



Press Release

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Collaboration to scale novel water detection technology and to innovate for additional functionalities and new smart solutions

Henkel and LAIER® partner to drive smart building applications based on printed electronics

Düsseldorf, Germany, and London, UK – Henkel and LAIER® (LAIER) today have announced a partnership to scale novel printed electronics solutions for smart building applications. Jointly the companies aim to drive the implementation of LAIER's Severn Water Leak Detector for commercial and industrial buildings and to combine their unique technology and innovation capabilities to further develop the solution. The novel sensor system solution aims to detect water leakages in buildings at a much earlier stage to minimize the high repair costs resulting from a water leak.

Henkel is an industry-leading supplier of printed electronics materials and services. The broad Loctite portfolio of functional inks allows to print functional electronics circuits on foil for various applications. The range of Loctite functional inks include silver, carbon, dielectric and other non-conductive inks, as well as silver/ silver chloride inks. These materials enable Henkel's partners to develop printed electronics applications tailored for the specific properties demanded by industrial customers. Beyond water detection sensors, the company's inks are suitable for a broad variety of sensor technologies including self-regulating heating, pressure sensing, or printed antennas.

LAIER has created the world's first smart tape by combining printed carbon and dielectric inks from Henkel with electronic hardware and digital services. The Severn Water Leak Detector (SWLD) is thin, conformable, robust, self-adherent, and designed to work throughout the building envelope. The tape is easy to install by an untrained professional, applicable to various surfaces, highly sensitive with a large coverage area. Thanks to its high resolution SWLD can detect the presence of just a couple of drops of water (~0.1ml) for example below pipes and tubes. The sensors are split into multiple sensing zones, which allows to identify the precise

location of a leak. The data includes parameters such as the sensor condition, condensing humidity and emergency messages in case of leak detection, which are transmitted wirelessly to the cloud for smooth integration into building management systems. Thanks to its properties, cost advantages, and easy applicable form factor the system offers a variety of benefits and improvements for commercial and industrial buildings compared to existing water leakage technologies such as sensing ropes and flood sensors.

“We are very excited about the partnership with Henkel as we are bringing together unique technology expertise to further drive the implementation of printed electronics solutions for smart and digital building applications,” said Matt Johnson, CEO and Co-founder of LAIIER. “Henkel’s functional inks have been critical to developing a sensor which is easy to install in a wide variety of spaces, covers a large enough area to be useful and is sensitive to detect a leak as it starts. Together with Henkel we will market and further improve the technology by adding new functionalities such as non-contact liquid level detection tailored for industrial applications as well.”

“Our partnership with LAIIER is another proof point of how we leverage our material expertise in printed electronics within a strong ecosystem to enable digital capabilities for analog products,” added Stijn Gillissen, Global Head of Printed Electronics at Henkel. “The LAIIER technology addresses a global challenge by offering a transformative continuous monitoring solution for commercial property insurers and facilities management that helps reduce costs and save resources. Together we aim to further develop the technology and to increase potential application areas towards Industry 4.0 and machine learning as well.”

The Severn WLD technology launched in November 2022 addresses markets such as building construction, building material suppliers, facility management, IoT integration and commercial property insurance. The market launch was supported by a presentation on ‘Connecting surfaces of the smart building to the cloud with sensors enabled through printed electronics’ held by Matt Johnson and Aad van der Spuij from Henkel during the Techblick event in Eindhoven, Netherlands, in October. Together with Melanie Wendrikat from Henkel Matt Johnson also presented during BIM World MUNICH on November 22 under the theme ‘Sensor tape to cloud: connecting physical and digital building infrastructure’.

For more information, please visit [Partnerships \(print-your-electronics-with-loctite.com\)](https://www.loctite.com/partnerships).

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 2021, Henkel reported sales of more than 20 billion euros. The company employs about 53,000 people globally – a passionate and highly diverse team, united by a strong company culture, a common purpose, 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 LAIIER®

LAIIER® makes wireless, connected printed sensors that install like tape, and detect leaks, occupancy, and more. It's building a Surface to Cloud™ industrial IoT solution that is uniquely easy to install and scale within the smart building and smart facility. Its Surface to Cloud Industrial IoT sensor solution addresses critical use cases in the smart building, starting with liquid leaks, liquid level, moisture detection, and much more. LAIIER®'s solution prevents damage to structures, conserves precious resources, and reduces the release of hazardous chemicals into the environment. LAIIER®'s ultimate vision is to make every surface in the built environment a smart LAIIER® from the point of construction. To create a more sustainable, healthy, and efficient world, we need to make it smart as we build it. LAIIER® makes that possible.

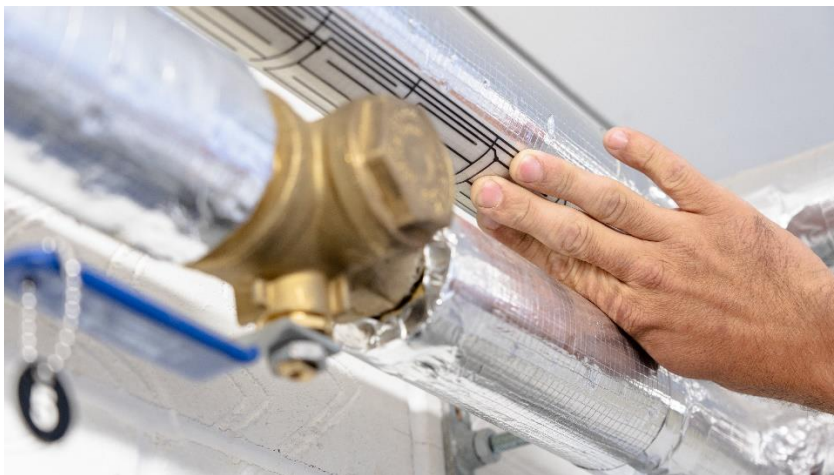
Photo material is available at www.henkel.com/press

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Henkel AG & Co. KGaA



Henkel and LAIIER[®] collaborate to drive smart building applications such as a novel water detection tape solution based on printed electronics.



The smart tape from LAIIER[®] is printed with Henkel inks and easy to install, applicable to a variety of different surfaces, highly sensitive and precise and enables to cover large areas.



Matt Johnson, CEO and Co-founder of LAIIR® .



Stijn Gillissen, Global Head of Printed Electronics at Henkel.