

Press Release

July 20, 2017

Driving the way to automotive lightweighting

Henkel opens new composite test center in Asia – the Composite Lab

Düsseldorf, Germany – Henkel has opened a state-of-the-art test facility for composites in Japan. The new Composite Lab in Isogo-ku, Yokohama, will allow automotive customers from across Asia to team up with Henkel experts to develop and test composite parts, and to establish the best process conditions to make their ideas ready for market.

Interest in the use of composites to reduce vehicle weight and increase performance is rising rapidly among automotive OEMs and Tier 1 suppliers. But their demands are strict: they require cost-effective processes suitable for production of more than 10,000 parts per year. In practical terms, this means they often want customformulated, fast-curing resins for use in short production cycles. This magnifies the importance of having reliable partners with in-house test capabilities.

This is why Henkel, a global leader in composite matrix resins, adhesives, sealants and functional coatings for the automotive industry, has opened the new Composite Lab, where automotive customers can work with Henkel experts to develop and test composite parts, and also optimize series production process conditions. They can carry out trials with different test molds on Henkel's own High Pressure Resin Transfer Molding (HP-RTM) equipment. The HP-RTM machine includes a 380 tons press for trials close to series production conditions.

Increasing global development activity

Last year, Henkel also opened a Composite Lab in Europe – in Heidelberg, Germany. The new test center in Asia reflects Henkel's commitment to deliver high levels of service, quality, service and know-how close to its customers around the world.

Frank Kerstan, Global Program Manager Automotive Composites, says: "We are very proud to have this new state-of-the-art test center in Asia. As vehicle manufacturers worldwide look to reduce weight in cars and trucks to help boost fuel economy and reduce emissions, they are having to set aside the mindset that has dictated traditional material and process choices, and look at new and emerging technologies.



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Both our Composite Labs offer OEMs and Tier-One suppliers the opportunity to work together with our experts to learn first-hand what the options and possibilities may be for using advanced composite materials with short production cycle times in their vehicles.

"Henkel strives to create a competitive advantage for its partners along the value chain. We continue to work closely with our customers to create cost-effective integrated solutions that are suitable for high volume production. Henkel products make vehicles quieter, lighter and more durable, while providing comfort, strength and safety."

Henkel's diverse composites portfolio includes composite matrix resins and adhesives. The Loctite MAX series of matrix resins is suitable for use with glass and carbon fiber preforms designed for the RTM process. This range also includes binders and release agents for fiber-reinforced components. Loctite composite adhesives are ideal for multi-material bonding and assembly. All these materials are backed up by extensive process know-how and engineering expertise for the RTM process and the simulation and characterization of composite parts.

For more information on the Composite Lab: <u>www.composite-lab.com</u>.

About Henkel

Henkel operates globally with a well-balanced and diversified portfolio. The company holds leading positions with its three business units in both industrial and consumer businesses thanks to strong brands, innovations and technologies. Henkel Adhesive Technologies is the global leader in the adhesives market – across all industry segments worldwide. In its Laundry & Home Care and Beauty Care businesses, Henkel holds leading positions in many markets and categories around the world. Founded in 1876, Henkel looks back on more than 140 years of success. In 2016, Henkel reported sales of 18.7 billion euros, adjusted operating profit of 3.2 billion euros. Its three top brands, Persil (detergent), Schwarzkopf (hair care) and Loctite (adhesive) generated more than 6 billion euros in combined sales. Henkel employs more than 50,000 people globally – a passionate and highly diverse team, united by a strong company culture, a common purpose to create sustainable value, and shared values. As a recognized leader in sustainability, Henkel holds top positions in many international indices and rankings. Henkel's preferred shares are listed in the German stock index DAX. For more information, please visit www.henkel.com.



Photo material is available at www.henkel.com/press.

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The following material is available:



Henkel's new Composite Lab in Isogo-ku, Yokohama, Japan where automotive customers can work with Henkel experts to develop and test composite parts, and also optimize series production process conditions. They can carry out trials on Henkel's own HP-RTM equipment coupled to a 380-tonne press. (Photo: Henkel, PR035)





The rear axle of the Volvo XC90, S90, V90 and the new Volvo XC60 features a new transverse leaf spring, made of lightweight composite material. Benteler-SGL mass-produces the composite leaf springs for the rear suspension using Loctite Matrix resin from Henkel. (Photo: Henkel, PR035)

This press release and relevant photography can be downloaded from <u>www.PressReleaseFinder.com</u>. Alternatively for very high resolution pictures please contact Kevin Noels (knoels@emg-pr.com, +31 164 317 011).