

Press Release

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Henkel to showcase innovative applications at Strategies in Light Europe

Solutions for Durable Luminaires and Lamps

Henkel will be showcasing its range of solutions for lighting applications under the proven brands Loctite, Bonderite, Technomelt and Teroson at the Strategies in Light Europe fair and conference from October 21 to 23 in Munich. Offering benefits like high transparency and temperature resistance, the products are particularly suitable for manufacturers of lighting devices.

High Transparency Low Pressure Molding

Combining all the advantages of low pressure molding with a crystal clear appearance: Technomelt AS 4226. It is resistant to UV radiation, moisture and extreme weathering. With its transparency and robustness, this innovation from Henkel is ideal for the encapsulation of LEDs and light engines destined for service in the wide outdoors. Street lamps and tunnel luminaires are among the possible applications. Because of the good adhesion afforded to various substrates, high encapsulation ratings of up to IP 67 can be achieved.

Bonderite ECC – The Innovation for Light-Metal Surface Treatment

Modern light-metal coatings are highly specialized technologies. Most systems combine maximum corrosion resistance with optimal weather resistance, while others offer exceptional hardness, flexibility in the forming process, extreme heat resistance or resilience under high mechanical stress. Bonderite ECC (Electro Ceramic Coating) is the first multi-functional titanium-based coating for light-metal surfaces of aluminum, titanium, magnesium and aluminized components that combines all of these features in a property profile.







Loctite SI 5700 Silicone – Making LEDs Weather-Proof

Henkel offers encapsulants capable of meeting particularly high temperature and media resistance requirements. One innovative development in the field of products for optical applications, for example the encapsulation of luminants (LEDs), is the highly transparent two-component silicone Loctite SI 5700.

It is highly and durably transparent, reaching transmission rates of up to 96 percent. The silicone is particularly suitable for the protection and encapsulation of LEDs, for example in modern street lights, facade luminaires, illuminated advertising media, illuminated signs and other outdoor as well as indoor applications.

Henkel's 16 meter wide and nine meter high illuminated company logo mounted on one of the site buildings in Düsseldorf was revamped last year in line with state-of-the-art energy efficiency. Thanks to the newly installed array of 13,340 LEDs, the sign now consumes less than one tenth of the energy previously required by the illuminating neon tubes. The LEDs were fixed in position with Loctite SI 5700 for truly durable weather resistance. They produce a more intense light than the old neon tubes, have a longer service lifetime and require no more than minimal maintenance.

Loctite 4090 Hybrid Adhesive

Henkel has introduced Loctite 4090, an innovative hybrid adhesive that combines the key features of structural and instant adhesives – bond strength and speed. This powerful combination provides high impact resistance, high-strength bonding on a variety of substrates, and high temperature resistance, making it versatile enough to solve a wide range of design and assembly challenges.

Loctite 4090 adhesive greatly expands the capabilities of traditional adhesives and opens the door to new applications and new solutions. This is the first hybrid adhesive capable of delivering the speed of a cyanoacrylate and the strength of an epoxy.

"The industry is under pressure to be more competitive, to reduce manufacturing costs and to look for new design and assembly solutions," says Henkel's Mike Quail, Vice President Marketing, General Industry. "Loctite 4090 has been designed to reach beyond conventional industry approaches. It is the first adhesive of its kind. Never before has there been a hybrid adhesive designed to tackle the most challenging situations."

Loctite 4090 Hybrid Adhesive offers high quality performance in extreme environments and challenging conditions. Its features and benefits include temperature resistance up to 150 degrees Celsius, high impact and vibration resistance, high moisture resistance, and gap filling up to 5mm. It is well-suited for bonding a variety of substrates, including metals, most plastics and rubbers.

Henkel Adhesives Satisfy Stringent Criteria for Use with Cree® LEDs

Henkel collaborated with Cree® to identify, test, and validate a wide range of Loctite and Teroson adhesives to determine their performance in direct and indirect LED assembly applications. Cree® reviewed and verified the results of the tests conducted by Henkel. The manufacturer of high performance LED lighting products has confirmed that numerous Loctite and Teroson products satisfy the stringent chemical compatibility testing protocol identified in the Cree® LED Solution Provider Program for use with their LED lighting components. "Adhesives and sealants are important to the production of an LED lighting fixture," explains David Cox, Director of Alliance Development at Cree. "Incompatible materials such as adhesives can cause the encapsulant to turn brown and block light emitted from the LED. We are excited by Henkel's development of Loctite products that meet our requirements and help to maintain the color point of our LEDs. Such adhesives help customers to ensure the consistent quality and long-term reliability of our LED lighting components." Henkel adhesive technologies help to ensure a long life for LED lighting devices, even in applications exposed to harsh conditions, such as extreme temperatures, dust, dirt, vibration and underwater immersion.

Henkel at Strategies in Light Europe

Experts from Henkel will be attending the Strategies in Light Europe fair and conference. On booth A24, they will be ready to provide further information to the aforementioned products as well as to other solutions from the company's range of adhesive, sealant and functional coating technologies.

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Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions both in the consumer and industrial businesses with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 47,000 people and reported sales of 16.4 billion euros and adjusted operating profit of 2.5 billion euros in fiscal 2013. Henkel's preferred shares are listed in the German stock index DAX.

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

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Henkel AG & Co. KGaA

The following material is available:



Henkel transparent encapsulants also optimally protect electronic components.



Be light years ahead with Henkel as the ideal partner meeting all lighting objectives.



Loctite 4090 delivers high quality performance in extreme environments and challenging conditions. This hybrid provides the necessary versatility to solve almost any design and assembly challenge.



A symbolic press of a button and the logo lights up once again! Second from the left: Kathrin Menges, Henkel Executive Vice President Human Resources and Infrastructure Services.