



compiled by Fastener World Inc.

# Innovation Alley

MiTek® TECO™



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## 1 Mercury Adhesives Brush-in-Cap Threadlocker

The New Mercury Exclusive Brush-in-Cap Threadlocker is a unique and revolutionary product that is changing the way builders are able to secure their fasteners. By using a Threadlocker (aka "Screw Glue"), fasteners are prevented from backing out. However, how do you apply it without making a mess? The Mercury Brush-in-Cap design provides precise application of Threadlocker to virtually any fastener size. Simply unscrew the top, pull out the brush, wipe off any excess on the side of the opening, and apply just the right amount you need to do the job. Even if the fastener is excessively small, the new brush design allows for single bristles to be used on tiny threads. The Mercury solution is ideal for RC Aircraft, Car, Helicopter, and Multirotor applications, as well as many others that use small fasteners.

## 2 New Subsea Fastener Coating from British Everlube Products

It is no doubt that trying to prevent the premature failure of subsea bolts is very important, as any failure may lead to



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oil/gas leakage in offshore installations. Many tests for corrosion resistance have been done on the new Everlube 1174® coating developed by Everlube Products, a subsidiary of Curtiss-Wright. According to the testing results, the Everlube 1174® with high dielectric strength and excellent insulation, is a low VOC, low-friction, load bearing, thin film, resin-bonded, corrosion-resistant, thermoset PTFE coating and can provide 1,500 hours of salt spray protection when applied over a phosphate pre-treatment, 2,500 hours over Zinc plating, and 5,000 hours over a Cermet basecoat. These subsea bolting system can also come into contact with various chemicals which are present in seawater or in oil extraction equipment. Everlube 1174® can resist all current hydraulic fluids used in the oil and gas industry.

## 3 Japanese Noguchi Corporation Releases Joist Screw

Noguchi HD sells construction hardware and screws. The company has added the all-new "Joist Screw" to its original brand "Artisan Power" Screw Series. Product feature: 1. Low torque. 2. Easy to insert. 3. Reverse thread under the screw head prevents loosening. 4. Strong tensile strength fastens the joist and lumber girder tightly to prevent the bed from shaking and making noise.

## 4 Japanese Shoki Company Releases One Shot One Interposition Nut

Shoki Company, located in Kagoshima Prefecture of Japan, released the innovative "One Shot One" interposition nut that cuts cost, labor, and time by 50%. In an average construction, inserting a nut onto the threaded part of a bolt requires tremendous labor and time. The use of a common interposition nut requires high price cost and is not practical. In order to reduce labor and cost simultaneously, the company improved the average interposition nut and rolled out "One Shot One" product.



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Size	Diameter
5.0mm	10.0mm

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Product feature: 1. Insert or remove the nut with a single hand. 2. User can insert the nut from any position without the need to turn it. 3. Shorten work time. 4. Eliminate the problem of insufficient workforce.

## 5 MiTek Launches MiTek® TECO™ Collated Nails, Featuring Color-Coding and Head Stamping to Indicate Length & Diameter

MiTek announced that it has launched its new brand of pneumatic, collated gun nails, called MiTek TECO. The MiTek TECO collated nails have a color-coded and head-stamping identification system that identifies the nails' length and diameter, before and after installation. This unique color-coding and head-stamping identification system allows a building inspector, or installer, to determine that the right nail has been used when installing MiTek products, without having to remove a nail for inspection. Additionally, engineers who need to ensure that the right nails are used as specified can survey a jobsite and determine proper fastener selections by simply looking at nail colors and head stamps.

## 6 Nihilo Concepts Releases All-new Aluminum Fasteners for Bikes

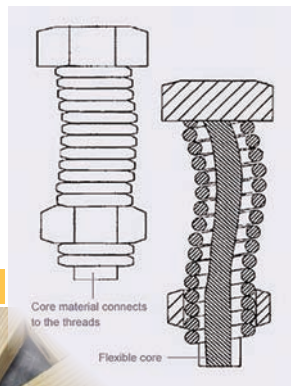
U.S. leading aftermarket parts for motorcross and off-road motorbikes manufacturer, Nihilo Concepts, recently announced its new product line: lightweight aluminum fasteners. Two items that fall into the category of light weight bolts and trick items that made their bikes lighter and stronger than stock are fork guard bolts and Brake Line Banjo Bolts. They are good candidates for light weight alternatives that can do the same job while taking off unwanted weight. The Aluminum Fork Guard Bolts designed to fit perfectly the fork guards can be used to replace the original 6 heavy steel bolts and can be also anodized to match colors of bikes. The precision machined Nihilo Banjo Bolts with unique thread pitch available for all Japanese bike brands are also much lighter than the steel OEM bolts and can be also anodized to match color of bikes.

