S.A.
www.seastrom-mfg.com
 1-800-634-2356

2011 FASTENER EXPO SHANGHAI
 上海紧固件专业展
 16-18 June 2011
 Shanghai Everbright Exhibition Center
 TEL: 86-21-20233768
 FAX: 86-21-61198711
 E-MAIL: service@chinafastener.com

THE ORIGINAL shear-Loc®
 THE ORIGINAL SINCE 1969 QUALITY INSTANT THUMB SCREW
 800-775-5668
WWW.SHEAR-LOC.COM
 OR FAX 949-768-8705



Smalley® Steel Ring Company
 Spiral Retaining Rings
 Wave Springs
 Engineering assistance for distributors, 5000 stock parts available in carbon and stainless steel.
 (847) 719-5900 • fax: (847) 719-5999
www.smalley.com • email: info@smalley.com



THE NATIONAL LINK
 THE NATIONAL MAGAZINE FOR FASTENER DISTRIBUTORS
 See the new online magazine at
www.linkmagazine.com
 New Digital Magazine



SOLON MANUFACTURING CO.
 Phone 800-323-9717
 Fax 440-286-9047
 Belleville Spring Washers
 Flange Washers
 Disc Springs
www.solonmfg.com



Solution Industries
www.solutionind.com

Tamper-resistant Screws
Specialty Screw Mfg.
www.specialtyscrewmfg.com



SPIROL
 1-800-321-4679
www.spirol.com



DDI System

75 Glen Road, Suite 204, Sandy Hook, CT 06482

Tel: 877-599-4334 Fax: 203-364-1400

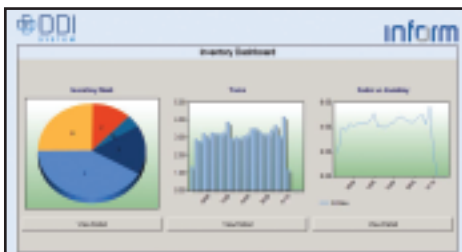
Email: sales@ddisys.com Web: www.ddisys.com

CONVERTING ANALYTICS INTO SALES DISTRIBUTORS TAKE ACTION

What would you do with “up to the day” business performance information? Today’s businesses have a not-so-simple response – turn them into sales. The idea of converting data into actionable steps is not a new one however; it can be a difficult one if the data is not readily available in an easy-to-analyze format.


DDI System’s **inform** software provides the information necessary to make faster and smarter decisions throughout top industrial organizations. Understandable dashboards display top-level overviews with immediate drill-down capabilities allowing for quick access to executive level data. When used consistently, this data directly leads to increased cash flow, lean inventory levels, stronger gross margin return on investment (GMROI) and more.

The ability to leverage purchasing and sales



information increases cross-sell opportunities, allows for effective management of advertising, and highlights pipeline potential. Anytime, anywhere access to this information provides your sales team with the necessary tools to recognize and remedy challenge accounts and take immediate action.

*“DDI’s **inform** was a terrific choice for us! Starting with an absolutely seamless transition, it has exceeded our expectations in every possible way. The information needed to run our business is now complete and can be ascertained in mere seconds. **Inform’s** thoughtful design has made it the window to our world.”*

With the strongest technology and exceptional user-driven reporting available today, DDI System’s comprehensive approach to distribution software will increase profitability and drive sales. 

Giving You More with One Integrated Solution

Software that Drives Success

FREE CRM
Call For Details



DDI’s Inform Software Delivers:

- Anywhere Access
- Real-Time Inventory
- Flexible Pricing
- Mobile Apps
- Business Intelligence
- Automated WMS
- Forms-Free Workflow
- Advanced Accounting
- Unparalleled E-Commerce
- Exceptional Sales Tools
- Comprehensive CRM
- And So Much More...



DDI System’s **inform** distribution software is the end-to-end solution for wholesale distributors. Call 877-599-4334 or visit ddisys.com.

FASTENER INDUSTRY WEBSITE DIRECTORY

For easy access to all of these websites, log on to www.linkmagazine.com and click on the ad of your choice for a direct hot LINK!



STELFAST FASTENERS, INC.
 Manufacturer/Importer
www.stelfast.com
 800-729-9779 • Fax 440-879-0044



SUPERIOR BOLT & NUT MFG
www.superiorbolt.com



WASHER & GASKET CORP.
www.superiorwasher.com
 E-mail: swg@superiorwasher.com



SUPPLY LINE
 MRO Distributor Supply Warehouse
www.usaSupplyLine.com



TAPCO INC.
 15 Million Elevator Bolts In Stock
www.tapcoinc.com



Tamper-Proof Screws, Inc.
 California
www.tamperpruf.com
 e-mail: tamperpruf90723@sbcglobal.net
The Ultimate Source in Security Fasteners



TITAN FASTENER PRODUCTS
titanfasteners.com
 800.789.8112
 Experience the Titan difference in packaged fasteners!

Specialists in Studs & Threaded Rods
 See our catalog in the Thomas Register and on the Internet at:
www.thomasregister.com




UMETA OF AMERICA INC.
 OEM Quality Grease Fittings and Grease Guns
www.umetausa.com



UNIQUE INDUSTRIES, INC.
 Manufacturer of Specialty Threaded Items
www.uiind.com • sales@uiind.com

Vegas Fastener Mfg.

- Hot Forged Fasteners
- Guaranteed Delivery Program

www.vegasfastener.com



visible inventory™
www.visibleinventory.com



VOGELANG CORPORATION
 800-526-2376
 Manufacturer of Spring Pins, Rollpins® (slotted & coiled) and the Engineered-RollPin™
www.VogelsangCorp.com



See the new online magazine at
www.linkmagazine.com

VOLT INDUSTRIAL PLASTICS, INC.

Finest nylon fasteners in the world.
www.voltplastics.com
www.thomasregister.com/volt
 e-mail: service@voltplastics.com



Western Wire Products Co.
www.westernwireprod.com
 E-mail: sales@westernwireprod.com

WORLD HORIZONS LTD
info@worldhorizonsinc.com

STAMPING THE FUTURE
 WROUGHT WASHER MFG., INC.



PHONE 414 744-0771 • 1-800-558-5217 • FAX 414-482-0144
WWW.WROUGHTWASHER.COM



WÜRTH
 Industrial, Military & Aerospace
www.revcar.com

WYANDOTTE INDUSTRIES, Inc.

www.wyandotte.com
 (734) 283-1870 • Fax (734) 283-6166



ZNB
 since 1988
www.zonbix.com.tw

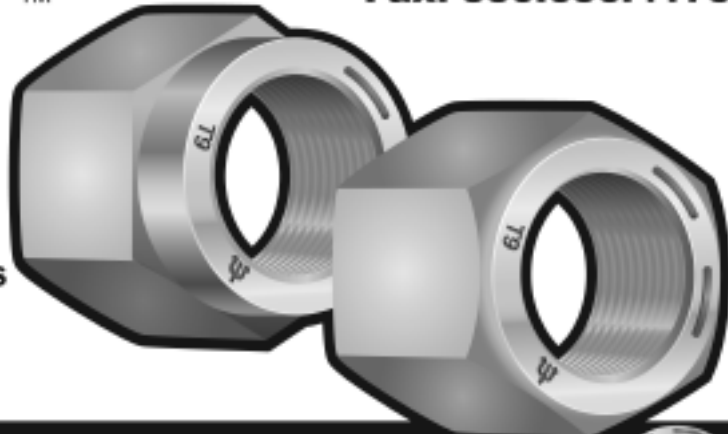
TriState

800.410.4558

Fax: 330.656.4175

T9 NUT

180M PSI Proof Load
 4140 Alloy Steel
 Works with High Strength Bolts
 Stock 3/4" - 1 1/2"
 Cadmium/Yellow Plating
 Hex Nuts
 Locknuts




 Ask about
 Hydraulic Ports
 & NPT Fittings

Grade A-B-C Automation 1/4" - 2"	Grade F 1/4" - 1/2"	Grade G 3/8" - 3/4"	Class 10 Metric Flange M6 - M16	Grade C Collar & Thin Collar 5/8" - 3"
---	-------------------------------	-------------------------------	--	--

O V A L T R I M H E A D X S G
 R B L I N D R I V E T T N P M
 I T H O L E S A W G E I I H R
 B L E S C S D I O V G N P E E
 B O X Y W O G T I T T N D R H
 E B N O G E U R U E U E E I S
 D W U L M N R N G K O R V C A
 N E T L M A D C T S N I O A W
 E K G A L E G G S E U B O L N
 C S J U T K N A L B R S R P I
 K A B T L E R D N A M S G O A
 G U O C H A M F E R G U I I L
 T L D T L O B P A T X E H N P
 S D E L L I R D S S O R C T K
 D A E H T U N G N I L P U O C

FASTENER WORDSEARCH

Can you find and circle in the grid above, the terms listed below?

- | | |
|-----------------|----------------|
| Alloys | Hex nut |
| Askew bolt | Hex tap bolt |
| Blank | Hole saw |
| Blind rivet | Jam nut |
| Chamfer | Mandrel |
| Countersink | Oval trim head |
| Coupling nut | Plain washer |
| Cross drilled | Ribbed neck |
| Grooved pin | Ribs |
| Runout | |
| Spherical point | |
| Slotted nut | |
| Teks | |
| T-head | |
| Thumb screw | |
| Tinner | |
| Tubular rivet | |
| Voids | |

Solution on Page 212



Gage Bilt Inc.

44766 Centre Court, Clinton Township, MI 48038.
Phone 586-226-1500 Fax 586-226-1505.
www.gagebilt.com email: solutions@gagebilt.com

GAGE BILT: YOUR RIVET & LOCK BOLT TOOL SOURCE

Gage Bilt is a blind rivet, blind bolt and lock bolt tool manufacturer located in Clinton Township, MI. They have been manufacturing tools since 1956. Initially a gage, nose assembly and tool supplier to Huck Manufacturing, the company launched its own Gage Bilt brand in 1979 servicing the global industrial and aerospace tool markets. Gage Bilt is proud to say that all of its pneumatic and hydraulic tools and components are "Made in America".



Gage Bilt's Clinton Township facility

Blind Rivet Tools

Gage Bilt produces a line of pneumatic/hydraulic tools for the installation of standard and structural blind rivets from 3/32 up to 3/8 diameter. "Our tools feature an easy to pull negative air pressure trigger and an air return piston that cushions the break load of larger size rivets. Operators like the feel and performance of our tools" stated Joe Butvin Director of Sales & Marketing at Gage Bilt.

"100,000 cycles before priming is required is typical with a Gage Bilt riveting tool. Our tolerances, proprietary processes and the fit of our seals and components provides this advantage." added Joe.

Gage Bilt also manufactures a wide array of standard, extra long, right angle and off-set nose assemblies for reaching unique customer applications.

Mandrel vacuum systems are also available on Gage Bilt tools.



Lock Bolt Tools

Gage Bilt also produces a full line of lock bolt tools designed to install lock bolts including Huck® standard, high strength, Magna-Grip®, BOM® and Bobtail® lock bolts. There are hand held pneumatic/hydraulic tools and weight saving tools with remote hydraulic boosters. "If it's a 3/16" aluminum multi-grip or a 7/8" high strength lock bolt Gage Bilt has a lock bolt tool for the application.

"One of our newest hand held tools is the GB756. This tool is designed to install standard and multi-grip lock bolt and structural rivets up to 3/8" diameter. The GB756 features 10,000 pounds of pulling force and a .960" stroke. It's a monster tool that's built to last!" claims Mr. Butvin.

Recently one of Gage Bilt's customers ran a side by side comparison test between Gage Bilt's 1/4" lock bolt jaws and those of a competitor.

"The result is a 3:1 advantage to Gage Bilt. Considering the cost of the jaws and the labor to change them over gives us a real cost savings advantage especially when our jaws fit the competitor's tool. Not only are our jaws interchangeable but our complete nose assemblies are interchangeable." adds Joe.

Perhaps the biggest advantage of Gage Bilt is delivery. "We stock machined castings and all the tool component parts. When we receive an order all we have to do is assemble the tool. This is why we can quote 2-3 weeks delivery on a tool. It's a real advantage against our competitors. If you need a blind rivet or lock bolt tool that is American made, delivers price, quality and delivery, come to Gage Bilt." commented Joe.

Huck®, Bom®, Bobtail® and Magna-Grip® are registered trademarks of Alcoa Fastening Systems. 



GB756

Special Washers & Stampings



- 40,000 Different Special Washers In Stock
- Vast On-Premise Raw Material Inventory
- In-House Tool Room
- Modern CNC and EDM Machines
- Short Production Runs for Prototypes
- Special Sizes and Tolerances
- .062" to 12" O.D.'s in All Shapes and Sizes
- Sheet Materials from .002" to 1/2" Thick

Specials are standard at Willie Washer. You can find over 40,000 different special washers available for same day shipments from Willie's stock. If a special run is what you need, Willie gives you a head start on production with an in-house tool room that has the latest in CNC and EDM machines and a separate short-run division for prototypes and low volume needs. Cap it off with presses that can stamp materials thinner than a sheet of paper, or up to a 1/2" thick, and you'll find the source for your special needs. Look to Willie Washer for quality craftsmanship and flexible production capabilities to make the right size at the right price... right on time!



WILLIE WASHER
MANUFACTURING CORPORATION

SPECIAL WASHERS AND STAMPINGS

MAKING THE BEST WASHERS SINCE 1972

847/956-1344 • FAX: 847/956-7943

9. Release Angle Analysis

The complete analysis of a fastener involves looking at both the tightening and the loosening torque angle curves as the fastener is first installed and then loosened. These curves are studied initially in the elastic tightening region where the fastener has not gone beyond yield, such as the assembly torque-angle signature shown in Figure 12. When the fastener is loosened, a torque-angle-loosening signature, as shown in Figure 13, can be recorded. The release signature shows the release of the fastener stretch and also the release of the compression in the clamped parts. Analysis of this signature provides a direct method for verification of preload or tightness. First, the line tangent to the elastic release portion of the curve is projected to zero torque to locate the elastic origin. The release angle, measured from the point where loosening starts to the projected elastic origin, is a direct measure of the tension released from the bolted joint.

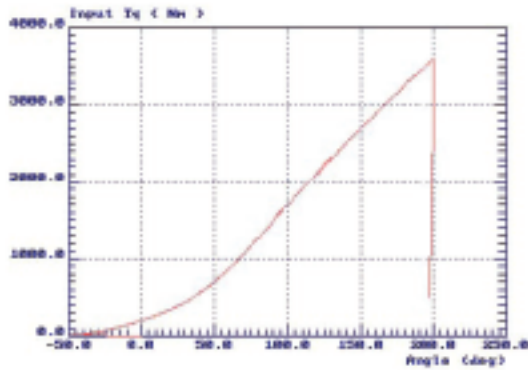


Figure 12 Torque Angle Signature

The tangent line must be drawn on the straight-line portion of the curve after the initial peak release torque due to static friction or thread-locking adhesive has been broken free. The starting point is the angle where initial loosening motion begins. The total release angle is measured from the initial loosening point to the projected elastic origin. Note that if a significant prevailing torque is present after loosening the fastener, the elastic origin must be located at the prevailing level, not zero torque.

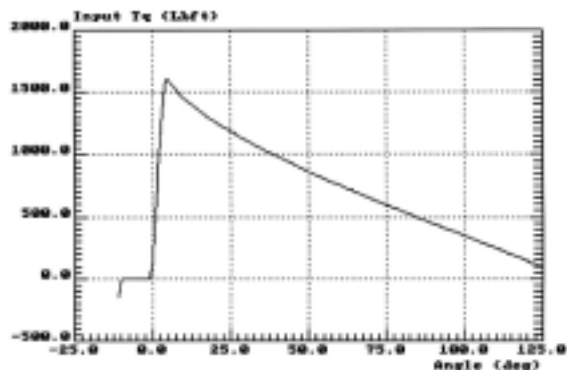


Figure 13. Loosening Torque-Angle Signature

The torque-angle signature shown in Figure 14 has been plotted as a M-Alpha Diagram with the tangent line, locating the elastic origin, drawn at 50 percent of the maximum torque to set the elastic tightening slope below the onset of embedment of the nut. The bolt is a M30 x 3.5 with strength Class 11.9. The corresponding clamp force signature, plotted as an F-Alpha (tension-angle) Diagram, confirms that the clamp force increases linearly with the angle of turn from the projected elastic origin. In the example shown in Figure 15, the elastic-tightening angle is approximately 125 degrees.

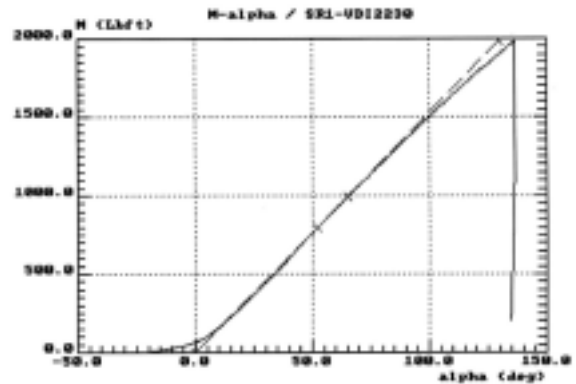


Figure 14. Torque-Angle Signature with Embedment

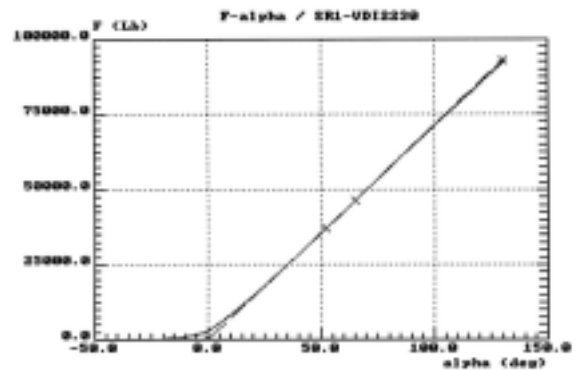


Figure 15. Clamp Force vs. Angle of Turn from Elastic Origin

Figure 13) also has a projected release angle of approximately 125 degrees. The F-Alpha Diagram (refer to Figure 15) confirms the fact that, even after embedment occurs, the clamp force increases directly in proportion to the angle of turn from the elastic origin. Similar to the analysis of added tension achieved after yield of the bolt, for embedment or thread strip, the backward projection to the extended tangent to the curve before thread strip or embedment is used to locate the effective tightening angle. Experiments with strain gage bolts or force washers, where the clamp force is measured along with the torque and angle during tightening, verify that this theory is correct for a given fastener. Figure 16 shows a release angle study performed on an automotive wheel nut. A tool with a torque and angle sensor connected to a transient recorder is used to loosen the nut, record the torque and angle values, and plot the data. The resulting printed



Wyandotte Industries, Inc.

Your Complete Source for... **Special Nuts**
Nylon Insert Locknuts
Screw Machine Products

Special Nuts



All Metal Locknuts
 Bearing Nuts
 Castle Nuts

Stake Nuts
 Spanner Nuts
 Wheel Nuts

Coupling Nuts
 Flange Nuts
 Jam Nuts
 Nylon Insert Locknuts

The molded grey nylon
 insert identifies
 Wyandotte Industries
 as the Manufacturer

Sizes: 11/32" Round to
 4 5/8" Round
 (8mm to 117mm)

11/32" Hex to
 4" Hex
 (8mm to 101.6mm)

Bushings
 Collars
 Fittings
 Inserts
 Knurled Parts

Machined Washers
 Pins
 Spacers
 Vents

Screw Machine Products



Call us today at (734) 283-1870

visit us at www.wyandotte.com

Fax (734) 283-6166



Wyandotte Industries, Inc.

4625 13th Street • Wyandotte, MI 48192

FASTENER STRENGTH - REAL OR NOT? *continued from page 8*

“plated”, some call out “dry” or “oiled”. Some others refer to a “torque coefficient” (actually the K-factor or nut-factor) of 0.20 for plain fasteners or 0.15 (!) for plated. This is not good enough information and can be down-right dangerous if applied to a critical joint.

A proper calculation of a tightening torque (taught in my classes) must be based on a K-factor taking into account thread friction, bearing surface friction (also area), thread pitch and the nominal fastener size. The biggest problem is to determine friction data, since there are not just one standard type of lubricant (like oil) but also very effective coatings, waxes, molybdenum disulfide, PTFE, graphite and others that will have much lower (and more consistent) coefficients of friction than oils and greases. Also, a “dry” fastener may be tightened against a “dry” surface, but be threaded in to a tapped hole with some residual tapping oil present. That condition would not match up with the simplified approach in a typical torque chart.

If we do a reasonably good job creating a K-factor based on reality, we could with confidence use the well known “short formula” to find a torque value to get it right;

$$T = K \times d \times F_p$$

where T = Torque or moment of force (Nm, lbfft, etc.)
 K = see above
 d = nominal diameter of fastener (mm, inch)
 F_p = target mean preload force (N, lbf, etc.)

Please note that some (most) torque charts neglect the desired preload level.

Friction coefficients

There is, unfortunately, no easy way to determine friction coefficients. The German design guide line VDI 2230 (the best available in the world) lists various friction classes based on material surfaces and types of lubricants or no lubricants. The guide line suggests that we try to be in friction class B meaning coefficients 0.08 – 0.16. The lower range means that we use very effective lubricants like MoS₂, graphite, PTFE and similar, the upper range being less effective lubricants like oils and greases.

