

ROUTE TO



FASTENER



INNOVATION



2019

presented by

**FASTENER
+FIXING**
M A G A Z I N E

Fastener+FixingMagazinewillonceagainsponsor the Route to Fastener Innovation Competition.

The editorial team will review the products and services you can find on the following pages, looking for a worthy recipient of the title Fastener Technology Innovator 2019.

To find out more read on – remember to take

a note of the stand numbers or look out for the distinctive Route to Fastener Innovation Competition 2019 logo on participants' stands.

On the second day of the show at 14:00, there will be a special presentation to the winners on the Fastener + Fixing Magazine stand (hall 5, stand 2614).

Lightweight blind rivet nut

By **GESIPA Blindniettechnik GmbH**

GESIPA reports that its new lightweight blind rivet nut is the next stage of development in blind rivet nut technology – meeting all industry requirements such as weight reduction and the careful and responsible handling of resources, which are key focuses in the automotive sector.



In addition to the advantages of up to 50% less weight; reduced space needed for the closing head; as well as a larger grip range than standard nuts; GESIPA points out that these blind rivet nuts provide the same or even better stability of the joints than usual blind rivet nuts.

The lightweight nuts are used for all applications where weight reduction is of utmost importance, such as for car bodies (lightweight materials), add-on components (plastic material) and structural components (aluminium).

All in all, due to their compact design and low space requirement, the new lightweight blind rivet nuts provide high-quality solutions in complex applications.

With three production sites in Germany, GESIPA Blindniettechnik GmbH develops and produces blind rivets, blind rivet nuts and solid rivets, as well as high-quality tools for setting the fasteners. GESIPA operates on an international level and offers its customers an innovative complete system comprising fasteners, setting tools and joining technology.

For more information visit stand 1.730

Superbolt® Multi-Jackbolt Tensioners

By **Nord-Lock GmbH**

Since 1984, Superbolt® Multi-Jackbolt Tensioners (MJTs) have allowed users to tighten large bolts accurately with simple hand tools. The brand new Superbolt Tool, or Multi-Jackbolt Tightening Tool from Superbolt®, a division of Nord-Lock Group, add an extra layer of speed to this solution by tightening all the jackbolts simultaneously.

Although MJTs are already quick and easy to use, the added speed of the Superbolt tool can benefit those who use a high number of these tensioners and/or those who have frequent maintenance schedules, as the tool reduces installation and removal times considerably.

The Superbolt Tool allows for fast and precise application of torque to multiple jackbolts. This maintains accurate bolt loading while providing even jackbolt load application, along with minimising procedural requirements.

The key principle behind the Superbolt tool is 'Powered by Uniforce Technology' – invented by Nord-Lock Group. The patented technology consists of a unique scroll and ball gear mechanism for uniform and high transfer of torque. Drive is provided via multiple, large surface area contacts onto the ball gear, avoiding single point contact with traditional drives. This allows high force transmission at low friction, enabling very high efficiency.

In operation, effective torque amplification is achieved in an extremely compact design – with input torque kept to a minimum.



For more information visit stand 3.2204

DUOBLADE

By **fischerwerke GmbH & Co. KG**

fischer is expanding its successful DUO-Line with the self-drilling plasterboard anchor DUOBLADE, which enables simple and easy installation in plasterboard and light cement board in combination with screws, hooks and eye-bolts.

Whether it be curtain rods, mirrors, blinds, pictures, smoke detectors or lightweight lamps on panelled walls or ceilings – the fischer DUOBLADE enables particularly simple and quick fixings in plasterboard, fibreboard and light cement board.

The anchor's distinguishing mark is its self-drilling sharp metal tip with three effective cutting teeth. The eponymous blade accelerates and simplifies installation while preventing the anchor from deviating. It enables a clean and effective drilling process during which the board structure remains intact. The middle tooth serves as a centring point and permits the precise setting of the anchor for additional safety.

The fischer DUOBLADE is placed using pre-positioned installation. The grey base body made of nylon expands at the appropriate level of single and double plankings. The anchor's additional expanding effect during the insertion of the screw ensures an optimal attachment and increases the critical load, as well as the holding force.

In addition, the DUOBLADE's special length guarantees a significantly lower risk of the anchor breaking out of double planked plasterboard, therefore preventing the weakening of the construction material. The sharp, self-drilling thread ensure quick progress and an optimal fit, which increases the holding values. The lateral shaft ribs prevent any co-rotation while the anchor is screwed in. The red element made of polyethylene reinforces and blocks the anchor's expanding function, providing more stability.

Common cross-tip screwdrivers (PZ 2) make installation even easier, as the anchor as well as the supplied screw are placed with this bit, preventing users from having to change tools. The high torque when bearing against the edge of the anchor provides a 'feel good factor' and a sense of reliability. It is important to note that the metal tip is heat resistant and will not melt during drilling in double plasterboard plankings even in high temperatures.



For more information visit stand 1.522

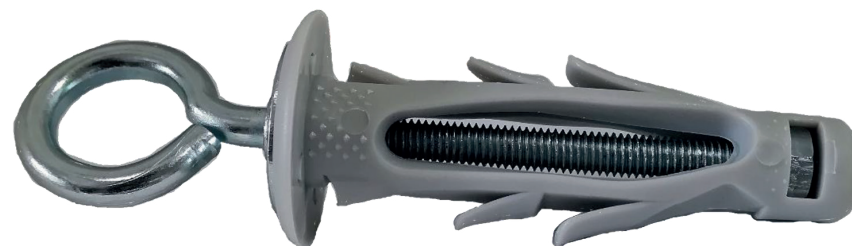
The Art. FSH

By **Bartolucci Fixing System**

Italian-based manufacturer of light weight fixings, Bartolucci, has introduced the Art. FSH series - designed to offer a solution to the fixation of suspended units on ceilings.

