Fastener Innovation Alley

compiled by Fastener World

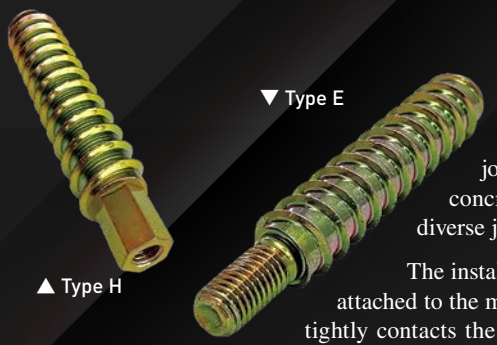
New TTX Stabilizer Bar Link

Mevotech released new TTX Stabilizer Bar Link, part number TXMS40836, enhancing its Terrain Tough Extreme (TTX) product line with full front-end coverage for both 12th and 13th generation Ford F-150 trucks (2009-2020 models). This new stabilizer bar link kit is engineered to provide superior durability, optimized compression control, and easier installation, making it ideal for demanding commercial and passenger vehicle use.

The TXMS40836 features advanced technologies including Repel-TEK™ surface treatment to resist rust and corrosion, and upgraded rubber bushings with knurling to secure the stabilizer bushing firmly in place. The design also includes a unique Labor Saver™ barrel nut that reduces installation time and effort. Mevotech's in-house and third-party durability testing ensures the stabilizer bar link delivers reliable, long-lasting performance, meeting the high standards required for heavy-use vehicles.

With this release, professional technicians can now access a complete range of TTX suspension and steering components for Ford and Lincoln trucks and SUVs in North America, supporting over 9 million vehicles. Mevotech continues to lead in providing robust, high-performance aftermarket parts designed for longevity and ease of installation.

New E and H Types in T-LSB Series



▲ Type H

▼ Type E

Japanese company Toneji has announced the launch of new products in its T-LSB (lag screw bolt) series—Type E and Type H—starting sales this summer.

The T-LSB series is a fastening component used for various types of wood material joints in construction, including wood-to-wood, wood-to-steel, and wood-to-RC (reinforced concrete) connections. The newly developed Type E and Type H enhance compatibility with diverse joint types such as wood-steel hybrid structures and RC components.

The installation method for Type E involves using a dedicated sleeve and a standard nut. The sleeve is attached to the male thread section at the rear end of the T-LSB and screwed in until the flange of the sleeve tightly contacts the wood surface. After confirming the T-LSB is fully screwed into the wood, the sleeve is removed using an electric torque wrench's reverse mechanism and reaction arm. The work is completed by ensuring the wood joint surface aligns flush with the rear male thread start point of the T-LSB.

For Type H, installation is performed by screwing it in with an electric torque wrench until the hexagonal portion at the end of the T-LSB is fully embedded in the wood (which requires a counterbore in the wood).

The introduction of Type E and H furthers the versatility and ease of use of wood structural joints, meeting various construction needs effectively.

Threaded Inserts Designed Specifically for 3D Printing Applications

E-Z LOK has launched threaded inserts specifically designed for 3D printing to address the issue of fragile threads in 3D-printed parts. These metal inserts provide durable and reusable threads that withstand repeated fastening and disassembly without damaging the parts.

The product line includes two main series: the E-Z Press and E-Z Fin (press-in inserts), which are suitable for quick installation and prototyping; and the E-Z Sonic series, which uses heat staking to securely embed the inserts into plastic parts. Available in various metric and imperial sizes, these inserts come in kits with installation tools, making them easy to integrate into design and production workflows. E-Z LOK threaded inserts are ideal for 3D-printed enclosures, fixtures, medical prototypes, aerospace components, and custom tooling, offering excellent wear resistance and crack prevention, even under extreme torque and frequent use.

With the growing adoption of 3D printing technology, E-Z LOK threaded inserts provide a reliable solution to enhance the strength and lifespan of printed parts, helping to bridge the gap between rapid prototyping and functional end-use products.

Plastic Fasteners and Components Made Entirely from 100% Recycled Nylon

TR Fastenings, a global leader in engineering and part of the Trifast plc Group, has made significant advances in sustainable materials by developing a new range of plastic fasteners and components made entirely from 100% recycled nylon. After extensive research and development, TR's recycled nylon fasteners demonstrate strong mechanical performance comparable to those made from prime-grade materials, while achieving up to a 90% reduction in CO_2 emissions related to raw materials.