Tightening

All tightening equipment will produce some scatter in the resulting tension in the joint. A well calibrated torque

wrench (dial or clicker) will typically give a tension scatter around +/- 20 %, even if the wrench itself is calibrated to have an accuracy of +/- 2 % or better. The worst performer is the noisy impact wrench that will give tension scatters around +/- 60! Don't let your service station tighten the lug nuts on your car with these horrible tools, it is always better to keep the wheels on your car instead of out in the woods. If a joint is designed to be tightened with a calibrated torque wrench and someone uses an impact wrench, the scatter will either break the fastener at the upper scatter or not produce enough load at the lower end.

Torsional stresses

How does torsion (twisting) affect the loading capacity of a bolt/screw? I mentioned earlier the data in our various standards showing proofing loads and tensile load levels. Those numbers are valid only for testing with a straight pull in a tensile testing apparatus. When we tighten (avoid the term torquing, we may tighten by means of torque) a fastener (nut on a bolt or a screw in a blind hole) typically 90 % of the moment/torque is wasted by overcoming friction. About 40 % of the torque value is for the friction between the internal and external threads. With this resistance, the bolt/screw will actually experience a twisting motion with torsional stresses being introduced in the fastener. The fastener is, in fact, a “glorified” rubber band. This twisting could substantially lower the capacity of the fastener to carry an axial load.

This is why we should never use the table values in the standards as they are listed, but instead modify them with the influence of the torsional “wind-up”. Factoring in torsion we will establish a new proofing load level that properly reflects the actual fastener strength as tightened. The way to predict the influence of torsion is described in figure 2.

$$\kappa = \frac{\sigma_e}{\sigma_{Fp}} = \sqrt{1 + \frac{1.2}{d_{st}} \left(\frac{P}{\pi} + 1.155 \cdot \mu_t \cdot d_2 \right)}$$

where

κ	ratio between effective stress (max Rp0.2) and preload stress in the bolt/screw due to the impact of torsional stresses.
σ_e	effective stress in the screw (usually max. Rp0.2), MPa or N/mm ²
σ_{Fp}	Preload stress in bolt/screw, MPa or N/mm ²
d_{st}	diameter of stress area, mm = $\sqrt{\frac{4A_s}{\pi}}$
P	pitch of thread, mm
1.155	a constant for 60° thread profile
μ_t	friction coefficient, threads
d_2	pitch diameter, mm

DISTRIBUTOR NEWS

Elgin Fastener Group has announced the latest addition to their expanding production line capabilities through the acquisition of Silo Fasteners, Kansas City, MO, effective February 7, 2011. Silo Fasteners was established in 1990 and has provided fasteners for highway construction, concrete form, and general distribution since that time.

Elgin Fastener Group will relocate the Silo Fasteners machinery and selected production personnel to their Ohio Rod Products facility in Versailles, IN. The acquisition will provide entry to new markets for EFG, as well as expansion of their existing and current participation in the construction market.

EFG combines a total of four domestic industrial fastener manufacturers (Ohio Rod Products, Leland Powell Fasteners, Chandler Products, Precision Screw & Bolt) with an additional engineering and international procurement division (Elgin Fasteners International) and a metal finishing company (Best Metal Finishing). All of the EFG companies are ISO certified.

For more information, contact *Elgin Fastener Group*, 1415 S. Benham Road, Versailles, IN 47042. Telephone: 812-689-8917, Fax: 812-689-1825. or visit www.elginfasteners.com.

Elgin Fastener Solutions

Get the right fastener solution for your application with the Elgin Fastener Group. ISO 9001:2008 quality. Complete range of styles, sizes and finishes.

 The right fastener right now.[™]
Elgin Fastener Group
Phone: 812-689-8917
www.elginfasteners.com

 **Elgin Fasteners International**
Versailles, Indiana

Extensive application engineering resources and trusted import sourcing experience.
Tel. 812-689-6565

 **Ohio Rod Products**
Versailles, Indiana

Superior straightness in long headed and threaded parts. Diameters from .072" to .625", lengths up to 96". Tel. 812-689-6565

 **Leland Powell Fasteners**
Martin, Tennessee

Special machine and thread forming screws in diameters from 4-40 to 1/2", lengths to 5" and fully tested. Tel. 731-587-3106

 **Chandler Products**
Cleveland, Ohio

Tight tolerances and multiple secondary operations for precision fastener components.
Tel. 216-481-4400

 **Precision Screw & Bolt**
Cleveland, Ohio

Exceptional value in cold-formed semi-standards (diameters from 1/4" to 5/8" and lengths to 3").
Tel. 216-522-1515

 **Best Metal Finishing**
Osgood, Indiana

Specializing in electro deposited zinc and zinc phosphate finishes. Tel. 812-689-9950

DISTRIBUTOR NEWS

The Durham Manufacturing Company introduces A New Heavy Duty Roller Bearing Rack. Made using prime cold-rolled steel, it has four cradles holding up to 75 lbs. each, when fully extended allow the compartment box to be opened beyond a 90° angle - preventing accidental closure. Compartment boxes can be easily removed for transport to work areas and punched holes along the side of the rack allow for easy application of locking hinge. Base is available as an accessory and the unit has a durable gray powder coat finish.



For more information and pricing call 1-800-243-3774 ext. 7300 or email info@durhammfg.com, or go to: www.durhammfg.com/durham_catalogs.

FASTENER STRENGTH - REAL OR NOT? *continued from page 170*

Only the thread friction coefficient, μ , influences the torsion. Using this method, combined with the standard formula for the K-factor calculation, we can, as an example, determine that a Hex Cap Screw M10 in dry condition (0.2 friction coefficient) will have a torsional factor of 1.45. That means that if the screw is in class 8.8 with a proofing load of 33.7 kN it will now have a new, adjusted real proofing strength of 23.2 kN or 69 % of the "book value". It is obvious that if we use the 75 % of yield (now Rp0.2) as often suggested in college text books, we are down at about 68 % of the new proofing load (about the same as above). If we now also factor in the tightening we will to "down-hill" very quickly. A good, calibrated torque wrench with a +/- 20 % tension scatter will have to be set to produce 19.3 kN so make sure that we don't exceed 23.2 kN at the upper end of the scatter. With the same token, our minimum required preload will only be

safe at the lower scatter range at 15.4 kN. That is now about half of the proofing load according to the table value listed in the standard. If our fastener is well lubricated the torsional factor can be around 1.17, meaning a new proofing load of 28.8 kN giving us a nominal preload of 24 kN (instead of 19.3) and a minimum preload of 19.2 kN (instead of 15.4).

I hope that this information has proven that;

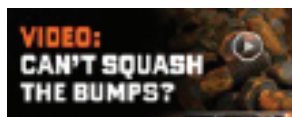
1. Proofing loads are "book values" only and must be adjusted for torsion.
2. Good lubricants will lower the torsional stresses.
3. Watch out for bad tightening tools.

All of the above areas (and a lot more) are covered in more detail in my 2-day "Fastening Technology and Bolted/Screwed Joint Design" classes. For information about class schedules and locations contact the Fastener Training Institute at www.fastenertraining.org. 

**Proofing loads are
"book values" only and
must be adjusted for
torsion.**

APPLIED BOLTING ANNOUNCES NEW TRAINING & TROUBLESHOOTING VIDEOS *continued from page 30***Calibration and Troubleshooting for Advanced Users**

Advanced users know how to use Squirter® DTIs and, more importantly, they know that Squirter® can help you identify problems. Three more videos, geared for more advanced users, address other questions we occasionally get from the field. Again, these are issues that we address in our on-site clinics. Our intent with these videos is to get important information into users' hands as quickly as possible to answers questions they may have. They have already chosen Squirter® DTIs – the most cost effective bolting solution. We want to make sure they get it right the first time without any delays.

**Ever seen a Quick Response Code?**


Quick Response codes (QR for short) allow people with smart phones to scan the code to access the videos on our web site. We include the code seen below in our advertisements and on our kegs of Squirter® DTIs. In the event that someone hasn't read the installation instructions, they can access the videos and instructions on our web site.

Let's Keep in Touch

We are always looking for ways to improve our processes and make it easier for our customers. Here are some comments we received from the field so far about the videos:

"The best yet from you guys. I love it!"

"Your videos created quite a stir in our office (a good thing). We also want to use them to train our QC and Field Engineers. The videos are great!"

If you have comments or suggestions, please give us a call or drop us a line. We look forward to hearing from you! 



The Premier Stocking Manufacturer Of Precision Fasteners

- Huge inventory of stock products for immediate delivery.
- Shorter leadtimes.
- Price, delivery & ordering online.
- Special quantity packaging.
- Broad product line including washers, clamps, brackets, *spring clips*, retaining rings, spacers, solder lugs & much more.
- ISO 9001 & AS 9100:2004 certified DFARS & REACH compliant



Made in the USA



www.seastrom-mfg.com & www.seastromwashers.com
1-800-634-2356

ATLANTIC FASTENERS AT 30 - AN EMPLOYEE OWNED COMPANY COMES OF AGE *continued from page 60*

Atlantic Fasteners Aerospace also has received service awards from defense industry and aerospace customers, including a prestigious Lockheed Martin STAR Supplier Award.

A recent new contract with a Chicago-based aerospace supplier also expanded the division's offerings by bringing Atlantic's trademark barcode-based vendor inventory management (VMI) program to the aerospace industry. This first contract gives Atlantic Fasteners Aerospace the responsibility for managing more than 680 aircraft parts.

The 5-year anniversary of 100% employee ownership.

As majority owner, O'Toole also had the foresight to help Peterson convert the company to employee ownership well in advance of his retirement. This was accomplished in late 2005 through an Employee Stock Ownership Plan (ESOP), an ownership structure with a good track record for increasing staff productivity and company stability.

"I watched a lot of my friends sell out to these 'rollups' and conglomerates," O'Toole says today. "In


every case, it decimated the business."

He chose instead to preserve independent, local ownership, noted Peterson, who considers employee ownership to be one of his proudest collaborative achievements in a long and distinguished history of business accomplishments.

"Employees make good owners," he said. "This has added to the stability and competitiveness of our company.

"I think many company owners feel this is something they can't afford," Peterson noted. "But we were pleasantly surprised at how smoothly we could accomplish it to everyone's benefit."

The ESOP structure has been good not only for business, but for employees, he said. Some have built up substantial ownership value, giving employees the same bright future prospects that Peterson sees on the horizon for Atlantic Fasteners. Sales for the anniversary year are already ahead of last year he said.

For more information on Atlantic Fasteners, contact Marc Dionne for aerospace and military at 800-313-1487 or John Kraus for commercial at 800-800-BOLT (2658). 

RE-EVALUATING YOUR COUNTER EFFORTS *continued from page 118*

destination, not a window shopping opportunity. Where additional “sparkle” is needed, such as illuminating brass or chrome, use halogen lamps to provide a whiter light with less energy.

Flooring

While the least expensive alternative is seal coated concrete there are some relatively inexpensive finishes that can add interest and enhance the space. Concrete treatments such as dyes, epoxy coatings and even polishing are relatively economical in comparison to vinyl tile. The key to maintaining these floors is a good grade of polyurethane sealer to provide a high gloss look. Even a coating of a highly reflective acrylic wax over plain concrete can make a dull floor look cleaner and more finished. Wax finishes can be applied with a roller, sprayer or even a towel on a stick. Just make sure to use two or three thin coats, not a deep puddle spread haphazardly. With any products the floor must be clean and dry before applying the finish.

A high solid epoxy trowel applied to at least 1/8” thick will provide a durable surface that lasts for years (unless equipment or materials are dragged over it). It is best to cover the entire area, even under the counter and displays. Epoxy finishes are difficult to color match and next to impossible to remove. Doing the entire room provides maximum flexibility when remodeling or relocating displays. Avoid consumer garage coatings that will quickly wear, chip and turn to dust.

Commercial grade tile and seamless flooring are also viable alternatives even where customers will be tracking in snow and mud. Raised dot rubber flooring wears well under these conditions and can be cleaned with a mechanical scrubber. Ceramic tile or “quarry tile” looks great and is easy to maintain, but it is expensive initially and may be slippery underfoot. Non-skid finishes are available but these tend to eat brooms and mops and are generally not recommended for a showroom or counter.

Some supply houses in other industries have experimented with carpeted aisle using recycled tires or other rugged materials. This is not a viable alternative when carts are used or the customers are coming directly from a construction site. Any carpet will make carts harder to move and unless the floors are well maintained even the best materials will look shabby in short order.

Carts, baskets and layout

Generally the more a customer can carry the more they will purchase. Grocery stores, hardware retailers and many others provide carts specifically designed to hold more items and slow the customer down so they shop longer. In a Fastener Distribution context customers need a means of transporting self service materials and a layout that is conducive to efficient movement. It is therefore a good idea to have a limited supply of carts and totes or baskets available for customer order picking. This can be supplemented and supported by stocking the shelves with cartons and boxes cut down to form bins for aesthetics and convenience. Customers and counter staff can use these empty bins as trays to help separate the items and transport larger quantities. Plastic bags should be available for small parts and these can often be obtained at minimal cost by using coop advertising from the vendors.

When carts are used the minimum aisle spacing should be double the width of two carts plus 6”. Usually this works out to between five and six feet. Basket or tote picking requires the same four foot aisles legally mandated by most building and life safety codes. Keep any uninterrupted displays or shelving to a maximum of forty feet long. In most situations the optimal length will be twenty four feet including end caps. Cross aisle should be wide enough for two carts or people to pass comfortably and ideally every aisle end should have an eye catching display or similar inducement to draw the customers through the entire display area. Obviously stools that encourage the customers to sit in one place are diametrically opposed to self service and good design.

Generally the more a customer can carry the more they will purchase. Many retailers provide carts specifically designed to hold more items and slow the customer down so they shop longer

Is it Time to Redo the Counter?

Go through the showroom as though you are a customer then ask all of the staff to do this exercise. If the space has not changed in two years you will probably hear some negative comments, even in a beautiful, “state of the art” merchandising area. Listen and act on their suggestions and use this opportunity to reiterate the need for regular restocking of the shelves while cleaning and maintaining every surface. Remind the personnel that while the space is important it is ultimately their attitude and support that builds lasting relationships after the showroom brings the customers through the door. ◻



UNIQUE INDUSTRIES, INC.

tel 205.668.0490
 fax 205.668.0431
 PO Box 683
 Calera, AL 35040
 sales@uiind.com
 www.uiind.com

- large stock of standards available for immediate delivery: anchor bolts, round u-bolts, wilson anchor sleeves, etc.
- materials: carbon and stainless steel, alloys, copper and aluminum
- dimensional capabilities: 3/16" - 4 1/2", lengths up to 60'
- let Unique Industries produce your custom fasteners in the size, shape, material and finish you need
- 100% traceable



MANUFACTURER OF SPECIALTY THREADED ITEMS

OVER 27 YEARS EXPERIENCE IN THE FASTENER INDUSTRY

PAC FAS

FULL LINE SUPPLIER OF PACKAGED FASTENERS & ACCESSORIES SINCE 1964

Now Available in Small Package Quantities.



Dewey Doneright

*Serrated Flange bolts - Woodruff Keys - Thumb Screws - Bent Eye Bolts - Screw Eyes - Metric Fasteners - Clevis Pins
 Spring Pins - Cotter Pins - Retaining Rings - Key Stock - Hanger Bolts - U-bolts & Thousands of Other Items*

We Put The "Fast" in Fasteners With Same Day Shipping!

UPS UNTIL 4PM CST

Division *BIG H CORPORATION*
 1509 ALABAMA
 South Houston, TX 77587

TOLL FREE PH# 1-800-444-5834

WWW.PACFAS.COM

TOLL FREE FAX# 1-800-388-8077

Special Considerations for C Corporations

C Corporations have special considerations to ponder. Generally C Corporations are taxed twice. As such, any gain made from an asset sale will be taxed at the corporate level. Once it is taxed, any money distributed to the owner as a dividend is then again taxed at the rate of 15% or better. The result is that the owner and company may pay nearly 50% in taxes for gains made in an asset sale. It is best to TIME the sale of the business to close before December 31, 2012. Given the time it takes to sell a business, it is generally best to consider selling soon.

Additionally, C Corporations, as mentioned above, do not benefit from preferential tax rates which other entities benefit from. The capital gains of a C Corporation are figured in with the ordinary tax rate of the corporation. This can mean that capital gains generally will result in a tax liability of up to 35% at the corporate level alone.

There is also special case law now in existence reducing the double tax/capital gains burden of the C Corporation taxpayer in a business sale.

Currently the tax interpretations allow for personal goodwill to be purchased by a buyer separate from the business transaction. Selling the personal goodwill, to the extent justified, allows the seller to escape a layer of tax to the extent of the personal goodwill sold and take advantage of the lower tax rates of an individual at 15%. This is a special, complicated tax issue. Sellers must deal with a specialist, knowledgeable in these types of transactions or else the IRS will disallow the personal goodwill. The Center is qualified and does handle many of these transactions involving the sale of C corporations,

Stock Sales

Stock sales differ completely from asset sales. A stock sale, in this context, is when a person or entity sells his or her stock to a third party for value. Stock sales tend to be the best tax scenario for a seller because the gain is primarily capital gain taxed at 15% no matter whether stock in a C or S corporation is sold.

In a stock sale, the seller will look to his or her basis in the entire company as opposed to each individual asset. Each individual asset's basis is not adjusted in a stock sale as opposed to an asset sale. As such, because the asset bases are not adjusted, the buyer does not gain a tax advantage and the seller does not suffer a detriment. Stock sales result in a less complicated and less costly tax scenario for the seller as opposed to asset sales.

The Tax Minimization Analysis

When selling your business, the tax consequences to the buyer are as important as the sale price is to the seller. When you are selling your business, it is extremely important to know what the tax consequences are before even entering negotiations.


Once again, Asset sales result in higher taxes for the seller and better benefits for the buyer. Stock sales, on the other hand, result in fewer taxes for the seller, but less tax benefits for the buyer. C Corporations face many more unique tax issues that other corporations and business entities do not.

It is extremely beneficial to have a Tax Minimization Analysis done. First of all, the Tax Minimization Analysis shows the tax consequences of an asset sale and a stock sale. From this view, the client gets to see the two extremes. Many are shocked at the effect of one structuring over another has on taxes and consequently cash made from the sale of the business. This is one benefit of the Tax Minimization Analysis.

Next, an ideal scenario is worked out to provide the client with a complete picture as to what can be done to minimize taxes and maximize the cash into their hands. This provides the client with the primary benefit of the Tax Minimization Analysis that of knowing a good tax strategy to achieve their goals.

When dealing with a buyer, it is critical you know the tax consequences of an asset and stock sale. It is equally important to know how to minimize your taxes right from the get go. Knowing this will give you power in the negotiations right from the word "go".

Conclusion

Owners of closely held businesses face numerous issues when selling their businesses. Knowing the basic tax ramifications is generally not enough to ensure a good result. Sellers are best advised to not go it alone when selling to maximize the price they get, time the transaction, and achieve minimum tax liability. Bart Basi and the staff at The Center are specialists in tax and frequently prepare the Tax Minimization Analysis. If you are thinking of selling your business or are representing someone selling, be sure to have a Tax Minimization Analysis done by The Center. Contact us at 618-997-3436 to learn more about saving taxes and getting more money for a seller of a business. 

It is best to TIME the sale of the business to close before December 31, 2012. Given the time it takes to sell a business, it is generally best to consider selling soon.

MID-WEST FASTENER ASSOCIATION

FASTENER TECH™ '11

"The All-Fastener-Industry Event in the Heart-of-the-Fastener Industry"
Seminars & Meetings Taking Shape

MWFA - P. O. Box 5, Lake Zurich, IL 60047 - Tel: 847.438.8338, 1.800.753.8338 - mwfa@ameritech.net - www.mwfa.net

FASTENER TECH™ '11



FASTENER TECH™ '11, the third staging of the unique concept in fastener industry trade shows, is scheduled to take place in Rosemont (Chicago), IL, USA, June 13-15, 2011.


Described as "The All-Fastener-Industry Event in the Heart-of-the-Fastener Industry," FASTENER TECH™ '11 offers attendees and exhibitors a valuable, cost-effective and easy-to-attend event that provides benefits to fastener manufacturers, distributors, users and suppliers. FASTENER TECH™ is a biennial event. SUR/FIN 2011 is the surface finishing industry's premier event, and it is a good fit for fastener industry professionals.

As a trade event, FASTENER TECH™ '11 will be unique on several fronts, including the following: the relatively low-cost and ease-of-exhibiting at and attending

the show, the all-industry focus, the heart-of-the-industry location, and a high level of participation from fastener industry associations and publications. Turn-key exhibit spaces start at \$1800.

FASTENER TECH™ '11 is being produced by Fastener Technology International magazine, Akron, OH, USA, and the Mid-West Fastener Association (MWFA), Lake Zurich, IL, USA. As was the case for the 2007 and 2009 shows, numerous trade associations and industry publications from around the world and different segments of the fastener industry will be involved in organizing, promoting and executing FASTENER TECH™ '11. For more information visit www.mwfa.net or www.fastenertech.com.

Still looking to exhibit? Contact Nancy Rich at 847-438-8338.

