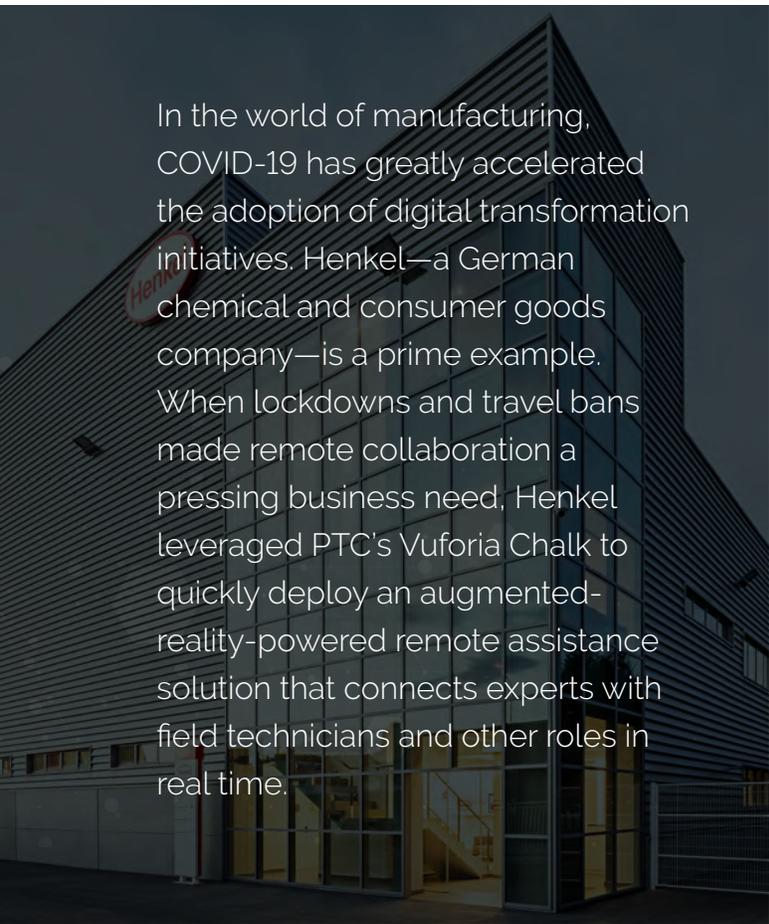


Henkel brings remote experts and field technicians together in real time using augmented reality



In the world of manufacturing, COVID-19 has greatly accelerated the adoption of digital transformation initiatives. Henkel—a German chemical and consumer goods company—is a prime example. When lockdowns and travel bans made remote collaboration a pressing business need, Henkel leveraged PTC's Vuforia Chalk to quickly deploy an augmented-reality-powered remote assistance solution that connects experts with field technicians and other roles in real time.

Henkel is a global company with world-famous brands

Founded in 1876 and headquartered in Düsseldorf, Germany, Henkel is composed of three business units: Adhesive Technologies, Beauty Care, and Laundry & Home Care. As leaders in industrial and consumer sectors, the three business units differentiate themselves by building strong brands through innovation and technology. Altogether, Henkel is a global company with more than 52,000 employees, with subsidiaries and production facilities located around the world.



Henkel's Laundry & Home Care global operations rely on product and production experts

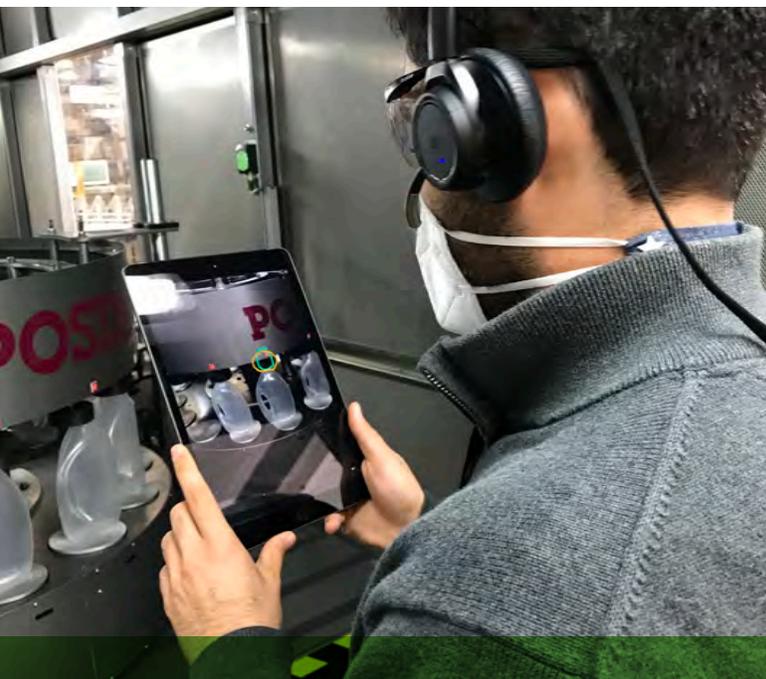
In Henkel's Laundry & Home Care business, production teams across more than 30 plants worldwide engage in active knowledge transfer. They also rely on continuous communication with the product specialists at the Henkel R&D departments, as well as external experts like the manufacturers of production machines. For example, technical support staff often need to travel to help operators and service teams around the world solve problems. If a process is not running optimally, process owners ask other plants to help drive improvements. Employees share best practices, such as optimal machine settings, with other teams across factory sites.

