

Press Pack

Our fasteners enable innovation today to build a better tomorrow





ESG: A journey not a destination



By Andrew Nuttall - European MD

The Paris Agreement on climate change in 2015 initiated a change in attitude in dealing with greenhouse gas emissions. The European Parliament ratified this agreement in 2016. The objective was to respond to global climate change and ensure that rising global temperatures were reduced and controlled getting back to preindustrial levels.

TR is a Trifast plc company and as such ESG became a very important part of our future strategy and a Sustainability Committee was formed by our CEO Mark Belton. Members of that Team came from key disciplines in the business to ensure that we covered all bases embracing the Environmental, Sustainability and Governance elements. This culminated in Trifast's Sustainability Report being published.

As MD for TR in Europe my focus has been on our distribution sites in Norway, Sweden, Holland, Germany, Spain, Hungary and the manufacturing facility in Italy. As part of a group transformation project, we had already embarked on creating a 'modern workplace' environment. This involved enhancing the IT infrastructure, the décor and image of our offices, break out areas for staff to relax and lunch together and generally creating a pleasant working environment. All sites are air-conditioned and accredited to ISO 14001 the environmental management system.

In 2022 we embarked upon further expansion and opened a new a distribution hub in Hungary to service that geographical area, and the 7 countries on their border. A new greenfield site allowed us to build and create from the ground up the most sustainable facility in our Group. This included triple glazing ensuring that in very cold winters and very hot summers that working conditions were excellent and cost effective, and the furniture came from sustainable sources. Solar panels and electric charging units were included in the specification, and the air extraction filtration system throughout the building created a great working environment meeting the building code regulations that the Hungarian government have mandated. Even the runaway rainwater is collected in an ornamental pond which is checked by the environmental agency to ensure that there is no pollution present. Once that has matured, we will be adding reed beds to further cleanse the water and encourage wildlife. <u>See the full story here</u>.

However, a manufacturing location the size of TR VIC in Italy is a wholly different proposition. This facility is located in Umbria in Italy and had been in private ownership for over 40 years until TR acquired it in 2014. This location in Fossato has a long history of manufacturing high volume fasteners, working on developing products and creating innovative designs for the domestic appliance market.

Over the last 5 years we have invested heavily in creating a manufacturing facility that is 'fit for the future' creating a sustainable production facility cold forging industrial fasteners.

Customers' needs and requirements have also changed over the last 5 years. ESG is high on multinational's agendas, and the reporting of CO2 emissions is a key factor. Their questionnaires, and those of industry bodies such as SAQ 5.0 focussed on supply chain sustainability are also driving change and decisions on where they place business is depending on fulfilling and meeting the criteria. The pandemic added another dimension as companies re assessed their dependence on Asia with increased lead times and the disruption



ESG: A journey not a destination



Continued

to supply chains that had been created. As a result, there has been a concerted drive by customers to 'near shore' to reduce lead times, the high cost of transportation and the need to be able to demonstrate Co2 reductions. It will be interesting however to see how the European cost of product versus anticipated Co2 savings will play out. We are however poised for further growth as we see that this desire to near shore is gathering momentum.

This year we are celebrating TR's 50th anniversary and our last major milestone was when we hosted a Group event for the 45th anniversary in TR VIC in Italy. We had 50 key personnel visit us from around the organisation including the Main Board of Trifast. This gave us an opportunity to completely revamp the offices, and all reception areas creating a modern environment prior to the event. Further investment followed and a roll out program of refurbishment of the main manufacturing location began, and investment in new Italian machinery. We were keen to diversify and had gained the IATF 16949 accreditation a few years before which has enabled us to attract and secure business with Tier 1s supporting the major OEMs. As a result, we invested in cold forging machines capable of making more complex and larger diameters, and in automatic packaging machinery. We have a conscious Industry 4.0 philosophy where feasible.

This investment continued with a recently opened extension to the manufacturing floor space creating an additional 33% capacity and injecting an additional 500-700 million pcs of new capacity. The last of the new machines are being installed during February. New efficient ventilation systems and power plants within manufacturing have been installed and major changes to the finished goods warehouse have been completed. This included infrastructure changes as we created a new road into the revamped and re-racked warehouse that are Microsoft D365 compliant and operate electric tugs between both buildings. We have had an increased number of successful automotive customer audits since the pandemic and a high percentage of our new business wins have increased the sector diversification that we anticipated following the IATF 16949 accreditation.

I have a Sustainability Project Team in TR VIC headed up by Stefano Pisoni the Managing Director. We have initiatives underway including changes in the way we clean the product after forging to reclaim the oil for reuse and eliminate waste. Most of the domestic appliance manufacturers prefer their product in plastic woven sacks as they are easier to handle and tip into automatic feeders on the production line. We are working on alternative sack material that is organic and have two products on trial at the moment.

As I said in my earlier comments this is a journey not a destination and there is more work to be done, and we are fully committed to doing it. We have produced a video in house documenting this journey, <u>click here to view</u>.



Sustainability into Action



Sven Brehler, Director of Engineering and member of Trifast plc ESG Committee & Torque Direct

As a major fastener supplier to the Health and Home sector TR is actively supporting new designs and the re-introduction of fasteners that can be accessible for disassembly and repair.

For us as consumers of household goods we have got used to more limited life span of appliances compared to say 30 years ago. Product then, was more solidly built and was assembled by conventional methods using the welding and riveting production methods used less often today. They were however not as aesthetically pleasing, the choice of colours was either cream or white, but they lasted for years. They could also be accessed and repaired quickly with spares readily available, as there were also fewer models available with common parts.

We have come a long way in the design of products to meet our requirements for modern appliances in our sleek kitchens and utility rooms. What has been sacrificed over time is the durability and longevity of the product which inevitably means that product cannot easily be repaired in or out of warranty, and then ends up as scrap and potentially in landfill sites. If it can be repaired, but is out of warranty, it is often too expensive and there is a tendency to replace rather than repair. You could deduce that there is built in obsolescence in the way product is currently manufactured today. It would be better for the environment, and our wallets, if products could return to having the ability to replace components with a screwdriver or wrench and buy spare parts easily. Once a product has been welded or riveted it is nigh impossible to do that. Another case in point would be electrical waste which could be reduced if replacement parts were readily available, and not just to costly service engineers.

Well known global brands of vacuum cleaners and electrical garden equipment are starting to enable consumers to buy online battery replacements which is a move in the right direction.

The environmental 'Right to Repair' legislation has put the consumer back in charge of their electrical goods and helps to address the 'throwaway tech culture' head-on which TR Fastenings supports. After years of campaigning, this EU legislation will drive change in assembly methods with a major shift in how electronics and domestic appliances will be manufactured and serviced. It is already playing a key role in helping to extend product life, cut carbon emissions, and reduce landfill. Where there are more mechanical assembly methods employed there could even be a boost to create more jobs within the industry sector.

