Fastenings

TR PRESS PACK PRESS RELEASES

TR FASTENINGS IS RECOGNISED THROUGHOUT THE INDUSTRY FOR WORLD CLASS PRODUCTS & SERVICES

WE MANUFACTURE, STOCK & DISTRIBUTE A VAST RANGE OF INDUSTRIAL FASTENERS & COMPONENTS

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TR Press Release TR Launches New Website: The go-to place for



Engineers, Designers & Buyers

2016



Leading global manufacturer and supplier of industrial components TR Fastenings is delighted to announce the launch of its new website, www.trfastenings.com designed to be the ultimate go-to resource for engineers, designers and buyers, with improved navigation and functionality throughout.

Key Features

With an annual output of over 50 billion components, TR supplies to a wide range of industries, from automotive, electronics, telecoms and domestic appliances to marine, audio, petrochemical and general industrial. The new website features an online catalogue of over 40,000 products for use in all sectors, from TR's own branded range of fasteners including Hank self-clinch fasteners and rivet bushes, self-locking nuts, inserts and screws for plastic, blind rivets and rivet nuts, plastic fasteners and cable management products to screws, nuts, washers and specially manufactured parts.

Combining a new modern design with a powerful search tool it has never been easier to find the product required. Users can simply search for the product or product range required using any number of search terms and choose from a range of items available and related technical information. Once the product and size needed has been selected, users can view, send or download a dynamically generated 2D drawing for the part that includes all related dimensional data, download the related 3D model in a number of formats and save the part to the enquiry basket.

In addition, the website carries an extensive Engineering Knowledge Base, which includes:

- A comprehensive range of 2D/3D fastener models available to download
- Step-by-step animated installation guides
- Tooling requirements and related technical information
- Detailed performance data
- Material and finish specifications
- Fastener standards and comparison tables
- Key industries and the services we supply

TR Fastenings is a full service provider and the new website also features sections on the key industries it supplies and the services and technical support available to its customers, from engineering and design through to specification, manufacturing, quality and logistics.

Looking ahead

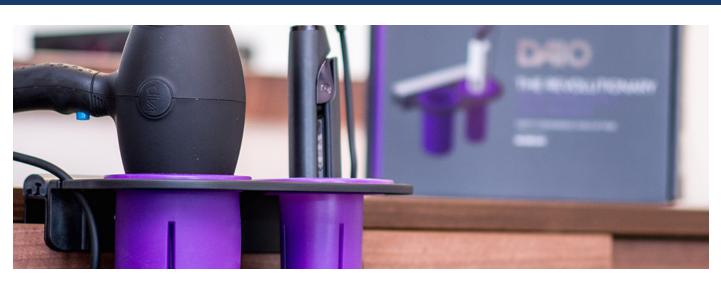
The TR Fastenings website will be continually updated over the course of 2016 with new products and features, including a customer portal and specialist technical articles. It is also planned to make the site available in a number of languages.

TR Fastenings Helps Make Hair Straighteners

Safer



2016



Durability of Burn-Prevention Invention Enhanced by Bespoke Fasteners Solution

Designed to protect young children and pets from serious burns, the DAIO is a revolutionary hair appliance organiser with a clever universal bracket. The bracket enhances the DAIO's practicality and appeal by allowing a wide variety of mounting possibilities around the home - a significant product benefit made possible by a bracket retainer manufactured by TR Fastenings. The bespoke technical solution also delivered durability and cost advantages.

The DAIO's British inventor, entrepreneurial professional hairdresser David Audsley, was inspired by his first-hand knowledge of the potential dangers of hair straighteners and other heated hair appliances. These popular appliances take as little as 15 seconds to reach a maximum temperature of 230°C and up to 40 minutes, after they're switched off, to be safe to touch. Audsley realised, as a father of two, that these perilously hot appliances are often left on the floor or furniture within easy reach of children and pets.

There is also the possibility of hair straighteners scorching carpets or furniture, or triggering more devastating fire damage - and that nagging doubt is experienced by many who, after leaving the house, can't help wondering whether they've remembered to switch the straighteners off. Statistics supported Audsley's fears: one in 10 childhood burns, and four in 10 burns in children under the age of five are as a result of electrical hair appliances. And there has been a 16% increase in domestic fire insurance claims directly attributable to heated hair straighteners.

The DAIO protects against these dangers by providing two cylindrical appliance holders, a bit like two tiny buckets, made of high quality silicone that will sustain a constant temperature of 300°C for up to three weeks. These two receptacles are located side-by-side in a small oblong heat-resistant plastic plate which is attached to a bracket for fixing to surfaces in the home or hair salon.