SUR/FIN, the annual conference and trade show organized by the National Association for Surface Finishing, www.nasfsurfin.com, is co-locating its 2011 event with FASTENER TECH '11 at the Donald E. Stephens Convention Center in Rosemont. Attendees and exhibitors can attend both exhibitions. 

Greenslade & Company, Inc.



Fastener Inspection Equipment

We supply the widest range of fastener inspection equipment in the world. Our line includes GO/NOGO and variable thread gages, recess measuring devices, head height protrusion gages, length gages, concentricity gages, and tapping screw testing equipment (including Nspekt 2, our patented data collection system)

Innovative Gage Design

With our highly trained engineering department, Greenslade designs special gages to meet customers' unique requirements. This service is performed at NO CHARGE. Most design proposals are provided within 48 hours of receiving a design request. Gage designs can be of attribute or variable type depending on the customer's specific requirements.

Dimensional Calibration

With our own calibration laboratory and utilizing state-of-the-art precision equipment, we specialize in providing dimensional calibration services to manufacturers and distributors throughout the world. We are accredited to ISO 17025 by the American Association of Laboratory Accreditation (A2LA). With continued equipment additions and scope expansions, we are broadening our capabilities to ensure the best possible service to our customers.

N-SPEKT™ 2
DATA COLLECTION SYSTEM

QUALITY EQUIPMENT
FOR YOUR QUALITY
DEPARTMENT



2234 Wrenneca, Fort Worth, Texas 76102 USA
Phone: 817-870-8888 Fax: 817-870-9199
E-mail: sales@greensladeandcompany.com
Web site: www.greensladeandcompany.com



EVENT REGISTRATION

FREE EXHIBITS & RECEPTION THROUGH JUNE 3, 2011
Advance registration pricing through June 3, 2011;
Online registration open through June 3, 2011
In-person registration: June 13-15, 2011

1

LAST NAME	MI	FIRST NAME
Company Name	Title (Optional)	
Company Address	City	State/Prov
Zip-Postal Code	Country	Telephone
Fax	E-Mail	

WAYS TO REGISTER
 Online: WWW.FASTENERTECH.COM
 (click on FASTENER TECH icon)
 By Mail: FASTENER TECH '11
 PO BOX 5
 LAKE ZURICH, IL, 60047, USA
 By Fax: +1 847-438-7580
 Questions Call: +1 847-438-8338
 Payment by Credit Card or Check payable to FASTENER TECH '11.

2 Company's Type of Business? (Check only one)

- A _____ Fastener Manufacturer
- B _____ Formed Parts/Cold Heading Manufacturer
- C _____ Fastener User - Direct OEM
- D _____ Fastener User - Component Supplier
- E _____ Fastener Distributor
- F _____ Service Center
- G _____ Government
- H _____ Machinery Supplier
- I _____ Tooling Supplier
- J _____ Accessory Supplier
- K _____ Wire/Rod Supplier
- L _____ Consulting, Design, Engineering Firms, Libraries
- M _____ Other (please describe)

3 Your Job Function? (Check only one)

- A _____ General & Administrative Management
- B _____ Operations Management
- C _____ Technical/Production/Engineering/Quality
- D _____ Purchasing
- E _____ Sales & Marketing
- F _____ Other (please describe)

4 Subscription (Check one)

- A _____ I would like to receive a free subscription to Fastener Technology International
- B _____ No Thanks

Signature _____ Date _____

5

REGISTRATION AND FEES FOR ALL EVENTS	DATE/TIME	FEES	CHECK BOX, ENTER COST
Monday June 13, 2011			
Fastener Technology Workshop Presented by: the Fastener Training Institute®	S1 9:00 AM to 5:00 PM	US\$299 Per Person (Sponsors' Members) Add US\$100 For Non-Members Add US\$100 for late registration	<input type="checkbox"/>
Tuesday June 14, 2011			
Heat Treating Grade 5, 8 and High-Strength Steel Fasteners Seminar Presented by: ASM Heat Treating Society (HTS)	S2 8:30 AM to 11:30 AM	US\$495 Per Person	<input type="checkbox"/>
Effectively Expand Your Domestic Fastener Supply Base & Find Technical Data in Seconds Presented by: the Industrial Fasteners Institute (IFI)	S3 9:00 AM to 10:00 AM	No Charge Compliments of IFI	<input type="checkbox"/>
Trends in Social Networking for Fastener Professionals Presented by: Fully Threaded Radio (FTR) and Fasteners Clearing House (FCH)	S4 10:00 AM to 11:00 AM	No Charge Compliments of FTR & FCH	<input type="checkbox"/>
Fastener Distributor Strategies to Boost Sales & Efficiencies Presented by: DDI System	S5 11:00 AM to 12:00 PM	No Charge Compliments of DDI	<input type="checkbox"/>
Exhibits (two-day pass)	E1 12:00 PM to 5:00 PM	Both Days Free in advance, US\$50 after June 3, 2011	<input type="checkbox"/>
Simulation Roundtable Presented by: Fastener Technology International (FTI)	S6 3:00 PM to 5:00 PM	No Charge Compliments of FTI	<input type="checkbox"/>
All-Industry Reception Presented by: FASTENER TECH™ '11 & SUR/FIN 2011	R1 5:00 PM to 7:00 PM	No Charge, Compliments of FASTENER TECH™ & SUR/FIN	<input type="checkbox"/>
Wednesday June 15, 2011			
Women in the Fastener Industry Meeting Presented by: WIFI (Women in the Fastener Industry)	S7 8:00 AM to 10:00 AM	No Charge Compliments of WIFI	<input type="checkbox"/>
Exhibits (two-day pass)	E1 10:00 AM to 3:00 PM	Both Days Free in advance, US\$50 after June 3, 2011	<input type="checkbox"/>
Dozens of Fastener Buying Tips Presented by: Global Fastener News (GFN)	S8 1:00 PM to 2:30 PM	US\$25 Per Person	<input type="checkbox"/>

All pricing, content & scheduling are subject to change.

Total of All Registration Fees For All Events You Will Attend : _____

6

Indicate Payment Method:

Check Enclosed \$ _____ Check Payable to FASTENER TECH™ '11 in US Funds

MC VISA AMEX DISC For \$ _____

CC number _____

Exp. Date _____ Cardholder Signature _____ Name as it appears on card _____

DISTRIBUTOR NEWS

How can a barrel plating provider make your job easier? By giving you exactly what you need!

Since 1956, **Wolverine Plating Corp.** has been an industry leader in providing Zinc and Zinc-Nickel barrel plating to businesses all across the Midwest and beyond. Why do so many choose Wolverine Plating:

- 99.5% Quality Record over the past 12-months
- 99% of jobs completed on or before schedule with an average turnaround time of 2.75 days
- Wolverine's website allows you to submit your RFQs with prints/drawings, but you can also check the progress of your order right from their homepage.

And now you have another reason to choose Wolverine Plating: They Now Offer Tin-Zinc Plating!

With its high corrosion resistance, superior ductility, excellent lubricity, and high resistance to extreme environments, Tin-Zinc may be the best choice for your next barrel plating job. Ask Wolverine Plating if tin-zinc is right for your next project!

Check out their comprehensive report *How to Avoid Plating Services That Will Help You Lose Customers*. This report examines some important characteristics to look for when choosing or using a barrel plating company.

For more information, contact *Wolverine Plating Corporation*, 29456 Groesbeck Highway, Roseville, MI 48066; phone 586-771-5000; or visit their website at www.wolverineplating.com.

QUALITY CONTROLLED CRAFTSMANSHIP



ISO9001:2008 CERTIFIED



R&R Engineering Company Inc
PO Box 428, Summitville, Indiana 46070
phone 800.979.1921 • 765.536.2331
fax 800.345.9583 • 765.358.3957
email sales@randengineering.com
web www.randengineering.com



DISTRIBUTOR NEWS

Crescent Manufacturing

receives an award from the United States of America Department of National Defense for contributing to national security and protecting liberty and freedom by supporting employee participation in America's National Guard and Reserve Force.

Crescent Manufacturing can be reached at 700 George Washington Turnpike P.O. Box 1350 Burlington, CT 06013; Tel: 860-673-2591 Fax 860-673-5973 or www.crescentmanufacturing.com.



CAUGHT LOOKING: PRIVACY ADVOCATES DEAL FASTENER MARKETING A BLOW *continued from page 44*

the visited site, another may have script program that activates upon entry, and a third may begin tracking a visitor after a certain image loads. Moreover, still other elements on Web pages can activate other tracking.

"Today, consumers share information with more Web sites than the ones they see in the address bar in their browser," says Dean Hachamovitch, vice president, Internet Explorer. "This is inherent in the design of the Web and simply how the Web works. And it has potentially unintended consequences."

Not surprisingly, the FTC's push has been met with resistance from the advertising industry, which prefers self-regulation over marching orders from the Feds.

"We agree with the (New York) Times and with the FTC that the industry needs to do better," says Scott Meyer, CEO, Better Advertising (www.betteradvertising.com), an agency trade group. "The industry needs to adhere to best practices that were prescribed clearly by the FTC in its 'Self-Regulatory Principals for Online Behavioral Advertising.' But doing so does not extend to the creation of an Internet-advertising version of the Do Not Call list."

Besides emboldening privacy advocates, the FTC's move has also been championed by the non-profit Mozilla, maker of the Firefox browser. "While we'll need more time to digest and evaluate the details, we're encouraged by what we've seen so far," says Harvey Anderson, Mozilla's general counsel. "In particular, the FTC has proposed a set of principles that align well with the Mozilla manifesto and our approach to software development including privacy by design, transparency user choice and no surprises."

At least two influential legislators – Senator John Kerry and House Rep. Ed Markey – have also jumped into the fray, promising to introduce bills this year that would curtail fastener Web sites' ability to monitor a person's Web activity without permission.

Markey's bill would attempt to cloak childrens' activity on the Web. "The Internet presents access to incredible opportunities to learn and communicate that were unimaginable only a few years ago," Markey says. "But kids growing up in this online environment also

need protection from dangers that can lurk in cyberspace."

Short-term, the greatest threat to visitor tracking will come from Microsoft, which has long possessed anti-tracking technology for Internet Explorer, but has resisted rolling it out for fear of alienating advertisers, as well as impairing its own Web advertising.

"As one of the leading online advertisers – and ad platform companies ourselves – Microsoft has a



U.S. Senator John Kerry is looking to tighten restrictions on the tracking of Web surfers this year.

substantial interest in helping the online advertising industry grow," says Rik van der Kooi, vice president, Microsoft advertiser and publisher solutions group. "We believe that the convergence of new privacy tools and robust advertising growth can, in fact, co-exist and we are


uniquely positioned to provide thought leadership in both areas."

Dubbed 'Tracking Protection,' Microsoft's anti-tracking must be turned on in Internet Explorer 9 by a user, and then fed a Do-Not-Track list, which enables the browser to block companies a user is looking to avoid.

As increasing numbers of Web users adopt Internet Explorer 9, increasing numbers of Do-Not-Track lists for Internet Explorer 9 are expected to be made available for download by privacy advocacy groups, which specialize in identifying and monitoring firms known to track Web site visitors. In addition, users will also be able to create their own Do-Not-Track lists for Internet Explorer 9, or edit lists created by privacy groups and others.

Microsoft's approach to anti-tracking is especially potent. Unlike other technologies, the feature does not rely on companies tracking visitor behavior to agree to 'cease-and-desist' tracking when alerted by a user's browser. Instead, any company on a user's list is simply prevented from tracking the user's activity as long as 'Tracking Protection' stays on.

All told, the backlash against visitor tracking is still in its early stages, and could be mitigated by quantifiable self-regulation by Web marketers, along with artful PR-messaging by groups like BetterAdvertising.

But given Microsoft's decision to roll-out anti-tracking technology with Internet Explorer 9, the momentum is currently with online privacy advocates. 

NOW STOCKING

BOLT BLANKS**Shipping in 1-2 Days**

Sizes 1/2" up to 2 1/2" in diameter and lengths up to 24"
 A325, A490, A193 B7, GR 8 hex & square

Check our website for monthly specials! • www.superiorbolt.com

Call Us For Your Next Inquiry

602-841-8100

SUPERIOR
BOLT
& NUT MFG

TEAMS, COLLECTIVES & THE CLOUDS: TURNING AN IDEA INTO TEAMWORK VIA TECHNOLOGY *continued from page 78*


these two computer science grad students collaborated on a search engine called BackRub run on Stanford computers. The following year they changed the name to Google based on the mathematical term googol meaning 1 followed by 100 zeros. This inspired term represented their goal to organize an almost infinite amount of information on the Web.

Early in 2008 Google came out with its Cloud Strategy as it is called in Google land. The concept is to deliver to students, researchers, and entrepreneurs all the power of Google computing using a cloud of Google and other computers. The cloud is maybe a million, maybe more, small computers like ordinary PCs. They are connected as a web and answer billions of requests in fractions of a second. Massive (essentially infinite) computing power becomes an essential resource in this emerging era of connected intelligence and the collectivization of information. Software for accessing and working with the information is also of critical importance. Google corrects spelling and translates languages with a program that fits on one sheet of paper. This is important because that same program must be used millions of times a day delivering information to users in a fraction of a second.

Computer Intelligence

At this time, computers or computer clouds are not ready for consciousness and free will. Working by themselves, they can't do artistic expression to evoke emotion, invention of complex products using several scientific disciplines, or just unrestricted wanderlust into the joys of poetry.

Arthur C. Clarke in his 1968 science fiction epic film 2001: A Space Odyssey has his super computer HAL ask the space ship commander: "By the way, do you mind if I ask you a personal question? ... I've wondered whether you might be having some second thoughts about the mission." In this case fiction, written by a scientist, proposes that a computer can think like a person.

Technology futurist Ray Kurzweil asserts that strong artificial intelligence (AI) and nanotechnology will be able to create any product, any situation, any environment that we can imagine at will. And this will be before the end of this century. Computer expert and intelligence theorist Jeff Hawkins disagrees. He states that "AI suffers from a fundamental flaw in that it fails to adequately address what intelligence is or what it means to understand something." 

SWFA - 292 Sugarberry Ci., Houston, TX 77024 • Tel: 713-952-5472 • Fax: 713-952-7488 • Email: swfa@swbell.net • www.sfa-fastener.org

SOUTHWESTERN FASTENER ASSOCIATION

2012 SPRING CONFERENCE & EXPO

MARCH 22-25, 2012

Salome, Stocking & Rodriguez elected SFA Directors


The Southwestern Fastener Association's popular Spring Table Top Exposition will be held during the 2012 Spring Conference and EXPO, scheduled March 22 to 25, 2012. The Table Top EXPO will be held from 1:00 to 5:00 P.M. on Saturday, March 24, 2012. Houston Marriott Westchase Hotel will again be the Houston location. SFA has secured an excellent room rate of \$79 per night for the conference. The last two EXPO's that were held in Houston were hosted by the Marriott Westchase. The hotel features free parking and is close to many of the finest restaurants in Houston. The hotel is also conveniently located off of Beltway 8 and Westheimer and is equal distance from Houston George Bush Intercontinental Airport and Hobby Airport. Exhibit agreements to prospective exhibitors will be mailed July 1, 2011. The conference will feature several educational programs, a golf tournament and numerous networking opportunities.

The 2011 Spring Conference was recently held in New Orleans, Louisiana. During the General Business Meeting, three new Members of the Board of Directors were presented to the membership. The newly elected Director Michael Rodriguez, The Fastener Connection, Houston, Texas. Directors re-elected were Bobby Salome, El Paso Bolt & Screw Co., El Paso, Texas and Tom Stocking, Heads & Threads International, Grand Prairie, Texas. They will serve a three year term beginning in the Fall of 2011 and ending in the Fall of 2014. They will be joining Susan



Davis, Southwest Distributor Sales, Don Carr, Porteous Fastener Co., John Longyear, Metric & Multistandard Components, Keith Slaton, Standard Fasteners, Dwayne Carnes, All-Spec Sales, Tammie Shields, Advanced Specialty Sales and Mary Chambers, Assembly Products & Sales on the SFA Board of Directors. Outgoing Director is Michelle Rosser, Big Red Fasteners, Broken Arrow, Oklahoma.

Also during the Business Meeting, American Alloy Nut & Bolt LLC, Carrollton, Texas, AFI Industries, Carol Stream Illinois, Fasteners, Inc., Jefferson, Louisiana and Gexpro Services, Irving, Texas were welcomed into the Association. Following the Business meeting, attendees were treated to an excellent presentation by Linda Wing, Enthone Inc., on Electroplating and how it is used in the fastener industry. Saturday's seminar featured Jodie Elizabeth Jeffrey, Partner in Brooks-Jeffrey Marketing, Inc., who talked about the importance of branding your company and introduced SFA members to the advantages of using social media that is now available as a marketing tool. The New Orleans Conference was the best non-expo attended conference in several years. Attendees represented twenty-eight different companies from six different states.

For information on SFA Conferences or membership in the Southwestern Fastener Association, contact John Elsner, Executive Director at SWFA.  Photos on page 186

DISTRIBUTOR NEWS

EFC International is pleased to announce the addition of Leslie Metzger and Tom Merrill as Sales Engineers.

Leslie Metzger will be based out of the Bloomington office. Leslie is responsible for application development and account management in the Chicago area. Leslie comes to EFC from Mid-States Bolt & Screw, prior to Mid-States, she worked for General Fastener and previously Oetiker.

Tom Merrill will be based out of his home in Dallas, Texas and cover the states of Texas and Oklahoma. Tom worked as key account manager for Valeo Compressor NA, Behr America and Eaton Corp. His past experience included working with Daimler/International Truck, PACCAR, Caterpillar, Volvo, Lennox, Carrier as well as GM, Ford and Chrysler.

EFC is a leading provider of specialty metal, plastic, electrical and assembled component parts to the OEM and Distribution marketplaces. EFC has provided its customers with a solution for specialty components, technical support and engineering assistance since 1983.

For more information, please contact EFC at 1940 Craigshire Rd, St. Louis, MO 63146. Tel 314.434.2888 or Fax 314.434.2902. Visit their website at www.efc-intl.com.

AUTOMATION EXPERIENCE TECHNOLOGY CONNECTIVITY FLEXIBILITY SUPPORT



AUTOMATION EXPERIENCE TECHNOLOGY CONNECTIVITY FLEXIBILITY SUPPORT

the only

business software you'll
ever need for your fastener
wholesale/distribution business

Distribution One's V2 Fastener is a powerful ERP solution for Fastener Wholesalers and Distributors. V2 Fastener software offers an exciting, dynamic and fully functional Windows® system. Our fastener distribution software can automate all facets of your business operations. It's powerful enough to handle all of your order entry, sales, accounting, finance, purchasing, secondary processing, inventory, and CRM needs. Our fastener distribution software was designed to run your entire business operation from order processing through general ledger.

Providing powerful business
software for Wholesalers
and Distributors.

www.distone.com

3 Terri Lane | Unit 6 | Burlington, NJ 08016

888.730.8600 | fx 609.387.7600 | info@distone.com

DISTRIBUTION
One

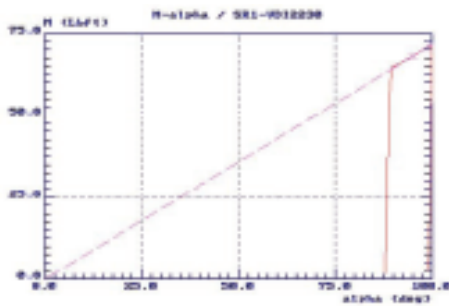


Figure 23. M-Alpha of Breakaway Torque Audit

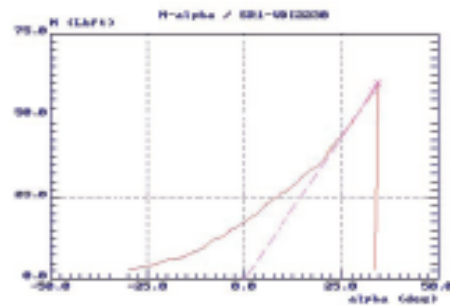


Figure 25. M-Alpha Diagram, Tightened Dry

10.3 Release Angle Audit

If the torque-angle signature is recorded when a fastener is loosened, as shown in Figure 24, the resulting release angle graph can be used to determine the elastic tightening angle, and thus directly estimate the approximate fastener tension that was released, provided that the F-Alpha slope for the joint has been established.

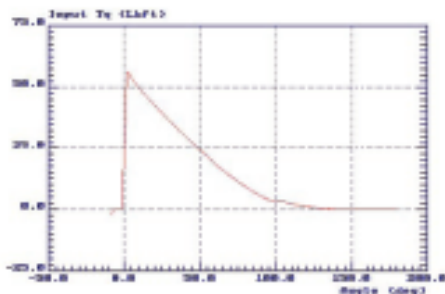


Figure 24. Release-Angle Signature

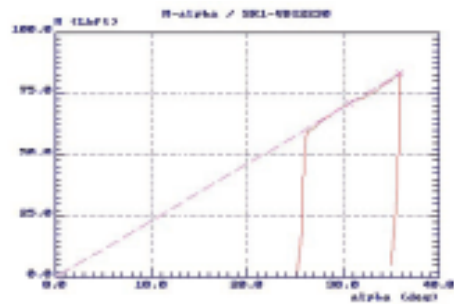


Figure 26. Breakaway M-Alpha, Dry Fastener


M-Alpha plots and release-angle plots can be used to directly estimate bolt tension, or preload, which is the ultimate goal of the fastener tightening process. The release angle of approximately 95 degrees in the example shown in Figure 24 that confirms the tightening angle measured on the M-Alpha Diagram for the hand torque audit. Clearly the release angle method of audit provides a direct measure of the capability of a given tool to develop tension in the tightened fastener.