The Art. FSH enables the fixing of heavy loads such as wall furniture, shelves, bathroom accessories, and supports for curtains and awnings, hanging elements, etc. Its design with two wings and the retainer under his head also allows special anti-rotation effects during the installation. Moreover, the surface of the plug improves its anti-rotation effects, with its holding adjusting to the thickness of the wall – whether in use on single or double plasterboard walls.

The Art. FSH is suitable for use with every kind of material including concrete, solid brick, hollow brick, compact stones, plasterboard and light wood walls.



For more information visit stand 1.766

NORMA® HVAC clip

By NORMA Group Holding GmbH

The patented shape and innovative use of plastic for the NORMA® HVAC clip provides unprecedented functionality and flexibility for corrugated spiral hose installations in HVAC – with NORMA Group reporting that on average 132 metal clamp sizes and materials can be replaced with just one plastic HVAC clip.

This means that using the NORMA® HVAC clip can deliver a major reduction in the number of parts customers have to hold in stock, simplify the ordering process, and most importantly, eliminate potential installation delays if incorrectly sized parts are ordered.

In combination with NORMA's range of cable ties, the HVAC clip also makes it very easy to attach externally corrugated spiral hoses in HVAC applications, as the shape of the HVAC clip and cable ties match perfectly to form a reliable system. The HVAC clip spans the crossing of the hose spiral and the cable tie grips the hose around its whole perimeter, fixing it safely and securely in position. The lightweight and flexible nature of the clip and cable also create less wear and tear on the application and make it easier and safer to install by hand in difficult to reach installations.

Not only is the product physically flexible, it equally creates flexibility in stockholding. The special geometry of the HVAC clip patented shape adds versatility, as it is suitable for both clockwise and counter-clockwise spiral hoses. Furthermore, the HVAC clip can be combined with different lengths of 9mm wide cable ties to allow for different diameters of hose.

Designed for long-term performance, all plastic components are chemically resistant, maintenance-free and the black cable tie has UV inhibitors to prevent fading and cracking from intense lighting or the sun, making it particularly suitable for outdoor applications. The HVAC clip works with plastic cables that are rust-free and long-lasting, important in damp application or where there are temperature fluctuations.

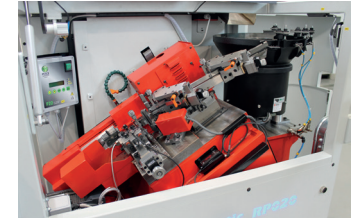


For more information visit stand 1.612

Micro threader RP020

By SACMA Group

A member of the SACMA Group, Ingramatic has introduced the smallest threader inspired by its I-Thread concept, the micro threader model RP020, W00/W000 die sizes, for the high-speed production of very precise miniature screws.



Ingramatic's well known modular 'I-Thread' machine line provides many innovative features such as the motorisation of the die match; a single starter unit driven by torque motor motion; and the patented double starter unit driven by servomotors.

These two types of starter units have, as a standard function, the self-learning adjustment of the starter fingers to make the set-up of the blank introduction easy and quick. Ingramatic states it is the first worldwide company to have engineered a solution for the whole range of machines from M1 to M33.

The new machine is equipped with the latest technologies available as an innovative tool holder, such as an introduction system driven by a torque motor for an ultra-precise introduction of the miniature blanks into the dies. The most innovative feature is the slide body running on linear guides (with ball circulation skates) in order to ensure a very high accuracy for the rolling operation – allowing the production of parts with an extreme precision and reliability. The drive transmission of the RP020 is made by an innovative double helical drive belt connecting the brushless main motor with an absolute master encoder. This new type of drive with double helical belt favours higher torque and precision.

The RP020 is also equipped with the same advanced functions of the 'I-Thread' machines, such as the self-learning adjustments of the starter unit. Plus, the introducer stroke can be adjusted by the operator panel or by means of the electronic handwheel, so technicians don't need to make any manual adjustment with service wrenches – ensuring speed and accuracy of measure change. To guaranty durability and precision, the frame is made of spheroidal cast iron and the SC-Matic interface ensures the management of the motorised adjustments.

In addition, to give a better understanding about the undisputable capacity of Ingramatic to design modular machines with the highest level of sophistication, to serve the most exigent users, the machine can be installed in less than one hour thanks to its plug and play capacity.

For more information visit stand 1.774

Dynaplug screw

By Hoenderdaal Fasteners

In 2018 Dutch screw specialist Hoenderdaal Fasteners introduced the 3rd generation of the new Dynaplug screw – which it says is fast, flexible, strong and remarkably easy to install.

The unique screw thread design, in combination with a transparent lubricant, gives the Dynaplug screw a remarkable low screw-in resistance, which makes the installation super easy. This ensures an optimal ease in use and saves a lot of energy for both the user and the battery of the installation tool, which means more screws can be installed per battery charge.

Thanks to its own special design drilling tip, with double cross sections and sawtooth thread, the Dynaplug screw ensures optimum pre-drilling features in wood and can also be used in nylon plugs. An extra big first thread for starting, ensures the screw grips immediately into the wood and the extra coarse thread makes this screw super fast in use.

