



Press Release

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Combination of innovative technology and advanced materials facilitates the development of new medical models and devices

Henkel and NewPro3D collaborate for unique 3D Printing Solution in the medical sector

Düsseldorf – NewPro3D recently joined Henkel’s Open Materials Platform with the goal of providing additive manufacturing solutions at production scale. Working collaboratively, the companies are combining their areas of focus to create next-level solutions for the medical industry. With Henkel’s expertise in materials and NewPro3D’s innovation in 3D printing equipment and software, the companies are enabling new applications in anatomical modeling, prosthetics and more.

NewPro3D’s unique technology for digital light processing (DLP) produces 3D models at record speeds. Specifically, the company’s Intelligent Liquid Interface (ILI™) consists of a transparent wettable membrane that is chemically designed to facilitate faster movement between cured layers, eliminating the slow mechanical processes used on conventional 3D printing techniques. When used in combination with Henkel’s wide range of photo-curing resins, the result is ultra-fast manufacturing of medical devices and tools including hard and soft anatomical models for use in surgical planning and educational programs.

“We’re excited to work with NewPro3D to develop applications which can have a life-altering impact for so many people,” says Henkel’s Head of 3D Printing Materials, Sean Dsilva. “Our goal with additive manufacturing is to drive production at scale. While that’s a potential game-changer in all the markets we serve, perhaps nowhere is it more important than in the medical industry, where lives are literally at stake. It’s very gratifying for our team to play a small role in improving the outcome for those in need.”

NewPro3D and Henkel will be showcasing some of these applications at the [2020 MD&M West Conference](#), which is being held at the Anaheim Convention Center in Anaheim, CA, beginning on February 11th.



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3D printed anatomical model of an infant's skull

As highlight at the MD&M West Conference exhibit the companies will showcase an anatomical model of an infant's skull. In this particular case, the child was afflicted with a syndrome that caused misalignment of the anterior mandible. To correct the issue, doctors must lengthen the mandible to approximate the maxilla. The model serves an invaluable role, helping the surgical team more accurately measure the defective position and identify areas where a device can be anchored to lengthen the mandible, in addition to helping them more easily visualize the overall position of other cranial bones.

"3D models help surgeons and proceduralists get better context and therefore improve their planning and performance," says NewPro3D's Chief Operating Officer, Gabriel Castanon. "3D printing should be looked at as a way to reduce risk and improve outcomes."

In this particular example, doctors with the use of this helpful tool, were able to develop a treatment plan that involved the construction of an osteodistraction device that was placed in the body of the mandible. As dictated by the treatment plan, the apparatus featured external screws, which were rotated daily to a prescribed number of revolutions.

Visitors of the MD&M West can see these unique applications first-hand at booth number 2321. For those who cannot attend but want to learn more about how this unique solution can help patients and healthcare practice, contact NewPro3D today at info@newpro3d.com to discuss your application and order a sample model.

To learn more about Henkel's innovation in 3D printing visit www.Loctite3DP.com. To see how your organization can collaborate with Henkel, please email us at Loctite3DP@henkel.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 2018, Henkel reported sales of around 20 billion euros and adjusted operating profit of around 3.5 billion euros. Henkel employs around 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 www.henkel.com.

About NewPro3D

NewPro3D, a Vancouver, Canada based company, focuses on ultra-fast 3D Printing of photopolymers. The firm's technology can be used with a wide variety of materials, and through strategic partnerships and collaborations with leading resin companies, offers some of the best materials available for DLP printing, NewPro3D is currently working side-by-side with leading universities and hospitals, where the accelerated rate of additive manufacturing contributes to better communication and procedures in radiology and dental departments. For more information, visit NewPro3D.com

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

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Application example of the collaboration of Henkel and NewPro3D: soft tissue anatomical model of a heart



Highlight at MD&M West Conference: Anatomical model of an infant skull