10.4 Frictional Analysis Audits

To provide an example of how audit techniques can be used to the effect of differences in frictional characteristics, the fastener type used in the previous examples (Figures 17 through 22) was stripped of all thread and underhead lubricants to create higher friction coefficients in the thread and underhead regions. The M-Alpha diagram for tightening to 81 Nm (60 lb-ft), shown in Figure 25, indicates a tightening angle of only 25 degrees projected from the elastic origin. Compared to the lubricated fastener, where the tightening angle was 85 degrees, the predicted preload of 9786 N (2,200 lb.) was confirmed by the clamp force measurement. The breakaway audit for the dry tightened fastener, shown in Figure 26, confirms that the installation torque was approximately 81 Nm (60 lb-ft), and also reveals the expected very low angle of turn from the elastic origin.

11. Summary

The torque-angle signature method of analysis applied to tightening and loosening curves is plain, simple, and straightforward. It is a basic engineering analysis technique using fundamental stress, deflection, and material strength properties to model and measure the bolted joint tightening process. Torque angle signatures can be analyzed to determine installation torque, thread strip, underhead embedment, bolt yield, and most important, fastener tension. While there are many factors that can alter the tightness of a given bolted joint, the torque-angle signature analysis method provides a practical method for direct verification of clamp force to assure a quality fastener assembly. The technique can be applied to fasteners of all sizes and all grip lengths.

The release-angle signature, when compared to the installation torque-angle, can be used to evaluate the clamp load retained after a dynamic test. Material creep and embedment phenomena, which lead to loss of preload, are readily analyzed and quantitatively evaluated through use of the release-angle analysis methods. The results of release angle audits, being directly related to the achieved tension, are significantly more meaningful than the torque magnitudes obtained from breakaway torque audits. An improved version of the breakaway torque audit, which uses the torque-angle signature of the audit, can be used to directly estimate fastener tension. This analysis process correlates precisely with the release-angle-signature method. The only limitation is that the breakaway audit must be conducted in the elastic tightening region for the bolted joint where bolt yield or thread strip are not present. 

ANCHORS ANCHORS ANCHORS

Here we **GROW** again!

Continuing to serve the industry since 1948

ANCHORS • SCREWS • NUTS • WASHERS • RIVETS • PINS • INSERTS • RODS

- Acoustical Lags
- Augers (Zinc/Plastic)
- Chair Seating Anchors/Studs
- Chemical Anchors/Studs
- Coupling Nuts
- Drive Pins
- Drop Ins
- Hammer Drives
- Hollow Wall Anchors
- Lag Shields
- Lead Wood Screw Anchors
- Machine Screw Anchors
- Nylon Nail-Ins



- Plastic & Vinyl Plugs
- Pull Toggles
- Self Drills
- Set Bolt Anchors
- Single/Double Expansion Anchors
- Sleeve Anchors
- Split Drives
- Toggle Wings/bolts
- Toggles-Plastic
- Wall Hooks
- Wedge Anchors
- Threaded Rod



- COMPLETE STOCKING INVENTORY OF ALL COMMERCIAL FASTENERS
- MILL QUOTES WELCOME



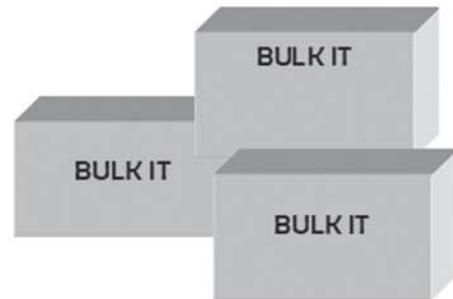
Conforming to all government specifications...AN, MS, NAS and commercial

J.I.T. Delivery
Direct Importing
In-House and On-Line Shopping
Certs on Request
Full Lot Traceability

Standard and Metric Specials
All materials, grades & finishes
Special fabrication
Bar Coding



PACK IT or



Regional Warehouses in New York, South Carolina and Georgia

GUARANTEED CUSTOMER SATISFACTION

7500 New Horizons Blvd.
Amityville, NY 11701
Tel: 800-645-1234
Tel: 631-225-6400
Fax: 631-225-6499
Email: novafstner@aol.com
Web: www.nova-anchor.com



SOUTHWESTERN FASTENER ASSOCIATION 2011 SPRING CONFERENCE & EXPO



THE SPECIALISTS IN STUDS & THREADED RODS



● **THREADED RODS**

0-80 TO 3 1/2" Diameter
Lengths to 20 Feet
Right or Left Hand Thread

● **SPADE BOLTS**

6-32 to 3/4-10 Diameter
With or Without Holes

● **CUSTOM BENT BOLTS**

U-Bolts - Rnd & Sqr Bend
J, L, V & Eye Bolts
Anchor & Hook Bolts

● **MATERIALS**

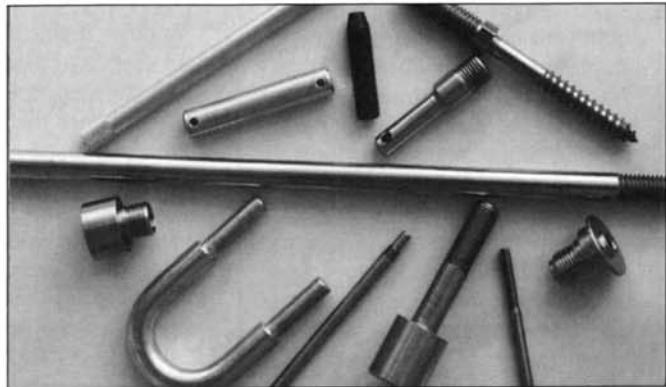
Carbon Steel (All Types)
Alloy Steel: 4037A, 4140, 8620
B-7, B-16, Stainless Steel
Copper, Brass, Bronze, Nickel
Alloys, Monel, Aluminum

● **STUDS**

0-80 to 3 1/2" Diameter
Continuous Thread
Single End Thread
Double End Thread
Roll or Cut Thread
Right or Left Hand Thread
UNC-Course Thread
UNF-Fine Thread
UNEF-Extra Fine Thread
Special Pitch Threads
Acme Threads
Metric Threads
End Slotted
Turned Down Diameter

● **SCREW MACHINING**

● **CNC PRECISION MACHINING**



TUTTLE
MFG. CO.



A Division of Arlington Fastener Company
1032 W. Northwest Hwy, P.O. Box 590 Barrington, IL 60010
(847) 381-7713 ph • (847) 381-9450 fx

Visit us at thomasregister.com to view our catalog

U.S. ECONOMIC OUTLOOK 2011 *continued from page 54***American Government**

The U.S. Congress, in cahoots with the Administration, is currently borrowing 40 cents of every dollar it spends. That spending, estimated at \$3,800,000,000,000 this fiscal year, has doubled during the past 10 years. The estimated budget deficit this year of \$1.6 trillion is simply mind-boggling at more than \$180,000,000 every 60 minutes...and is financial cancer.

American Employment

The surprising and welcome plunge in the nation's unemployment rate between November 2010 (9.8%) and February 2011 (8.9%) is unlikely to continue. Unemployment is likely to average perhaps 8.7%-9.2% over the balance of the year, with a slightly lower average in 2012.

Employment gains in coming months may be muted somewhat by the uncertainties now impacting businesses. Still, gains averaging 150,000-200,000 net new jobs monthly seem achievable.

American Inflation

The Federal Reserve's intention to create a bit of inflation has borne fruit. In fact, the harvest may be more than the Fed bargained for, with consumer inflation accelerating in recent months.

Higher commodity prices of all stripes and rising energy prices tied to the issues above will see inflation likely exceed the 1.5%-2.0% annual goal of the Fed. More and more companies have been able to boost prices, while more and more consumers face stretched budgets.

The Federal Reserve

The Federal Reserve's Open Market Committee's latest official view of the economy was released in mid-March, noting "The economic recovery is on a firmer footing, and overall conditions in the labor market appear to be improving gradually." The FOMC statement also

noted that the Fed "will pay close attention to the evolution of inflation and inflation expectations."

Financial market players see the Fed concluding its \$600 billion purchase of U.S. Government securities, affectionately known as QE2, in June. Given the

Fed's more optimistic assessment of the economy than in prior months, most financial market players would NOT like to see the announcement of QE3, noting the high level of monetary stimulus already in the financial system.

The Fed's critical federal funds rate has been at an historic low target range of 0.00%-0.25% for the past 28 months. It could easily stay at that level for another year.


Housing

One of the most anticipated and long-delayed developments within the U.S. economy has been stability in home prices. Most economists see U.S. home prices stabilizing this year, with modest gains during each of the next few years. As usual, some markets will perform better than others.

Stability and modest home price appreciation will be most welcome following painful downward moves between 2006 and 2010. Conventional mortgage rates still starting with a "4" will benefit those willing (and able) to refinance a home or finance a new or foreclosed property.

The Global Economy

Reasonably solid global growth is likely to continue, with stronger or weaker performance a function of the items above. China and India are growing at a rapid pace, with both addressing uncomfortable inflation. Northern Europe is growing, while southern Europe deals with austerity. South America is growing, led by Brazil. Mexico struggles with cartel violence, while Canadian growth is reasonable.

Uncertainties...unknowns...waiting for whatever is next. 

U.S. economic growth has now been positive for seven consecutive quarters

One of the most anticipated and long-delayed developments within the U.S. economy has been stability in home prices.

Your competitor is selling springs, why aren't you?



Short Runs
Custom Springs
Torsion Springs
Extension Springs
Compression Springs
Spring Assortments
Over 1500
Stock Springs

WE STOCK SELECT-A-SPRING EQUIVALENTS AS WELL AS MANY OTHERS

At Ajax Wire in addition to a growing list of stock springs, we can produce springs to your specifications from a sample, drawings or dimensions. We can manufacture these springs in short runs (even one spring) and long runs. We also offer several assortments that come with display boards and cabinets. They feature a full range of spring sizes that are suitable for manufacturers to place in their maintenance and tool cribs. Springs have been our only business for 70 years and three generations, and our aim as always is to continue to provide you with quality spring products. Distribution and sales of springs are growing and you too should benefit, and put more money in your pocket.



It's always spring-time at Ajax Wire!

Call for our latest catalog and pricing information;

Ajax Wire Specialty Company, Inc.

119 Bloomingdale Rd., Hicksville, NY 11801
Voice: 516 935-2333 FAX: 516 935-2334
www.ajaxwire.com



Toll Free:
800 966-AJAX (2529)

WHERE IS THE MONEY? (psst...The Government has it!) *continued from page 98*

they just wait until the new fiscal year and spend it then. It's as if they have a certain amount of money in the bank, can only spend that amount, and know that more money will be put in the "bank" at the beginning of the next year.


4. Market to the government just as you would to any other market segment. Do your research. What do the various government agencies with whom you want to work need? Who are the principle contacts? How can you network with them and others who have worked with them? Remember too, that many large contracts are let to the private sector with the caveat that small businesses and disadvantaged business get a lion's share of the sub-contracts. Find out who is getting the large contracts and market your product or service to them. It's a great way to get started working with the government and build your experience base and reputation.

5. There ARE smart and hard working people in government. The myth that there are no such people is perpetuated by the difficulty government units have in building the documentation required to get rid of non-performers. As a result, there seem to be a few people

in every department who don't pull their weight and are not held accountable for it. The whole department then gets a reputation for being inefficient, ineffective, or lazy.

Unfortunately, that reputation then tars some really dedicated and passionate people who may, in fact, be the large majority of the department. Your job is to find those smart, hard working people. Keep looking, they're there.

6. Be patient, again. Even though government can be very slow to react and very slow to make a decision, when they do, the expectation is that the private sector can turn on a dime and carry out the directive. Accept it. Live up to it. They will appreciate it and your reputation as a good firm with which to work will be built.

Success in business is all about finding customers who want what you have to sell and can afford to buy it. Governments, both federal and state, have all kinds of needs and a lot of money to spend. While it can be difficult to get your foot in the door and get qualified, it makes no sense to ignore the largest single purchaser of goods and services in the U.S., just because you don't know the rules. Learn the rules and get in the game. Your profit and loss statement will be glad you did. 



DISTRIBUTOR SOCIAL

Thursday, May 19, 2011

5:00 - 8:00PM

Registration: 4:30PM

**The Crowne Plaza Hotel
5300 Rockside Rd.
Independence, OH 44131
216/524-0700
Skyline Ballroom**

The North Coast Fastener Association is proud to offer fastener distributors a unique networking opportunity with top suppliers of our industry. On May 19, 2011, the NCFA will be orchestrating a distributor social. This event is meant to bring top suppliers of the fastener industry in direct contact with you, the fastener distributor. This networking event is constructed to allow purchasing agents, buyers, inside sales representatives and other key personnel of your distributor company an opportunity to mingle with several contacts associated with the industries top suppliers.

Brief List of Confirmed Suppliers:

- ADVANCE COMPONENTS**
- ALL OHIO THREADED ROD CO.**
- AMERICAN RING & TOOL**
- BRIGHTON-BEST INTERNATIONAL**
- CARDINAL FASTENER & SPECIALTY**
- CSM FASTENER PRODUCTS CO.**
- EARNEST MACHINE**
- ERIEVIEW METAL**
- KERR LAKESIDE**
- MASTER BOLT & MFG.**
- METRIC FASTENERS CORP.**
- METRIC & MULTISTANDARD**
- NATIONAL THREADED FASTENERS**
- NUCOR FASTENERS**
- PORTEOUS FASTENER**
- PRECISION FASTENER**
- R.L. ENGLISH**
- SCREWS INDUSTRIES**
- SOLON MFG.**
- STELFAST INC.**
- STORK HERRON TESTING LABS**
- VERTEX FASTENERS**
- XL SCREW CORP.**

North Coast Fastener Association
7737 Ellington Place
Mentor, OH 44060
Phone: 440/975-9503
Fax: 440/350-1676
Email: Lgraham@ncfaonline.com
Website: www.ncfaonline.com

Distributor Reservation Form

RSVP Deadline - Monday, May 9, 2011

It is important to preregister for this event. Please remit reservations to our home office via mail, email or fax. Thank you in advance for your cooperation.

*Up to 5 employees from each distributor company will be admitted to the event for FREE! Appetizers and drinks (2 drink tickets per attendee) are included. If you would like to send additional attendees, the cost will be \$25/per person and does not include drink tickets. A cash bar will be available. Please make check payable to N.C.F.A. and mail to our home office by May 9, 2011

Company: _____

FREE Attendees: _____

Additional Attendees @ \$25/per person:

Payment for additional attendees must be received by the RSVP Deadline of 5/9/11

DISTRIBUTOR NEWS

Sherex Fastening Solutions, an industry leader in the manufacturing and distribution of blind rivet nuts & other specialty fasteners has introduced a new rivet nut insert installation tool, the SFS FLEX-5 Tool.



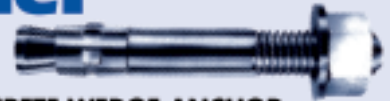
The new FLEX-5 Series will feature 5,000 pounds (22kN) of pulling force and 7mm (0.276 in.) of available stroke. The tool is capable of installing rivet nuts from M3 to M10 and 6-32 to 3/8-24 & rivet nut studs from M5 to M8 and 10-24 to 5/16-24. The tool is based on an innovative modular design that offers the flexibility of both pull to pressure and pull to stroke installation methods allowing the proper method to be used based on the application requirements. The SFS FLEX-5 has the ability to be upgraded from the original base tool to different levels of process monitoring that will provide feedback to the operator ensuring each rivet nut is set properly. The original base tool also will offer upgrades such as conversion to an in-line tool and conversion to a split tool with a remote booster.

The SFS FLEX-5 has an all aluminum body which will give it added strength and durability relative to plastic tools in the market. It will feature a single stage trigger and Socket Head Cap Screw Mandrel. The SFS FLEX-5 is one of the lightest tools of its kind in the marketplace at only 4.2 pounds and comes in a convenient & easy to carry case.

To learn more about the new SFS FLEX-5 Tool including a full demo, please visit www.sherex.com.

Trouble-free use with maximum holding power. Prompt delivery!

Thunder Stud®



THE ULTIMATE CONCRETE WEDGE ANCHOR

Listed by UL Labs, City of LA

Concrete Reasons to Use Thunder Stud

- Collar expander offers full 360 contact with masonry
- Patented collar design expands on first turn of the nut
- Comes complete with nuts and washers ready to use
- Projections on collar immediately grip concrete
- Easy to install through object to be fastened
- Anchor diameter equals hole diameter



Kap Toggle®

HOLLOW WALL FASTENER

The strongest, trouble-free way to hang almost anything on hollow surfaces, such as sheetrock, cinder block, tile, metal, fiberglass, paneled walls and ceilings.

Thunder Bolt®



THE ALL PURPOSE SLEEVE ANCHOR

Only ThunderBolts can be used in every masonry material, solid or hollow, and offers the maximum in holding power.

Thunder Anchor Line



MARKSMEN®
MANUFACTURING CORPORATION

355 Marcus Blvd. • Deer Park, New York 11729
1-800-305-6942 • Tel: 631-226-0666 • Fax: 631-226-0796
www.marksmenmfg.com • E-mail: wedge1966@aol.com

USING THE POWER OF SMARTPHONES TO GROW YOUR BUSINESS *continued from page 96*

A word of caution; do your due diligence and check the developers' references to ensure your intellectual property and ideas are protected.

If your app can solve a problem (i.e. the Jott app records voice messages and converts them to text messages) then you're on the right track. If you own a Smartphone, think about your favorite apps and how you heard about them. Most likely you heard about them from a friend. Viral word-of-mouth marketing is why popular apps can grow in use so fast with virtually little marketing expense.

Make your website Smartphone compatible

The Internet is going mobile. Have you visited your website using a Smartphone? What type of user experience did you get? If you want to gain a competitive advantage over your competition, your brand needs to be as mobile as your customer. Your customers and prospects don't have the patience to view websites on their phone that aren't user-friendly.

Start by viewing your current website on a Smartphone or iPad. If you haven't designed a mobile specific website, it probably won't look the same. Text is smaller, graphics may not show up and you have to scroll up, down, left, right, etc to view content. You'll get much more targeted traffic and improved conversions if you create a mobile-enabled version of your site's main content to meet the demands of today's multifaceted Internet mobile user. Creating the mobile version of your website's content from a layman's point-of-view requires reformatting the navigation, text and graphics to fit the smaller screen size of Smartphones. The files are then published on your web server and special code is added to your regular website to identify the type of device accessing your website. When a user visits your website, the appropriate version of your website is displayed. It's a good idea to provide links from your mobile version to your full site as some users will elect to visit your full-size website.

Engage mobile customers through social networks

If you're not friending and following, tweeting and

YouTubeing, you're missing out on a lucrative opportunity to connect and engage with your target market. Social networking has leveled the playing field; it's no longer just the companies with an over-inflated ad budget who can make waves. If you learn to add value and create a presence on websites like LinkedIn, Facebook and Twitter, you can expand your reach, increase awareness of your brand, and create a loyal following of customers who will help promote you!

Research shows that more people access social media via Smartphones than with their desktop computers. People who access the Internet with their Smartphones are more likely to socialize online than their desktop counterparts, according to a Ruder Finn study. The study found 91% of mobile Web users socialize online, while just 79% of desktop users can say the same. The average American spends 2.7 hours a day on the mobile Web, the study found, with


The future of your business is in the palm of your hands, and in the handheld devices of your customers and prospects around the world.

45% of those users commenting on social networking sites and 43% contacting with friends through the sites. Imagine the impact you can have when your customers can view your YouTube videos anytime they want using their Smartphones. Just think of the effect a viral video could have on your business success. This can only happen if you create and upload the videos to content sharing websites like YouTube or Vimeo. There are hundreds of video sharing websites, but start with YouTube since it's the 2nd largest search-engine.

Keep your videos short, authentic and to the point. If you have a larger message, you may want to break it down to shorter segments as user's attention spans have shortened.

Don't Wait... Make Your Brand Mobile

Not only is mobile marketing a great way to gain and connect with new customers, it also enables you to add value for your current customers. By making your brand mobile, you will increase awareness about your company, products and services.

The future of your business is in the palm of your hands, and in the handheld devices of your customers and prospects around the world. If you aren't on board already, make sure you jump on or you and your business will surely get left behind. 



• Drywall Screws
 • Self Drilling Screws
 • Woodworking Screws
 • Acoustical Fasteners
 • Needle Point Self Piercing Screws

CTG International LLC
 140 Commerce Way
 Walnut, CA 91789
 Phone: (909) 598-9251
 1-877-CTG-INTL (284-4685)
 Fax: (909) 598-6042
 www.ctgintl.com
 Email: ctgintl@ctgintl.com

RAPID DRIVE
 Premier Industrial Fasteners

ENHANCE YOUR PROFESSIONAL CREDIBILITY *continued from page 114*

Your Reputation

Your reputation is the total of what your values are and how you choose to act. Ultimately your behaviors lead to your reputation, and then all three of these factors – your values, your behaviors, and your reputation – lead to credibility.