Dynaplug screws are available in zinc plated indoor use and for outdoor use with a very high corrosion protective anti-rust coating, which meets the standard of C4. The screws are made of hardened carbon steel and are super strong – meaning no more issues with screws that break off during screwing. Thanks to a sophisticated hardening process, the screws are also very flexible. They can absorb the forces of working wood, minimising the chance of the screws breaking off in the structure.

This new screw is now the third generation that the Dutch company Hoenderdaal Fasteners B.V has developed under its brand name Dynaplug, which is already the third biggest screw brand in the Netherlands. At Fastener Fair Stuttgart the company will be looking for new distributors and customers.



For more information visit stand 3.1578

CONTROLRIV

By Rivit Srl

Rivit's CONTROLRIV helps monitor rivet nut and blind rivet assembling operations to avoid mistakes and deactivations, resulting in improved productivity, higher standard of work and reduced waste.

CONTROLRIV can also be connected to riveting tools with the work of the tools monitored in real time, in accordance to the predetermined settings made by the operator. Other features include a display, easy to understand procedures and a PC interaction program to set-up and control activities in a few steps.

Monitoring of the assembling operations is developed by the study of the curves, through piece and batch counters, and work lists. Work monitoring is also supported by stored set batches data and by all check activities, either with positive or negative results.

For what concerns working phases, visual and sound alerts have been designed to highlight the correct or wrong applications, and particularly the lack of air in the latter case.

Finally, the system features a pneumatic valve that turns compressed air on and off, to safely secure the hole, best distinguish the working phases from the configuration ones, and prevent further errors in the event of wrong application results.



For more information visit stand 3.1702

EPW screw

By TR Fastenings

TR Fastenings, the global engineer, manufacturer and distributor of industrial fasteners, has designed, developed and patented a new fastening solution, the EPW thread forming screw for thin sheet metal.

EPW is a self-extruding, high strength thread form fastener, which creates its own female thread in punched sheet metal, thereby dramatically reducing assembly times and costs. The screw works by being aligned to the pilot hole in the sheet metal, where it then forms the extruded collar, combining the forming of the thread and the creation of a strong extruded profile, before finally tightening and clamping into the metal.

The key benefits of the EPW screw include:

- + Removable and reusable strong screw joint.
- + High stripping torque.
- + High break loose and prevailing torque.
- + Excellent vibration resistance.
- + Combined thread forming and creation of strong extruded profile.
- + Very high radial compression on screw shank.
- + Standard machine screws can be used in the thread created by the EPW screw.
- + Can be used for electrical earth connections.
- + Suitable for both manual and automated assembly.

The EPW screw is designed to function best in thin sheet materials, typically steel (0.4mm – 1mm thick) and aluminium (0.4mm – 1.5mm thick). It is available in a variety of surface coatings from standard zinc plating to zinc nickel and organic zinc flake for higher corrosion resistance. The screw is also suitable for use in a variety of applications for home appliances, automotive, electronics, technology, energy, medical, telecoms and general industry sectors. Depending on size, the minimum economical manufacturing quantity is approximately 20,000 pieces.

“We are committed to providing the highest possible service to our customers, both in terms of the quality products we manufacture and how we deliver and distribute those products. The development and launch of the new EPW screw is a culmination of the hard work and talent of our TR VIC Italy design team, as well as the significant investment TR has made in the factory. The EPW screw will allow customers to make significant improvements to their manufacturing processes, reduce production times, and increase efficiency and cost-effectiveness,” explains Karol Gregorczyk, TR VIC sales and development director.



For more information visit stand 1.830

Fully nylon slotted capstan screws

By Bülte GmbH

A specialist in plastic protection, Bülte has extended its wide range of nylon and plasto-metallic fasteners with the fully nylon range of slotted capstan screws DIN404 – an alternative to the metal screws usually available on the market.

Composed of an enlarged cylindrical head, a straight slot on the top of the head, and two radial holes on each side of the head, these new slotted capstan screws have been published on Bülte’s website and introduced to the market in February.

In comparison with metallic fasteners, nylon fasteners offer various advantages such as being lighter, cheaper, and easier to recycle. They do not conduct electricity and are also not subject to corrosion.

Slotted capstan screws have a unique head design similar to a cheese/pan head in shape, and they have two holes bored through the side of the head at 90 degrees to one another – which serve a dual purpose – so that the screw may be tightened by inserting a tee bar into the holes when it is not possible to use a screw driver to tighten the screw; and to allow for locking wires to be attached to the cross holes to secure the screw.

Slotted capstan screws are designed to be either tightened or loosened from the side rather than from the top, by inserting a small bar into one of the side radial holes in the head – this is very useful when there is restricted access to the top of the screw.

Slotted capstan screw DIN404 can be used in a variety of applications including machine building, instrument making, as well as industrial sectors for bonding structural elements from various materials.

In terms of design the standard colour of the slotted capstan screw DIN404 is natural nylon, however as it is polyamide it can be coloured, according to the RAL chart.



For more information visit stand 1.1357

Deform-Ti®

By Specialinsert Srl

Specialinsert® has introduced Deform-Ti® – a threaded tubular rivet fully made of titanium alloy and designed for installation on sheet metal and composite panels.

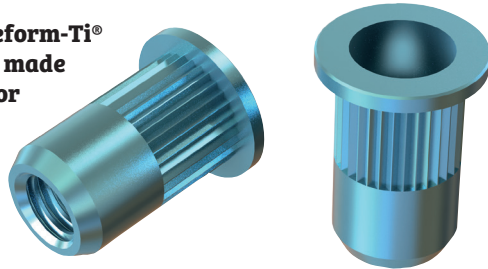
Due to Specialinsert®'s research and development oriented business strategy, Deform-Ti® emerges from the evolution of one of Specialinsert's leading products –

Deform-Nut – the threaded tubular rivet made of steel, stainless steel and light alloy.