Given the importance of expert support throughout their operations, Henkel recognized that improving their ability to communicate information and assist teams around the world—while also decreasing the need to travel—would have a significant impact on their business. Namely, they would reduce operational costs, increase workforce productivity and efficiency, and improve safety and compliance across their operations.

Henkel leveraged an augmented reality solution to facilitate remote assistance and knowledge transfer

To better support their production teams and deliver expertise where and when it's needed, Henkel began searching for a remote assistance solution that uses augmented reality. As their Digital Business department explored potential solutions, they engaged in workshops with PTC to explore their augmented reality application and potential use cases. Following these workshops, Henkel decided to use Vuforia Chalk, an augmented-reality-powered remote assistance application that connects technicians with experts.

With Vuforia Chalk, experts and technicians make digital annotations on a live, shared view of a real-world environment and troubleshoot issues or guide multi-step solutions. Vuforia Chalk's digital annotations are anchored to the technician's view, making multi-step solutions easy to follow and greatly reducing the potential for mistakes and miscommunication.



"Because physical observation is often required to solve problems, augmented reality was a perfect fit for our manufacturing operations," says Stefan Goeris, Process Consultant Manufacturing at Henkel.

Chalk's ease of use was a key feature, as Henkel planned to scale the initiative to all their Laundry & Home Care sites as quickly as possible.

"Vuforia Chalk is extremely easy to use," says Jaume Carreras, Project Manager, Henkel Digital Transformation team. "Downloading the app and getting started only takes a matter of minutes."

"And because Chalk is available on mobile devices, tablets, desktops, and hands-free devices, we could make it widely available throughout the business without investing in extra equipment," adds Goeris.

Henkel achieved rapid time to value as COVID-19 accelerated the urgency of their augmented reality initiative

When COVID-19 caused lockdowns and disruptions worldwide, travel became prohibitively difficult and unsafe. Henkel's experts could no longer travel to assist the production teams or facilitate in-person knowledge transfer. "The issue of remote collaboration took on a completely new importance. We had to find a rapid solution," says Goeris.



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Stefan Goeris

*Process Consultant
Manufacturing at Henkel*

Fortunately, with a proof of concept of Vuforia Chalk already in place, Henkel recognized that they could accelerate and scale their use case to address their business needs. Because their IT specialists had already tested the security of the solution with positive results, Henkel quickly rolled out the solution and granted end devices access to Chalk on the Henkel network. Now, they have workstations where Chalk can be used in more than 30 factories worldwide.

Furthermore, connection is quick and seamless between users. Establishing a connection with an expert only takes a few minutes. Using the connect code functionality, the session host can quickly invite another participant into a session once they have the app. With this functionality only one of two parties need to have a Chalk

license, making it easy for experts or service employees in their home office to assist the technical support teams. Today around **200** Henkel employees are using Vuforia Chalk.

"As word got out that they were testing the augmented reality solution, Henkel's factories started to ask when they could get their hands on the solution. They could hardly believe that the answer was 'right away,'" says Carreras.

Within six months, Vuforia Chalk established itself as a communication solution in more than 30 plants of the Laundry & Home Care division and is beginning to gain a foothold in the other divisions as well. Also remarkable is the wide range of users that now leverage the solution, from line workers and machine operators to managers and engineers.



"We can reduce travel costs and save time. We get productive solutions fast through virtual collaboration."

Stefan Goeris

Process Consultant Manufacturing at Henkel

Chalk enables Henkel to increase workforce productivity and efficiency, reduce operational costs, improve safety and compliance, and simplify communication

Chalk has become an indispensable tool within the Henkel Group—and will remain so after the pandemic lifts. Using Chalk, Henkel improves internal collaboration and knowledge transfer. The results have been significant: experts are able to provide high-level troubleshooting, maintenance, and support to teams around the world.

Henkel also improves workforce productivity and efficiency by facilitating remote assistance both internally and externally. Using Chalk, experts at Henkel are able to interact with colleagues at various production sites around the world without traveling. They simply start a Chalk session on their phone or tablet with the remote colleague and guide them through any maintenance.

"We can reduce travel costs and save time. We get productive solutions fast through virtual collaboration," says Goeris.

Henkel continues to expand their use of Chalk throughout the business

Currently, Henkel uses Chalk primarily with smartphones and tablets, but is thinking about making RealWear headsets available throughout their plants. This would make working with augmented reality even easier because the operator's hands would be free.

"COVID-19 will continue to be a challenge for companies worldwide," says Goeris, "but even outside of the pandemic, Chalk will remain an important tool that simplifies communication, saves costs, increases workforce productivity and efficiency, and improves safety and compliance."

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