Your reputation is something you have, whether you know it or not. And unfortunately, you can get a bad reputation very easily. For example, if someone else values prompt return phone calls, and you routinely don't return phone calls, you'll quickly get a bad reputation as someone who doesn't follow through. In fact, it's often the small things – like not returning emails promptly – that tarnish someone's reputation more so than the bigger issues.

The good news is that you can enhance your reputation by working on it, which will inevitably boost your credibility. You simply need to think about the behaviors you choose and the kind of reputation you want to earn. Therefore, find out what people's expectations are of you and then meet them. Additionally, observe

people who are successful or who you think have a good reputation. What behaviors do they choose and why have people bestowed credibility on them?

Finally, realize that being likable doesn't play a big part in your reputation. You can be very quiet, shy, and totally introverted yet still have a stellar reputation. Conversely, you can have a great personality, be the life of the party, and be totally charming, but have a less than flattering reputation. So no matter who you are, where you work, or what your personality, you can have a great reputation.

Credibility Matters

In today's economy and job market you need to take the proper steps to enhance your credibility. In fact, if you're not taking values, behaviors, and reputation into consideration, you could quickly find yourself out of a job with few prospects for new work, as your credibility will be tarnished. A lot is on the line here, so take it seriously. Build your credibility today so you can have the success you desire for years to come. 

You MUST ATTEND THIS 2011 EVENT if you use fasteners or are in the fastener industry!

There's lots to do in Branson!

Centrally located in the heart of the U.S.A. – Branson, Missouri – easy travel and great entertainment!

12 championship golf courses including Payne Stewart Golf Club

More than 50 live performance theaters

Three pristine lakes

International award-winning theme park, Silver Dollar City

Retail, dining & outlet shopping galore including Branson Landing

Hilton Branson Convention Center Hotel is the show location

2011 Exhibitors

(as of 3/2011)

Act Fastening Solutions
Advance Components
Aeroparts Plus Inc.
Afi Industries, Inc.
American Fasteners And Components, Inc.
Andre Corporation
Androck Hardware Corporation
Archer Screw
Az Lifting Hardware
Bradley Adhesive Applications
Brooks-Jeffrey Marketing, Inc.
Cable Tie Express
Cambridge Resources
Chrislynn Threaded Inserts
Computer Insights, Inc.
Delta Secondary, Inc
Distributor's Link, Inc.
Dokka Fasteners Inc
E-z Lok
Fall River Manufacturing Co.
Fastener Technology International
Forest Products Laboratory
Greenslade & Company, inc.
Hanger Bolt & Stud
Hill Fastener Corp
International Fasteners Inc.
Interstate Threaded Products
Iqms
ITW Shakeproof
Jergens Specialty Fasteners
Kanebridge Corporation
Lindstrom Metric, LLC
Metric & Multistandard Components Corp
Metric Fasteners Corporation
Minneapolis Washer And Stamping Inc
S.w. Anderson Co.
Sarjo's Fas-kit Fastener Assortments
Screws Industries
Seastrom Mfg. Co., Inc.
Sems And Specials Inc
Smi Gripfast
Star Stainless Screw Co.
Superior Washer & Gasket Corp.
Tennessee Galvanizing
Trinity Hardware Headquarters
Unique Industries, Inc
United Dowel Pin Manufacturing
Volt Industrial Plastics
Western Wire Products Co
Women In The Fastener Industry (wifi)
XI Screw Corporation
Yellow Woods And Roads Less Traveled Co.



2nd Annual May 12-13, 2011

- Mix business and pleasure within the fastener community.
- Find new and innovative fasteners and fastener related products.
- Find new solutions to cut your bottom line and save money.
- Make important connections with others in the fastener industry.

Interested in Attending?

Visit us online for the latest schedule updates and convenient links to book hotel and airfare.

AllAmericanFastenerShow.com

Toll Free 1-877-865-8237



Selling to Distributors Only

We specialize in short-run quantities (1 pc, 5 pcs, 20 pcs, 100 pcs) of socket products and other special fasteners, in almost any length, in most materials, diameters from #3 to 1-1/4" and M2.5 to M30. We can mill from bar, rework existing parts, or ship from our large inventory of special items.

Small Quantity Specialists

- Socket Cap Screws • Socket Set Screws-Any Point • Socket Shoulder Bolts • Flat Head Socket Caps • Square Head Set Screws-Any Point
- Slotted Set Screws-Any Point • Hex Heads
- Slotted Machine Screws • Dowel Pins • Button Head Socket Caps • Low Head Socket Cap
- 1936 Series Socket Cap

Points

- Cup • Flat • Cone • Half Dog • Full Dog • Flat to Root • Oval • Any combination of above

Materials

- Alloy Steel • 4140 • 302, 303, 304, 309, 310, 316, 316L, 316 Strain Hard, 317L Stainless, 321, 330, 410, 416, 420, 430, 431, 440 Stainless
- Aluminum • Brass • Bronze • Copper
- Titanium • C276 • Alloy 20 • 17-4PH
- Ni-Cu 400 • 405, Nik 200, Nick 600
- Nitronic • AL6XN • Acetal

Size Range

- Inch: #3 thru 1-1/4"
- Metric: 2.5mm thru 30mm

FASTENER SPECIALTIES MANUFACTURING

7110 Georgia Ave. • West Palm Beach, FL 33405
Phone 561-582-7022 • Fax 561-582-7030 • www.fastenerspecialties.com



THE HUNT FOR OPPORTUNITIES *continued from page 122*

4. They focus on exponential, not incremental, opportunities.


All discussions of opportunities are directed to significant, not average, results; performance “lite” is unacceptable. They use the information they glean about the market, customer, strengths, and trends to consider opportunities that have the potential to be significant. Successful organizations know nothing lasts forever and they must continually reinvent themselves – each time more significantly than the last. These organizations constantly review what they do; they focus on the exponential in their hunt for exponential opportunities.

5. They share success with everyone.

Today’s best ideas are not uniquely resident in management. Organizations that hunt for opportunities realize that opportunity-thinking must happen at every level. Therefore, all successes are openly shared and celebrated. Failures are communicated to inspire employees to rethink, redefine and reinvent. In an intellectual workplace, innovation, inventing and opportunity hunting must be core expectations of all employees; every employee must watch, listen and communicate more effectively to identify improvements and opportunities. The more successes are shared with

everyone, and failures are seen as a way to improve, the more performance- and idea-risks employees will take – all in the hunt for opportunities.

In today’s uncertain recessionary period – where the regular, average or incremental approaches are not sufficient – successful organizations have mobilized their teams to be on the hunt for opportunities. It may be in a retail store that creates a new and more “hip” line of products that are less expensive to match today’s reductions in consumer spending. It may be a restaurant that now opens at lunch, creates a mobile delivery van, or a special take-out section, to appeal to a changed demographic. It may be a financial services firm that sponsors savings, investing and retirement education to create more savvy and loyal investors who better appreciate and value the firm’s conservative and pragmatic approach.

Some people are distracted or discouraged by failure and change. Others see these as opportunities for greater success. This perspective comes is encouraged and supported in a culture that is on a constant hunt for ways to be better and to make a greater difference. Not only can the hunt for opportunities increase your success, but it may help you invent the next product, service or idea the rest of us cannot live without. 



FASTENER
TRAINING
INSTITUTE

Week-long Certified Fastener Specialist™ training to be offered again in 2011

The Fastener Training Institute® in partnership with the Industrial Fasteners Institute will offer a week-long intensive version of FTI's Certified Fastener Specialist™ advanced technical training program, July 25-29, 2011 in Cleveland OH.

Fastener Training Institute/IFI-Cleveland 2011 will include everything that a student would experience in the regular seven-course CFS™ training, but all on consecutive days. And fastener association members will receive substantial discounts on registration fees. For more information or to register online go to www.fastenertraining.org.

The difference between you and your competition is employee skill, knowledge and productivity. Your return on investment will be:

- *Added value to your company and your customers, enhanced company image*
- *Increased efficiencies in processes, resulting in financial gain and sustainability*
- *Increased innovation in strategies and products, risk management*

The FTI/IFI Cleveland 2011 event will feature learning labs taught by leading industry experts, Joe Greenslade (IFI), Carmen Vertullo CFS (Simply Better Inc.), and Salim Brahim (IBECA Technologies), interactive exercises, quizzes to reinforce learning, and plant tours of manufacturing, secondary processes and testing facilities. Upon completion of this training and passing a final exam, attendees will be eligible to receive the Certified Fastener Specialist™ (CFS) designation.

Registration fees for members of an endorsing organization are as low as \$2,500 for the first person from a company with a 40% discount for each additional attendee from the same company. The deadline for this special rate is May 27, 2011.

What our students have to say:

- *"Great. Well worth my time and money. The instructors are very dedicated to the improvement and education of the industry."*
- *"The CFS program drastically shortened my learning curve regarding fastener specifications.....CFS is a great program taught by excellent instructors."*

www.fastenertraining.org

• info@fastenertraining.org

VIRGINIA FASTENERS

THE GALVANIZED SOURCE



TIMBER BOLTS
HEX BOLTS
ANCHOR BOLTS
SQUARE HEAD BOLTS
LAG BOLTS

CARRIAGE BOLTS
TIE RODS
HEX NUTS
SQUARE NUTS
FLAT WASHERS

OGEE WASHERS
DOCK WASHERS
SQUARE WASHERS
ALL THREAD ROD

**Huge Inventory of Hot Dipped Galvanized Hardware
Take Advantage of Our Attractive Freight Allowances**

1-800-368-3430

P.O. Box 3108 Chesapeake, VA 23323 www.vafasteners.com

Phone 757-436-1717 Fax 757-136-1460

E-mail sales@vafasteners.com

ASTM F1941 AND F1941M REPLACES ASTM B633 FOR ELECTROPLATING ON THREADED FASTENERS *continued from page 120*

ASTM F1941 also provides a helpful chart in Annex X3 that indicates the maximum plating thickness that can be applied to class 1A and 2A threads of all pitches without exceeding the 3A GO gaging requirements after plating. The Appendix section X3.2 makes an often confused issue very clear by specifically stating that inch threads, which are 2A before plating, are gaged using Class 3A Go gages and 2A Not-Go gauges after plating.

Metric Threads: ASTM F1941M covers thread fit requirements metric threads in the following two paragraphs:

6.3.1.2 *External Threads* – Maximum coating thickness at high current density threaded tips must provide for basic (tolerance position h) GO acceptance gauge acceptance. Therefore, the thread after coating is subject to acceptance using a 6h GO gauge for plated 6g class external threads and 4h6h GO gauge for plated 4g6g external threads respectively.

6.3.1.3 *Internal Threads* – Maximum coating thickness of internal threads must provide for basic (tolerance position H) Go thread acceptance. Therefore, the thread after coating is subject to acceptance using a class 6H GO gauge for 6H class internal threads.

ASTM F1941M also provides Table X3.1 in Appendix X3 that indicates the maximum plating thickness that can be applied to class 6g and 4g6g coarse pitch threads without exceeding the 6h or 4h6h GO gaging

requirements after plating respectively. The Appendix section X3.3 makes an often-confused issue very clear by specifically stating that metric threads, which are 6g before plating, are gaged using Class 6h Go gages and 6g Not-Go gages after plating.

Risk Management Issues for Hydrogen Embrittlement

Section 6.4 of both ASTM F1941 and F1941M cover hydrogen embrittlement issues very thoroughly. This section makes the following points:

1. Fasteners having hardness of Rockwell C40 and above, all case hardened parts, and parts having captivated hardened washers must be baked to minimize the risk of hydrogen Embrittlement.

2. Typically, baking should be done within 4 hours after plating, with one hour preferred. Parts should be baked for 2 to 24 hours at a temperature between 350 and 450 degrees F. The supplier and purchaser should agree on the specific bake times and temperatures to be used on their products.

3. Fasteners above Rockwell C 40 must be tested unless the plating bath has been qualified in accordance with the test methods in ASTM F1940. The effectiveness of the baking process in relieving hydrogen from the steel fasteners must be verified using one of the test

please turn to page 199

NCFA - 7737 Ellington Place • Mentor, Ohio 44060 • Phone 440-975-9503 • Fax 440-350-1676 • web: www.ncfaonline.com

NORTH COAST FASTENER ASSOCIATION

NCFA's DFAR/ITAR MEETING


Kelly Hommel, NCFA President (XL Screw Corp.)

Government regulations impact the fastener industry in many different ways. William Weisberg, an attorney with Bryan Cave in Washington D.C. (and counsel to several fastener companies), made a presentation on behalf of the NCFA to our local members. This informative meeting, held on February 10, 2011, concentrated on two government regulations; ITAR (International Traffic in Arms Regulations) and DFARS (Defense Federal Acquisition Regulation Supplement).

Over 60 attendees enjoyed a great Italian dinner while William Weisberg concentrated on educating our attendees on these government regulations. The main topics covered during the presentation were on export

controls on fasteners, sales to the U.S. government, and stimulus and recovery act projects. William was flexible with his presentation, allowing questions and discussion through out the entire meeting.

Attendees left the meeting with questions and concerns answered. The NCFA is pleased with this meeting and are gracious to William for doing this meeting for us. Thank you to all attendees for coming to this event. We are thrilled to be able to provide an educational meeting that will help you with your daily business.

For additional information on the North Coast Fastener Association, please visit our website www.ncfaonline.com or alternatively contact our office at 440/975-9503. 

NCFA's DFAR/ITAR MEETING



Drilled Fillister Specialists

BRASS STAINLESS STEEL

EMPIRE FASTENERS INC.

12-10 30th Avenue Long Island City, NY 11102
(800) 598-5212 • (718) 728-3900 • Fax (718) 726-4067

Empire Manufactures and Stocks

AN 500A	AN501A
MS 35265	MS 35266
MS 35271	MS 35272
MS 35273	MS 35274
MS 35275	MS 35276
MS 35277	MS 35278



NEW...
NOW CHECK STOCK & E-MAIL QUOTES
ON LINE

www.EmpireFastenersInc.com

• Manufactured in the U.S.A.

ALL CERTIFICATIONS AND TEST REPORTS ON FILE

All Requirements are in accordance with:

- | | | |
|--|---|--|
| • Quality Control: MIL-I-45208 A | • Plated Cadmium: Per QQ-P-416, Type 2 CL 3 | All screws are tested to meet the Tensile requirements of procurement spec. FF-S-92B |
| MIL-STD-45662 A | • Stainless: UNS-S30430 | |
| • Steel Drilled Screws: Fed. Std. No. 66 | • Passivation: Per QQ-P-35 | |

ASTM F1941 AND F1941M REPLACES ASTM B633 FOR ELCTROPLATING ON THREADED FASTENERS *continued from page 197*

methods in ASTM F606, F1624, F519, or NASM 1312-5. The testing of parts below Rockwell C40 is not mandatory.

4. Baking must be done before applying chromate finishes to parts. Temperatures above 150 degrees F will damage the chromates and make them ineffective.


Performance Requirements for Corrosion Resistance

Section 9.3 of ASTM F1941 and F1941M state, fasteners must be subjected to salt spray corrosion resistance tests only if specifically required by the customer's purchase order. If parts are required to pass salt spray tests, the corrosion requirements only apply to those areas on the parts that meet the specification's definition of "significant surface".

Parts are required to age for 24 hours after plating before being corrosion tested. The salt spray testing method used must meet the requirements of ASTM B117. The four tables in Annex A1 in both standards specify the minimum number of hours of salt spray resistance that is required for each of the electrodeposited platings having the various thicknesses, and added chromate finishes. As an example, .0002 inches (5 μ m) of zinc on steel with a clear chromate, designated as FE/ZN 5A, must

withstand 24 hours of salt spray resistance before exhibiting red rust while the same thickness of zinc with an opaque (olive green) chromate, designated as FE/ZN 5D, must withstand 96 hours of salt spray resistance before exhibiting red rust.

The ASTM F1941 AND F1941M electroplating standards are the first produced exclusively for threaded fasteners. They thoroughly address areas of misunderstanding that have existed between fastener customers and suppliers in the past. Fastener suppliers should obtain a copy of this specification immediately and should start to follow them while urging their customers to use these on future purchase orders for electroplated threaded fasteners. ASTM F1941 is included in the IFI 8th Edition Inch Standards Book. Both of these standards can be obtained directly from the ASTM web sight at www.astm.org.

Fastener suppliers are encouraged to subscribe to the IFI Fastener Technology Connection™ for the fastest possible retrieval of fastener technical data and to obtain the newly published 8th Edition of the Inch IFI Standards Book published in early 2011. See information on these two information products at www.indfast.org. For more information on this and other fastener related issues contact the author at jgreenslade@indfast.org. 

HOW TO AVOID BEING LEFT BEHIND IN 2011 *continued from page 142*

The latter requires grasping the task, thinking through the implications, developing a plan, implementing it and evaluating the results. Ironically, such initiative is as necessary behind the counter at McDonald's as it is in the c-suite, and every place in between. It is often missing in both.

5. Jump at small opportunities.

It's popular today to talk about "less is more," although there are indications that we don't believe it. Salespeople are often impatient for the moment they can move up and go after the "really big accounts." In the same way, national attention takes precedence over local stardom. We grab every "Top 100" list we can find and add the names to our prospect list.

A marketing executive took a call from a company president for a small order of a particular promotional product, but over the next 30 years, that first order grew into a steady flow of very good business.

No one wants to get burned today. It's too costly. Buyers want to see how we perform. Do we take small orders seriously? If we do, they are more likely to give us more of their business.

6. Look at the long term.

The last time Marc Buoniconti moved his arms and legs was when he made a tackle for The Citadel in 1985. Although a quadriplegic since that fateful moment, he has become a mover and shaker, having raised \$350 million to find a cure for paralysis.

Almost hidden in the last part of a USA Today story about this determined man, Marc reports that his medical care runs from \$500,000 to \$600,000 a year. Who pays for it? All his medical expenses are covered by a "catastrophic insurance policy" his father had taken out. That's serious long-term thinking.

The issue is not about having objectives in life or on the job, but creating the personal infrastructure to make sure we get there. Without that, we become like so many people, subject to forces well beyond our control.

7. Put yourself on the line.

My wife and I play a game as we walk through Newport, RI, on weekends. We guess which stores and restaurants will make it and which won't and we speculate about the outcome, one way or the other.

One example is the attractive Gelato shop that opened in a good location on a high-traffic street. As soon as we tried it, we gave it a "doomed" rating because of tiny portions and high prices. It closed at season's end.

A retail store opened on the same main street, but in something of a less desirable location. It featured interesting and fun, non-clothing items for the home (such as the "Gone to Newport" sign we have at home). It seemed to have a plan to make it, particularly since it was friendly and owner-managed. Before long, it was gone—across the street to a larger space.

It's a productive game for figuring out who has a winning concept and why and whose idea is problematic. It's a good exercise in testing one's business acumen.

The issue is not about having objectives in life or on the job, but creating the personal infrastructure to make sure we get there.

A name of a person, a product or a company doesn't become important until someone is hooked. It's the same with everything we do.

8. Focus on what's important.

Surprisingly, this doesn't include your own name or the name of your company, whether you're an employee or own it. If this seems a little crazy, it isn't.

Take the ad, for example, that a college in Boston ran on boston.com. Attracting the attention of prospective students seemed to be the objective.


Yet, the headline was the name of the school and the sub-head was its location. It was a missed opportunity and a costly mistake.

This is no different than placing an ad for a job and using your name as the headline and the name of the town where you live as the sub-head. What would that attract? Not much; just a few people who say, "I saw your name on a website."

The college might have stated, "93% of our graduates land a job fast," followed by, "Get the details here." Start with the benefit, not the name of the school.

In the same way, a person looking for a job in advertising might use the same space this way, "My ad sold 342 pairs of jeans. Check it out here." Now, visitors are ready to listen to your story.

A name of a person, a product or a company doesn't become important until someone is hooked. It's the same with everything we do.

The year ahead will be pushed one way and then another by an endless series of events beyond our control. The eight tools may help move our prospects for success several notches, which might just make it a very good year. 

What do you need?

Sex Bolts



Including the MALE SCREW and FEMALE SCREWS.
Various heads. Thread #10-24.
Length 1/2" - 4". Other sizes available.
Materials: Steel, Zinc Plated, Stainless Steel.

Binding Posts & Screws



Including the MALE SCREWS and FEMALE SCREW.
Thread #8-32. Length 1/8" - 6".
Other sizes available.
Material: Aluminum, Brass.

Blind Rivet Nuts, Blind Jack Nuts & T-Nuts



Round and Hexagon heads. Big and small flanges.
Open and closed ends. Knurled ones are also available.
Materials: Aluminum, Brass, Stainless Steel and Steel.

Clinching Parts (Nuts & Screws)



Bushes, Clinching Nuts, Stand offs, Studs and Spacers. Information on sizes and materials available upon request.

Self-Tapping Threaded Inserts



Internal thread #2 - 7/8". External thread M4.5 - M36. Provides stronger and more durable permanent threads in plastic.
Materials: Steel, Brass & Stainless Steel.

Stretch Folding Blind Rivets



Rivet Dia. 5/32" & 1/5". Length 0.57" - 1".
Finish available in a multiple of colors.
Rivet Body: Aluminum 5052.
Mandrel: Aluminum 5056.