With Deform-Ti, the company is introducing a solution able to meet the most stringent industry standards where weight control is as important as the materials' mechanical strength capacity. Technical laboratory tests on the TC M6/TZ insert demonstrates that the titanium alloy rivet (2.1g/pc) weighs 40% less than a stainless steel one (3.7g/pc) and is able to withstand a tensile strength of 25,800N, 27.8Nm torsion and 6,450N shear strength. Specialinsert points out that these features, combined with high rust resistance, ensure Deform-Ti's excellent performance, making it the first choice as a partner for the automotive, nautical and chemical industries.

Ideal for applications where there is no possible access from the inside, such as tubes, metal sheets, and box structures, this system is easy and quick to apply. In fact, the user simply inserts Deform-Ti in the created hole on the material to be fastened and then uses the specific installation tool on the rivet – deforming the expansion chamber at the top of the insert and anchoring it to the receiving material. Another plus of Deform-Ti is its extreme versatility. It can be mounted on any type of composite material, starting from a minimum of 0.5mm, and on finished parts to be used in any production process phase – guaranteeing the utmost design freedom.

Available in a cylinder version with different shaped heads, with the most popular threading, the titanium alloy rivet, like other Specialinsert ranges, can be customised according to customer needs, guided step-by-step in the choice and development of the right fastening system for any application by a team of in-house specialists.



For more information visit stand 1.1266

New hot forging lines

By Videx Machine Engineering Ltd

Videx has launched a new hot forging line that consists of between six and ten machines, replacing the traditional separate forging presses and trimming operation machines.

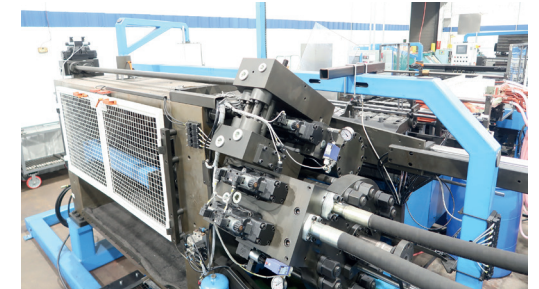
Videx's new line comprises of a bar feeder and bar shear, cutting the material to length – this is for coils or long bars;

a chamfer machine with optional turning stations; extrusion machine, extruding the chamfered end from major to pitch diameter; induction heating machine; double blow, solid die forging machines with stations – one feed station, two forging stations, and two ejecting stations; a cooling conveyor; and lastly, a thread rolling machine.

The forging machines are available in 300MT, 400MT and 500MT for M20 to M48, M64 and M76 in lengths of 200mm – 1,000mm under head. The head (hex for example) is formed in a closed die and it does not need trimming. Its production rate is 4 – 6 parts per minute.

The chamfered and extruded bars are fed into the die by a pneumatic piston. The feed dial indexes the parts to the first forging station, which upsets the parts and breaks the scale. The second forging station then completes the head shape. After heading the parts are ejected to a conveyor that transfers them onto a cooling conveyor on which they cool before they go into the thread rolling machine. The machines are sold either as complete lines or as self-standing independent machines.

“There are numerous benefits and reasons why this solution is better than anything already on the market. It is the first and only real commercial solution, starting from raw material and ending by a sellable product. This line is the fastest of its kind and the machine construction enables production of long bolts, in almost any length. The machine is also controlled from a single panel, which allows one operator to run the entire line,” comments Videx Machine Engineering Ltd.



For more information visit stand 1.1200

i.SEAL transparent

By i.GLUESYSTEMS GmbH

With a solvent-free formulation, the new innovative sealant – i.SEAL transparent – offers numerous advantages in contrast to conventional silicone products. Available in cartridges from i.GLUESYSTEMS GmbH, the product is virtually odourless, free of isocyanates and has excellent adhesion properties on almost all surfaces.

With low thread formation, as well as very good smoothness properties and a good stability, craftsmen can work fast, professionally and clean. Due to the low shrinkage behaviour no cracks occur – thus mould formation is minimised, since microorganisms responsible for mould have no attack surface.

i.SEAL transparent is currently in certification and will be available by the summer of 2019. Like other sealants, it will carry the well known CE Marking. Of course i.GLUESYSTEMS is aware of its responsibilities as a manufacturer and has taken care to ensure the greatest possible protection of health and the environment, especially in residential applications. This is confirmed internationally by the EMICODE® label.

“We are a team of technicians, engineers, and creative heads in an innovative upcoming company. Our employees have many years of experience in the range of fastening technology in the branches of construction, sanitary, project management, as well as in research and development,” comments i.GLUESYSTEMS.



For more information visit stand 1.328

Q-Tool N10

By Qonnect B.V

Qonnect B.V will be introducing its new cordless blind rivet nut setting tool – Q-Tool N10 with patented ball screw technology – to visitors at this year's Fastener Fair Stuttgart.

Already successfully used in the Q-Tool R50 cordless blind rivet setting tools and Q-Tool R64, this patented technology has many advantages including less friction due to rolling motion, less stick-slip behaviour and less wear.

These advantages, in conjunction with the built-in BLDC motor, provide high-speed and high efficiency performance. The patented ball screw technology provides high efficiency motion, accurate running, low drive torque and long service life.

