

# SHD Composite Materials exhibit at JEC with Sustainability Showcase Car

Press release

6<sup>th</sup> February 2025

# SHD Composite Materials (SHD) is exhibiting at JEC World, Paris, in March to showcase the companies increasing global scale and enhanced portfolio of lower impact prepreg solutions.

On display on SHD's stand will be the collaborative 'Sustainability Showcase Car', developed and manufactured together with KS Composites (KS). The car highlights ten individual advanced material solutions to demonstrate how prepregs can be tailored to deliver high performance materials with reduced environmental impact. The car, simulating a Formula 1<sup>®</sup> car, has been built collaboratively between the two companies, highlighting both SHD's innovation in future materials and KS's expert manufacturing capabilities.

# In pole position for the race to Net Zero

Sustainability is at the heart of both companies strategies. SHD's commitment is to ensure they consider the environmental impact associated with their activities, and to take positive action to mitigate and reduce these impacts. By demonstrating their capabilities in bio-based resins, extended outlife chemistry and in recycled and natural fibres, SHD are enabling customers to make positive choices in design and procurement, to reduce the overall environmental impact of their product offering.

# **Driven by Innovation**

Since its inception 15 years ago, SHD has prioritised innovation, continually utilising and developing novel and emerging technologies to create material solutions for high-performance applications. This commitment to innovation is particularly evident in their ever growing range of more sustainable materials. SHD firmly believes that sustainability should not compromise performance. Instead, they engineer their materials to enable innovative design solutions, empowering the composites supply chain to progress towards Net Zero.

# Building a bio range

SHD's expanding bio-range of products have been used across the showcar to demonstrate a reduced reliance on the fossil fuel based systems typical of advanced composite solutions. MTB350, a novel 30% bio-based epoxy, delivers a versatile component system with excellent baseline mechanical properties. Optimised for natural fiber reinforcements, like flax, it provides improved handling and excellent wet-out during manufacturing. An outlife of at least 6 months at 20°C eliminates the need for frozen storage and shipping, further reducing its carbon footprint.

At almost 100% bio based, PS200 is a revolutionary system derived from waste by-products of the food industry. It offers exceptional resistance to extreme heat, making it well-suited for use in battery boxes designed to contain thermal runaway events. SHD has conducted a comprehensive cradle-to-gate lifecycle assessment to fully understand the material's carbon footprint, from raw material sourcing to dispatched product.

# **Material Collaborations**

SHD recognise that reducing the environmental impact of advanced composite solutions cannot happen in isolation. Showcased on the car are also some exciting developments with material collaborators. From innovative recycled and natural fibre architectures to healable resin



formulations, SHD is collaborating across the supply chain to deliver the future of longer lasting, reduced impact, high performance solutions.

#### **Company Milestones**

2025 marks an important milestone for both SHD and KS as they celebrate their 15th and 40th anniversaries, respectively. 2025 also marks 75 years of Formula 1<sup>®</sup>; an industry which has always represented the pinnacle of advanced material and manufacturing solutions.

You can find SHD in Hall 5, H52 at JEC World, Paris 4-6 March 2025.

#### **About KS Composites**

KS Composites is a class-leading, turn-key composites solutions provider. Founded in 1985 by Kelvin Smith and now run by his son, Jamie. The company remains independent and family run as it heads into its 5<sup>th</sup> decade. KS has always relentlessly pursued the design, development and manufacture of composite solutions, while continuously operating at the pinnacle of the industry. It operates across a variety of sectors and applies its engineering-led strategic approach to all projects. The brand ethos and core philosophy of Innovation, Experience and Excellence have never been truer than they are today.

info@kscomposites.com +44 (0)1664 823111

KS Composites Ltd, 1 Rapier House, Crown Business Park, Old Dalby, Leicestershire, UK, LE14 3NQ <u>www.kscomposites.com</u>

#### **About SHD Group**

SHD Composites Group operates through 4 manufacturing sites in the UK, Europe and USA, and are well-established industry suppliers of high-quality structural and tooling prepreg materials. EN9100:2018 and ISO9001:2015 accredited, SHD pride themselves on their quality, service and responsiveness to local customer needs.

UK	USA	EU
sales@shdcomposites.com	us-sales@shdcomposites.com	eu-sales@shdcomposites.com
+44 (0) 1529 307629	+1 (704) 626-6876	+386 16 001 472

Unit 4, The Reservation, Sleaford Enterprise Park, Sleaford, Lincolnshire, UK, NG34 7BY <u>www.shdcomposites.com</u>