Ask us.

IMPERIAL RIVETS & FASTENERS CO. INC.

Office: 7201 Walden Lane, Darien, Illinois, 60561-3734
Warehouse: Unit H, 8404 S. Wilmette Ave., Darien, Illinois, 60561-3734
www.imperialrivet.com Email: sales@imperialrivet.com
Tel: 630-964-0208 Fax: 630-963-0289



CHICAGO NUT & BOLT - WHERE CUSTOM FASTENERS ARE A BIG DEAL *continued from page 126***Golden Gate Bridge (Refurbishing)**

The Golden Gate Bridge is a suspension bridge spanning the Golden Gate, the opening of the San Francisco Bay into the Pacific Ocean. The Golden Gate Bridge was the longest suspension bridge span in the world when it was completed during the year 1937 and has become one of the most internationally recognized symbols of California and the United States. This bridge stretches 8,981 feet long, sits 746 feet tall, and spans 90 feet wide. Chicago Nut & Bolt supplies custom fasteners for the constant refurbishing and maintenance of this historic landmark.

**Seawolf Submarines**

The Seawolf class attack submarine was the intended successor to the Los Angeles class, ordered at the end of the Cold War in 1989. This class currently consists of three 353 feet long submarines that were larger, faster, quieter, and more efficient than their predecessors. When submerged, these submarines can reach speeds of 35+ knots (40+ mph) and contain extensive equipment for shallow water operations, including a floodable silo capable of simultaneously deploying eight combat swimmers and their equipment.

**IMPISA Container Cranes**

Chicago Nut and Bolt has provided the wide array of custom fasteners required for these massive cranes designed to load and unload container ships. CNB is a supplier in multiple locations including the Port of Long Beach, the Port of New Orleans, the Port of Baltimore, and several overseas locations.

**City Center**

Located on the Las Vegas Strip in Paradise, Nevada, City Center 16,797,000 square feet mixed-use, massive urban complex on 76 acres. It is the largest privately funded construction project in the history of the United States. The complex features the Aria Resort & Casino, The Vdara hotel-condo complex, the Harmon Hotel, the Mandarin Oriental condominium-hotel, the Veer towers, and the Crystals, City Center's 500,000 square foot retail and entertainment district.

**Wind Tower Projects**

Wind Towers are wind turbines that use the wind to make electricity. Wind Towers have many environmental benefits.



Wind power consumes no fuel, and emits no air pollution, unlike fossil fuel power sources. Utility scale turbines range in scale from 100 kilowatts to as large as several megawatts. Chicago Nut & Bolt has been involved in several wind tower projects across the nation as well as overseas.

Eric puts it simply. He says, "Let us become your Custom Fastener Manufacturer."


The BUSINESS EDGE 2.0 - On Time and On Budget

Eric told us one secret to their ability to offer such a diverse and comprehensive bundle of products and services. He said, "Chicago Nut and Bolt has worked with Computer Insights for over 10 years. When we installed The BUSINESS EDGE, our system was installed and up and running on time and ZERO dollars over budget. I was also amazed that even though Computer Insights, Inc. headquarters is only 5 minutes away, we did all the training on line. It turned out to be the most efficient computer implementation I have ever experienced."

"Since then, the system has helped us maintain the level of customer service that we have committed to our customers. With The BUSINESS EDGE, all the information that we need is at our fingertips. It is helping us with our ISO Quality requirements and it is enabling us to give our customers what they need in a single call, no call backs, no voice mails, just prompt, professional accurate service. I have also been impressed by the flexibility of the system and the ability to customize it to our specific needs."

"Additionally, The BUSINESS EDGE has been instrumental in CNB's efforts to maintain an efficient inventory level and seamless Lot Traceability. " The Brighton Best Connection is the latest updated feature—supplied at No Charge—that will help us streamline our purchasing process even further."

Chicago Nut & Bolt, Inc. can be reached at 150 Covington Drive, Bloomingdale, IL 60108, Mr. Eric K. Carlson. Their telephone number is 630-529-8600. E-mail ecarlson@cnb-inc.com and their website is www.cnb-inc.com.

Computer Insights, Inc. can be reached at 108 Third Street, Bloomingdale, IL 60108. Their telephone number is 1.800.539.1233, E-mail sales@ci-inc.com and their website is www.ci-inc.com. 

TAKE A GOOD LOOK AT THE STORAGE PRODUCTS THAT YOU & YOU'RE COMPETITORS OFFER, THEN TAKE A LOOK AT OURS

CRAFTLINE™



STORAGE SYSTEMS



- Ball Bearing Slide Service Tray Box Racks 100 lbs. Per Drawer
- Patented "Scoop Front"™ Bin Cabinets
- Large Capacity Ball Bearing Slide Drawer Cabinets
- Competitively Priced Ready to Ship Quality Products Black or Gray
- Proudly Made in the USA Since 1945

www.craftline.us

800-505-9099

www.plattlabonia.com

Let's face it, there's not a lot of new business to be had out there. With you and your competitors going after the same customers offering the same storage products as each other, how can you stand out?

Offering a higher quality, truly modular, better looking, more organized storage product than your competition is the smartest way to stand out and increase your business. Add value to your program and enhance your image in a very competitive marketplace.

Let our company go to work for yours

VISIT OUR NEW WEBSITE
www.craftline.us

DISTRIBUTOR NEWS

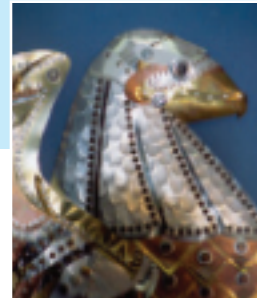
Manufacturer of quality fastener and parts storage products, **Craftline Storage Systems**, North Haven, CT, USA has launched a totally redesigned website. "The goal for our new site is to provide the essential information that our customers require in a quick and easy to use manner," said Craftline/Platt & LaBonia Company's President / CEO Elizabeth LaBonia. The new Craftline website includes easy to find detailed information on industrial storage cabinets, drawer systems, bin cabinets, compartment trays, rack cabinets, mobile carts, tip-out bins, hose racks and more. The new website has a brand new modern look with many new features to make the site easy to navigate. From the home page or products page any products specifications, descriptions and pictures can be viewed in detail and are no more than 3 clicks away. Included on every product page is a listing of all other modular or related products with a link to go directly to those products. This makes

it extremely easy for Craftline distributors to create the perfect modular storage system for their customers. Other options of the site include links for custom manufactured products, how to become a distributor, how to find a distributor, contact information as well as the ability to view or download the company's new full line catalog. The website is also backed by the friendly and knowledgeable staff of Craftline Storage Systems/Platt & LaBonia Company that remains committed to outstanding customer service. Craftline is proud of their continued and successful growth over the years and are pleased to extend the company's value and service even further with their newly enhanced website.

For further details or information contact Craftline Storage Systems, P.O. Box 398, 70 Stoddard Avenue, North Haven, CT 06473. Toll free 800-505-9099; Fax 203-234-7978; Email; sales@craftline.us; or visit their website at www.craftline.us.

INDUSTRIAL FASTENERS INSTITUTE

IFI'S SOARING EAGLE AWARDS PROGRAM



The Soaring Eagle Awards is a program dedicated to those persons who have ascended far beyond the expected in their contributions to the North American fastener industry and the many industries it serves.

The Institute would like to thank all those who submitted nominations for the year 2011. Also, special appreciation is expressed to the Awards Committee for selecting this year's distinguished recipients.

Brian Lowry	Chairman
Preston Boyd	Division I
Pat Wells	Division II
Pete Baenen	Division III
Bruce Smith	ASD

The William E. Ward LEADERSHIP AWARD

The William E. Ward Leadership Award honors outstanding contributions by an individual who has provided direction, vision, and focus toward the timely resolution of strategic issues challenging the mechanical fastener industry and the many markets it serves. The award is intended to encourage others to give of their time and talents to achieve exceptional leadership.

George J. Grabner
Eighth Recipient March 15, 2011



This award acknowledges that George Grabner has been an outstanding leader providing vision, guidance, and resolve in the timely resolution of strategic issues challenging the mechanical fastener industry and providing an example of what all future industry leaders should seek to become.

The Roy P. Trowbridge TECHNOLOGY AWARD

The Roy P. Trowbridge Technology Award honors an individual who has contributed to the advancement of fastener application engineering, and has materially added to the pool of knowledge relating to the design and application of mechanical fasteners and formed parts.

Frank Cosenza
Eighth Recipient
March 15, 2011



This award acknowledges that Frank Cosenza has made significant contributions to the advancement of fastener technology and the pool of knowledge related to the design, manufacturing, and/or application of mechanical fasteners and formed parts.

The George S. Case, Sr. MERITORIOUS SERVICE AWARD

The George S. Case, Sr. Meritorious Service Award is presented to an individual who has a record of significant and lasting contribution to the mechanical fastener industry and has demonstrated outstanding service to the IFI in its pursuit of the objectives for which it was founded.

Daniel P. Haerther
Eighth Recipient March 15, 2011



This award acknowledges that Dan Haerther has contributed many years of valuable service to the Industrial Fasteners Institute, enabling the Institute to fulfill its mission of continually providing dedicated service to the mechanical fastener manufacturers of North America.

"Every man owes a part of his time and money to the business or industry in which he is engaged, and no man has a moral right to withhold his interest to an organization that is striving to improve the conditions within his sphere."

- Theodore Roosevelt 

Light Construction Fasteners • Mill Shipments • Fast Quotes • Nationwide Services

HIGH QUALITY & SERVICE SETS US APART

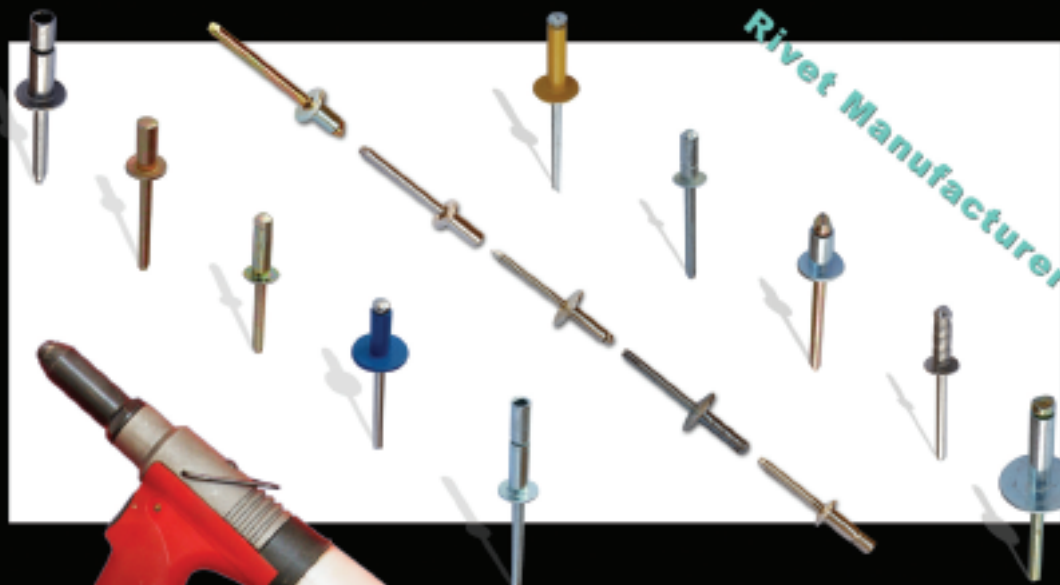


INTERFAST GROUP

THE PROFESSIONAL'S CHOICE™

www.interfastgroup.com

2730 E. Philadelphia St. Ontario, California 91761 Toll Free: 1-800-605-1233 Fax: 909-930-2183



Rivet Manufacturer In China



Shanghai Fast-Fix Rivet Corp.

NO. 1151, Lian Xi Road, Shanghai, P.R. China 201204
T: 0086-21-58912860 (sales) F: 0086-21-58912793 (sales)
E-mail: sales@rivet-china.com
URL: www.fastfix-rivet.com

Factory: JiangSu Fast-Fix Fastener Co., Ltd.
Jing Jiang Fast-Fix Rivet Manufacturing Co., Ltd.

www.fastfix-rivet.com



STOP

NEW!! DIGITAL MAGAZINE
at www.linkmagazine.com

**THE NEXT ISSUE IS
ALREADY IN THE WORKS...**

3 GREAT EVENTS!

ENJOY THE BENEFITS OF DISTRIBUTION AT:
NEFDA Tabletop Show – Sturbridge, MA
NEFDA Fall City Meeting – Chicago, IL
Pac-West Fall Conference – Denver, CO

UNDER CONSTRUCTION

SECURE YOUR SPOT NOW!

Editorial Deadline: June 5
Ad Materials Deadline: June 15

**FREE ...ONLINE DIGITAL AD / WEBSITE AD
AND FEATURE ARTICLE WHEN YOU ADVERTISE**



ADVERTISING OPPORTUNITIES

phone 1.800.356.1639 | 239.643.2713

email maryann@linkmagazine.com

tracey@linkmagazine.com

www.linkmagazine.com

THE
DISTRIBUTOR'S



THE NATIONAL MAGAZINE FOR FASTENER DISTRIBUTORS

Stamped to Perfection

Every washer, gasket, and stamping we produce meets or exceeds the most stringent specifications. From military specs to your most complex parts, JTD Stamping's Quality, Service and Just-In-Time delivery, are second to none.

Our state-of-the-art tooling and production practices produce the results you expect at costs you can afford. From aluminum to titanium and from in-stock to custom orders, JTD Stamping has provided precision stampings for over 35 years, and with our customers' continued support, we will continue to provide quality stampings for many years to come.

Please do not hesitate to call, write or email us with all your questions and inquiries. We will be happy to quote you on any size order.



J.T.D. STAMPING CO., Inc.

Manufacturers of Washers and Gaskets

ISO 9001-2000

403 Wyandanch Ave.
North Babylon, NY 11704

Tel: 631-643-4144
Toll Free: 1-800-927-7907
Fax: 631-643-4016

www.jtdstamping.com
Email: quotes@jtdstamping.com
info@jtdstamping.com

*J.T.D. Stamping has provided
Precision Stampings for over 35 years*





**MRO Distributor
Supply Warehouse**

*Order Only What You Need & Get It
Right Away !*

***We Inventory* Over 25,000 MRO
Supply Items, So You Don't Have To.**

- *Small Minimum Order*
- *Flexible Fastener Packaging*
- *Broken Case Quantities, OK!*
- *Drop Ship Your Orders*

No Franchise Agreement & No Contract to Sign

**436 Page
MRO Sales
Catalog -
Yours FREE !**



**Use In The
Field As Your
Sales Catalog**

Also Available:
Generic Catalog
with loose pages.
No Cover, No Name.

www.usaSupplyLine.com

Setup an account to see Distributor Pricing

Call: 1-800-44-SARJO - Fax: 845-454-0070

DISTRIBUTOR NEWS

What would you do with “up to the day” business performance information?

DDI System's inform software provides the information necessary to make faster and smarter decisions. Understandable dashboards display top-level overviews with immediate drill-down capabilities allowing for quick access to executive level data.

The ability to leverage purchasing and sales information increases cross-sell opportunities, allows for effective management of advertising, and highlights pipeline potential.

“DDI's inform was a terrific choice for us! Starting with an absolutely seamless transition, it has exceeded our expectations in every possible way. Inform's thoughtful design has made it the window to our world.” – Sikes Paper Company

With the strongest technology and exceptional user-driven reporting available today, DDI System's comprehensive approach to distribution software will increase profitability and drive sales.

For more information call 877-599-4334, email sales@ddisys.com or visit www.ddisys.com today.

DISTRIBUTOR NEWS

On April 1st, Franklin Township Chamber celebrated their 50th anniversary at an Awards Banquet which was held at the DoubleTree Hotel of Somerset, NJ. The Keynote speaker was Lt. Gov. Kim Guadagno. **Franklin Chamber has awarded Rotor Clip - Company of the Year.**

Rotor Clip Company, Inc., is a manufacturer of a full line of retaining rings, wave springs and hose clamps for the automotive, appliance and general OEM (original equipment manufacturer) marketplace.

Nearly 40 years ago, Robert Slass, Rotor Clip's founder, decided to make Franklin Township his corporate home. It was a great choice as Rotor Clip grew along with the community providing long-term job opportunities for area residents and becoming an interested and involved corporate citizen. Constructed between 1970-2002, Rotor Clip currently occupies 250,000 square feet on 30 acres and employs 275 people from Somerset and the surrounding communities.

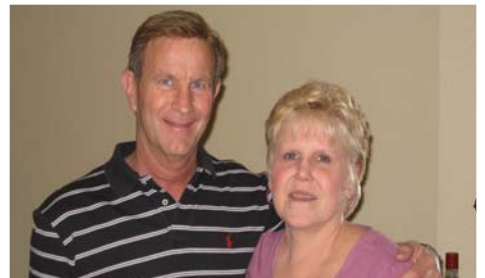
During that time, Rotor Clip actively supports the local board of education through a variety of activities like sponsoring an annual tour of its facility for local school children. Other regional organizations like the P.B.A., Franklin Food Bank and the 4-H club of Somerset County have also received support from the company.

Rotor Clip is a primary example of successful American manufacturing. The “100% Made in America” label is one it wears proudly since all of the processes needed to make the company's product line are performed at the Somerset location, exporting to other countries, bringing dollars and opportunities to Franklin Township.

Today, Rotor Clip retaining rings and hose clamps are all around us, though they are rarely visible. For example, they are used in automobiles on ABS brakes, air conditioning compressors, steering systems, braking systems and more. You will also find them in virtually any product that needs to be fastened in some way.

Visit www.rotorclip.com for online specs, sample requests and quotation requests. To request a hard copy of the 2010 catalog, email adv@rotorclip.com. For technical considerations or design questions email tech@rotorclip.com.

SOUTHWESTERN FASTENER ASSOCIATION 2011 SPRING CONFERENCE & EXPO



CRYPTIC FASTENERS

Decode the ten terms below by finding a simple substitution code. A set of letters has been substituted for the correct letters. Look for terms that might reveal themselves by their distinctive spelling or by frequently used letters. When you have identified a term, knowing the letters will help you decode the other terms, because if A stands for T in one word, it will be the same throughout the list.

Category: TYPES OF NUTS (such as: Hex)

- | | |
|--------------------|------------------|
| 1. I K S E | 6. L F B O R V |
| 2. B J T F P V | 7. B R Y O O V M |
| 3. L Y T D R K S E | 8. G R F S E V |
| 4. Z F X | 9. G R F O |
| 5. O P F L W | 10. D F S V R |

Solution on Page 212



"Just because you're a nut doesn't mean you're nuts!"



SECURITY FASTENERS

All Your Tampruf™ Security Screws A Complete Line of Tools, Nuts & Bolts

- Tampruf™ - tri-groove
- Button head hex
- Six Lobe
- Spanner
- Sockets 6, 10, 20, 30
- Hex Insert Bits
- Six Lobe
- Spanner

Available in case hardened steel and stainless

-
- Competitive Prices •
 - Same Day Shipment •
 - Complete Range of Stock •
 - Screw & Nut Sizes •

NEW!

Now Stocking a Complete Line of

Grease Fittings

NEW!

Call or write for our free catalog

16216 Gundry Avenue • Paramount, CA 90723

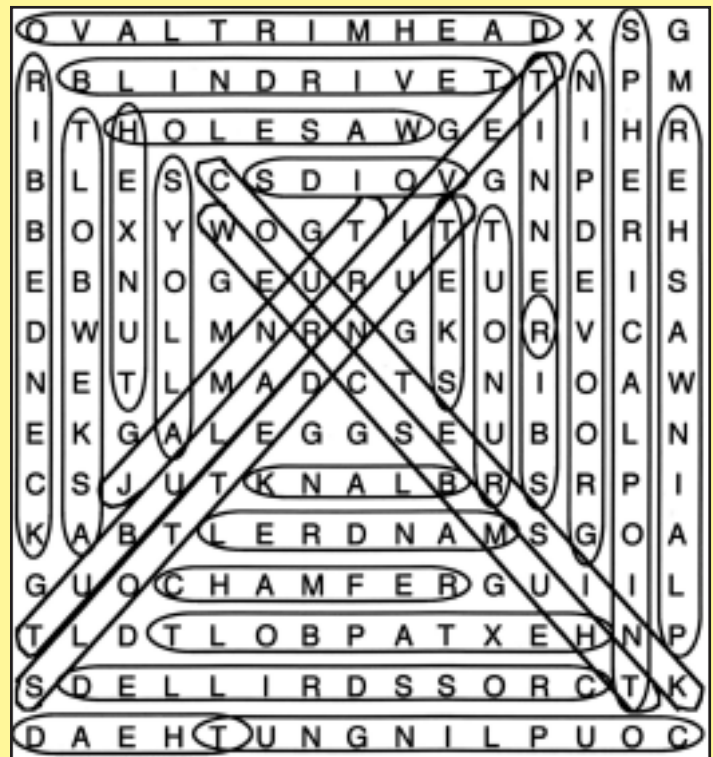
800-543-2614 • Fax 800-543-2615

FASTENER PUZZLE SOLUTIONS

Fastener Crossword Solution



Fastener Wordsearch Solution



Cryptic Fasteners Solution

1. Wing
2. Square
3. Coupling
4. Jam
5. Track
6. Castle
7. Slotted
8. Flange
9. Flat
10. Panel

3 New Ways for Fastener Distributors to Think "Quick" and Save Big

Vogelsang Corporation rolls out additional "Quick Ship" products

In 2010, Vogelsang launched **Quick Ship**, which offers SAME DAY SHIPMENT on their most popular coil pins, roll pins and bushings — over 200 SKUs. Due to the success of this revolutionary program, additional products are being added in an effort to continue to meet customer demands. "We're pleased to be able to expand **Quick Ship** by offering more of what our customers have asked for...pre-packaged and ready to ship same day," explained Mike DaFonseca, Business Development Specialist of Vogelsang Corporation. "There will be 3 waves of new product releases. A total of 105 additional SKUs will be added to our **Quick Ship** line-up" DaFonseca continued. The first wave rolled out in early April, and included several new Carbon and Stainless Steel Roll Pins with various Imperial and Metric Diameters, heavy — and medium — duty carbon Coil Pins with Imperial Diameters, and many new Bushings. The remaining 2 waves will be released on June 1st and August 1st. Most lines can be ordered in pre-packaged quantities.