Out of the box, the DAIO can be quickly and easily mounted to any horizontal surface around the user's home, such as a table, shelf or mantelpiece. Alternatively, the bracket can be easily disengaged from the DAIO chassis and turned 90° so that the DAIO can be mounted on any vertical surface, such as a drawer front, cupboard door or radiator. The bracket can also be removed completely for mounting the DAIO permanently to a fixed vertical surface such as an interior wall or the side of a cabinet or wardrobe. The bracket fixes to any surface up to 33mm in width.

TR Press Release TR Fastenings Helps Make Hair Straighteners Safer



2016

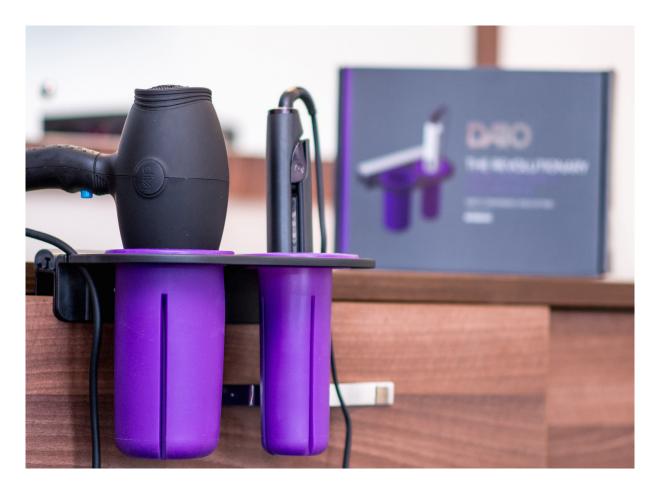
This all-important bracket was originally designed to be attached to the DAIO's receptacle-holding plate with a single self-clinching fastener installed from the inside of the bracket. However, designer and founder of klippsafe product innovation Simon Klippel on behalf of AOK-Design UK, identified that prolonged use of the bracket with this type of fastening could make it vulnerable to working loose.

Simon consequently discussed the details at length with the TR Fastenings team and after reviewing several options, devised and produced production details for a more robust solution.

To ensure the bracket achieves long-lasting rigidity, the fastening would either have to be installed from the outside or, because of inadequate access for a press, installed from the inside in two halves. The latter solution was chosen, using a standard countersunk screw and a Klipp Nut.

TR Fastenings was able to interpret the client's requirements, agree the alternative technical solution, and manufacture it in sufficient quantities within weeks – and as well as being more robust, it saved the client costs.

The DAIO was widely acclaimed for its innovative technical approach and safety benefits, receiving nationwide newspaper and TV coverage during 2015 Child Safety Week, and its manufacturers continue to donate £1 from every unit sold in the UK to the Child Accident Prevention Trust.



Pushing the Boat out at TR Fastenings Poole

with New Product Range



2016



A member of British Marine and part of the global TR Group, TR Poole has one of the largest portfolios of marine components on the South Coast.

The company is always looking to develop and improve its service, quality and products and has recently introduced a range of +315 Deg C silicone masking caps and plugs, ideal for thread masking needs such as anodising, powder coating, spraying, painting and protection against damage.

TR also supplies a wide range of marine grade A4-316 grade stainless steel fasteners as well as riveting and bolting fasteners – suitable for masts, spars, sails, rigging and deck hardware. All these products are easy to find on TR's new website, which also includes information on TR's Vendor Managed Inventory Service. This is an ideal way to manage the supply of components direct to the production line while eliminating unnecessary administrative processes. TR can tailor each system to a customer's specific needs, from a simple KanFax system to full Direct Line Feed.

TR Fastenings' worldwide sourcing enables it to meet high-quality production demands at competitive prices, ensuring that all fasteners are traceable as a standard requirement. Maintaining this innovative approach, TR Fastenings is looking ahead to develop its product range and markets further, with continued growth forecasted.

"We have had a presence in Poole for 35 years and have built up a well-deserved reputation as the go-to source for Marine fasteners and fixings," comments Jerry Howe, Operations Manager at TR Fastenings Poole. "As experts in the Marine industry and locally-based, we have the advantage of being on hand to provide engineering support whilst also having access to the latest warehousing and global logistics capabilities."

For more information, please call us on 01202 440450.

