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High-impact solutions and growing ecosystem to accelerate additive manufacturing processes across industries

Henkel offers novel 3D Printing material solutions for industrial manufacturing

Düsseldorf – Henkel accelerates commercializing tailor-made materials and offers comprehensive services and equipment know-how for 3D Printing solutions to its customers. The Adhesive Technologies business unit strengthens its ecosystem by expanding strategic partnerships with global technology leaders to drive adoption in the rapidly growing market for additive manufacturing beyond prototyping to final parts production.

Henkel Adhesive Technologies is supplying customers worldwide with a broad portfolio of high-performance materials such as light cure acrylic, silicone, epoxy, and polyurethane adhesives. The business unit develops tailor-made products and services to provide high-impact solutions to various industry segments. Based on its technical expertise and know-how Henkel has now developed novel materials customized for various 3D Printing processes and technologies.

To accelerate the industrial usage of 3D Printing solutions, Henkel in addition offers a growing portfolio of services and equipment. This includes specialized enabling equipment for automation as well as solutions for curing, impregnation and surface treatment in post-processing. This range of products and services has further strengthened the company's additive manufacturing ecosystem and accelerates the



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integration of 3D printed parts into the industrial assembly and supply chain infrastructure.

"We believe that the full potential of additive manufacturing will come by identifying the right customer application and focusing the right materials, with the right printing process and leveraging the right software," explained Philipp Loosen, Head of 3D Printing at Henkel Adhesive Technologies. "We have therefore partnered with strong technology leaders such as Carbon and HP, which already have developed exciting technologies for 3D Printing solutions. These collaborations enable us to leverage our broad materials know-how and customer access to develop new solutions for the industrial manufacturing."

Together with Carbon, Henkel is working on materials and specialized dispensing equipment for polymerization-based 3D Printing technologies. The companies have developed meter a mix and dispense device (MMD), a resin dispensing system and accessory to Carbon's SpeedCell manufacturing system that allows for proper dispensing of Carbon's materials in bulk quantities. Additionally, Henkel is beginning the development of Loctite resins for Carbon's materials ecosystem.

Together with HP, Henkel is already working in HP's open materials community to develop materials for HP's powder fusion based Multi Jet Fusion technology. In addition, the company has become the first global reseller of HP Jet Fusion 3D Printing solutions to enable qualifications among industrial production.



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 <u>www.henkel.com</u>.

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

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Henkel offers novel materials that enable 3D Printing solutions for industrial manufacturing.





With specialized enabling equipment, services and a broad portfolio of post-processing, Adhesive Technologies can provide total solutions to its customers.



Henkel is partnering with technology leaders such as Carbon and HP to leverage its materials know-how for new customer applications in 3D Printing.