As a leader in the coil & roll pin industry, Vogelsang created **Quick Ship** (QS) with the fastener distributor in mind. Perceiving a trend within the industry to increase cash flow by reducing inventory, Vogelsang responded by pre-packaging different quantities of their most popular products — all competitively priced — making them ready to ship same day. As the demand for **Quick Ship** has grown, Vogelsang has responded again with these new 3 releases.

"Vogelsang is the first pin manufacturer to offer this type of creative program and our distributors who participate in it have quickly seen just how beneficial it is," said Dale Stuban, Vice President & General Manager at Vogelsang, adding "**Quick Ship** has allowed these distributors to maximize their cashflow by buying only what they need, when they need it."



Ordering from Vogelsang's expanding **Quick Ship** product offerings allows these savvy distributors to save capital ordinarily used to maintain huge stockpiles of inventory, especially since Vogelsang can usually get these orders shipped the same day, with no-charge drop ship privileges.

Complete **Quick Ship** details & part numbers, specifications, and pre-packaged quantities are available online at www.VogelsangCorp.com. To order, visit the website or call 800-526-2376.

Orders placed before 1:00 pm (EST) are shipped the SAME day. Orders received after 1:00 pm (EST) will be shipped the NEXT business day. Each **Quick Ship** shipment has no additional charges or handling fees and each package includes lot traceability. ▼

The Fastener Distributor's Best Friend...



Economical, same-day shipments on Rollpins, Coilpins & Bushings when you order before 1pm EST.

TO ORDER CALL: 800-526-2376
VISIT: www.VogelsangCorp.com

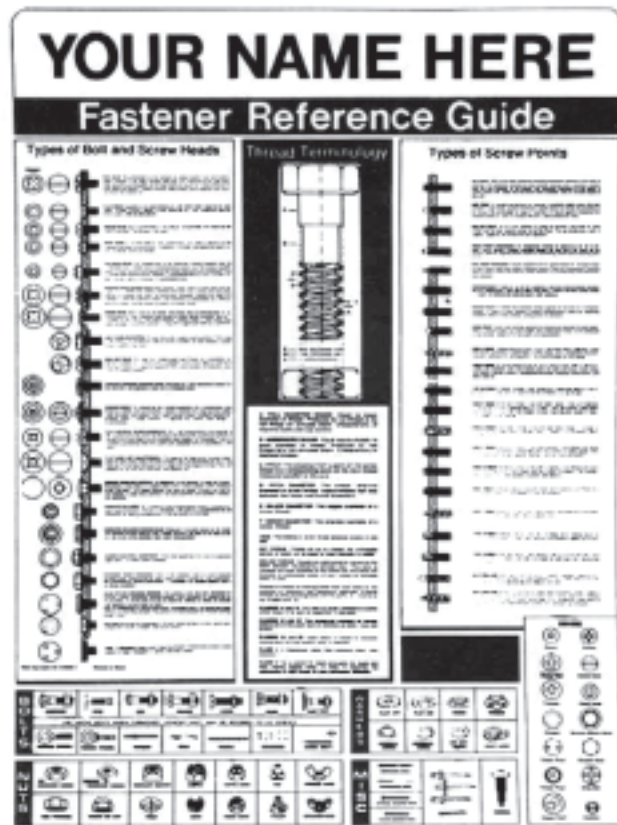


VOGELSANG CORPORATION
1790 Swarthmore Ave., Lakewood, NJ 08701
ISO/TS 16949

**Fastener Reference
Guide. A Great
Gift for Customers.**



**A Great Way
to Advertise Your
Company.**



This 17" x 22" handy reference guide for common fasteners will serve as an attractive and informative addition to your customers' offices and stockrooms.

Your name, logo, address, phone number, e-mail, and/or web site address are all boldly and handsomely printed above detailed descriptions of common screws, sheet metal screws, machine screws, bolts, nuts and washers. It's a great way to personalize your company's image and advertise your capabilities at the same time.

The poster is made of sturdy heavyweight paper printed in red and black. It's the perfect giveaway for both existing and potential customers!

To have a company logo printed on the chart, please provide a clean, black & white copy of the logo or line art (can be printed or digital).

To order, fill out the form below and return to:

Distributor's Link Magazine, 4297 Corporate Square, Naples, FL 34104 • Ph. 800-356-1639

Ship to: _____

Name

Company

Address

City

State

Zip

250 copies: \$275 • 500 copies: \$395 • Inquire about larger quantities. Prices do not include shipping. We will send them UPS Freight Collect or bill your UPS or Fedex Number # _____

Please include full payment with order. Checks payable to: Leo J. Coar

Since 1935

Our mission is to provide the best products, services and relationships, creating loyal customers all of whom value quality.

Over 75 years of fastening the world with exceptional quality and service.

Quality

- Machined Slots - no cam out
- Unique Point Styles
- Total Quality Management

Service

- Delivery
 - Fast turnaround on standard, short run and specialized products
- Short Run Specialist
- Manufacture to Blue Prints
- Quoting with 24 hour response - online quoting
- Order Management

Engineering

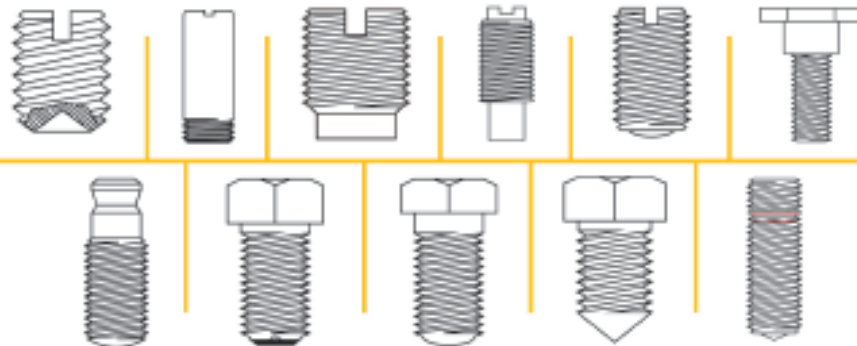
- Application / Design Development
- ISO 9001 : 2008 Certified
- QSLM Approved for Class 2 Fasteners
- Cage Code: 1T4U7
- Custom Engineering
- Production Part Approval Process

Special Point Styles • Special Threads • Blue Print Jobs



Set Screw & Mfg. Co.

USA Manufacturer of Slotted, Square Heads & Specials
Steel - Alloy - Brass - Stainless - Aluminum



Set Screw & Mfg. Co.

1210 St. Charles Street • Elgin, IL 60120

Kim Todd, Fastener Specialist

Heather Walker, Fastener Specialist

Phone: 847.717.3700 • Fax: 847.717.3710

www.setfast.com • email: sales@setfast.net



SRC Special Rivets Corp.



Now has a company representative in the U.S.

Headquartered in Taiwan with two factories in China and a monthly production capacity of 500 million blind rivets. SRC offers break stem blind rivets of various materials and some high strength STRUCTURAL blind rivets. Because of our high production capacity we offer good prices and service. SRC has been supplying blind rivets to some of the largest companies in the blind rivet market.

SRC now has a company representative in the U.S. to serve our customers. Tony Di Maio is well known in the blind rivet industry and he will assist you in every way he can. We appreciate the opportunity to quote your blind rivet needs. Contact Tony for catalogs.

SRC offers the following:

- Quality ISO Approved and Manufactures to IFI Specifications
- Competitive Pricing • Fast Delivery
- Fast, Accurate Communication • Technical Assistance by Tony



Contact: **Tony Di Maio**

6 Hermon Ave. • Haverhill, MA 01832

Phone & Fax: 978-521-0277 • Email: tdimaio@verizon.net



ADVERTISERS INDEX

A

- ABBOTT INTERFAST** 58
Your complete fastener house
Tel (847) 777-3030
Fax (847) 459-4076
- ABLE LABEL, INC.** 57
Customized labeling, kit labels, promo labels, shipping and return address, logo and graphic insertion and bar coding.
Tel (800) 348-1455
Fax (509) 922-4854
- ABLE LABEL SYSTEMS, LLC** 133
Product identification labels & hardware/software
Tel (877) 414-5867
Fax (509) 272-3845
- ACCURATE MFG. PRODUCTS GRP FC, 16, 135**
Manufacture a full line of extra thick component washers from #0 thru 4" bolt sizes, standard and special sex bolts in most materials
Tel (317) 472-9000
Fax (317) 472-9010
- ACF COMPONENTS** 53
Master stocking distributor of AVK, Bivar, Heyco, Panduit, Richco, RAF, 3M
Tel (800) 227-2901
Fax (510) 471-7018
- ACS MANUFACTURING, INC** 41
Formed spring steel fasteners
Tel (888) NUTS-R-US
Fax (847) 695-6336
- ADVANCE COMPONENTS** 7
The Distributor's source for specialty fasteners
Tel (800) 275-7772 or (972) 446-5500
Fax (972) 242-3090
- AJAX WIRE SPECIALTY CO., INC.** 189
Wire spring manufacturer. Short & long runs, all sizes, all lengths. Also supply cabinets, displays, packaging for private label
Tel (800) 966-AJAX
Fax (516) 935-2334
- ALBANY STEEL & BRASS.** 51
Specialty Tapping Screws - Swageform
Tel (312) 733-1900
Fax (312) 733-9887
- ALFA TOOLS/DIV. OF ALFA MANUFACTURING** 73
Full line of drills, taps, dies, annular cutters, end mills, abrasives and screwdriver bits.
Tel (800) 253-2532
Fax (800) 258-6657
- ALL AMERICAN FASTENER SHOW - BRANSON, MO** 194
Tel (877) 865-8237
- ALL AMERICAN WASHER WERKS** 50
Quality producers of washers and stampings
Tel (847) 566-9091
Fax (847) 566-8381
- ALLEGHENY BOLT & SCREW** 211
Distributor of screws & nuts
Tel (800) 543-2614
Fax (800) 543-2615
- ALPHA FASTENERS** 61
Distributors source for captive and shoulder screws, thumbscrews, standoffs, spacers, clamps, shafts, gears and racks. Customer parts manufactured to customer specifications.
Tel (516) 867-6188
Fax (516) 867-6189
- ALPHA-GRAINGER MFG. CO.** 25
Electronic hardware, captive screws, shoulder screws, spacers & standoffs
Tel (508) 520-4005
Fax (508) 520-4185
- ALUMINUM FASTENER SUPPLY CO., INC** 127
Specializing in a wide range of aluminum fasteners
Tel (800) 526-0341
Fax (239) 643-5795
- AMERICAN IMPERIAL SCREW CORP.** 65
500 million fasteners in various materials and finishes. Stocking distributor of spring steel fasteners.
Tel (800) 431-2391
Fax (845) 354-4377
- ANDROCK HARDWARE** 117
304 Stainless steel eyebolts, S-hooks in 304SS & eye bolts with lag threads
Tel (815) 229-1144
Fax (815) 229-1895
- ANTHONY MANNO & COMPANY** 139
Precision fasteners, electronic hardware. Quality components, service and reliability.
Tel (800) 915-7703
Fax (888) 505-6551
- APPLIED BOLTING TECHNOLOGY** 219
Manufacturer of Direct Tension Indicators. DTI's are a simple, accurate and cost effective product used to measure tension on A325 & A490 bolts.
Tel (800) 552-1999
Fax (802) 460-3104
- ARK-PLAS PRODUCTS** 112
Polyethylene Post & Screws & Nylon
Tel (870) 453-2343
Fax (870) 453-2567
- ASPEN MFG. COMPANY** 149
Fastener secondary services: drilling, tapping, cut-down & chamfer, slotting, milling, lathe work, captivating, grinding, thread rolling, short run specials.
Tel (630) 495-0922
Fax (630) 495-0924
- AUSTIN HARDWARE & SUPPLY** 161
Authorized stocking distributor, tool repair facility for the finest brand name fasteners and installation tools including vendor managed inventory programs.
Tel (800) 220-8118
Fax (888) TO-RIVET
- AZ LIFTING HARDWARE** 85
Carbon and stainless steel eyebolts, eye nuts, shackles, wire rope clips, lifting eye bolts, turnbuckles, thimbles, hooks & swivels.
Tel (888) 936-1466
Fax (623) 936-8909
- AZTEC WASHER COMPANY** 125
Bonded Sealing Washers
Tel (858) 513-4350
Fax (858) 513-4305
- AZTECH LOCKNUT CO.** 38
Metal prevailing torque locknuts of all types
Tel (800) 321-5625
Fax (630) 236-3210

B

- BAY FASTENING SYSTEMS** 47
A leader in the engineered fastener industry since 1962. Millions in stock, lowest prices, next day delivery.
Tel (800) 718-8818
Fax (516) 294-3448
- BBC FASTENERS** 155
Manufactures hot forged and cold headed standard and specialty fasteners. They offer expedited service for your cold headed prototypes.
Tel (708) 597-9100
Fax (708) 597-0423
- BEACON FASTENERS** 3
Lowest Prices - Largest Inventory on Stock Thread Forming, Thread Cutting, Sheet Metal/Tapping, High-Low Tapping and Sems Screws.
Tel (800) 669-2658
Fax (847) 541-1789
- BIG BOLT SPECIALTY MANUFACTURING/BIG BOLT CORP.** 129
The largest fastener machine shop in the United States. Stocking/Manufacturing facility operating 24 hours a day, 5 days per week.
Tel (630) 539-9400
Fax (630) 539-9480
- BOLT PRODUCTS, INC.** 56
Light duty clamps, double tube clamps, extruded cushion clamp, medium duty clamps, heavy duty clamps. Tube clips, wiring clips and grate clips.
Tel (800) 423-6503
Fax (626) 333-1908

News Plus More.

News Briefs

Feature Articles

FIN Fastener Stock Tracker

Daily Fastener Quiz

FIN Classifieds

Product News

Fastener History

FIN Calendar

Trade Shows

Associations

Article Store

Fastener Quality

Obituaries



GLOBAL

FASTENER NEWS.COM

Tel 503-335-0183 E-mail FIN@GlobalFastenerNews.com

2207 NE Broadway #300, Portland, OR 97232, USA

ADVERTISERS INDEX

B continued...

BRIGHTON-BEST INTERNATIONAL OBC
 Socket screw products - L-Nine products -
 Grade 8 hex head - pipe plugs - shoulder
 bolts - hex keys - square head set screws -
 dowel springs-nuts-metrics
 Tel (562) 808-8000
 Fax (562) 808-8108

BRITISH METRICS 101
 Metric and British Hardware
 Tel (410) 857-3990
 Fax (410) 857-3766

C

CABLE TIE EXPRESS 77
 Master distributor for cable ties and wire
 management products
 Tel (888) 603-1233
 Fax (800) 395-1233

CAPITAL MARKETING 159
 Business development and improvement,
 fastener applications, merger and
 acquisition, supply chain management, and
 strategic planning.
 Tel (336) 884-1704
 Fax (336) 884-1778

CHICAGO HARDWARE & FIXTURE CO. 53
 USA manufacturer of steel forgings and wire
 forms for the Fastener, Industrial, and
 Marine industries
 Tel (847) 455-6609
 Fax (847) 455-0012

**CHRISLYNN PRECISION THREADED
 INSERTS 48**
 Professional thread repair, precision helical
 wire, rock solid K-Type, E-Z Fix, E-Z Lok, no
 minimums, same day shipping.
 Tel (800) 926-1495
 Fax (888-526-4566

COMPONENT PACKAGING 135
 Contract packager specializing in the
 fastener industry - automated or hand
 bagging, shrink packaging and assembly. All
 check weighed for accuracy
 Tel (417) 624-9395
 Fax (417) 624-2303

COMPUTER INSIGHTS 19
 Offering "The Business Edge," a complete
 integrated system for fastener distributors
 Tel (800) 539-1233
 Fax (630) 893-4030

COPPER STATE BOLT & NUT 113
 Manufacturers of pre-headed and square
 bolts.
 Tel (800) 528-4255
 Fax (602) 272-3316

CRAFTLINE STORAGE SYSTEMS 203
 Bin cabinets, drawer systems, cabinets,
 compartment boxes, fastener storage
 systems, custom products, tip-out cabinets,
 racks - since 1945
 Tel (800) 505-9099
 Fax (203) 234-7978

CRESCENT MANUFACTURING 145
 Specialize in miniature fasteners
 Tel (860) 673-2591
 Fax (860) 673-5973

CTG INTERNATIONAL, LLC 193
 Standard and non-standard fasteners
 Tel (909) 598-9251
 Fax (909) 598-6042

CURTIS METAL FINISHING CO. 99
 Experts in the application of Engineered
 Coatings. Coating systems include: Magni,
 NOF-MCNA, PPG, Whitford and Yuken.
 Tel (586) 939-2850
 Fax (586) 939-6140

D

DARLING BOLT 119
 Large & special hex cap screws and socket
 products, 12 point flange screws
 Tel (800) 882-0747
 Fax (586) 757-1555

DDI SYSTEM 163
 Distribution software that seamlessly
 combines daily operations with advanced
 sales and marketing tools.
 Tel (877) 599-4334

DELTA SECONDARY 123
 Cut off & chamfer, cut threading, cross
 drilling, drilling & tapping, turning, milling,
 slotting, grooving. Quality machine shop
 offering fastener distributors over 35 years
 of machining experience.
 Tel (630) 766-1180
 Fax (630) 766-1285

DISTRIBUTION ONE 183
 Distribution software for your fastener
 wholesale distribution business
 Tel (888) 730-8600
 Fax (609) 387-7600

DISTRIBUTOR'S LINK 206

E

EASTWOOD MANUFACTURING 89
 All materials; specials and non-standards
 Tel (281) 447-0081
 Fax (281) 447-0098

ELGIN FASTENER GROUP 171
 Industrial fasteners from Ohio Rod Products,
 Versailles, IN; Leland-Powell, Martin, TN;
 Chandler Products, Precision Screw & Bolt,
 Cleveland, OH
 Tel (812) 689-8917

ELITE SALES, INC. IFC
 Importers of wire rope, strand, cable,
 hardware, chain products in ungalvanized,
 galvanized, and stainless steel.
 Tel (305) 262-3105
 Fax (305) 262-3859

EMPIRE FASTENERS 199
 Fillister head - specialty drilling
 Tel (800) 598-5212
 Fax (718) 726-4067

E-Z LOK 118
 Thread inserts for metal, wood &
 plastic
 Tel (800) 234-5613
 Fax (310) 353-4444

EZ SOCKETS, INC. 31
 Socket products, alloy or stainless
 Tel (800) 631-7833
 Fax (973) 376-7130

F

FALL RIVER MFG CO., INC. 67
 Stainless steel & non-ferrous fasteners
 Tel (800) 275-6991
 Fax (508) 675-8770

FASCOMP 115
 Spacers, standoffs, handles, captive screws,
 shoulder screws, thumbscrews, jackscrews,
 handles and ferrules.
 Tel (407) 226-2112
 Fax (407) 226-3370

FASTAR, INC. 28
 Coiled spring pins, slotted spring pins, dowel
 pins, cotter pins, taper pins, and special pins
 Tel (888) 327-8275
 Fax (845) 369-7989

FASTENER EXPO SHANGHAI 76
 Top international fastener exhibition in Asia.
 www.fastenerexpo.cn

FASTENER SPECIALTIES MFG. 195
 Specialize in short-run quantities of socket
 products and other special fasteners in
 almost any length, in most materials.
 Tel (561) 582-7022
 Fax (561) 582-7030

**FASTENER WEBSITES
 152, 154, 156, 158, 160, 162, 164**

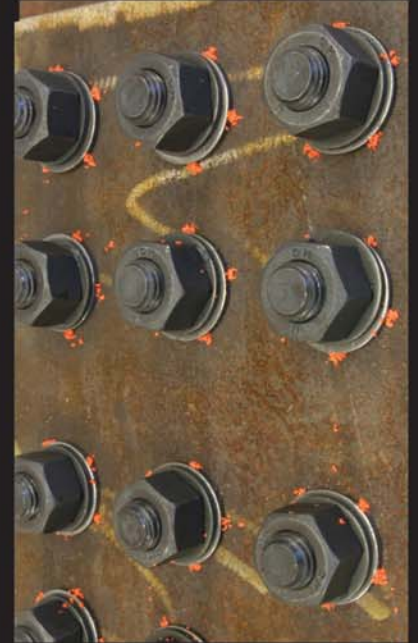
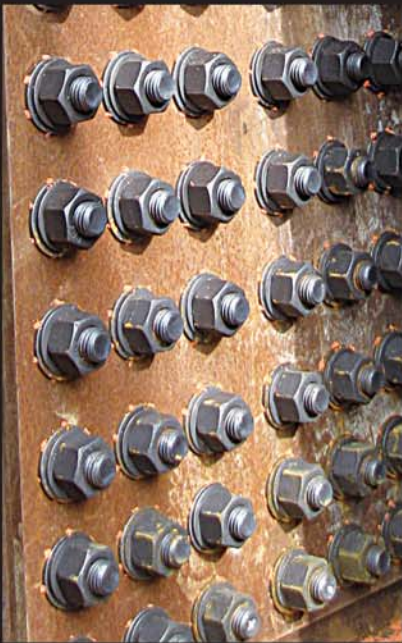
FASTENER REFERENCE CHART 214

FORD FASTENERS, INC. 15
 Self-drilling, tapping-thread cutting screws -
 410 stainless
 Tel (800) 272-3673
 Fax (201) 487-1919

Your job is hard enough...