One example to illustrate the changes that can be consciously made is in the assembly of a washing machine. Working in collaboration with domestic appliance customers this is being urgently addressed. It is clear to see in the <u>washing</u> <u>machine animation</u> which we have produced in house, the return to conventional assembly methods that is being encompassed in the latest designs. A good example would be the move to thread forming screws and high strength fasteners that allow for disassembly and reusability.

Sustainability case study

One example, the transit bolt, can be clearly seen in our <u>washing machine animation</u> which we have produced. This transit bolt used to be a 5-piece assembly holding the drum securely in transit when it was delivered to your home. Originally this assembly comprised of two plastic spacers, a rubber damper, a metal washer and a bolt which were then discarded once the machine



Sustainability into Action



Continued

was located in position. TR developed in our Italian manufacturing facility TR VIC, a one-piece assembly that is patented and fully recyclable.

TR Hungary case study

TR's Sustainability Report is published on our website. The challenge is to embed this strategy/ ethos in a practical way within our business. Last year we opened a sizeable new build location in Hungary. It is not often that you get the chance to design a building from scratch. Our Teams used this opportunity to ensure this building was environmentally compliant, incorporating many features such as solar panels, triple glazed windows, clean air filtration systems in the warehouse, sustainably sourced office furniture and EV charging points. Company vehicles are now all electric. <u>Read the full article on our</u> website.

TR VIC Italy case study

This TR manufacturing location is a key supplier to the Domestic Appliance market. The collaboration with the European multinationals and their design and technical teams has been focussed on ensuring that the 'Right to Repair' legislation is being embraced and incorporated in all new models. We have taken the same approach in our manufacturing facility in Umbria based on the principal of working towards being Industry 4.0 compliant. This has enabled us to develop a modern, and greener and more efficient workplace. The investment made has been sizeable over the last 5 years culminating in a newly extended production facility and warehouse, new multistage forging machines being delivered, and the work does not end there. This investment increases our production capability by 33% to meet the demands of customers requiring 'near

shoring' which again is a sustainable target for many companies' intent on reducing Co2 emissions. There is a never-ending continuous improvement program in place working on reducing waste, oil reclamation and new extraction and filtration systems. <u>Read the full article on our</u> <u>website</u>.

"There is talk that the 'Right to Repair' is gathering strength in other sectors too including automotive."



TR Fastenings designs a unique push screw solution for monitor mounting brackets



CASE STUDY

In the changing world of home working, hot desking and the need for two screen displays we are seeing changes in how devices are being positioned in the workspace. One global monitor manufacturer whom we have worked with for over 20 years had a requirement for a small but strong fixing solution that enabled easier assembly.

The requirement

The customer, a globally recognised computer and enclosure manufacturer, required a bespoke solution to launch a new product as well as enhance its range of mini-PC screen stands. It first approached TR to help it create more effective fasteners for its mounting brackets when they could not find a solution to attach a stand that would be reusable. It also needed to be capable of screwing and unscrewing repeatedly without wearing or loosening. And it had to be strong enough to take the load and support of the monitor weight.

After consultation with TR, it became clear that it needed a product that was unique for its new launch, something that would go beyond what was currently available in the market.

The solution

The customer had initially set about identifying a plastic rivet solution, but it became apparent that to achieve their goals, a specifically designed component was required. TR's design and engineering teams supported the request and were able to develop a unique proposition - an innovative and effective push screw rivet.

Together they identified the need to have an insertion force of 35N, to prevent RSI, an

extraction force of a minimum of 90N, in order to remain secure, and the need for it to be unscrewed repeatedly with a screwdriver without wearing down over time. No small challenge for a small fastener!

Kevin Rogers, Global Director of Plastics and Rubber Commodity, TR Fastenings said:

"As part of the testing process, a formal audit partner was brought in, application tests including push in force, pull out force, individual cavity inspection, fail tests, shear strength testing, and others were all carried out. I invited the customer's senior engineer who happened to be based only 30 mins away from our vendor's factory in China. The plan was to show him the design process and summary to date, all of which was prepared in advance by our vendor for the day in question. We worked on their production line to see the final design running live and took samples from the line for inspection. Whilst this was being done, a team of engineers was busily conducting a full PPAP, which was presented in the afternoon. Upon asking the customer's engineer for his decision he commented: 'How can I possibly reject a presentation and product like this. I have never seen such an efficient, well prepared and executed product audit in all my years as an engineer'. At which point the green light was given.

As a final deliberate destruction test as this product is unwrapped and assembled by the public for home use, he asked three of us to physically hold down the stand, at which point he put his foot against the desk and physically tore the PC bracket from the stand. Amazingly the metal stand snapped, but the four special plastic push screws remained firmly in place! At which point he simply smiled!"



TR Fastenings designs a unique push screw solution for monitor mounting brackets



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Project challenges

The project required the design and manufacturing of a unique product, so this was both an exciting but challenging opportunity for the TR team. From the start, it required a lot of additional testing and resources that all partners needed to be involved with and had to collaborate closely together on.

In early design phase, it was a concern that the pull-out force required to remove the screw from above the unit would be too weak, so this needed addressing. The question was raised as to how additional tooling could be used to resize the existing part and modify it. In a short time, and through collaboration, this was improved and a sweet spot in the tightness of the shank was achieved, providing acceptable installation force, and enhanced pull out force.

Under normal usage testing, the rivet was pushed into the fixture TR had provided and removed using a standard screwdriver. This was repeated eight times then the insertion force of the 9th time pressing fixture and the pulling force when forced out. In wall mount passing test under the weight of 15.0KGF tested for 24 hours the screws remained tight in place.

Project conclusion

TR Fastenings has developed a solution that is unlike anything currently on the market. It has the capability to be a game changer for the home computing market. It joins an entire range of M3-M8 sizes in three different head styles to suit a variety of applications.

The team at TR has worked to create a product that has the capability to change the way fasteners are used with PC screen brackets, delivering increased product life and enhanced quality.



TR VIC – a renowned manufacturer

Credit: Will Lowry, Fastener + *Fixing Magazine*



TR VIC (Viterie Italia Centrale SpA) has been manufacturing fasteners in Fossato Umbria for over 50 years and is one of the most renowned manufacturers in Italy – with a history of product development and innovative design capability.

From its Italian site, TR VIC manufactures products for many well known global brands and distributes the products to multiple customer locations across four continents – becoming recognised for male threaded cold forged products, specifically to customer drawings, and in the development of products to enhance production assembly methods.

TR Fastenings, the parent company of TR VIC, was historically known as being a provider of fasteners to the electronics and tech industries and over the last 15 years its focus has diversified into the automotive sector – becoming a key supplier to tier 1 companies. To retain a balanced customer spread, TR Fastenings also focused on the health and home sector, which encompassed domestic appliances, and was already supplying this sector to a smaller degree before the acquisition of VIC gave it a much larger market share.

Another important reason for the acquisition of TR VIC, was the advantage of having a manufacturing facility in 'middle Europe' that could meet the needs for faster prototyping and shorten lead times compared to Asia supply. TR already had five manufacturing sites in Singapore, Malaysia, and Taiwan, and this acquisition significantly increased its manufacturing capability and footprint.