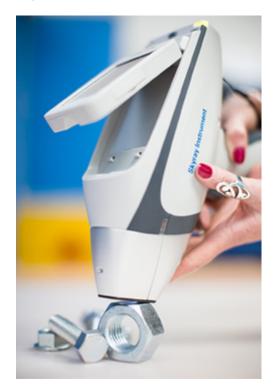
TR Press Release Investment in New X-Ray Fluorescence Spectrometer Reinforces TR Fastenings



2016



As a leading global manufacturer and distributor of industrial components, TR Fastenings is seriously committed to ensuring all its products comply with the necessary substance-based legislation, such as RoHS 2 and REACH.



These European directives restrict the amounts of hexavalent chromium, lead, mercury, cadmium and other hazardous elements in products, where content needs to be less than 1,000 ppm (or 100 ppm for cadmium).

Since 2004, a year ahead of the introduction of Restriction of Hazardous Substances legislation, only RoHS compliant products have been stocked by TR Fastenings. In 2012 TR set up its own in-house RoHS compliance testing facility, testing in excess of 80,000 different part numbers each year, to give its customers the confidence of meeting their own due diligence and due care requirements. Now TR Fastenings has gone one step further by investing in a new X-Ray Fluorescence Spectrometer which analyses the chemical make-up of materials and products, and checks they are compliant with legislation.

TR selected the Genius 3000 from Optech Solutions which is configured with RoHS and Alloys softwares. A highperformance handheld XRF analyser, it incorporates the best silicon drift detectors on the market; providing the level of

accuracy, precision and speed required for such complex analysis. The Genius has a lower limit of detection and can detect Mg through to U.

"We're delighted with the XRF Spectrometer," commented Jenni Morland, TR's European Health, Safety and Environmental Manager. "This innovative way of testing our products will ensure that we remain compliant and give our customers confidence."

TR Press Release TR Perspective on UK Fastener Market



2016



By Geoff Budd, Trifast Director and European Managing Director

With over 40 years' experience in the fastener industry, we have witnessed numerous changes within the UK market and always strive to respond to the ever-changing requirements of the domestic manufacturing sector.

Among the most notable recent developments is the resurgence of the UK automotive manufacturing industry, especially in the Midlands and the North East, which currently account for 35% of our UK turnover. TR specialises in producing multistage complex fasteners for Tier 1 customers to go into products such as seating components, IP console, braking systems, airbag assemblies and highly engineered parts for engine and powertrain fastenings.

Lightweighting in automotive is also a key driver and we have seen a sharp increase in sales of plastic fasteners being used to replace traditional steel ones, along with a range of industrial drive systems for more sophisticated engineering applications.

In terms of the benefits and challenges of being a UK company, TR Fastenings is in the fortunate position of being able to offer local support whilst also being able to tap into a global network of resources. We still manufacture in the UK – we have been the market leader in the production and supply of rivet bushes in the UK for over 30 years – but most of our manufacturing takes place in the Far East, much of it in our own production facilities.

Looking ahead, underlying growth remains encouraging and this has been bolstered by the recent acquisition of new companies (such as VIC in Italy and Kuhlmann in Germany) and the opportunities these bring. We are also continuing to pursue opportunities that add product range and customers to the TR footprint. Moreover, as the fastener supply sector continues to remain highly fragmented, there is also ample scope for consolidation by acquisition.

TR Fastenings Belfast: Specialists in Fastenings

Solutions

2016



TR Fastenings Belfast, part of Trifast PLC, a global manufacturer and supplier of industrial components, specialises in the supply of fasteners to the Crushing & Screening, Earthmoving, Agriculture and Materials Handling Equipment sectors throughout Ulster & Leinster, stocking high tensile grades 8.8 and 10.9 bolts up to M48.

These complement the company's standard fastener range which can be found on its website. In addition, it is a major stockist of U Bolts, Hose clips, Castle nuts, nut & bolt clamps, Grease Nipples, Circlips, R-Clips, Wire Rope clamps, Split pins, Spring Pins, Couplings, Lynch Pins, through hardened washers and 1" grade 8.8 coiled threaded rod (speed bar) and nuts. As a full service provider, TR Fastenings Belfast also offers vendor management solutions, design and engineering support and maintains vigorous quality standards throughout its manufacturing facilities in Europe and Asia.

Maximus Crushing & Screening

One of the many companies benefiting from TR Fastenings is Maximus Crushing & Screening, an independent, global manufacturer and distributor of mobile crushing and screening equipment for use in a wide range of applications; mining and quarrying, earthmoving, civil contractors, recycling and material handling industries.

