



ExOne Accelerates Expansion into 3D Printed Tooling Business with Acquisition of Freshmade 3D Assets

April 28, 2021

NORTH HUNTINGDON, Pa.--(BUSINESS WIRE)--Apr. 28, 2021-- The ExOne Company (Nasdaq: XONE), the global leader in industrial sand and metal 3D printers using binder jetting technology, today announced it has acquired the assets of Freshmade 3D, an Ohio-based startup with a patented method of creating durable AMClad® tooling out of sand forms 3D printed on ExOne machines.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20210428005417/en/>



The ExOne Company now offers fast, durable, and affordable AMClad® Tooling. Developed by Ohio-based startup Freshmade 3D, AMClad is a patented process of infiltrating and coating 3D printed sand forms to give them strength for a wide range of tooling applications, including vacuum forming and more. (Photo: Business Wire)

ideal solution for companies looking to shorten supply chains and produce tooling and final products locally.”

“We launched AMClad with the idea of using sand 3D printing technology to deliver hard tooling faster and with more design freedom, to enable U.S. manufacturers to produce more locally and faster,” added Rich Wetzel, Freshmade 3D co-founder, who will now join ExOne’s applications team. “ExOne is the best company to accelerate this technology as we scale up for customers who’ve decided to leverage our solution to meet production goals faster. Companies are just beginning to discover how robust and affordable this technology is over conventional tooling.”

In addition to tooling, the AMClad process is being used to produce artwork or restoration pieces, including replication statues for museum exhibits, exterior reproductions for architectural refurbishment, or custom chrome details on classic cars. The versatile surface finishes available with the AMClad process include metal, stone, or painted finishes that allow for a range of artistic applications to be realized in a cost-effective manner. An AMClad replica of the Statue of Liberty’s Italian sister – the Liberty of Poetry – was [featured at Ellis Island](#) and now resides at Kent State University.

An Outgrowth of Northeast Ohio’s Growing 3D Hub

The strategic move will strengthen ExOne’s position as a provider of large-format 3D printed tooling for industrial applications.

AMClad tooling, which is 3D printed in low-cost sand on ExOne systems and then infiltrated and coated using Freshmade 3D’s patented method, often eliminates weeks or months of time spent waiting for conventional tooling. What’s more, it typically offers a 30-50% cost savings.

This fast, durable, and affordable solution can be used for a wide range of tooling applications, including composite layup, vacuum forming, compression molds, urethane casting molds, trim fixtures, hydroforming, sheet metal stamping, and more. AMClad tooling is being used today by customers in the aerospace, art, architecture, automotive, construction, and energy industries.

ExOne has been developing tooling products for its large, industrial 3D printers since 2014, and currently offers sacrificial tooling for composite layup that washes out with water. However, ExOne believes Freshmade 3D’s patented approach offers additional unique benefits and can help accelerate adoption of 3D printed sand tooling solutions.

“We are delighted to add Freshmade 3D’s patented process for creating durable 3D printed tooling to our portfolio,” said John Hartner, ExOne CEO. “We plan to scale up this process for a global aerospace customer, who intends to use this tooling for composite layup of parts. This is an

Freshmade 3D was founded by Wetzel, Christopher Tomko, and Dr. Brett Conner in 2016 and is a portfolio company of the Youngstown Business Incubator, which supports the development of innovative high-tech companies in the Northeast Ohio region. Freshmade 3D has also received development support from America Makes, part of the National Network for Manufacturing Innovation established by the Revitalize American Manufacturing and Innovation Act of 2014.

"We're so proud to be a part of Freshmade 3D's success," said Barb Ewing, CEO of the Youngstown Business Incubator. "Two of the three founders started their entrepreneurial career as part of our team. They are proof that Northeast Ohio is fast becoming the epicenter for additive manufacturing in North America."

For more information about AMClad tooling, visit exone.com/AMCladTooling.

About ExOne

ExOne is the pioneer and global leader in binder jet 3D printing technology. Since 1995, we've been on a mission to deliver powerful 3D printers that solve the toughest problems and enable world-changing innovations. Our 3D printing systems quickly transform powder materials — including metals, ceramics, composites and sand — into precision parts, metalcasting molds and cores, and innovative tooling solutions. Industrial customers use our technology to save time and money, reduce waste, improve their manufacturing flexibility, and deliver designs and products that were once impossible. As home to the world's leading team of binder jetting experts, ExOne also provides specialized 3D printing services, including on-demand production of mission-critical parts, as well as engineering and design consulting. Learn more about ExOne at www.exone.com or on Twitter at @ExOneCo. We invite you to join with us to #MakeMetalGreen™.

View source version on businesswire.com: <https://www.businesswire.com/news/home/20210428005417/en/>

Media:

Sarah Webster
Chief Marketing Officer
724-516-2336

sarah.webster@exone.com

Source: The ExOne Company