Inevitably, existing customers showed an interest in having a TR manufacturer in Europe and when TR VIC gained the IATF16949 accreditation it opened up further opportunities. TR VIC management also embarked upon an investment program that included a state of the art heat treatment plant; new automatic packaging machines; and the upgrading of machinery and facilities. This culminated in a recent £5 million (€5.8million) investment to increase TR VIC's manufacturing footprint by 30%, by adding new forging, thread rolling and pointing machines. This included the addition of 6-die 6-blow machines from Carlo Salvi and SACMA Group, which has increased the diameter range TR VIC is able to produce. The growing portfolio of machinery also increases TR VIC's capacity, especially for more complex applications within the sectors that it services.

Investments to the manufacturing location; a focus on environmental improvements; and a major facelift of the offices; has ensured that TR VIC is seen as a modern facility that is appealing to a discerning customer base. Additionally, the company has developed further warehouse capacity capable of holding 12,000 pallets. Plus, investment in training, initiated by Stefano Pisoni, managing director of TR VIC, has developed into a formal training academy, which has become key to recruitment and staff retention – with the headcount since acquisition almost doubling.

Investment in people, capability, and capacity, is key and never more so than during the Covid-19 pandemic. The huge increase in requirements for domestic appliances put a strain on the team at TR VIC, but they met the challenge. This significant increase in demand was driven by people working from home during lockdowns, investing in new appliances, lifestyle products and making home improvements. This societal transformation meets



TR VIC – a renowned manufacturer

Credit: Will Lowry, Fastener + Fixing Magazine



Continued

with a rapid deployment of new technology to improve quality of life, from fresh ground coffee machines to clean air products and personal grooming, all of which have rich fastener content.

Innovation is key

Another fundamental aspect of TR VIC's success has been innovation, with the company winning several design awards, including the TR EPW screw for thin sheet metal, which picked up the Route to Fastener Innovation 2019 award at the Fastener Fair Global show. The transit fasteners for washing machines and tumble driers were also a design success some years ago – reducing four components to a combined recyclable component, which is still in high demand.

Another aspect is meeting the needs of the market, such as the new European legislation 'Right to Repair' which came into force last year. This is already changing assembly methods as there is a move away from welded products to fasteners that can allow for disassembly. TR VIC is working with global brands who are focused on returning to core conventional fastener methods. Sven Brehler, engineering director at TR Fastenings, comments: "This is a very positive development that has been years in the making. While this is primarily about giving control back to the consumer, this is also a very strong environmental improvement case. It will significantly reduce appliances destined for landfill, which can now be repaired 1."

Another example would be a high volume part for an automotive lighting cluster assembly – where TR VIC produces 60 million pieces a year. The current part features a neoprene washer under the head of the screw to prevent water ingress. However, TR VIC has designed in a special screw, which it has patented, that has a unique feature under the head that negates the need for the washer. This has improved the integrity of the product, time to manufacture and has given a cost and recyclable environmental benefit to the customer.

TR VIC's approach to sustainability is also highlighted in the cleaning of products through to researching environmentally friendly packaging materials, as well as the movement of product between manufacturing areas. This investment is seeing real benefits for TR with keen interest in the TR VIC facility shown by numerous customers, with nine audits taking place in the next two months. Due to geopolitical issues in other parts of the world, TR is also experiencing a high demand from customers to 'near shore' their product. The introduction of CBAM will also accelerate the need for products to be manufactured in Europe and therefore further investment to increase capacity is inevitable. Enhancing the technical support that the company can give to customers at the early design stages is crucial for the future.

For instance, the EV and EVB opportunities are an interesting example of new product for this growth industry. To meet new product requirements, TR VIC has invested heavily in developing product forged in copper, which will be a real game changer. "Supporting customer requests, particularly in emerging technologies is key to our future," explains Andrew Nuttall, managing director for TR Europe and the UK. "Working together in these developments we can achieve our respective objectives and future proof our business."

¹ https://www.trfastenings.com/company/newsroom-and-media/ press-releases/the-right-to-repair

Why the association with the NEAA is important to TR Fastenings

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TR Fastenings, a Trifast Group Company, is once again exhibiting at the NEAA Expo held at the Beacon of Light in Sunderland.

We continue to enjoy and benefit from a longstanding relationship with the NEAA, which now spans 7 years. Their platforms have been instrumental in opening doors and introducing TR to key Tier 1's around the globe. Our membership has created valuable opportunities for us such as generating business in the North East and also via trade missions to Japan and Mexico.

TR's location in Newton Aycliffe, which has been established for over 27 years, is in a prime location to service this region. Initially TR was the supplier of choice for Black and Decker and Electrolux managing their high-volume production providing a DLF system with product lineside. Both companies however relocated to Eastern Europe and TR regrouped and focussed on the growing opportunities that Nissan created. The skills learned in high volume supply of quality product, coupled with a lean build approach to the supply chain ensured that TR met the criteria required by the Tier 1's supporting Nissan.

Designed in Fasteners

Fasteners may sometimes be seen as lower down the food chain, but the NEAA has recognised that TR can bring value to the Tier 1's not just on product supply but in providing technical and design support at a local level. Often fasteners have the highest numbers of parts on a customer's BOM, so the demand planning must be at the highest level. For example, if we failed to supply one part to a seat manufacturer then the impact on Nissan would be felt within two hours and would seriously disrupt their production line. Using the seat example there can be as many as 30 fastening components in a car seat. This ranges from safety critical parts called marriage bolts, to seat belt restraint fasteners and plastic cable management parts. Today, we are a key supplier globally to multiple sites of a number of Tier 1's including those based in the UK. Using a seat manufacturer again as an example we can be supplying the same components in Asia, Europe and N. America to more than 30 sites of the same company. Early design involvement is key to these relationships, and we operate at corporate level not just with their commercial teams but also with their design engineers.

Evolving EV and EVB market

As we embrace the pace of change in the EV sector our technical support is in more demand. This is especially true as new startup companies enter the marketplace particularly in EVB production. The requirements for different materials and electrostatic coatings are just one area where we have provided support. We have recently commenced trials on forging copper components in our Italian factory TR VIC to develop parts for one battery manufacturer. Our Italian teams have developed other new products, and these are showcased in this YouTube video. This includes footage of the £5 million pound investment in an extended manufacturing facility, a warehouse with 12,000 pallet storage and new multistage forging equipment. This investment was made to meet the growing demand for nearshoring and the introduction of CBAM which comes into effect in the next few years.

We have reflected the extensive products that TR are capable of manufacturing and supplying in the graphics on the walls of our exhibition stand at

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the NEAA Expo. We are on hand to have technical discussions on the day, and we are hoping to have a very interactive dialogue with the attendees and productive follow up meetings.

Chris Black, Director of Automotive New Business Development comments "Since joining the Alliance we have been actively involved in meetings and events and there has been real encouragement in having collaboration with other members."



TR Fastenings provides timecritical solution to The London EV Company

CASE STUDY



Continued

The world's most instantly recognisable vehicle, the trusted London black cab, has been on an exciting journey, transforming into a zero carbon mobility technology company. TR Fastenings is delighted to play its part in the story, helping this icon of London heritage evolve its production for a greener future.