Used by customers around the world, Maximus's crushers and screeners operate in the harshest environments. Priding itself on its excellent build quality, the company required a seamless supply system to ensure production levels and lean manufacturing can be maintained, so turned to TR Fastenings for advice and assistance.

TR Fastenings Belfast was able to oversee a smooth transition to a new, more efficient VMI (Vendor Managed Inventory) system which includes:

- A twin bin barcoded replenishment system, with 'free on loan' racks and bins.
- State-of-the-art bar-coding technology to trigger demand and monitor usage. This usage information is shared • with Maximus and is ideal for its engineers and the rationalisation of components.
- Detailed reports from TR Fastenings which provide good-quality management intelligence. •
- Delivering only what Maximus requires. •
- Eliminating H&S risks of trip hazards. Fasteners must be in the bin not on the floor! •
- A dedicated Account Manager.
- Unlimited access to TR's engineering website: www.trfastenings.com

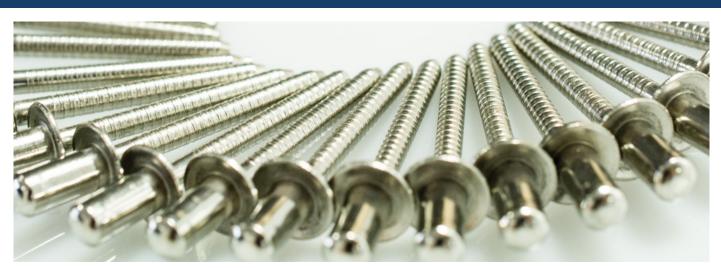
"It was a pleasure to work with Maximus and we are delighted that their new system has assisted in improving efficiency already," comments Arlene Martin, Divisional Manager at TR Fastenings Belfast.

"We enjoy a high level of service and support from TR Fastenings," comments Paul Colton, Operations Director at Maximus. "Our new VMI system from TR Fastenings has dramatically eliminated non-productive time at our facility. Production can focus on its core function and parts are always available at the point of use."

TR Press Release TR Norway's Space Odyssey: Supplying Fasteners for the New Mars Rover



2016



TR Fastenings Norway, part of Trifast PLC, is pleased to have been asked to supply essential rivets and tools for a Radar Imager for the new NASA Mars Exploration Rover which launches in 2020. This is the first time components that TR have supplied have gone into space, and it is exciting to be a small part of future history.

The Norwegian Defence Research Establishment (FFI) which is designing and developing the Radar Imager on behalf of NASA, required components which were robust enough to withstand the extreme conditions of Mars' atmosphere, where temperatures can plummet to minus 125 degrees centigrade. Drawing on its experience of working within the telecommunications and energy sector, TR Fastenings Norway was able to tap into the company's global network of suppliers and deliver the components to FFI within the required timeframe.



The Radar Image will be used in Mars' subsurface experiment, known as RIMFAX. It will add a new dimension to the Rover's toolset by providing the capability to image the shallow subsurface beneath the Rover in unprecedented detail. It will explore the ancient habitability of its field area and select a set of promising samples that will eventually be returned to Earth.

NASA's Mars Exploration Rover Mission is an important, ongoing robotic space project which began in 2003 with the sending of two solar-powered

roversm Spirit and Opportunity, to explore the Martian surface and geology. Primary among the mission's new scientific goals is to search for a wide range of rocks and soils that hold clues to past water activity on Mars. The new Mars Exploration Rover will build on the work of the other rovers in its scientific goals of searching for evidence of ancient life on Mars.

Artist's Concept of the SuperCam Instrument for Mars 2020 Rover. Image Credit: NASA

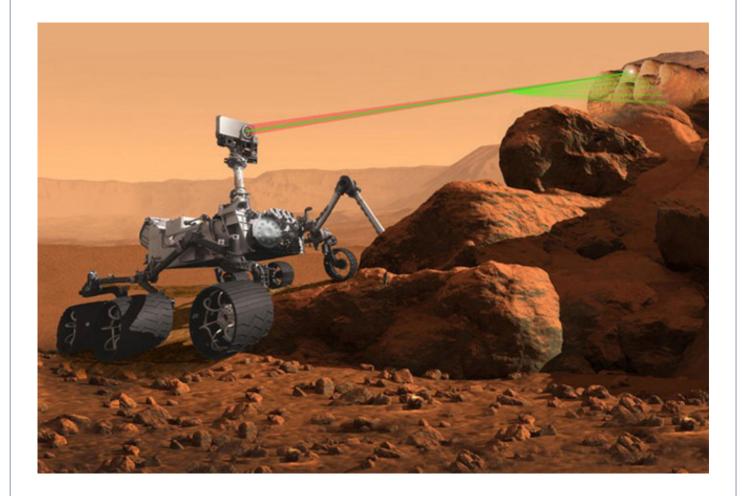
TR Press Release TR Norway's Space Odyssey: Supplying Fasteners for the New Mars Rover



