

Press Release

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Collaboration to accelerate the prototyping, scale-up and production of innovative smart products across multiple industries

Henkel expands strategic partnership with Quad Industries for driving printed electronics solutions

Düsseldorf, Germany – Henkel Adhesive Technologies and Quad Industries, Sint-Niklaas, Belgium, today have announced the expansion of their strategic partnership to offer capacities and support for technological value creation and prototyping with printed electronics solutions across multiple industries. The companies started their collaboration in 2019 and since then successfully worked on different projects such as the development of the innovative [COVID-19 smart health patch](#) introduced by [Byteflies](#) that was launched in 2020. With the advancement of the partnership Quad Industries has become a strategic partner in Henkel’s ecosystem for design creation, prototyping and manufacturing of printed electronics via flatbed screen printing.

With more than 35 years of experience in printed electronics across multiple industrial markets Henkel Adhesive Technologies offers a broad material expertise, market know-how and partner network to support the commercialization process for smart product solutions. The business unit is a leading provider of a broad portfolio of conductive inks and coatings that enable flexible, cost-efficient and high-performing applications.

“At Henkel we believe in a differentiated partnership approach across the entire value chain,” explains Stijn Gillissen, Head of Printed Electronics at Henkel. “Our network enables us to provide customers not only with products and knowledge, but also connecting them with circuit designers, printing manufacturers or external IoT specialists. Together we can leverage the potential of digital transformations by utilizing the benefits of printed electronics.”

Quad Industries has been at the forefront of applied electronics for more than 25 years and is well-known as a trusted partner in the development and manufacturing of user interfaces,

control panels and sensing devices for both consumer and industrial applications. In recent years, the company has extended its activities in the domain of printed electronics, using its extensive knowledge to develop and manufacture printed, flexible sensor solutions.

“At Quad Industries we see the growing potentials for electronics manufacturers to innovate with new material solutions provided by leading material suppliers such as Henkel,” explains Arne Casteleyn, Managing Director Sales and Strategy at Quad Industries. “Based on our multidisciplinary expertise we can support them developing highly innovative smart products that create additional value for consumers. By enlarging our strategic partnership with Henkel, we aim to strengthen the creation of printed electronics solutions such as electronic skin patches, stretchable sensors, film heaters or film antennas and even accelerate the time to market. The novel skin patch solution from Byteflies already is a good example for the value of this collaboration.”

Together with Henkel, Quad Industries and four other medical and technology companies, Belgium-based Byteflies, a medically certified B2B-services company, has developed a smart health patch for remote patient monitoring. The system was initially set up to monitor the vital functions of patients with heart failure and epilepsy. After the outbreak of COVID-19 in 2020 the partners leveraged the patch’s potential for coronavirus patients. This new COVID-19 smart health patch allows continuous, remote, and wireless monitoring of patients’ respiration, heart rate, and temperature and is already applied by numerous hospitals in Flanders, Belgium, to monitor up to 300 patients infected with the virus.

Henkel solutions ensure the optimal material performance of the COVID-19 smart health patch and other digitally enhanced medical applications, for example for point-of-care diagnostics or wound care. The company has developed medical electrodes and conductive inks that enable the patch to be used for five days rather than just one. Quad Industries printed the electronic circuit on a very thin and stretchable foil and integrated the technology into the wearable patches. With the expansion of their strategic partnership the two companies now bundle their expertise to enhance the support of manufacturers in the development, commercialization and production of smart printed electronics solutions in markets such as healthcare, hygienics, automotive and furniture and building.

“The closer collaboration will enable us to offer our customers a ‘one-stop shop’ for prototyping printed electronics innovations in a matter of weeks,” Stijn Gillissen says. “As our trusted ecosystem partner Quad Industries will support the prototyping, design creation and manufacturing of printed electronics via flatbed screen printing. This includes the

optimization of printed sensors based on Henkel's materials know-how as well as the production of high-volume applications."

"The partnership offers customers a comprehensive and fast development support starting with the direct access to the companies' R&D teams comprising experts in material and manufacturing know-how in printed electronics," Arne Casteleyn adds. "Together we can offer quick feasibility analysis and fast functional prototyping of novel customer ideas."

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 2019, Henkel reported sales of more than 20 billion euros and adjusted operating profit of more than 3.2 billion euros. Henkel employs more than 52,000 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 Quad Industries

Quad Industries is a leading technology provider specialized in the manufacturing of customized printed electronics. For more than 25 years we have been serving well-known, international customers in a broad range of markets such as medical, automotive, home appliance and industrial markets. With a competence center in Belgium and a production location in Slovakia, we are in the heart of Europe. Ready to support you with contract development and contract manufacturing – from lab-scale prototypes to high volume manufacturing.

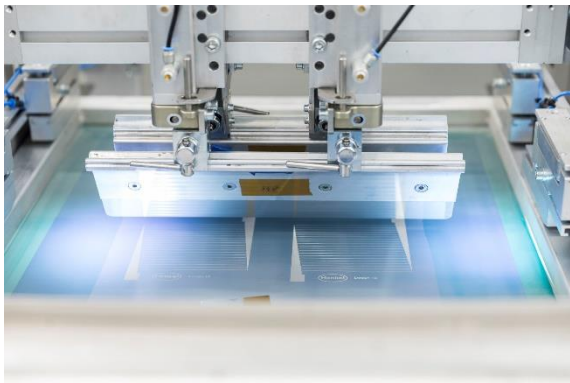
Photo material is available at www.henkel.com/press

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Henkel Adhesive Technologies is a leading provider of a broad portfolio of conductive inks and coatings that enable flexible, cost-efficient and high-performing printed electronics applications.



Quad Industries now has become a strategic partner in Henkel's ecosystem for design creation, prototyping and manufacturing of printed electronics.



The partners aim to support manufacturers in the development, commercialization and production of smart printed electronics solutions in multiple markets.