The demand for electric vehicles has been rapidly growing across the world, putting pressures on the traditional automotive supply chain. This has driven providers to find new ways of working and be more committed than ever to the changing needs of their customers – a trend that was brought into sharp focus when TR was approached by the London EV Company (LEVC) with a time-critical problem.

The requirement

LEVC is part of the Geely Holding Group and is on a challenging but ambitious journey with its innovative and market-leading electric TX taxi. Working in a just-in-time environment, it needed a reliable automotive components provider that was able to supply a consistent and seamless service. When that was suddenly no longer possible, LEVC had to find a new provider that could step in and help keep production moving. The company needed to enhance and secure its supply chain, embrace operational changes and focus on technical and engineering support coupled with a robust logistics service.

During this intense transition period it gave TR and LEVC an opportunity to review each part in tandem. Rationalisation of the number of parts used, the types of fasteners and eliminating bespoke special parts where feasible. TR was selected as the supplier of choice as its years of experience of designing and manufacturing fasteners for automotive applications was a key deciding factor. Additionally, TR also supplies other companies within the Geely Holding Group, including Proton in Malaysia, Lotus cars in the UK and the major Tier1's supplying into Volvo.

The solution

As a global fastener specialist, TR's design and engineering teams were involved from the outset. An internal review was conducted to understand LEVC's exact needs and project teams from both TR and LEVC were immediately assigned to work together. It was critical that there was a constant on site presence at LEVC during this time working across the different disciplines. This was important in instilling confidence and working to a very tight timeline.

TR was quickly able to establish a stable fullservice provision for LEVC, especially important for a new product launch. TR now provides some 350 components used in the vehicles, and to the Tier 1's that supply the drive train, brakes, lighting clusters, car seats, IP console and battery pack.

Dan Pereira, Engineering Manager, UK & Ireland, TR Fastenings said: "This was a challenging project where time was a critical factor. We needed to act fast to understand the customer's exact needs and put in place a system that worked. Thankfully, we understand the pressures automotive manufacturers are under and this project was a great example of how TR Fastenings can step up to any situation, working with the client to be that safe pair of hands they need. It showcases our commitment to fulfilling the needs of our



TR Fastenings provides timecritical solution to The London EV Company

CASE STUDY



customers, no matter the size or complexity of operation."

Project challenges

LEVC needed support quickly to meet demand, and TR was able to step in, providing additional on-site customer support. It set about reviewing stock quantities to understand any gaps in the system, it established working relationships, collaborated with the engineers on the ground to understand their needs and ensure a seamless transition. TR as the supplier shared data sheets with engineers and purchasing, agreeing specifications and this sped up the process of producing product and gaining PPAP approvals. Additionally, TR was asked to manage other bespoke parts on LEVC's behalf and these too were added to the bill of materials.

Supply of critical stock resumed, and production suffered no disruption.

Project conclusion

TR's complete, full-service approach, prevented manufacturing disruption and enabled a lasting relationship with a new customer. This could not have been done without the close collaboration with LEVC and its key managed suppliers.

To celebrate a successful transition, TR was delighted to showcase the electric TX taxi on its stand at the recent Automechanika Show in Birmingham and there was great interest shown by many of the attendees over the three-day event.

Sven Brehler, Global Director of Engineering at TR Fastenings, said: "The TX was a great talking point which opened up conversations about our capabilities and vast product range. As the EV market continues to expand, TR is well placed to lead on fastening solutions for this sector."

TR is leading the way in design engineering and manufacturing with more than 55,000 products across its portfolio. It supplies components to more than 5,000 companies globally across a wide range of industries from its global facilities in 18 countries encompassing 7 manufacturing sites.



Charting the changing face of fastener logistics over 50 years



This year TR Fastenings celebrates 50 years within the fastener industry – having seen a dramatic change in the logistics and services required by customers over this period. Here Glenda Roberts, global projects and marketing director at TR Fastenings, charts the key moments in the company's history and how it met the challenges and opportunities that came its way. customers, no matter the size or complexity of operation.

TR Fastenings was founded by Mike Timms and Mike Roberts, whom the company is named after, in Uckfield, East Sussex – an area that was hardly the centre of the fastener world at that time, as the major UK fastener manufacturers and suppliers were in the Midlands and reigned supreme. Both Mikes came from a background in fasteners having worked for a large turned parts company. They had ambitions to start a different kind of distributor business in the south, as they realised there was a different way of servicing large manufacturers. Supply of critical stock resumed, and production suffered no disruption.

Typically, in that era the large fastener producers supplied against a purchase order based on manufacturing batch quantities. They made it in bulk and shipped in bulk. Most customers' manufacturing facilities had large warehouses to enable them to hold many months of inventory and they had little option but to take that batch quantity and the rule was it was plus or minus 10%. If it was 10% short of what was required, then they had to purchase a new batch quantity.

The Mikes convinced enough large companies in the south that they could deliver on a weekly or monthly basis their exact requirements, reducing stocks and cost, etc. This necessitated working with the manufacturers in the Midlands and they brokered agreements to have scheduled deliveries of fasteners held against a blanket order. This may not sound groundbreaking in today's world, but it was a revolution at that time. As their team expanded and the business grew, they added more product to the portfolio. Over time the phrase 'Just In Time' became common parley in our industry, but TR were one of the first companies to introduce this into supply chains. To this day, TR Fastenings still uses the number plate JIT TR on one of its vehicles. The 1980s saw manufacturing growth and TR expanded its locations including setting up screw manufacturing in Telford.

When I joined 34 years ago, we had five locations in the UK and Ireland and today we employ approximately 1,400 people and have locations in 18 countries, including seven manufacturing facilities, which underlines how far we have come.

Leaning the supply chain

In the 1990s change came in the form of the DTI, the Department of Trade and Industry, who asked us to participate in a 'Managing in the 90s' programme.

There was a wind of change happening where suddenly cheaper household products, such as small domestic appliances, were being imported from Asia. The DTI anticipated this escalating and started to look for partner companies such as TR to help manufacturing companies become lean. This was a new concept for many and Malcolm Diamond, our UK MD at the time, and I hosted visits to our HQ or visited companies, with the DTI, where other speakers talked about how we could all assist in leaning their supply chain.



Charting the changing face of fastener logistics over 50 years



Continued

We further developed our logistic systems including feeding straight to the production line – eliminating waste, time and improving overall efficiencies. At that time, it took some selling to convince people this was the way to progress, as naturally everyone was sceptical that we would deliver one less washer in the bag to the bin. One customer commented at the time 'People have had their eyes opened, and TR can help us to initiate change. The fact that they are managing our fasteners is almost secondary to some of the other initiatives that have taken place because of it'.

Today, many global companies building a new facility often do not include a warehouse as they expect the product to arrive 'On Time In Full' (OTIF) with order fulfilment and demand planning via EDI.