Moreover, the Q-Tool N10 cordless blind rivet nut setting tool differs significantly from other similar products on the market due to its ergonomic design and unique ratio of weight, size and capacity. The rubberised handle and optimal centre of gravity allow for fatigue-free working.

The Q-Tool N10 for blind rivet nuts (M3 – M12) and blind rivet bolts (M4 – M8) has a stroke of 1mm – 9mm, which can be adjusted digitally in 0.5mm steps and a setting force of 24,500N maximum, also digitally adjustable.

The low weight of 1.9kg (including battery 18V/3.0Ah), the quick mandrel change, in conjunction with a speed charger and the overload protection, stand for a mobile, user-friendly handling.



For more information visit stand 1.1174

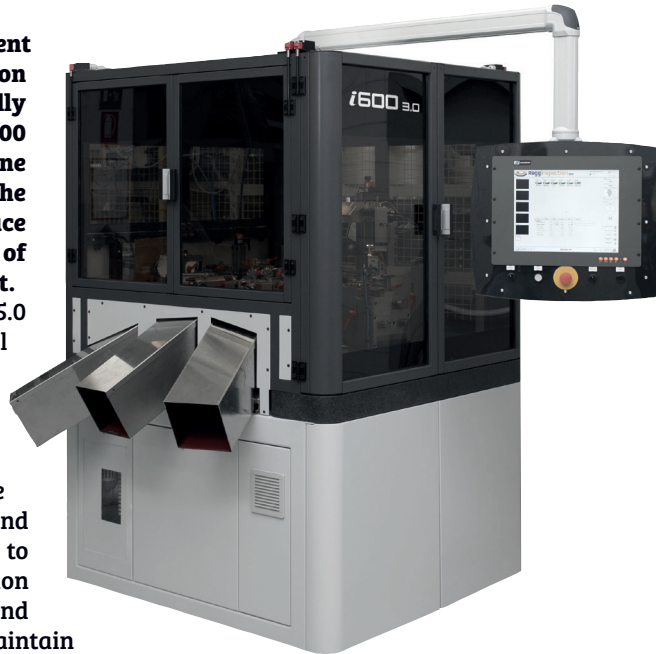
i600 5.0 inspection machine

By Regg Inspection Srl

The R&D department of Regg Inspection Srl has successfully developed the new i600 5.0 inspection machine in order to improve the efficiency and reduce the false reject of components to inspect.

This new i600 5.0 features 5 megapixel high-speed cameras, gaining more than 20% in terms of precision with respect to the previous version, and IP65 backlights to boost the inspection consistency and durability – to help maintain the same brightness and performance over time.

Also new, the i600 5.0 inspection machine features the Regg server data management system. This was developed according to Industry 4.0 requirements and designed to monitor the machine performance in order to recover functioning data, and to set the various parameters in order to improve the production in terms of quality and quantity.



For more information visit stand 3.2240

HELIOS III FASTENERS

By Glomax Srl

HELIOS III FASTENERS is an innovative instrument able to measure the diffusible hydrogen in steel components such as fasteners, bolts, springs, nuts, etc, using a hot gas extraction method.



Manufactured by Italian-based Letomec Srl, HELIOS III FASTENERS is being presented to the fastener market by its official worldwide distributor – Glomax Srl. The HELIOS III FASTENERS carries out a test where a sample is heated at a constant temperature in a furnace chamber in order to produce the desorption of the hydrogen. The instrument is also equipped with a solid state sensor that is able to measure the hydrogen content in air. The air containing the desorbed hydrogen is therefore pushed through the sensor by means of an air pump.

Compared to other devices available for similar tests, HELIOS III FASTENERS has the following advantages:

- + The testing procedure is safe and simple – the instrument does not require substances such as mercury, glycerin or silicone oils.
- + The device is robust – no fragile components such as glass crucible or borosilicate cell, are involved.
- + Low costs for the use and maintenance – carrier gas and dehumidification columns are not required.
- + Low test time – customised furnace so that any potential object, regardless of size or shape, and even coated, can be measured.
- + Fast analysis – test for elaboration depends only on the size of the specimen.
- + Easy calibration – calibration can be performed at every temperature using a certified kit able to produce different hydrogen concentration in the air.
- + Easy to use – the system has a user-friendly software interface.

“The automotive, aerospace and construction industries require steels having greater tensile strength in order to achieve weight reduction and to improve the mechanical performance of the products. However, the high strength steels are typically affected by hydrogen embrittlement,” explains Letomec. “Assessing the structural integrity is becoming mandatory to measure the hydrogen content. The HELIOS III FASTENERS can become the basis for developing methods able to evaluate the hydrogen content in fasteners by quantifying, for instance with proper indices, the risk of delayed fracture in service.”

For more information visit stand 5.3151

The adjustable SF range

By Bülte GmbH

Introduced in February 2019, Bülte's new range of levelling/adjustable feet – the adjustable feet SF range – has a round base (various diameters available) and a hexagon shaped base above the foot.

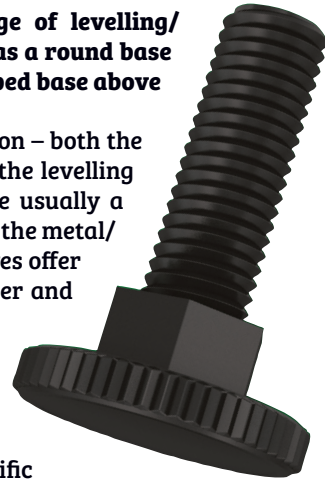
Bülte's new range of adjustable feet are fully nylon – both the threaded part and the feet – which is different to the levelling feet currently available on the market, which are usually a mix between metal and plastic. In comparison with the metal/plastic combined products, Bülte's nylon alternatives offer various advantages including being lighter, cheaper and easier to recycle.