2016

"We are extremely proud to be involved in the development of this new Mars Exploration Rover," comments Jan-Erik Storsve of TR Fastenings Norway. "It is incredible to think that our fasteners will be used in outer space and is a testament to the high regard our products have with such a prestigious customer as FFI."

A spokesperson for FFI commented, "The Radar Imager for Mars' subsurface experiment is a groundpenetrating radar experiment for NASA's Mars 2020 Rover. The radar antenna itself is an aluminium sheet metal construction assembled from several complex shaped parts. The harsh environment during launch, landing and operation on the Mars surface necessitates strict mechanical requirements to the antenna. Furthermore, the integration with the Rover is demanding with respect to the very precise tolerances. The antenna is assembled with CherryMax® aerospace certified blind rivets and the assembly process is aided by dedicated guiding tools, all delivered by TR Fastenings."

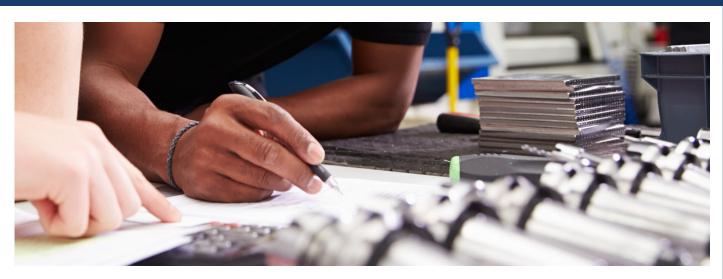


TR Fastenings' New Website: The Go-to

Resource for Engineers



2016



TR Fastenings is a major manufacturer and supplier of mechanical fasteners for the automotive, electronics, telecoms, domestic appliance and general industrial sectors, with an annual output of 50 billion components worldwide.

As a leading global assembly partner, TR fully understands the requirements of engineers and its new website provides them with an essential resource. Designed for ease of navigation and functionality throughout, the website features an online catalogue of TR's portfolio of products, an extensive Engineering Knowledge Base plus details of the key services and technical support available to its customers – from engineering and design through to specification, manufacturing, quality and logistics.

Extensive product portfolio

TR's website carries an online catalogue of over 45,000 products, which is constantly being added to. These range from TR's own branded range of fasteners, including Hank self-clinch fasteners and rivet bushes, self-locking nuts, inserts and screws for plastic, blind rivets and rivet nuts, plastic fasteners and cable management products, to screws, nuts, washers and specially manufactured parts.

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- Fastener standards and comparison tables
- Looking ahead, the TR Fastenings website will be continually updated with more products and features, including a customer portal and specialist technical articles.

TR Fastenings Sponsors Stylish Swedish-

designed Sidebuddy



2016



As our cities become increasingly congested with traffic and pollution, bicycles are proving an increasingly popular way to get around town more quickly and easily - and with the added benefit of zero emissions.

However, sometimes cycling may not be practicable – for example, if you have to transport children, pets or shopping for example - so Swedish designer Jordi Hans saw an opportunity to invent a versatile add-on solution – the SideBuddy side trailer.

Inspired by the classic designs of motorbike sidecars, the SideBuddy can be attached to either standard bicycles or new electric models and fits up to three children (aged 0-7 years) or cargo up to 120kg. Multi-functional and versatile, it is ideal for families, street sellers, tourists, commuters and even surfers!

TR Fastenings and Sidebuddy

Always keen to support new and innovative ideas, when TR Fastenings Sweden was approached by the designers of SideBuddy to be a possible sponsor they were keen to hear more. Eugen Kühnl, Engineering and R&D Manager at TR Fastenings Sweden, comments, *"As a leading manufacturer and supplier of industrial components, environmental thinking is an area we are particularly interested in. In our opinion, the Sidebuddy is a unique project with huge commercial potential and one we are delighted to support."*

"The components that were selected – such as screws, nuts, washers, springs and rubber parts - were already approved and validated for use in the automotive sector and readily available for us to supply to the customer. This amounted to a huge saving in terms of time for the Sidebuddy team."