Working with Asia

We imported our first fastener parts from Taiwan 35 years ago and this was a huge learning curve – having never had to manage freight and customs before. Without the internet and mobile phones, etc, there was a reliance on telex and fax machines and personal visits. I sometimes wonder how we ever did business then, as today everything is so immediate and information is at our fingertips. Many of our early relationships forged in those days are still in place today.

Our supply chain expanded in Asia as suddenly manufacturers were driving us towards 'low cost countries' as they strained to get their costs down. We opened our manufacturing locations initially in Singapore and Taiwan and grew our suppliers - adding increased product ranges. Suddenly we were shipping containers of products and managing our logistic operations became a key focus, as it was such an important step in our development.

Managing production lines based on longer lead times from Asia was a logistics challenge and our IT team developed systems to give us greater visibility. Today, our freight forwarders provide us portal access to enable us to see end-to-end where goods are in transit. Additional critical data on carbon emissions is provided, and the allimportant customs support and advice.

Meeting challenges

In 1999 we, like many companies, prepared for the 'Millennium Bug' and concerns about what this could do to interrupt supply chains. Contingency plans were put in place to ensure that we had enough stock in the right place, so we were not the ones that stopped a production line. Manual backups in case our computer systems would switch off at midnight were put in place, and of course this never happened. However, at the time it could have been disastrous on many fronts.

We continued to develop Direct Line Feed systems globally, mainly working with UK and European companies who had transitioned to lower cost countries such as China, India and laterally Mexico - who knew the service we could provide. Coaching personnel in TR sites to manage DLF systems was key and on a number of occasions we also helped these companies teach other component suppliers how to provide lean logistics. One such event sticks in my mind when I was asked to speak at NCR's (an ATM manufacturer that we supply globally) conference in India - to talk to their suppliers about lean build and the benefits as we had previously done in China. I had



Charting the changing face of fastener logistics over 50 years



Continued

not realised that there were over 300 suppliers attending and from that event we generated business with some of these companies.

On 11th September 2001 we all saw the horror that was 9/11. As we mourned that disaster and in a state of shock, we had to turn our attention to the fact that all flights had been cancelled to and from North America. Weekly we received two air freight containers from North America to support several computer manufacturers in Scotland during the Scottish Silicon Glen boom period. Fortunately, everyone in their supply base pulled together to maintain supply until flights resumed.

Preparing for BREXIT consumed our time for several years - assessing risks and trying to plan for every eventuality. The logistical challenges, customs documentation and transport issues the vote to leave the European Union caused were immeasurable. From the UK we supplied 33 Master Distributors across Europe - who market our proprietary ranges, such as self-clinch products and fasteners for plastic. We took the decision after some months of logistical challenges to move the stock and the management of these important customers to our company TR Kuhlmann in Verl, Germany. An extension to its building was needed to house a further 500 pallets. Its business has continued to grow organically and this has necessitated the building of a new warehouse alongside our existing site to manage the future growth (pictured above). This is close to completion and will house an additional 1,200 pallets.

TR Hungary also moved to a new purpose built site to manage its growth and supply to customers in the seven countries on its border. It continues to develop its DLF logistics to customers in that

region[1].

Planning for the future

This year in the UK the decision was taken to change our business model and create a modern warehouse, an engineering centre and centralising other key functions. This is designed to improve our customer service and create a more efficient and cost-effective National Distribution Centre. NDC in the West Midlands. This is a significant investment in a 75,000 square foot purpose built warehouse positioned off junction 10 on the M6. This gives better access to motorway routes and our other locations remain as customer service centres. It is no longer economic to house stock in multiple locations and although this is a challenging task, we know that this will future proof our business for years to come. There are always new challenges, and we are in the midst of managing the Russian Sanctions Directive, which is time-consuming, and we have the delights of CBAM to think about next, but at TR Fastenings we always look to meet global challenges head on and see how we can turn them into opportunities for us as business.

[1] <u>https://www.trfastenings.com/company/</u> <u>newsroom-and-media/ press-releases/new-facility-</u> <u>in-hungary</u>



TR introduces range of TENTE Castors



Smart mobility solutions for a range of sectors. TR Fastenings and TENTE Castors, a leading international castor and wheel manufacturer, are working together to enhance TR's already extensive sheet metal range.

The existing product range included on the TR website, has been enhanced with more than 150 new products. TR is now able to provide mobility solutions to a wide range of customers and applications from domestic furniture and laundry carts to hospital equipment and heavy duty industrial.

New products will include Swivel Braked Castors, Swivel Castors and Fixed Castors with accessories such as Circlip Stems, Stem Plates and Threaded Stems. Wheel diameters are available from 14mm to 200mm, serving a wide range of applications.

TENTE were attracted to working with TR to access and supply to their wide customer base in sectors such as health and home, energy, tech & infrastructure and general industrial.

Produced in high-quality materials, including solid rubber or synthetic compounds, this range of Castors is not only designed to be aesthetically pleasing but have longevity and increasing wholelife efficiencies.

Further product features include load capacities ranging from 25kg up to 1,200kg and a wide variety of wheel tread options to suit different situations including: Polyurethane, Polypropylene, Polyamide, Thermoplastic Rubber, Solid Rubber and Elastic Rubber Tread.

Sean Cushen, Commodity Manager, TR Fastenings, said: *"Following on from the successful launch*

of our Enclosure Hardware products, this was a natural progression to add the TENTE range. Having spent time with the TENTE technical and manufacturing teams on site, we have got to know the brand and we are confident that we can work very closely together."

Carl Garner, Managing Director, TENTE Castors Ltd, said: *"TR Fastenings is a global company* with a respected reputation in servicing and supplying a wide range of products in many fields of applications and TENTE is a global manufacturer with a wide range of castors and wheels to suit all industries needing the right mobility solution for all their customers.

"It was clear from an early stage, when I spoke with Glenda Roberts, TR Global Projects and Marketing Director at an exhibition and Sean Cushen at a networking event, that our two companies share many values and are passionate about exceeding customer expectations. We are now at the stage where both our companies can grow together through our teams and our brand."

TR launches new products to its Plastics & Rubber Hardware range



TR Fastenings, part of the Trifast group of companies, is expanding its product portfolio with the addition of 1500 new part numbers being added to the existing Plastic & Rubber Hardware range. This is in response to product requests across all sectors including automotive, health and home and energy, tech, and infrastructure.

With this rising market demand combined with technical support on new innovative plastic materials, TR has embraced the opportunity to work with design teams across different industries with varying application requirements. TR's strength is in the fast turnaround of prototypes and short lead time support on tooling, giving TR engineers a leading edge when involved in early engagement design projects.

The automotive industry in particular has experienced the biggest surge in growth with the use of plastic components over machined metal parts, mainly driven by the continued global momentum of electric vehicle production. Automotive manufacturers are looking at using plastics as base materials to build automotive parts due to their lightweight properties which can be 30% to 50% less compared to metal.

TR's top new product ranges and their application uses include:

 Screw Rivets provide a fastening that is simple to use and is removable, making them ideal for applications where maintenance or servicing via a removable panel is required. For automotive applications they are used in splash guards around wheel arches, internal upholstery, and bumper assemblies. Screw Rivets also find applications in domestic appliances, marine, audio equipment and furniture fittings.

