ExOne to Offer World’s Largest Metal Binder Jet 3D Printer With a Controlled Atmosphere, Capable of Aluminum and Titanium Production, in 2022

March 18, 2021

- In December 2020, ExOne was issued a patent on binder jet 3D printing in an inert atmosphere sufficient to allow reactive materials to be processed
- Feature will smooth the way for production 3D printing of high-demand materials that require environmental controls

NORTH HUNTINGDON, Pa.--(BUSINESS WIRE)–Mar. 18, 2021-- The ExOne Company (Nasdaq: XONE), the global leader in industrial sand and metal 3D printers using binder jetting technology, today announced that it will offer a controlled-atmosphere model of its X1 160Pro™ extra-large production metal printer in the second half of 2022.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20210318005436/en/

The X1 160Pro, with a build box of 800 x 500 x 400 mm, or 160 liters, is ExOne’s 10th and largest production-ready metal binder jetting system to date. The new model is now shipping from the company’s European headquarters and production facility in Gersthofen, Germany.

A controlled atmosphere is essential for 3D printing of reactive fine metal powders, but it also offers other benefits, such as reduction of powder oxidation and enhanced powder dispensing and spreading through control of humidity. This update will smooth the way for high-volume production of aluminum, titanium, copper, and several other materials using binder jet 3D printing technology.

ExOne has successfully been binder jetting reactive powders in controlled atmospheres, also sometimes referred to as inert or chemically inactive, for years. On Dec. 1, 2020, ExOne was issued a patent on binder jet 3D printing in a controlled atmosphere (U.S. Patent No. 10,850,493).

ExOne’s controlled-atmosphere X1 160Pro can be used with nitrogen or argon and will be paired with accessories and ancillary equipment also equipped with inert atmosphere features. These include a curing oven, powder conditioning system, depowdering station, and transport device for moving the build-box between process stages to ensure complete atmosphere control throughout the process.

Importantly, ExOne will continue to offer the original model of the X1 160Pro, a streamlined model for customers who do not need a controlled atmosphere system to process metal powders such as stainless steels. ExOne customers currently use the X1 25Pro® metal binder jet system for production today without an inert feature, with one customer now operating six of the systems for serial production.

ExOne binder jet 3D printing technology is capable of processing 23 metal, ceramic, and composite materials, including a dozen single-alloy metals such as aluminum and titanium.

About ExOne

ExOne (Nasdaq: XONE) 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™.
Media:
Sarah Webster
724.516.2336
sarah.webster@exone.com

Doug Braunsdorf
1.646.899.7687
doug.braunsdorf@bcw-global.com

Source: The ExOne Company