The adjustable SF range does not conduct electricity and is not subject to corrosion. The polyamide material allows the use of the adjustable feet SF in areas subject to corrosion which, for reasons of hygiene or for specific regulations, require materials resistant to it.

The hex end in the base allows fastening with a spanner when the product is in application, and the nylon base – available in four different diameters – provides a smooth non-abrasive surface that protects floors. The adjustable feet also allow adjustment under load and are an excellent solution for the levelling and height adjustment of a piece of furniture, machinery or general appliance.

The hexagon, which can be found at the top of the thread, can be used for adjusting the height of the feet from above the foot, without having to remove it from the application they are attached to. They are easy to install without specific tools and make sure work surfaces are both even and secure.

The standard colour of the adjustable feet SF is black nylon but as polyamide can be coloured according to the RAL chart, the range can be made to suit any application.



For more information visit stand 1.1357

GO 3312

By Degometal

French-based DEGOMETAL states that its new GO 3312 new battery riveting tool for rivet nuts is fast, sturdy, reliable and ergonomic.

The new GO 3312, containing the latest generation of lithium-ion batteries, has the advantage of allowing a true riveting by traction installation with an automatic phase for the screwing and unscrewing of the insert.

The GO 3312 permits the riveting of rivet nuts from M3 to M10 in aluminium, steel and stainless steel and up to M12 in aluminium. The tool is provided in a plastic box with a charger and one or two standard batteries, 14.4V lithium-ion (4.0Ah), depending on model.



For more information visit stand 1.214

SilverMate

By GebuVolco

At Fastener Fair Stuttgart 2019 GebuVolco will introduce to the market for the first time the SilverMate range – a new chipboard screw with a specially developed tip and other distinctive elements.

GebuVolco's balanced range of SilverMate chipboard screws, also produced in a chromium-6 free galvanised version, offers extremely wide coverage of all needs. By using only three Pozi and three Torx® versions across the range, bit changes will be less frequent, thus saving time.

With affixed CE Marking, and issued with an ETA (ETA – 18/0284), the SilverMate also features improved milling ribs to ensure a perfect damage-free finish. An extremely sharp point, combined with the improved thread, ensures rapid engagement in the wood with a minimal splitting risk.

“The SilverMate is the strongest chipboard screw in its class, making it suitable for mounting into almost any type of wood. Sophisticated shaft ribs on the partial thread version and a superior wax also ensure minimal turn in resistance,” comments GebuVolco B.V.

The SilverMate's unique characteristics also include:

- + Extremely strong screws with minimal risk of head break-off.
- + Minimum turn in resistance due to the use of superior wax.
- + Particularly fast engagement, almost immediately from the first rotation of the drill with minimum starting pressure.
- + Very low splitting risk due to the four special milling ribs at the tip of the screw.
- + Special shaft ribs give extra space to the screw head when it penetrates the wood, further reducing the chance of splitting.

SilverMate is packed in a sturdy professional box featuring a viewing window and easy access tray.

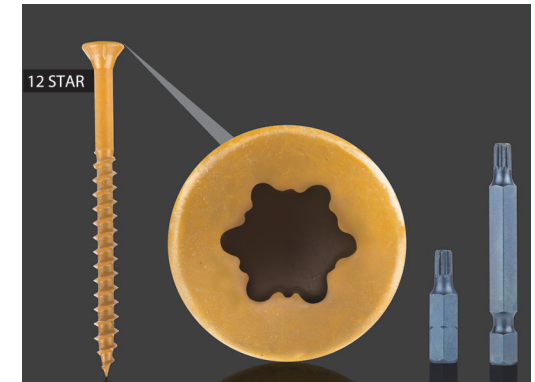


12 Star screw

By DIN LING Europe

It can be very annoying and time-consuming if problems with the recess occur during assembling. The choice of the right drive and the right bit is crucial for professional work.

Din Ling says it has developed a revolutionary new drive for wood screws, with its 12 Star screw drive system offering the perfect combination of bit fit and power transmission.



The screw head of the 12 Star screw is composed of a six lobe recess, which has been extended with additional ribs at selected positions. The drive consists of six main ribs in combination with six partial ribs, which increases precision.

The matching 12 Star bit is inserted into the 12 Star recess in such a stable way that the screw does not fall off. The resulting one handed operation enables a more efficient workflow. This new screw drive system also allows the placing of screws in a stable and smooth running manner without rocking, shaking, tilting or wobbling. The innovation has been patented in Taiwan and the USA.

Din Ling says its invention of the 12 Star screw drive system guarantees the perfect bit fit, optimal power transmission and no wobbling. “The 12 Star system is a patented drive system that adds six additional points to a normal screw,” states Din Ling. “This provides the largest possible contact surface for installation.”

For more information visit stand 1.1122

For more information visit stand 5.3230

Jeclin

By Jeveka B.V

The growing market of vacuum and cleanroom technology requires strong suitable fastening solutions, in order to get an optimal vacuum environment and prevent virtual leaks and potential contamination.

With that in mind, Jeveka B.V has developed Jeclin – an extensive range of products for vacuum and cleanroom

applications, characterised by a standard quality of stainless steel A4-80 (1.4432) and also available in inconel and titanium TiAl6v4 (Grade 2 and 5).