- Barbed Push-in Rivets, also known as Fir Tree/ Pin Tree Clips are designed to secure two panels together. They are easy to install with a simple push-fit action. In automotive the are used in wheel arch bumpers, splash shields, bumper assemblies, internal upholstery, and trim. Other applications include domestic appliances, furniture and electrical/electronic equipment.
- Kwik Nuts are designed to push fit onto a threaded stud then turned through 180° to secure in place, allowing a tool free rapid installation. Automotive applications include vehicle acoustic engine liners and interior assemblies. Other applications include air conditioning and ventilation equipment.
- Push Screws are a new product which combines the rapid installation of a Fir Tree Clip with the versatility of a conventional threaded screw. The part is designed to push fit and retain in a female thread, then be removed with a standard screwdriver. The part enables rapid tool free installation with pull out forces ranging from 50N (M3) to 210N (M8) making them ideal for decorative trims, seat trim panels and mounting brackets.
- Shockproof Snap Rivets is a new development and an improvement on the standard design of a Snap Rivet. The design incorporates a locking mechanism under the head which resists pin movement when subject to mechanical shock or vibration, making them ideal for automotive interior applications, industrial lighting, pumps, heating, and ventilation. Heat resistant options are also



TR launches new products to its Plastics & Rubber Hardware range



Continued

available for applications where operating temperatures of up to 190°C are required.

Andrew Fletcher, Director of Plastics and Rubber (Commercial and Technical) at TR commented; "We remain fully committed to offering our customers the very best in plastic components with our continuous product developments. It's more than just delivering a product, it's about design, development and collaboration; we're here to provide solutions and we're perfectly placed to react quickly to the changing marketplace."





TR PSEP Malaysia receives prestigious Award from Boon Siew Honda



The TR PSEP Management Team were delighted to be given this award, presented by Boon Siew Honda when they visited its manufacturing facility in late November 2022. Mr Tong Ping Siong and Mr Philips George received the award on behalf of their Team.

This was of special significance to the TR Team as the pandemic and manufacturing restrictions imposed by the Government to control Covid meant that they had to work very diligently to ensure that no customers were impacted. The award was given based on service and quality as the best Chutanki - Cold Forging Manufacturer in their supply chain managing over 130 parts.

Boon Siew Honda is a joint venture company formed in 2008 between Honda Motor Company and Oriental Holdings Bhd. TR PSEP has many years of experience in supplying Japanese OEM's and has been a vendor to Honda since 2001. The companies experience of Japanese materials, methodology and expectations has been their strength. This has ensured growth within the Malaysian automotive sector, both with the two major Malaysian brands and the Tier 1's who require the level of quality and service that TR PSEP can provide.

TR PSEP, established in 1972, is accredited to IATF 16949 and was acquired by Trifast plc in 2011. The company manufactures multi-stage and safety critical cold forged products at both of its facilities in Shah Alam. Their capability and knowledge in supplying the Automotive industry strengthened TR's manufacturing and product offering in this sector. conditions due to the pandemic, receiving this award has really lifted everyone's spirits. We look forward to working even more closely with Boon Siew Honda. We are very grateful for this recognition."

TR PSEP has continued to invest in its facilities, completing the installation of solar panels on the roof of the buildings which provide not only the locations energy needs but enables the company to sell the overcapacity back to the national grid. Sustainability is a key pillar in the Trifast Group's strategy.

Awards

\$ \} Mr Tong said "Following some difficult trading

TR Fastenings at Fastener Fair Global 2023



TR Fastenings, part of the Trifast plc Group, is delighted to again be exhibiting at this year's Fastener Fair Global, an exciting year for TR as we celebrate our 50th anniversary.

TR supplies components to more than 5,000 companies globally across a wide range of industries, including <u>light</u> & <u>heavy vehicle</u>, <u>health</u> & home, energy, tech and infrastructure and general industrial. Our key focus at Fastener Fair Global is to reengage with our Master Distributors in Europe, and to seek out new <u>Distributors</u> in geography where we currently don't have coverage.

This creates a great opportunity to network and showcase our proprietary products and enhanced range. This includes our core product <u>Self Clinch</u> and the increased range of <u>Fasteners for Sheet</u> <u>Metal, Enclosure Hardware, Screws and Inserts</u> for Plastic, <u>Cable Glands</u>, <u>Security Fasteners</u> and <u>Plastic and Rubber Hardware</u>.

Manning the stand will be key members of our Distributor Team, commodity specialists and technical engineering team. We are particularly keen to have meetings on the stand to discuss how we can further increase our support and assisting in distributing more of our product.

In 2022 TR invested heavily in Europe including creating a German logistics hub to ensure that we have near shored stock to support our Master Distributors, eliminating Brexit issues and smoothing out our supply chain. A by product of this is that this also reduces our carbon footprint assisting with our Sustainability goals. Additionally, we have invested heavily in another two of our European sites through creating a new facility in Hungary and a €5m extension to the TR VIC manufacturing location in Italy. The TR Team is looking forward to meeting with our European distributors, and end users who attend the event. Visit us in Hall 1 stand 612.

21st - 23rd March 2023, Messe Stuttgart, Germany, Stand 612



TR Fastenings to exhibit at the Advanced Engineering Show in Sweden





19 & 20 April 2023 Prioritet Serneke Arena, Gothenburg Stand K10



This year the show is being held in Gothenburg, following the Advanced Engineering show in the UK in November 2022 which was a success. Advanced Engineering Sweden represents a unique opportunity for TR to meet representatives from across the industry spectrum.

The venue is the impressive Prioritet Serneke Arena, a multi-use complex in the city's Kviberg district. This is a two day event (April 19th & 20th), with manufacturers, designers and specifiers attending. The TR Fastenings team will be looking forward to existing customers visiting the stand and establishing networks with new ones. Much of the focus here will be on the environmental benefits and development of products, allied to the design and supply of specific materials and components.

TR's Technical and Innovation Centre is based in the Lindholmen Science Park in Gothenburg, which is home to representatives of major industries, including automotive and communications. TR's presence in the area enables collaboration with key customers and to have an involvement in development projects.

Niklas Andersson, Operations Manager for TR Sweden, says;

"We work closely with Tier 1 suppliers and using our expertise we assist with OEM requirements, advising on the right fastener technology for their needs. Our Gothenburg operation opens doors for us, and this show will help with those early conversations with customers where we can discuss their requirements in person this year."

TR has established three global Technical and Innovation Centres; Birmingham in the UK, Gothenburg in Sweden and South Carolina in the USA.

- Visit stand K:10 and meet the TR team:
- Manoj Parmar Business Development Manager
- Nirari Yousif Strategic Account Manager
- Eugen Kuhnl Engineering Manager
- Patrik Ringdahl Technical Manager

19th & 20th April 2023, Prioritet Serneke Arena, Gothenburg, Stand K:10



TR Fastenings to exhibit at UK's largest Battery Tech Expo

Battery Tech Expo

04
APRIL 2023

Image: Transformed provide the standard provide the

TR Fastenings Ltd (TR), part of the Trifast plc group of companies, will once again be exhibiting at the annual Battery Tech Expothe largest UK event for the battery sector. This year's event, the sixth of its kind, will be held at the world-famous Grand Prix venue, Silverstone on 20th April and promises to be as busy as ever with the largest audience of battery industry buyers, specialists and suppliers under one roof.

