

Fastener Innovation Alley

扣件新品大道

1 T-SLB Fasteners for Wood-steel Hybrid Buildings

T-LSB (Lug Screw Bolt) manufactured by Japanese Toneji is a fastener for fastening steel plates and cross-laminated timber (CLT). It is designed to simplify construction process and reduce costs, delivering great performance on wood-steel hybrid buildings.

The features of T-LSB are:

Unlike the previous LSB fastener, T-LSB doesn't include a hexagonal head and doesn't require counterboring the wood.

- Without counterboring, there is no need to fill in epoxy resin.
- The operator can use designated bolts to drive in with ease.
- Simplified construction process, shortened work time.

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T-SLB Fasteners
for Wood-steel
Hybrid Buildings



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RIVKLE® Solutions for
Electric Vehicle Battery Packs



3

A Range of Compression Limiters



2

RIVKLE® Solutions for
Electric Vehicle
Battery Packs

Böllhoff has developed the RIVKLE® Seal Ring range of blind rivet nuts and studs with integrated and captive sealing function for battery pack applications. The resulting assembly is robust and fluid tight; the entire range meets the most stringent sealing quality requirements (ISO 20653 IPX7) and automotive quality requirements. In combination with Böllhoff's automatic setting tools, the RIVKLE® solution is optimised in terms of cost and speed of installation, with an unprecedented level of validation of the quality of the implemented product (process control). This global approach also allows optimal machine availability, thanks to both a high autonomy of the machines (automatic function "2nd try" with replacement of the RIVKLE®) and reduced frequencies and periods of maintenance (optimized TCO).

3

A Range of Compression Limiters

As the speed of technology and trends in consumer behaviour accelerates, companies around the world are evolving quickly and TR Fastenings is no exception. TR's latest product launch of Compression Limiters has been developed to meet the growing global demand from multi-sector manufacturers developing products using plastics, particularly in the EV space. Compression Limiters reduce the stress that's generated by traditional threaded fasteners. Demand has mainly been driven by the automotive sector, and applications in the energy and general industrial sectors where high load bearing plastic components are used and have also contributed to the surge in worldwide demand. Compression Limiters are used extensively in composites and plastic mouldings as through holes help reduce the stress generated by conventional fasteners. These non-threaded inserts are commonly used in applications where a compressive load is applied to a plastic assembly to prevent the integrity of the plastic being compromised.

These products are used extensively in electric vehicles and the battery housings. As technological advances continue, so does the need to continually develop the primary components that make up an electric vehicle. Newly created giga factories and battery housings manufacturers in Europe, Asia and North America will be looking to include these products in many upcoming automotive research and development projects and with a global presence, TR Fastenings is ideally positioned to meet this demand, whilst also providing technical and design assistance. TR's experience over the last few years is that many of these are designed in specials and required in high volume. There are a number of different types and as a guide the TR's Compression Limiter range consists of symmetrical, flanged, split seam and oval manufactured from steel, stainless, brass and aluminium.



4 FGW 90F Gas-actuated Fastening Tool

The new fischer FGW 90F fastening tool allows nails to be processed quickly, safely and easily in wood. The gas-actuated fastening tool can set up to three fastenings per second, more than 1,100 fastenings per fuel cell and 8,000 fastenings per battery charge. The FGW 90F thereby makes working in wood economical and efficient.

Be it roofing battens, wood frame construction or facade cladding – wood is a highly popular building material, including in multi-story residential and commercial construction, not to mention in classic applications such as floor surfacing, decking boards or ceiling cladding. With various types of wood and wood materials, users require a reliable tool that allows them to cover every kind of application while creating quick and safe fastenings.

The fischer FGW 90F gas-actuated fastening tool fulfils these requirements. With a weight of 3.8 kilogrammes and compact dimensions (390 mm length x 108 mm width x 381 mm height), the tool is comfortable to grip. Users can quickly commence any fastening tasks, as the pressure loaded magazine can be quickly and easily loaded with up to 60 nails. A safety clip prevents nails from falling out, making it safe to reinsert them. Thanks to the high-grip nose and a setting energy of 90 joules, nails can be set at precisely the right location and in every direction, which also makes overhead installation easy to do.



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FGW 90F
Gas-actuated
Fastening Tool

5 Smart Expansion Anchor

After Sanko Techno launched sales of its expansion anchors back in October 2020, customers had hoped for an expansion anchor that can be used in tunnel construction. Therefore, the company developed "Smart Expansion Anchor". With a shorter embedding length, the new anchor expands and cuts the wall as it is drilled into the hole with a small hammer drill, so the operator can quickly complete the work even when the anchor is drilled upwards. Using anti-loosening nuts with the anchor can prevent deterioration in the gap between the anchor and the hole.

"Smart Expansion Anchor" is available in 3 sizes including M8, M10 and M12, and in two material types including steel and stainless steel. It launched sales on March 1, and is expected to bring a total revenue of JPY 15 million this year.



5
Smart
Expansion
Anchor

6 CAMO® Offers New Stainless Steel Fastening Solutions for Deck Building and Exterior Projects

National Nail's CAMO® brand of tools and fasteners has introduced new CAMO Stainless Steel fasteners to help contractors, remodelers and DIYers build better in every environment. Now, the CAMO brand can add fastening efficiency and strength to exterior projects across the country, no matter the environment. Designed to protect connections against the elements, CAMO's 316 Marine Grade Stainless Steel fasteners are ideal for use in highly corrosive coastal and agricultural environments and applications that face abrasive agents. CAMO 305 Stainless Steel fasteners provide excellent corrosion resistance and long-lasting aesthetics for a variety of inland exterior projects. "CAMO is excited to offer a full line of Stainless Steel screws and nails for contractors to add value and performance to their upcoming projects," said Doug Hutchings, Vice President of Product Development at National Nail. "The variety of Stainless Steel fasteners deliver superior corrosion resistance and holding power on any jobsite, even in the harshest coastal conditions." Hutchings added that the unique Stainless Steel Fastener packs with metallic lids is the first in a series of visually bold, new CAMO packaging that will ultimately be rolling out to all CAMO products. Other brand colors like CAMO's distinct orange is designed with the end-consumer in mind for easier selection.

Perfect for building wood or composite decks and other exterior projects, CAMO's new line of Stainless Steel fasteners includes hand drive deck, composite and trim screws that come with a 2 in. (50.8mm) power bit for jobsite convenience. They also offer 316 Stainless Steel Marine Grade Edge Screws for use with CAMO MARKSMAN Pro® tools and

CAMO®

The Better Way to Build a Deck

6 CAMO® Stainless Steel
Fastening Solutions for Deck
Building and Exterior Projects

collated screws for use with the CAMO DRIVE™ stand-up tool. New to the CAMO brand are ring shank deck nails and joist hanger nails as well as collated ring shank framing nails and collated metal hanger nails that are compatible with a wide array of pneumatic nailers. Just like other CAMO tools and fasteners, CAMO backs up their line of Stainless Steel screws and nails with a warranty to resist rust and corrosion. ■