Andrew Fletcher, Head of Plastics & Rubber (Commercial & Technical) at TR Fastenings, emphasized that this initiative is central to the company's strategy to provide engineering-led, environmentally responsible solutions. As environmental regulations tighten across industries such as lighting, power, data, and water infrastructure, demand for durable, eco-friendly components grows. TR Fastenings identified a key opportunity in engineered fasteners, which have been overlooked in sustainable plastic markets.

The company undertook rigorous trials, including mechanical testing, molding trials, and accelerated heat aging, to validate materials. The recycled nylon fasteners tested include cable ties, fir tree mounts, push lock rivets, drive fasteners, wire saddles, snap rivets, fir tree clips, and threaded pillars. These are widely used in smart infrastructure applications, such as securing data cables and fastening control systems. With commercial launch nearing, TR Fastenings invites engineers to collaborate for sample testing and integration. Looking ahead, TR Fastenings plans to enhance flame retardancy and expand its sustainable materials portfolio, continuing to lead innovation in smart infrastructure solutions.

SURFACER SRP for High-Precision Surface Roughness Measurement

LK Metrology has introduced the SURFACER SRP, a high-resolution surface roughness probe designed for use on any coordinate measuring machine (CMM) with a standard probe head. With a resolution of one micron, this plug-and-play probe allows manufacturers to integrate surface roughness measurement directly into the CNC measuring cycle without needing secondary inspection. This streamlines inspection by combining multiple measurement processes into a single setup, saving significant time and cost.

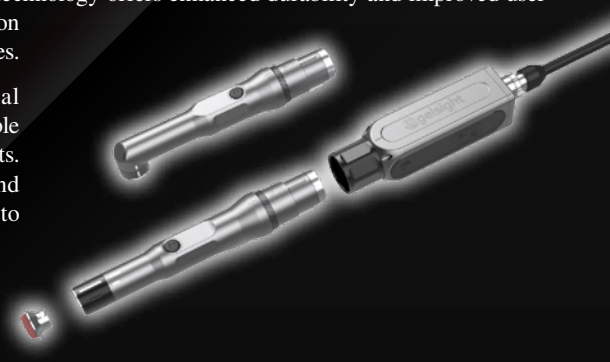
It features three interchangeable probe modules for measuring various surface types, including flat, conical, cylindrical, concave, convex, and grooves. It communicates wirelessly with the CMM via Bluetooth 4.0, ensuring easy data transfer and installation. The probe's skid system guides the stylus precisely, capturing microscopic surface irregularities with exceptional accuracy. An integrated preload mechanism isolates the stylus from machine vibrations for consistent results, while the stylus force is minimal, preventing surface deformation.

With a measurable roughness range of 0.5 to 6.5 Ra, it measures fine-scale surface variations critical for component function, durability, and performance. LK Metrology highlights that integrating roughness measurement into a single platform improves accuracy, reduces inspection time, and enhances product quality. This innovation supports manufacturers in optimizing surface finishes, which impact friction, wear, sealing, corrosion resistance, and bonding effectiveness.

Modulus™ for Precision Inspection in Hard-to-Reach Area

GelSight has newly launched the Modulus system, featuring an innovative single-lens reflex modular design that allows real-time swapping of lenses and cameras. This design adapts to the inspection of bores, tight spaces, and open surfaces with complex and previously unreachable geometries, delivering tactile measurements with micron-level precision.

Modulus integrates GelSight's leading software platform to provide fast, reliable, and repeatable surface measurements, replacing costly and destructive methods such as disassembly or replica workflows. Its upgraded gel technology offers enhanced durability and improved user experience and accuracy. At the same time, Modulus's portability opens new inspection possibilities for the aerospace, automotive, and high-precision manufacturing industries.



This system assists engineers and field teams in performing precise internal measurements, saving time and preventing scrap or rework. It also supports expandable lenses and cameras, aligning with digital and AI-driven product design requirements. Paired with GelSight Mobile 4.2 software, it offers easy one-click reporting and comprehensive defect tracking. Modulus was expected to ship in August 2025, set to revolutionize mobile metrology by enabling high-precision inspection anywhere. ■