With hundreds of visitors and exhibitors, and 40 industry speakers all in one place, on one day, Battery Tech Expo 2023 will provide TR with a not to be missed opportunity to showcase its products and expertise to increase its influence within this hugely buoyant industry.

As EV sector growth continues apace with global record sales, this Expo is the perfect platform for TR to demonstrate the significance of fasteners and engineered components for the fast-moving EV and EVCU market. TR's product range includes battery retention bolts, cable management hardware, compression limiters and designed in special components.

Sven Brehler, Director of Engineering at TR who will be at the show, says:

"We are experiencing increased worldwide demand from car and battery manufacturers and so we are continuing to develop our product range to meet this opportunity. We have been exhibiting at this Expo for many years and as it attracts professionals from all segments of the battery industry, we look forward to increasing our network. "The high-tech engineering sector is booming in the UK and this is the ideal event for key decision makers and influencers from across the power industry to share insights, best practice and latest innovations. It's a fantastic platform for TR to share expertise and to support this sector."

Joining Sven at the event will be Dan Pereira, UK and Ireland Engineering Manager and John Pountney, UK Automotive Sales Manager.

20th April 2023, The Wing, Silverstone, UK, Stands 27 & 28



TR celebrates 50 years of trading at this year's Fastener Fair Global



The TR Fastenings team was delighted to be back exhibiting at Fastener Fair Global, after four years since the previous event. This is a special year for TR, a Trifast plc Group Company, as it is its 50th Anniversary and the whole team was pleased to be able to celebrate this at the exhibition.

Its stand carried a 50th golden theme to acknowledge this major milestone and the design and layout received compliments from all the visitors. TR paid extra focus on comfort and it was designed to have comfortable seating areas which facilitated more in-depth discussions face to face with customers in comfort, and on numerous occasions we were so busy that every seat was filled. The two large TV screens showcased how fasteners are made from wire through to completed product explaining the different processes, including heat treatment and finishings. These videos have been produced in house for training purposes for both staff and customers and include animations illustrating where TR products are used. These created a lot of interest and are available in the media library on the TR website.

This show was very important to the whole TR team, who were keen to meet up with its 35 Master Distributors located throughout mainland Europe and thank them for their support in distributing its proprietary products including Self-Clinch parts, Plastic and Rubber commodities and Fasteners for Plastic. There was interest shown too in TR's recently expanded manufacturing site TR VIC in Italy.

Managing Brexit to ensure that there were no supply issues, necessitated opening a central warehouse hub in Verl, Germany. This is close to the TR Kuhlmann site, and TR Kuhlmann Managing Director, Peter Henning oversaw this successful project. He enhanced his Sales Team to manage the increased business and they continue to work with TR's distributor team in the UK who have long term relationships with many of these Master Distributors.

To thank them for their support, and the growth that TR is seeing, it hosted a 50th dinner celebration for 50 people during one of the evenings. TR Board members attended and Adam John, European Distribution Sales Manager hosted the event.

"It was amazing to be able to meet so many of our Distributors in one place and to thank them personally. Some of the conversations over dinner really cemented future opportunities." Adam John - European Distribution Sales Manager

Traditionally, this exhibition has been a distributor show and the team was very pleased to see high profile OEM's attending, in particular from the automotive sector. TR had been extensively advertising the fact that it was attending and that certainly boosted the visits to the stand. It scanned more than 350 visitors who spent time with our teams, and it has already secured sizeable new business wins and forged new relationships.

Scott Mac Meekin, Interim CEO of Trifast and Dan Jack, Chief Operating Officer supported the team on the stand, and they had a number of high-profile meetings during the days with both vendors and customers. It proved to be an exceptionally great place to network which has not been possible during the last few years.

John Dick, Group Supply Chain Director, and his team had booked a conference room on the mezzanine, where they held 24 supplier meetings



TR celebrates 50 years of trading at this year's Fastener Fair Global



Continued

during the show proving to be a very productive and effective use of their time.

"This venue enabled us to have personal meetings with key vendors which proved to be very beneficial. This cut down what would have been many weeks of travel and cost to meet so many people. We will certainly be utilising this facility again. As ever the exhibition was very well organised, and we are booking space for 2025. The exhibition staff were very supportive and visited us several times a day to ensure that we had everything that we needed. Glenda Roberts, Trifast Global Projects and Marketing Director; said "We had a very productive exhibition, and we were delighted with the quality of the footfall. It was good to be back and well worth the investment in time and money!" John Dick, Group Supply Chain Director



TR Fastenings to exhibit at the Automechanika Show



6-8 June 2023, NEC Birmingham on Stand D20

The highly anticipated automotive trade show Automechanika Birmingham returns to the NEC for the first time since 2019 and TR Fastenings (TR), part of the Trifast plc group of companies is delighted to be participating again.

In the last 4 years the pace of change to electrification in vehicles has accelerated dramatically. As a Full Service Provider (FSP) to The London Electric Vehicle Company (LEVC), we are very pleased to be able to showcase its innovative electric TX taxi on our stand. Our teams work very closely with LEVC in the UK providing technical and logistics support.

LEVC is part of the Geely Group of companies, and we are a key supplier to other parts of the group including Lotus, Perodua and numerous Volvo Tier 1's. We are proud of our association with this global brand.

Having enjoyed successes at previous events, this three-day show has proven to be the place to be seen, not only for TR but for companies working within the automotive supply chain. With TR's key focus on components for EV charging units and EV batteries, this event will enable TR to discuss its Full Service Provision for Tier 1 and Tier 2 businesses supporting global OEMs.

Around 12,000 visitors are expected from across the UK and Ireland making this an event not to be missed. The event will offer visitors 12 interactive feature areas, 4 workshop training hubs providing 192 hours of skills training and a 3-day keynote conference. TR's technical and commercial Teams will be available throughout the 3 days at stand D20. We look forward to having productive technical and commercial discussions, and to be able to demonstrate our supply capability more fully.



TR Fastenings exhibits at the Advanced Engineering Show in Sweden



19th & 20th April 2023, Prioritet Serneke Arena, Gothenburg, Stand K:10

The internationally regarded Advanced Engineering show returned to Sweden in April, and TR Fastenings Ltd (TR), part of the Trifast plc group of companies, was delighted to be making a return visit. This year the show was held in Gothenburg where TR engineers are based. The Advanced Engineering Show represented a unique opportunity for TR to meet representatives from across the industry spectrum, and over those two days it proved to be very worthwhile.

TR's Technical and Innovation Centre is based in the Lindholmen Science Park in Gothenburg, which is home to representatives of major industries, including automotive and communications. TR's presence in the area enables collaboration with key customers and to have an involvement in development projects.