“Current vacuum products on the market are usually a lower grade A2 or A4-70,” explains Stephanie Veltkamp, joint managing director at Jeveka. “For the Jeclin brand we decided to use A4-80 and higher grades, which creates a much stronger product, even if you drill a hole through it.”

These ultra high-quality vacuum products can have a rerolled thread and various surface treatments are available, including electro polishing for reducing friction and particles; kolsterising for preventing galling; as well as Ag or Au plating. The Jeclin range is also provided in cleanroom suitable packaging for minimising contamination.

“The different surface treatments in combination with the extensive range of products means Jeclin is suitable for vacuum and cleanroom technology in the aerospace, solar systems and health technology industries,” points out Stephanie. “A wide range of Jeclin products give users the certainty of finding the best fitting connection with the right conditions for the best vacuum and cleanroom applications.”



For more information visit stand 1.1010

SWG Terrace Screws

By SWG Schraubenwerk Gaisbach GmbH

Through its focus on terrace screws for various applications, and its commitment to launching innovations into the market, SWG Schraubenwerk Gaisbach GmbH – Business Unit Production has been able to introduce a new range of terrace screws.

For applications with very hard wooden boards, SWG's terrace screw features a reinforced shank and an enhanced drill tip, making it the first choice for numerous customers.

The drill tip ensures a precise positioning of the screw, no splitting effect and short edge distances. The grooved shank collects existing wood fibres and prevents movement of the boards and any disturbing 'cracking sounds'. Thanks to a small countersunk head with milling pockets, a final and visually appealing finish is provided. Any remaining chips are repeatedly collected and captured.

One further development of the described stainless steel terrace screw is the new 'vintage look'. In a special heating process the screw gets a dark brown colour, which changes the surface of the screw meaning a galvanisation process is not necessary. The result is a durable colour, which cannot be damaged by the application and transport.

The 'vintage look' terrace screw matches perfect with dark wooden boards, for example terraces made of tropical wood. Besides the terrace decking, there are also other types of stainless steel screws with the 'vintage look' available, which can be used for fixing façades and many other applications.



For more information visit stand 1.746

Screw-Tite®2

By Tite-Fix Ltd

The next generation Screw-Tite®2, from Tite-Fix Ltd, incorporates all the benefits that made Screw-Tite® great but with a number of new advancements.

The Tri-lock™ TS threadform still offers all the benefits of a twin and single thread on one screw, allowing a fast insertion with an enhanced start to ensure a perfectly balanced and straight drive with no kicking over on entry.

The improved, acute Tri-Lock™ shank reduces torque helping the screw to go in easy and this, teamed with the coarse, single thread portion, locks into the substrate making sure once it's in, it's in. The high strength of Screw-Tite 2's core means that with the majority of applications there is no need to pilot and just like Screw-Tite it can be used in almost anything.

Early screws acted as both a fixing and a dowel in one, the dowel portion preventing lateral movement and reinforcing jointed timbers, whilst the threadform provided a strong fix, a feature lost on modern screws. Screw-Tite 2 reintroduces this concept with the unique Dowel-Tite® shank acting as a dowel, removing the need for additional support and reducing lateral movement whilst the Tri-Lock TS threadform provides a fast and firm fix.

The new dowel ream reduces timber splitting by driving the perfect clearance for the Dowel-Tite shank, allowing screws to be fixed close to the edge and ensuring timbers are clamped fast and with a firm fix.

Screw-Tite 2 is powered by the patented and award winning Stick-Tite® drive system, a specially designed recess that gives the ultimate grip between bit and screw. This tight fit ensures screws stick fast to the bit allowing them to be driven one-handed or at awkward angles, there's no cam-out so no damage to the recess and, if needed, the screws can still be driven with a standard Pozzi® bit.



For more information visit stand 1.212

EVIRT ITALIA PLANAR® series

By EVIRT ITALIA

EVIRT ITALIA has introduced the EVIRT ITALIA PLANAR® series which it says closes the loop between the die centre line positioning axis and the rotary die positioning axes. The series offers many user-friendly benefits, which not only cut job set-up time but also offer extended rolling processes and control features for high-levels of quality and tool life savings.



The SMART ROLLING MACHINES® with built-in safety features are the answer for cutting long-term costs, improving production quality and increasing flexibility among operators by fully automating and minimising the manual guesswork, as well as the chance of costly set-up errors – what used to be hours set-up time has been reduced to less than five minutes.

The automatic spindles' inclination makes the machine's set-up automatic and absolutely independent from the operators' skills. Performed by servomotors and locked by hydraulic devices, the Smart Rolling Feature makes the spindles' inclination process easy, instantaneous (inclination performed in less than two seconds) and highly repetitive, warranting a positioning precision lower than 0.01 degrees.

The EVIRT ITALIA laser-based auto-pitching system is also able to automatically measure and calculate the most suitable dies' rolling positions. Lasting only two minutes of optical analysis, the patented system does not require any operators' skill or material waste.

The device allows a simple and intuitive definition of the work-rest highness, making the two die rolling machine as easy and flexible as the three die ones. Hydraulically actuate and controlled through a proportional valve, it permits to define the workpiece's rest highness in a fully automatic mode with 0.01mm positioning tolerance.

"Watching Factory 4.0 concepts, the EVIRT ITALIA HMI has been designed to automatically define all the working parameters. Based on over 50 years of rolling experience, the operating interface allows an intuitive and easy machine's set-up according to a mistake proofing method."

