Press Release

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Expansion of collaboration to support serial production in Additive Manufacturing

Desktop Metal and Henkel announce the onboarding of Loctite branded formulations on the Xtreme 8k machine

Düsseldorf – Desktop Metal and Henkel have announced the first initial workflow validations on the Xtreme 8K, the largest DLP build volume machine for the 3D Printing market. Over the past two years, the companies have collaborated on various unique applications on ETEC's printer platforms for industrial and medical use. The onboarding of Loctite branded formulations represents both partners' strategic vision to support volume production in additive manufacturing.

A workflow specific to the machine and material is needed to achieve optimal and repeatable results. Loctite 3D Printing has pioneered the sharing of detailed workflows developed specifically to the machine and material. The workflow validations provide complete specifications for printing, curing, and cleaning parts printed with Loctite materials.

The acquisition of ETEC by Desktop Metal in 2021 continues both companies' partnership agreement and deepens the commitment to drive the adoption of production-level 3D Printing further. As already announced in 2021 Loctite has validated several materials on the ETEC Envision One printers, including:

- **Loctite 3D 3955 HDT280 FST** – The first 3D photopolymer material that passes vertical burn and aerospace FST standards with an HDT of >300°C. This halogen-free flame retardant material with UL94-V0 rating delivers extremely high HDT and excellent flexural and tensile physical properties.

- **Loctite 3D IND406 HDT100 High Elongation** – A tough material with all-round strength, good impact resistance, high elongation, and an HDT of >100°C

- **Loctite 3D IND402 A70 High Rebound** - A high-rebound elastomer with high elongation and energy return that does not require additional thermal post-processing.

The onboarding of photoplastic and photoelastic single-part materials on the Envision One printers allowed users to print highly viscous and solid resins. The additional initial workflows on the Xtreme 8k open up a myriad of solutions across more than eight hundred industry segments.

The Xtreme 8k offers the world's largest production-grade DLP 3D printer for high-volume production of end-use parts. The Xtreme 8k uses top-down printing to allow for faster curing of each layer, high-power projectors, and a custom optical train to ensure high power is delivered to each voxel. This combination means that the large format 3D printer allows the production of large 3D parts without sacrificing quality or accuracy.

Combining Henkel's material expertise and ETEC's advanced printer hardware allows for the adoption of end-use 3D printed parts. With an impressive build volume of 450 x 371 x 399 mm, users can now take advantage of the increased manufacturing capacity of over 150 liters of resin. Coupled with Loctite 3D photoplastic resins, customers can quickly produce tough and durable end-use parts with outstanding surface finish and premium mechanical properties.

"I saw the Xtreme 8K before its release and knew it would excite the industrial additive space with the large build volume. I am pleased with our teams' work to bring Loctite resins to the platform with initial workflow validations," said Sam Bail, Head of Business Development Management and Partnerships for Loctite 3D Printing at Henkel.

The following Loctite branded photopolymer materials have been initially validated on the new Xtreme 8K machine:

- **Loctite 3D 3843 HDT60 High Toughness:** A high-strength ABS-like engineering plastic with superior impact resistance and excellent surface finish. It displays high green strength and HDT.

- **Loctite 3D IND405 HDT50 High Elongation:** A high-strength, tough PP-like engineering plastic with outstanding impact resistance and excellent surface finish properties.

"Our team is delighted to partner with Henkel and offer their Loctite materials on our truly differentiated DLP printing systems," said Ric Fulop, Founder and CEO, Desktop Metal. "By printing Loctite 3D IND405 HDT50 High Elongation and Loctite 3D 3843 HDT60 High Toughness on the ETEC Xtreme 8K, manufacturers will be able to produce on-demand end-use parts in all-new sizes and at higher throughputs that help drive down the per-part cost. What's more, they won't need to pay for, or wait for, tooling to get the job done affordably."

To learn more about Henkel's innovation in 3D printing visit LoctiteAM.com. To see how your organization can collaborate with Henkel, please email Loctite3DP@henkel.com.

To learn more about ETEC's 3D printing solutions, visit etec.desktopmetal.com.

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 Desktop Metal

Desktop Metal, Inc., based in Burlington, Massachusetts, is accelerating the transformation of manufacturing with an expansive portfolio of 3D printing solutions, from rapid prototyping to mass production. Founded in 2015 by leaders in advanced manufacturing, metallurgy, and robotics, the company is addressing the unmet challenges of speed, cost, and quality to make additive manufacturing an essential tool for engineers and manufacturers around the world. Desktop Metal was selected as one of the world's 30 most promising Technology Pioneers by the World Economic Forum and named to MIT Technology Review's list of 50 Smartest Companies. For more information, visit www.desktopmetal.com.

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

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Henkel AG & Co. KGaA

A helmet outer shell printed with Loctite 3D IND405 HDT50 High Elongation with Desktop Metal and Loctite branding design

A helmet outer shell printed with Loctite 3D IND405 HDT50 High Elongation and a buckle printed with Loctite 3D 3843 HDT60 High Toughness