The venue was in the impressive Prioritet Serneke Arena, a multi-use complex in the city's Kviberg district. The TR Fastenings team was joined by the KTH Formula Student Team who showcased their concept car alongside their creative students. The car created a great deal of interest and enabled our engineers to have some interesting technical discussions. It was good to re-establish face to face contact with existing customers and to also meet some interesting new potential customers looking for technical and innovative support. There was a key focus on the environmental benefits and development of products, allied to the design and supply of specific materials and components especially for the EV sector.

Niklas Andersson, Operations Manager for TR Sweden, says; *"We were delighted to attend the show again, and very pleased with the quantity and* quality of the visitors that took time to visit our stand. We are already seeing the benefits of these discussions, as visitors got a better perspective on our supply capability and willingness to assist in new and challenging developments in EV."

TR has established three global Technical and Innovation Centres; Birmingham in the UK, Gothenburg in Sweden and South Carolina in the USA.



TR Fastenings supports the NEAA Expo 2023



Visit us on stand A5

28th September 2023

Beacon of Light, Sunderland, UK

TR Fastenings, part of the Trifast group of companies is delighted to be involved at the prestigious NEAA Expo 2023 for the seventh time.

Held at the famous Beacon of Light in Sunderland, this is the flagship event for the North East Automotive Alliance, attracting hundreds of industry attendees from far and wide. In 2022, the Expo featured more than 100 exhibitors, enabling visitors and delegates a vital opportunity to facilitate business connections with ease. This year is likely to be just as busy and just as popular.

TR will be on stand A5, close to both the main entrance and the Technology Zone. The event takes place on Thursday 28th September, which is also, significantly, National Manufacturing Day. There is a strong emphasis here on skills, innovation and technology, and with headline speakers and panel discussions taking place throughout the day it promises to be an interesting and rewarding occasion for all.

The NEAA Expo, now in its eighth year, offers all delegates and visitors an opportunity to network with manufacturers, designers, engineers, supply chain professionals and many others, and as such it enables TR Fastenings to showcase a huge range of products, including fastenings, connectors and more for all types of vehicles.

As a partner sponsor for the show, TR is looking forward to playing an important role in the overall success of the event. Attending from TR will be Chris Black, Global Director of Automotive Business Development, Malcolm Hildyard, Automotive Sales Manager and Dan Pereira, UK and Ireland Engineering Manager. TR's attendance further underlines the company's determination to embrace the opportunities afforded by influential trade shows.



TR Fastenings to exhibit at Advanced Engineering Show 2023



ADVANCED ENGINEERING 1& 2 November 2023 | NEC Birmingham

Meet the Team on stand K140 NEC Arena in Birmingham.

TR Fastenings are celebrating their 50th year in fasteners. TR has experienced the changing world of fasteners over that period with the advancements in plastics, composites and the use of more exotic materials. These changes have required fastenings to evolve particularly in areas such as plastic mouldings where thread forms have been designed and developed to perform in new materials. The changing fastener requirements continues within the EV space as electric vehicles and battery housings require differing and often exotic materials and electrostatic finishes.

They will be showcasing application case studies across a broad spectrum of industries to illustrate their range and capability and ability to solve fastener application issues through suggesting alternatives. The two TVs within their new purpose-built stand will focus on the fastener product animations and videos that TR are known for. These are great training tools to lift the lid on what products are used in assemblies.

Increasingly TR are being seen as not just a fastener supplier as they have capabilities in sourcing and manufacturing product assemblies incorporating spring parts and other components.

The TR Team members on the stand during the two days will be:

- Sven Brehler, Director of Engineering
- Dan Pereira, Engineering Manager
- Andrew Fletcher, Director of Plastics & Rubber
- Andrew Nuttall, European Managing Director

- Don Lamb, Strategic Account Manager
- Kevin de Stadler, Sales Director
- Glenda Roberts Global Projects and Marketing Director

To set up media interviews in advance, please contact Aneela Rose, Rose Media Group, on 01444 241341 or email <u>aneela@rosemediagroup.</u> <u>co.uk</u>



TR Fastenings proud to support a vital kidney research charity

Kidney Research UK

At the recent Automechanika trade show, TR Fastenings had the pleasure of meeting the inspirational Andrew Freeman, an ambassador for Kidney Research UK, the leading kidney research charity in the country.

Having personally undergone a twin kidney and pancreas transplant after rapid complete kidney failure due to diabetes, Andrew's story is close to the hearts of everyone at TR as last year, a dear friend and TR colleague was taken after a lengthy battle with kidney cancer. As a result, TR was keen to do something positive for the charity.

TR has donated an Amazon Echo Show to be auctioned later this year at the Silverstone Festival. This high-profile family event offers a weekend of music, food and of course historic motorsport, and the auction will be raising money for research aimed at transforming treatments for kidney patients.

If things don't change, kidney disease will be the fifth highest cause of life years lost by 2040, but with heightened awareness, effective research and, crucially, greater availability of transplant surgeries, things can and will change.

There are over three million people living with the most severe stages of chronic kidney disease, with millions of others having to cope with the early stages of the condition. TR is proud to be involved in the fight to make things better.



TR's Karen Holden is pounding the pavements for the Alzheimer's Society

United Against Dementia

We're delighted to report that TR's UK Operations Manager Karen Holden will be running in the Darlington 10k event in August, and will be helping to raise money and awareness for an extremely worthy cause at the same time.

Karen only started running in 2022, but as she says herself, she was soon 'bitten by the running bug'. Her efforts will be helping to bring much-needed funding for the Alzheimer's Society.

One of the UK's most important charities, the Alzheimer's Society has been working ever harder to fund ground-breaking research into the causes and effects of dementia. This debilitating disease has touched the lives of millions, and it continues to cause great upset to both sufferers and their loved ones all over the world. Karen's family has also been affected by the condition, so it's a cause that's particularly close to her heart.

For anyone who'd like to make a donation, and to thereby give her efforts even more of a boost, please visit this page: <u>https://www.justgiving.com/</u> <u>page/karens-10k</u>



TR Fastenings in Houston has had an impactful and communityfocused year



It's been an exciting year for TR Fastenings Houston, here they share their involvement in various community sponsorships.

The team participated in Marine Toys for Tots, a wonderful way to spread joy and make the holiday season brighter for those in need. Through the gift of a new toy or book, Marine Toys for Tots programs bring the joy of Christmas and sends messages of hope to America's disadvantaged children.

Their donation to the UT Racing Team as a bronze sponsor, along with providing hardware support, demonstrates a commitment to nurturing talent and education. Longhorn Racing is a student chapter of Formula Society of Automotive Engineers and the American Solar Challenge located at the University of Texas. A nephew of one of one of the Business Development Managers, is working with the electrical vehicle team and is partnering with the student chapter to get a list of the hardware needed.

Also sponsoring the Memorial Elementary giving campaign that raises funds to enhance the educational experience for students and teachers. The fund support's various enrichment activities for all students, classroom materials support, updated playground equipment and campus maintenance and beautification.

Great work from all of the TR team in Houston!