For more information visit stand 3.2184

SPC-ROBOT

By Dimac Srl



SPC-ROBOT, a robotised unit with cobot, enables the automatic control and execution of complex measurements, SPC data calculation and collection, non-contact and human error-free.

SPC data collection has become a talking point within companies, due to the time needed for operators in key departments to measure the produced parts – using calipers, hand micrometres and a variety of other tools. In some companies, every thirty minutes they have to measure five parts with different parameters each, which can be extremely time-consuming.

Expressly conceived for Industry 4.0, SPC-ROBOT is 'one of a kind' equipment, differing from any other product designed for similar purposes, using the latest automation and state of the art robotics. It enables companies to carry out automated statistical parts control in process, as well as the related data collection, on the production floor – achieving sustained quality by stable, predictable process results.

The main benefit of SPC-ROBOT is that it automates several inspection processes that are repeated. Getting operators to repeat the same operation eight hours a day seems very inefficient when a robot can do the same job, in the same time interval. The SPC-ROBOT can be left to work on its own – it does not need to be monitored.

In addition, the use of cobots mean the system is very user-friendly and does not require any technical knowledge. The cobot used is a very popular version, an open-source system, which means there are a lot of different plug-and-play options for it, such as different gripping systems. This is very beneficial, as fasteners are very complex to handle and have different shapes and geometries.

With an accuracy up to 5µm and repeatability up to 3µm, three models are available with a working range of 4mm – 25 mm in diameter, with a length of 30mm – 150mm. SPC-ROBOT also offers tangible and identifiable advantages for the end user including an easy touch screen, unlimited number of plans storing, barcode reading, interfacing with the net and ERP system and a data backup system by UPS with floating battery.

For more information visit stand 3.1818

GROWER TENKEEP®

By Growermetal Srl



With its technical know-how, use of simulation software, and numerous laboratory tests, Growermetal's R&D department has developed GROWER TENKEEP® flat safety washers, which will be launched on the market at Fastener Fair Stuttgart.

When compared to other safety washers on the market, GROWER TENKEEP® safety washers have knurls with a different geometry on each side of the two surfaces – specially designed to ensure maximum performance against unscrewing of the bolted joints even in the presence of extreme vibrations and dynamic loads.

In fact, thanks to the different geometry of its surfaces, the GROWER TENKEEP safety washer becomes immediately solid to the bearing surface when the bolted joint is tightened, while the screw continues to rotate. In this way the friction conditions are defined and uniform and therefore the tightening torque to be applied, in order to reach the required preload, is independent from the material and the mechanical characteristics of the supporting surface. There is no damage of the supporting surface during its application, even on galvanised or painted surfaces.

Growermetal Srl says its GROWER TENKEEP safety washers guarantee the perfect grip of the bolted joint on all metallic materials with variable hardness range between 100HV and 350HV. The main advantages also include excellent locking performance in the presence of vibrations and dynamic loads, precise correspondence between tightening torque and screw preload, regardless of the material of the supporting surface, and minimal space requirement compared to the type of nuts and bolts used. There is also no geometric interference between the washer's hole and the underhead radius of all the screws according to ISO and DIN standards. After assembly, the washer will always remain inside the screw head.

For use with all types of bolts up to Class 12.9, the GROWER TENKEEP washer series is also suitable for applications with embedded holes and has a standard surface coating with very high resistance to corrosion. The series is also assembly friendly due to the presence of an internal chamfer indicator and reusable performance.

Finally, with functionality regardless of the presence or absence of lubricant, and with excellent price/performance ratio, the GROWER TENKEEP safety washer is produced in three standard series: Medium series from M3 up to M30 (ideal for hexagonal bolts), large series from M5 up to M20 (ideal for flanged head bolts, soft material support surfaces and slotted holes), and lastly the cylindrical series from M4 up to M30 (ideal for cylindrical head bolts).

For more information visit stand 1.1036

ULTRACUT FBS II

By fischerwerke GmbH & Co. KG

fischer is expanding its range of concrete screws for use with heavy loads with the ULTRACUT FBS II made of stainless steel (A4) for individual fixings, with a specially hardened red tip enabling quick and safe installation.

Due to being made of stainless steel, the ULTRACUT FBS II is suitable for use in wet rooms and outdoors. Just like previous versions, the ULTRACUT FBS II A4 with a red tip has an ETA (ETA – 15/0352), which covers applications in concrete and additionally the seismic performance categories C1 and C2. It has also achieved the fire resistance class R 120.

The whole programme of fischer ULTRACUT FBS II covers a broad range of applications through their various diameters of 6mm – 14mm in the galvanised steel and 8mm – 12mm in stainless steel (A4). Depending on the diameter, the different variants are also approved for many different screw-in and anchoring depths that correspond to the respective existing load. There are also various head types, which enables fischer to always provide the right FBS II type for all fixing tasks in concrete.

The patented thread geometry and the large core diameter guarantee the absorption of high-tensile and shear loads in concrete. The flanks of the FBS II cut deep into the concrete when it is screwed in. This allows the FBS II to reliably transfer all loads while anchoring itself in the anchoring substrate without expanding. The FBS II also features low edge and axial spacing, enabling safe and easy installation.

The concrete screw can also be reused in certain conditions. It can therefore be used multiple times with temporary fixings, which is ideal for the installation of formwork in concrete construction, as well as many other applications. Temporary anchoring can also be carried out in fresh concrete with a strength of just 10N/mm²



For more information visit stand 1.522