Overcoming Design Challenges

Using its experience in assembly and fastener technology, TR Fastenings worked closely with Jordi Hans, from concept to the final design.

Together the team overcame a number of design challenges, including finding a suitable way to connect the bicycle to the Sidebuddy, steering issues and combine functionality and top-quality design in a multi-functional, moving product. Jordi Hans comments, *"We are hugely grateful to TR Fastenings and our other sponsors for all their support. We have just officially launched Sidebuddy and are delighted with the response so far!"*

TR Fastenings Sponsors Stylish Swedish-

designed Sidebuddy



2016



Sidebuddy Specifications:

- Designed by: Jordi Hans Design
- Materials: High quality Scandinavian design materials
- Colour: 12 different colours to select and all type of customized Vynil laminations
- Features: Extendable Cowling 50 cm, Dual break system, Fold able Seats, Mudguards, Position lights, Front Wheel, Extendable Walking Handle, Bike Connectors Connectable to 80% of Bicycles & 90% of Electrical Bicycle.
- Weight: Approximately 16 kg.
- Maximum Cargo Load: 120 kg.

TR Fastenings Expands Into Spain as Part of

Global Strategy



2016



TR Fastenings, the trading arm of Trifast Plc, has expanded its global logistics and customer technical support resources with the opening of a new distribution facility in Barcelona, Spain. The new operation's initial focus will be on the burgeoning Tier 1 automotive sector, which continues to be an important growth-driver for the company.

TR Fastenings has developed its highly successful global footprint over the past 20 years by establishing a combination of greenfield sites and acquired business teams to support major customers on a more localised basis. Opening the facility in Spain is the latest move in a long-term strategy enhancing TR's growing reputation as a full service provider, with the capability to provide early design and technical involvement, Value Analysis/Value Engineering, global sourcing, and logistical solutions.

Why Spain?

TR selected Spain not only because of increasing customer demand in this region, but also for the availability of skilled personnel, affordable premises, government support and accessibility to major modern manufacturing clusters within the country, many of which are in automotive, electronics and domestic appliance assembly. Spain also has strategic and cultural links with Mexico, which is increasingly important to TR's facility in Houston, Texas, providing some common links to the Group's growth plans.

Geoff Budd, Trifast Commercial Director and Managing Director of TR Europe, commented: "Since Raul Fernandez Moreno recently joined us as a country manager for Spain, we have been planning the best route to give him a fully-resourced facility to operate from. The first priority has been a logistics and technical facility and when this Barcelona property became available we moved quickly to secure this vital first stage."

TR's Application Engineers work closely with Automotive Tier 1 customers at their Design and Engineering Centres across Europe (as well as Asia and the USA), providing technical advice and support on the use of fastenings in numerous applications including car seats, cockpit modules, powertrain, door and instrument panels, steering systems, chassis, transmissions, engines and brakes.

Global Company Joins Sussex Chamber of

Commerce



2016



TR Fastenings, the leading global manufacturer and supplier of industrial fasteners, has joined the Sussex Chamber of Commerce 43 years after the company started with five employees and a rented room in Uckfield.

Today TR Fastenings retains headquarters in Bellbrook Park, Uckfield, but as part of Trifast PLC has 27 locations worldwide, including eight high-volume production manufacturing sites, with more than 1100 staff, and annual group revenue of over £161m.

TR Fastenings' Executive Chairman, Malcolm Diamond MBE, commented: "It's true that our company has grown out of all recognition since starting-up on Uckfield High Street in 1973, but we've never forgotten our Sussex roots. Becoming a member of the Sussex Chamber of Commerce reinforces our active interest in the local and regional communities. It's also important that British Chambers of Commerce have strong links with UK Trade & Investment (UKTI), the Government's department promoting business overseas."

History of TR

After first renting a room in Hooke Hall, Uckfield, TR Fastenings moved in 1976 to a small converted industrial unit in the town to start the in-house manufacture of threaded sheet metal fasteners. The company's success brought huge growth throughout the UK in the 1980s and 1990s, enabling a full listing on the London Stock Exchange in February 1994 as Trifast PLC. This was followed in the next two decades by international expansion.

In 2015 TR Fastenings supplied more than 50 billion components – including rivet bushes, self-clinch fasteners, screws for plastic, blind rivet nuts, self-locking nuts, security fasteners, plastic fasteners and cable management products - to over 5,000 companies globally across a wide range of industries including automotive, electronics, domestic appliances, telecoms and marine.



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