



Press Release

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Lightweighting and safe crash performance with hybrid structural parts

Structural hybrid solution for EV battery protection to be presented at BEVA Europe 2018

Düsseldorf, Germany – At the upcoming Battery Electric Vehicle Architectures Congress Europe 2018 (BEVA Europe) in London on December 5 and 6, Henkel and RLE International will present a fresh new approach to the protection of battery units in next-generation electrical vehicles.

Facing the challenges of battery protection in electric vehicles (EV), Henkel and RLE International have investigated and validated the use of hybrid structural solutions vs. conventional designs for effective EV battery protection. The study comprises full simulation of optimized rocker panel and other parts in standard automotive side (pole), front and rear crash scenarios. At the same time, it reveals a significant lightweighting potential to compensate the added weight of EV batteries.

As Headline Sponsor of the BEVA venue, Henkel will introduce the concept in a presentation entitled “Lightweight Architecture Concepts for Battery Protection” and given by Henkel’s Head of Global Automotive Engineering, David Caro, together with David Irving, Head of Engineering at RLE International UK, on Day One of the congress at 12:15 hours.

The presentation explains the incorporation of hybrid structural inserts and the use of adhesives for achieving significant weight reduction by substrate change to light metals, material down gauging and topology optimization. The project also emphasizes the synergy between materials science and engineering expertise to drive competitive advantages with the design of lightweight structures and cutting-edge mobility concepts. The concept of hybrid designs using high-performance structural foam that has been developed and optimized under The Mobility Alliance of Henkel and RLE.



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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 2017, Henkel reported sales of 20 billion euros and adjusted operating profit of around 3.5 billion euros. Combined sales of the respective top brands of the three business units – Loctite, Schwarzkopf and Persil – amounted to 6.4 billion euros. Henkel employs more than 53,000 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.

About RLE INTERNATIONAL

The RLE INTERNATIONAL Group is one of the world's leading development, technology and consultation service providers to the international automotive industry. With more than 30 years of experience and a global concept about 2.000 engineers and specialists constantly keep abreast of technological progress and to add value for the international partners along the value chain.

For more information, please visit www.rle.international.

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

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