





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 Fastenings takes its electric vehicle fasteners to Battery Tech Expo



February 2020

Stands 30 and 31, The Wing, Silverstone NN12 8TN, 26th March 2020, 09:00 - 16:30

TR Fastenings Ltd (TR), a global specialist in the design, engineering, manufacture and distribution of high quality industrial fastenings, is exhibiting at Battery Tech Expo at Silverstone on 26th March.

The annual event will explore the future of battery technology including battery storage, battery systems and electric vehicle (EV) batteries.

TR delivers its extensive product range and in-depth industry knowledge to start-ups, OEMs and Tier 1 suppliers developing transformative technology such as longer lasting batteries, lightweight solutions and connected devices.

The role of fasteners in EV is significant: not only are they needed for the vehicles themselves, but charging units, EV battery (EVB) casings and general infrastructure equipment all require high quality fastenings to provide robust and secure settings for this valuable technology.

lan Carvell, Engineering Manager says: "The growing consumer demand for EVs, coupled with the rapid development of EV and EVB technology has enabled TR Fastenings to combine our extensive fastener product range and industry expertise into the ideal package to support and contribute to these progressive sectors.

"The EV and EVB markets are exciting and fast-moving and the resulting impact on global supply chains in the automotive and electronic industries has been huge in terms of demand and opportunity.

"We're looking forward to meeting professionals from across the advanced battery technology industry to share our knowledge and showcase our product range."

TR will be displaying the following products, which are particularly relevant for EVB assembly, at Battery Tech Expo:

- Fasteners with electrically isolating coatings
- Lightweight non-magnetic fasteners
- Battery retention bolts
- Cable management hardware
- Compression limiters

Staff from TR's skilled engineering and sales teams will be on hand at the Expo to discuss its Design for Manufacture services and EV products, and to exchange ideas with professionals involved in new battery technologies.

TR is a full service provider to the automotive industry, supplying and distributing fastener products to the Tier 1 market. TR's global reach now extends to 32 locations including eight manufacturing sites worldwide.

Update - May 2020

Battery Tech Expo, which was due to take place on 26th March in Silverstone, has been rescheduled until 22nd April 2021. Whilst the postponement is unfortunate, we are in full support of the organiser's decision on this matter.

Driving product development at Sweden's premier automotive engineering event



February 2020

Stand E:17, Automotive Engineering Hall, Advanced Engineering, Gothenburg, Sweden, 25th-26th March 2020

TR Fastenings Ltd (TR), the international specialist in the design, engineering, manufacture and distribution of industrial and Cat C fastenings to the global automotive assembly industry, is exhibiting in the 'Automotive Engineering' hall at Advanced Engineering Sweden 2020.

Located within the dedicated 'Vehicle' area of the exhibition, TR's stand is located in front of the Development Stage, which is the focal point for the show's expert speaker line-up. Discussions on the stage will address trends and technical opportunities in the engineering industry and provide insights on, amongst other things, 5G, challenges in mobility, and AI.

Representatives from TR's European engineering team will be at the show, which is billed as the meeting point in the Nordic region dedicated specifically to those who want to develop a new or existing product within automotive applications, electronics and other mechanical manufacturing.

TR has its own Technical and Innovation Centre in Lindholmen Science Park, in Gothenburg, an area which is dedicated to research and development in mobile communication, intelligent vehicles and transports systems, and modern media. The science park is also home to many Tier 1 and Tier 2 automotive OEMs, including where the new Volvo SPA2 platform is being developed - the next generation of Volvo Cars' award-winning SPA modular vehicle architecture.

Eugen Kuhnl, Engineering Manager at TR Sweden, says:

"Advanced Engineering puts product development decision-makers in the same room as technically knowledgeable suppliers, providing an opportunity for visitors – and exhibitors - to keep updated on the latest products and services and to discuss solutions to the engineering challenges they are trying to meet.

This year, our product focus at the show will be on fasteners for electric vehicles (EV), and EV battery chargers. Our representatives will be able to advise designers, production and purchasing personnel on our fastener technology, including our new patented fastening solution, the EPW thread-forming screw for thin sheet metal.