Squirter® DTIs we make bolting easy.



New training videos available online.

Your customers have questions...
we have answers, fast!



Training video link
Scan with smartphone
or go to our website

- **Classic DTIs / Squirter® DTIs**
- **Large inventory in stock**
- **Same day shipping***
- **DTI CERT's/MTRS online**

the best way to bolt!



www.appliedbolting.com

email: info@appliedbolting.com

1 800 552 1999

TRAINING • FIELD SUPPORT • TECHNICAL EXPERTISE

ADVERTISERS INDEX

G

GAGE BILT, INC. 157
Manufacturers a full range of blind rivet and locknut installation systems to install POP®, Huck®, Avdel-Cherry® and other fasteners. In-line, offset and right angle equipment for the most challenging applications.
Tel (586) 226-1500
Fax (586) 226-1505

GEORGE SELTZER CO. 95
T-slot bolts, hex nuts, washers, T-slot nuts, studs and more
Tel (800) 445-4101
Fax (610) 532-3024

GLOBALFASTENERNEWS.COM 217
24-hour online news service dedicated to the fastener industry.

GREAT LAKES PARTS 88
Wheel nuts for heavy duty trucks, light duty trucks and passenger cars.
Tel (440) 546-0304
Fax (440) 546-0306

GREENSLADE & COMPANY, INC 177
Provide fastener inspection equipment, dimensional calibration and innovative gage design to manufacturers and distributors.
Tel (817) 870-8888
Fax (817) 870-9199

H

HANGER BOLT & STUD CO 63
Hanger bolts, studs, dowel screws, pins
Tel (800) 537-7925
Fax (800) 994-2658

HANSON RIVET & SUPPLY CO. 47
Rivets, threaded inserts, riveting tools, riveting machines, washers
Tel (866) 61-RIVET (617-4838)
Fax (323) 221-5300

HI-TECH FASTENERS 2
Specializing in stainless self-drilling, self-tapping, and thread cutting screws
Tel (800) 858-7341
Fax (718) 392-4337

HOLBROOK MFG, INC. 75
World-class manufacturer of Custom and Standard Fasteners geared toward engineering products for the future.
Tel (847) 229-1999
Fax (847) 229-0996

ICS FLANGE 141
Stocks flange bolts and nuts in Grade 5, 8, 8.8 and 10.9 in steel and stainless. These parts are available in any finish.
Tel (800) 231-0360
Fax (800) 586-2461

IDEAL FASTENERS 39
Precision socket head cap screws
Tel (714) 630-7840
Fax (714) 632-3829

IDEAL SUPPLY, INC. 107
One of the largest Monel fastener inventories in the world to meet your customer's commercial/military requirements to ASTM/MIL-SPEC.
Tel (815) 477-4427
Fax (815) 477-7252

IMPERIAL RIVETS & FASTENERS CO., INC. 201
Manufacturer of special fasteners; rivets, binding post screws, anchors
Tel (630) 964-0208
Fax (630) 963-0289

INDUSTRIAL FASTENER INSTITUTE 125
Technical Fastener Association
Tel (216) 241-1482

INDUSTRIAL RIVET & FASTENER CO 27
One name, one number, one source for all your rivet needs
Tel (800) 289-7483
Fax (201) 750-1050

INTERCORP 91
Premium-quality fasteners for every construction need. Self-Drilling, drywall, needle point, stainless steel, pole gripper, outdoor, cement board and woodworking.
Tel (800) 762-2004
Fax (714) 744-4672

INTEGRATED PACKAGING, INC 71
"Contract packaging" fastener/hardware kits, high speed automated equipment, poly bagging, custom carton kits, etc.
Tel (847) 439-5730
Fax (847) 640-8894

INTERFAST GROUP 205
Distributor/importer of drywall screws, deck screws, self-drilling screws and self-piercing screws
Tel (800) 605-1233
Fax (909) 930-2183

INTERNATIONAL FASTENING SYSTEMS 45
Full line supplier of close end, multi-grip, Buildex and open end rivets; knurled rivet nuts, hand power tools.
Tel (508) 884-9600
Fax (508) 884-9666

JTD STAMPING CO. INC. 207
Manufacturer of all types of washers
Tel (800) 927-7907
Fax (631) 643-4016

K

KEN FORGING, INC. 23, 79
Manufacturer of forged eye bolts, rod ends, stainless, clamps
Tel (888) 536-3674
Fax (440) 992-0360

KEY BELLEVILLES 35
Belleville disc springs made in the U.S.A.
Tel (800) 245-3600
Fax (800) 847-1672

K INTERNATIONAL, INC. 109
Specializing in X-mas tree and ratchet style push-in fasteners made of nylon; binder posts, screws and sex bolts made of aluminum and steel; Zip-It wall board anchors and economy style screw drivers and wrenches.
Tel (800) 323-2389
Fax (847) 623-0105

K-T BOLT MFG. CO. INC. 69
Bolt manufacturing, forging
Tel (800) 553-4521
Fax (281) 391-2673

LOCKNUT TECHNOLOGY 97
Specializing in processing all metal prevailing torque locknuts
Tel (630) 628-5330
Fax (630) 628-5331

LOK-MOR, INC. 83
Full line of locknuts
Tel (800) 843-7230
Fax (817) 453-2923

M

MAR-BRO MANUFACTURING, INC. 93
Manufacturers of standard and special cold form fasteners
Tel (602) 278-8197
Fax (602) 269-1235

MARKSMEN MFG. CORP. 191
Sleeve anchors, wedge anchors and hollow wall fasteners
Tel (800) 305-6942
Fax (631) 226-0796

MEHTA TRADING INTERNATIONAL 140
The complete stainless steel fastener source for MILL shipments.
Tel (888) 324-6974
Fax (972) 642-1244

METRICBOLT.COM LLC 124
Direct importers of metric size fasteners. All grades of steel and stainless.
Manufacturer of short run specialty metric items.
Tel (561) 630-3142
Fax (561) 691-4820

SPECIALTY SCREW MANUFACTURING

Superior Quality Fasteners!
With a Special Division of “Tamper Resistant Screws”
- stock and made to order!

The Pioneer in Screw Manufacturing!

- Standard & Specials
- Inch & Metric
- Alloy & Stainless Steel

- Quick Delivery
- Volume Discount
- Competitive Pricing

**FOR A QUOTE...
Call or Fax us Today!**



**SPECIALTY SCREW
MANUFACTURING**

236 S. 8th Avenue
City of Industry, CA 91746

Phone: 626/336-2900

Fax: 626/336-2910

E-mail: sales@specialtyscrewmfg.com



We now stock!!!



www.Specialtyscrewmfg.com

ADVERTISERS INDEX

M *continued...*

METRIC & MULTISTANDARD COMPONENT CORP. 13

Fasteners, specialties, tubings/fittings, wrenches, cutting and measuring tools
Tel (800) 431-2792
Fax (914) 769-5049

MICRO PLASTICS CORP. 1

Nylon fasteners, printed circuit board fasteners & assortment kits
Tel (870) 453-8861
Fax (870) 453-8676

MORTON MACHINE WORKS 82

Manufacturer of quality tooling components that include adjustable handles, spring plungers, fastener and a wide variety of workholding components.
Tel (717) 692-2128
Fax (717) 692-2120

MW INDUSTRIES, INC - TEXAS 43

Texas based, ISO 9001:2008 certified, manufacturer of washers, special fasteners and metal stamping for 35 years.
Tel (800) 875-3510
Fax (281) 233-0449

N

NATIONAL THREADED FASTENERS LTD. 105

Grade 8 hex flange screws, grade 5 serrated flange screws, extra thick SAE thru-hard flat washers, grade G hex flange locknuts, complete line of standard fasteners in packaged and bulk quantities. New expanded line includes specialty flat washers in both package and quarter keg quantities.
Tel (888) 480-9841
Fax (440) 350-1676

NATIONWIDE PACKAGING SERVICES, INC. 33

Commercial and mil-spec fastener packaging.
Tel (973) 882-1711
Fax (973) 882-1742

ND INDUSTRIES 116

Self-locking and self-sealing processes
Tel (248) 288-0000
Fax (248) 288-0022

NEW ENGLAND FASTENER DISTRIBUTORS ASSOCIATION 150, 151

Tabletop Show Info/Registration Form
Tel (860) 436-4652
Fax (860) 436-4113

NORTHEAST FASTENERS 11

Commercial, military, aerospace and automotive.
Tel (860) 589-3242
Fax (860) 589-6969

NOVA FASTENER, CO. 185

Full line screws, nuts, bolts, washers, and fence related parts.
Tel (800) 645-1234
Fax (631) 225-6828

NUCOR FASTENER CORP. 80, 81

Manufacturer of nuts, bolts, washers
Tel (800) 955-6826
Fax (260) 337-1726

O

OSSCO BOLT & SCREW CO., INC. 73

Distributor of nuts - full range
Tel (800) 367-2688
Fax (401) 461-6970

P

PAC FAS div. BIG H CORP. 175

Full line supplier of packaged fasteners for resale
Tel (800) 444-5834
Fax (800) 388-8077

PACIFIC WAREHOUSE SALES 223

Fastener distribution warehouse for spring pins, taper pins, dowel pins, woodruff keys, studs, threaded rods, blind rivets, key stock & cable ties.
Tel (909) 287-7750
Fax (909) 287-7755

PORTEOUS FASTENER COMPANY 37

Standard nuts, bolts, screws, washers and threaded rod
Tel (800) 426-6887
Fax (310) 513-6887

POWERS FASTENERS 87

Private company specializing in global marketing of quality packaging and fastening products for concrete, masonry and steel.
Tel (914) 235-6300
Fax (914) 235-5881

R

RAF ELECTRONIC HARDWARE 69

Electronic Hardware
Tel (203) 888-2133
Fax (203) 888-9860

RAPID RIVET & FASTENER CORP. 66

Wholesale distributor of rivets, rivet-nuts, threaded inserts and tools to install them. Specializing in Mil Spec, AN, MS, NAS and OEM specifications.
Tel (631) 249-0400
Fax: (631) 249-0401

RIPPA PRODUCTS 95

Acorn nuts, high & low crown, open end
Tel (906) 337-0010
Fax (906) 337-0505

W.J. ROBERTS CO. 35

Spacers and standoffs. Manufacture hex and rounds 3/16 to 5/8 diameter. Standoffs in brass, aluminum, steel and stainless steel.
Tel (781) 233-8176
Fax (781) 231-1456

ROTOR CLIP COMPANY, INC. IBC

Retaining rings, hose clamps and related products
Tel (800) 557-6867
Fax (732) 469-7898

R&R ENGINEERING INC. 179

Bent bolts, wire forms
Tel (800) 979-1921
Fax (800) 345-9583

S

SARJO'S FAS-KIT ASSORTMENTS 50

Most complete line of fastener assortments customized with your company's name and address.
Tel (800) 44-SARJO
Fax (845) 454-0070

SCREW PRODUCTS, INC. 131

Specializes in the industry's leading quality "Star Drive" fasteners. Contact for all of your wood joinery needs.
Tel (888) 888-3305
Fax (253) 853-8881

SCREW & SUPPLY CO. INC. 32

Tamper-resistant security screws made in the USA.
Tel (800) 223-1316
Fax (631) 567-3057

SEASTROM MFG. 173

Broad product line including washers, clamps, brackets, spring clips, retaining rings, spacers, solder lugs & more!
Tel (800) 634-2356

SET SCREW & MFG CO. 215

USA manufacturer of slotted headless and square head set screws, fully threaded studs and miscellaneous screw machine products.
Tel (847) 717-3700
Fax (847) 717-3710

SHANGHAI FAST-FIX RIVET CORP 205

Rivet Manufacturer in China.
Tel 0086-21-58912860
Fax 0086-21-58912793

SHEAR-LOC PRODUCTS 140

The original instant thumbscrews. The ultimate socket head cap screw accessory
Tel (800) 775-5668
Fax (949) 768-8700

PWS'S BRAND NEW FACILITY IN CHINO, CA.



COMMITTED TO DISTRIBUTORS. COMMITTED TO YOU.

Pacific Warehouse Sales has long been the go-to supplier for distributors. In fact, we've worked solely with distributors for nearly 30 years now. As a family business, we pride ourselves on our attention-to-detail, vast product portfolio and commitment to customers of every size and need.

PWS'S WIDE RANGE OF ITEMS

- Rivets – Blind, Closed End, Multigrip
- ACT Fastening Solutions Cable Ties and Accessories
- Spirol® Slotted Spring Pins and Coiled Pins
- Western Wire Products Cotter Pins, Hitch Pins and Wire Products
- G.L. Huyett Clevis Pins, Keystock, Machinery Keys
- Taper Pins
- Sherex® Rivet Nuts
- Powercoil® Wire Thread Inserts
- ITW Devcon® /Permatex® Adhesives, Metal Repair, Lubricants, Cleaning Products
- KMC® Clamps – Vinyl Dipped & Rubber
- Camcar® LLC Socket Products
- Krylon® Industrial Paints and Lubricants
- Prestige Stamping Domestic Through Hardened Washers.



PACIFIC WAREHOUSE SALES



15368 EL PRADO ROAD
CHINO, CALIFORNIA 91710

PHONE #909-287-7750 FAX #909-287-7755

TOLL FREE FAX #800-874-0587

E-MAIL: SALES@PACIFICWAREHOUSES.COM WWW.PACIFICWAREHOUSES.COM

ADVERTISERS INDEX

S continued...

S & M RETAINING RINGS 21

A Division of Schneider & Marquard, Inc.
Manufacturers of retaining rings, applicators and dispensers.
Tel (973) 383-2200
Fax (973) 383-6529

SMALLEY STEEL RING CO. 41

Manufacturer of spiral retaining rings, Spirawave® wave springs, and flat wire compression springs. Free engineering assistance for distributors.
Tel (847) 719-5900
Fax (847) 719-5999

SOLOMAN MANUFACTURING CO. 88

Solon belleville springs, Solon flange washers and Solon disc springs manufacturer. Online part search.
Tel (800) 323-9717
Fax (440) 286-9047

SOLUTION INDUSTRIES 147

Tap bolts, screen bolts, dome plow bolts, tooth plow bolts, hex nuts, zinc plated socket products, and nylon patched products.
Tel (866) 297-8656
Fax (440) 816-9501

SPECIALTY SCREW 221

Manufacturer of security screws
Tel (626) 336-2900
Fax (626) 336-2910

SPIROL DISTRIBUTION 111

Coiled and slotted spring pins, solid pins, disc springs, alignment dowels and bushings, spacers, compression limiters, machined nuts, threaded inserts for plastics, shims.
Tel (800) 321-4679
Fax (860) 774-0487

SRC SPECIAL RIVETS CORP. 215

Blind Rivets. Contact U.S. company representative Tony DiMaio.
Tel & Fax (978) 521-0277

STELFAST FASTENERS, INC. 55

Fastener importer specializing in nuts, washers and wheel attaching hardware.
Tel (800) 729-9779
Fax (440) 879-0044

SUPERIOR BOLT & NUT 181

Stocking blanks 3/4" - 2-1/2" diameter. Offer quick delivery and fast quotes at competitive prices.
Tel (602) 841-8100
Fax (602) 841-6700

SUPERIOR WASHER & GASKET 29

Stocking mfg. of washers, shims & small stampings
Tel (631) 273-8282
Fax (631) 273-8088

SUPPLY LINE 208

MRO distributor supply warehouse
Tel (800) 447-2756
Fax (845) 454-0070

T

TAMPER-PRUF SCREW, INC 103

Security hex, torx, one way, drilled spanners.
Tel (562) 531-9340
Fax (562) 531-2464

TAPCO, INC. 121

The largest, most diverse inventory of elevator bolts in the world.
Tel (314) 739-9191
Fax (314) 739-5880

TITAN FASTENER PRODUCTS 49

Quality packaged fasteners for distributors only
Tel (800) 789-8112
Fax (912) 262-6401

TRISTATE 165

T9 Nut, 180M PSI Proof Load, 4140 Alloy Steel. Works with High Strength Bolts.
Tel (800) 410-4558

TUTTLE MANUFACTURING 187

Anchors, bent bolt specials, spade bolts, acme threaded bars
Tel (847) 381-7713

U

UMETA OF AMERICA 159

OEM quality grease fittings and grease guns
Tel (704) 799-1840
Fax (704) 799-1923

UNIQUE INDUSTRIES 175

Manufacturer of specialty threaded items
Tel (205) 668-0490
Fax (205) 668-0431

V

VEGAS FASTENERS 59

Hot forging, standards/specials. All materials.
Tel (702) 651-9222
Fax (702) 651-9453

VIRGINIA FASTENERS 197

Specializing in hot dipped galvanized timber, hex, carriage, lag bolts, tie rods, nuts/washers.
Tel (800) 368-3430
Fax (757) 436-1460

VISIBLE INVENTORY FOLD OUT

Visible Inventory supplies a system that automates "Vendor Managed Inventory" programs. By using a weight based sensor, Visible Inventory remotely determines how many parts are in a bin location. The software then compares this to a pre-set MIN/MAX to determine if more parts are required.
www.visibleinventory.com

208 VOGELSANG CORPORATION 213

Featuring Quick Ship - same day shipment on roll and coil pins, bushings. Maker of wide variety of pins, bushings, compression limiters, spacers and Engineered-RollPin™
Tel (800) 526-2376
Fax (732) 364-8111

VOLT INDUSTRIAL PLASTICS, INC. 9

Specializing in precision plastic fasteners, all types & quantities
Tel (800) 844-8024
Fax (870) 453-8707

W

WESTERN WIRE PRODUCTS 137

Cotter pins, wire fasteners
Tel (800) 325-3770
Fax (636) 305-1119

WILLIE WASHER MFG 167

Special washers, stampings & prototype parts
Tel (847) 956-1344
Fax (847) 956-7943

WOLVERINE PLATING CORP 148

Zinc, Zinc-Nickel and Tin-Zinc Barrel Plating. Quality barrel plating services, completed on-time.
Tel (586) 771-5000

WORLD HORIZONS LTD 104

Direct Mill Shipments and Stock & Release Programs
Tel (954) 943-4254
Fax (954) 943-6662

WROUGHT WASHER MANUFACTURING, INC. 143

Custom stampings & washers
Tel (800) 558-5217
Fax (414) 482-0144

WURTH REVCAR FASTENERS, INC. 153

Master distributor of industrial, military and aerospace fasteners as well as machined specials. Over 40 proprietary lines including SPS, MacLean ESNA, Tinnerman, Heyco, Palnut and AVK.
Tel (800) 542-5762 (ask for military sales)
Fax (540) 561-6577

WYANDOTTE INDUSTRIES 169

Special hexagon nuts milled from bar
Tel (734) 283-1870
Fax (734) 283-6166

Z

ZONBIX ENTERPRISE CO., LTD. 33

Gathering fasteners into one shipment to save costs.
Tel 886-7-6994364
Fax 886-7-6994318



ONE

STOP

RC



ROTORCLIP.COM



ROTOR CLIP®

Designed for Quality

BUILD WITH THE BEST

Brighton-Best International, supporting your structural & construction fastening needs with quality components and deep inventories since 1925.



**BRIGHTON-BEST
INTERNATIONAL**

www.brighton**BEST**.com

1 - 8 0 0 - 2 7 5 - 0 0 5 0

STRUCTURAL NUTS

- A194 2H Heavy Hex Nut Plain
- A194-2H Heavy Hex Nut Hot Dip Galvanized
- A563 Grade C Heavy Hex Nut Plain
- A563 Grade DH Heavy Hex Nut HDG/Wax & Blue dye

STRUCTURAL BOLTS

- A325 TYPE 1 (Inch) Plain (Import)
- A325 TYPE 1 (Inch) HDG (Import)
- A325 Structural Bolts (Inch) Plain (USA)
- A490 Structural Bolts (Inch) Plain (USA)

FLAT WASHERS (THRU HARDENED)

- F436 (Inch) Plain (Import)
- F436 (Inch) HDG (Import)

TC BOLTS

AVAILABLE LATE SPRING

BBI products and services offered
exclusively through distribution