## 7 Japanese Ohi Works Acquires Insulation Bolt Patent

Last November Ohi Works applied for a patent for self-developed insulation bolt.



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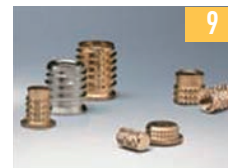
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On May 1st 2015 the company received the patent certificate from the Patent Office. The patent is titled "insulation bolt and its fastening structure". Patent number 5740039. Content includes "OHi electrical insulation bolt structure" and the exclusive lining technology that can firmly bond metal and resin.

### 8 Helix Linear Announces New "HBN" Style Bronze Anti-backlash Nuts for Lead Screws

Helix Linear Technologies, the leaders in precision lead screw manufacturing, announced that they are expanding their lead screw nut offering by developing a new bronze anti-backlash nut for high load applications. The new nut design will integrate to the fill lineup of Helix lead screw sizes ranging from 2mm – 50mm diameters. The new HBN nut grew out of customer requests for higher load carrying capacities, longer life and lead screw assemblies without axial or radial lash. HBN nuts are offered with a standard flange mount or a thread mount which interchange with all major manufacturers' plastic nut designs.

### 9 KVT-Fastening Offers Lightweight Threaded Inserts

KVT-Fastening offers a comprehensive range of threaded inserts Tappex, Filtec+, Lockfil+, Kato, Fasteks and Keenserts: threaded inserts for highly reliable threaded fastenings in lightweight construction materials. The automobile industry, railway industry, machinery and precision engineering: in all these industries, lightweight construction materials such as fibreglass-reinforced plastics, aluminium and magnesium materials and zinc die castings are absolute essentials. For secure, threaded fastenings with high tear-out strength in materials, which are often notch-sensitive and materials with a low shear strength, KVT-Fastening offers a wide range of products in the field of threaded inserts. Depending on individual requirements, Tappex, Fasteks or Keenserts threaded inserts or wire-thread inserts will meet special fastening challenges, from the production of precise, durable nut

threads to subsequent thread reinforcement or repair.

### 10 L/R Screw that Never Loosens in Any Circumstance

An invention fanatic created a screw that promises to not loosen in any circumstance surprised the entire world. The inventor, Mr. Michiwaki, brought a breakthrough to the screw history of the past 2,000 years. He has started to cooperate with big companies and is preparing to put this screw, named "L/R Screw" developed under the company "NejiLaw" into mass production. A NAS-compliant screw endurance test conducted in 2010 proves that the Screw shows not a single sign of loosening after a 3-hour long test, way past the acceptance line (17 minutes). Moreover, it turns out that the testing equipment broke down before the Screw did.

### 11 Bryce Fasteners Newest Release of the REVX® Security Screw

Higher performance of REVX® is achieved by the perpendicular driving face and tapered socket. Torque is optimized, eliminating cam-out and a tight stick fit control is gained. When compared to six-lobe fasteners, REVX® tolerances proved to be 10 times tighter. The resulting "one handed control" makes assembly time faster. Configuration of the head shape is engineered to reject conventional security bit tips and common tools. Only a REVX® security bit, manufactured by Bryce Fastener, can install and remove the screw. Fasteners are available in sizes ranging from #2 (M2 metric) to 5/8-11 (M16 metric), in stainless steel and alloy.

### 12 Flexible Fastener Bendable Bolt

Born out of a design for earthquake-resistant structures, the Flexible Fastener bolt is designed to bend and could also find its way into robotics and medicine. Created by Professor Saeed Niku at California Polytechnic State University, the Flexible Fastener consists of a shank made from a strong, flexible material such as Kevlar or wire rope. The shank is then wrapped with threads of coiled steel, resulting in a fastener that is "axially ridged by laterally compliant." The screw can be secured in the same way as conventional screws, but is flexible enough to enter mis-matched holes or connect surfaces that are not quite parallel.

### 13 Japanese Mitsubishi is Developing Carbon Fiber Reinforced Polymer Screw

Mitsubishi C.I. Co. Ltd specializes in wing bolts. Since 3 years ago the company has been cooperating with the academy on developing Carbon Fiber Reinforced Polymer Screw (CFRP Screw). CFRP is a base material that is light-weight, strong and rust-proof, and is applicable to the aerospace, automotive, and energy industry. The company is currently offering PPS (Polyphenylene sulfide) Bolt (containing 30% carbon fiber), and PC (Polycarbonate) Bolt. ■