Our expert engineers will be joined on the stand by a team of mechanical design and engineering students from Stockholm's respected KTH Royal Institute of Technology (KTH), and the electric car they have designed and built to compete in Formula Student, Europe's most established educational motorsport contest. TR Sweden has supplied KTH students with a free supply of components and technical consultancy for the past three years, demonstrating our ongoing commitment to supporting new engineering talent."

Update - June 2020

The Advanced Engineering Sweden event, which was due to take place on 25-26 March in Mölndal, has now been rescheduled for 24-25 March 2021. Whilst the postponement is unfortunate, we are in full support of the organiser's decision on this matter.

TR's Chris Black to speak at NEAA's first Automotive Export Week



August 2020

Chris Black of TR Fastenings is to demonstrate how a UK company with global presence can generate growth around the world at the first North East Automotive Alliance (NEAA) Automotive Export Week 14th to 18th September 2020.

The NEAA is working with Supply Chain North East and the Department for International Trade (DIT) to ensure the virtual event invites businesses at every stage of the process to explore key automotive markets, learn about all aspects of export, seek support from market specialists and trade champions, build contacts and meet potential customers.



Chris, the Global Sales Director for Automotive Business Development at TR, is the industrial lead for the NEAA's trade working group, which was launched as a key part of the NEAA's 5-year strategy to better understand and support the trade activity of its members.

He will explain to NEAA members how TR has developed its automotive customer base in many countries on three continents around the world and how it is continuing to invest and expand in North America, Europe and Asia.

Chris, who has more than 30 years' experience in the fastener industry, said: "As a full service provider to the automotive industry, TR is adept at reducing

the cost of engineering projects through our teams working hand in hand with our customers to develop the right solution for them, from design through to production.

"We're continuing to invest in our manufacturing sites and innovation centres to support our automotive customers' needs, in particular to partner with the growing number of niche and start-up electric vehicle manufacturers.

"Our experience of developing first class supply chains and providing cost benefits to customers can act as an example to other businesses and help them tackle the challenge of growing overseas."

Automotive Export Week will feature more than 40 events including country briefings, interactive panel discussions and workshops. In addition, the week will provide a platform for delegates to market their products and services to enable business matchmaking, collaboration and one-to-one networking.

Over the past 30 years the North East has established itself as a centre of excellence for automotive manufacturing. It is the second largest automotive region in the UK and accounts for 30% of UK passenger vehicles, 20% of Europe's electric passenger vehicles, 10% of all UK non-highway vehicles and produces 350,000 engines per year. More recently, it has established itself as a leading location for electrification with strengths in battery manufacturing, power electronics, motors and drives.

Paul Butler, CEO, North East Automotive Alliance, said: "Automotive Export Week creates the ideal opportunity for businesses to expand their sector knowledge and raise their company profile with a view to boosting sales overseas and speaking directly to specialist trade advisors."

Lawrence Davies MBE, automotive sector team, DIT, said: "This event will bring together automotive country specialists from within the Department for International Trade and other supporting organisations and companies from across the North East and the UK. Companies at all stages of export will benefit from this amazing opportunity."

TR Fastenings Sven Brehler is to speak at Battery Tech Expo's Virtual Event



October 2020

On 8th October 2020, Sven Brehler, Group Engineering Project Manager at TR Fastenings will be presenting at the first <u>Battery Tech Expo virtual event</u>. Focusing on 'Design for Manufacture — optimising fastener function and assembly', Sven will share insight into the benefits of early design involvement and consideration of fasteners used within Electric Vehicle Battery (EVB) assembly.



This annual event usually held at world famous Silverstone will explore the future developments of electric battery technology. This year has an impressive line-up of guest speakers who will be discussing the latest breakthroughs.

This event is an opportunity to meet, connect and network in a safe, online environment with hundreds of industry professionals. The presentations will run from 10.10 to 14:20 with Sven scheduled to speak at 11:25 with supporting slides and a Q&A session to follow. You can register to attend the virtual event here or download the Battery Tech Expo app by going to your mobile app store. For Apple users click here and Android users click here.

Sven is a Chartered Engineer with more than 20 years' experience in mechanical engineering. He has gained a working knowledge over recent years through working with major Tier 1's in the automotive industry. Based in the

UK and with experience of working in China, the USA and South Korea, his skill is in identifying products and materials early on in the design process, which have helped him support start-ups and OEMs.



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