ExOne Metal 3D Printing Adoption Center Surpasses 2 Million Parts, Adds New Systems for Stainless Steel Part Production

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- Two new X1 25Pro® binder jet printers now support dedicated production of 17-4PH and 316L stainless steel parts for industrial customers and service bureaus
- ExOne will continue offering the company’s most popular and affordable 3D printed metal – now named X1 Metal 420i™ – available in a dozen custom finishes and durable enough for use in plastic injection molding and other tooling applications
- The newly renovated Adoption Center operates 24-7 with 28 metal 3D printers and about a dozen furnaces, including a high-capacity Elnik batch furnace and a continuous furnace

NORTH HUNTINGDON, Pa.--(BUSINESS WIRE)--Jun. 16, 2021--The ExOne Company (Nasdaq: XONE) (“ExOne” or the “Company”), the global leader in industrial sand and metal 3D printers using binder jetting technology, today announced it has surpassed delivery of 2 million metal parts to customers worldwide and has added two X1 25Pro metal printers for dedicated production of stainless steel parts.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20210616005607/en/

The mission of the ExOne Adoption Center is to allow customers to try metal binder jet 3D printing for their designs before they decide to buy an ExOne printing system for their own production.

Located outside of Pittsburgh, ExOne’s Metal 3D Printing Adoption Center produces parts 24-7 on more than two dozen metal 3D printers for industrial customers and on-demand manufacturing service bureaus such as Shapeways, Sculpteo, Xometry, and more.

ExOne’s metal 3D production facility has been in continuous operation since 2005 and has now produced more than 2 million parts in a wide range of metals, with production of single-alloy metals picking up following the launch of the company’s patented Triple Advanced Compaction Technology (ACT).

Now featured on all ExOne production metal printers, Triple ACT uses an exclusive method of dispensing, spreading and compacting ultra-fine metal powders during binder jet 3D printing — delivering metal parts with industry-leading density, accuracy, and repeatability.

Two new X1 25Pro printers featuring Triple ACT have now been installed in the ExOne Adoption Center and are dedicated to running two stainless steel materials for customers: 17-4PH and 316L. The 25Pro is designed for high-volume production and has a build area of 400 x 250 x 250 mm (15.75 x 9.84 x 9.84 in), enabling it to 3D print a wide range of part sizes.

Popular Metals with Programmable Porosity

Aside from 316L and 17-4PH, ExOne offers a variety of other single-alloy metals, including 304L, M2 Tool Steel, Inconel 718, 6061 Aluminum, Copper, and more.

However, the company’s most popular material continues to be X1 Metal 420i – a metal matrix composite made up of 60% 420 stainless steel that is 40% infiltrated with bronze, one of the earliest metals ever processed on ExOne printers. This material is highly durable and is being used for industrial and tooling applications, such as plastic injection molding and blow molding. Additionally, it’s the most popular and affordable material option for consumer goods, such as jewelry, where it’s popular for a dozen unique finishes such as gold, nickel, and matte black.

ExOne also offers X1 Metal 316i™, an easier-to-machine matrix material that is 60% 316 stainless steel 40% infiltrated with bronze. This material also offers enhanced corrosion resistance properties.
A unique feature of ExOne's binder jetting technology is the ability to 3D print metal parts with a specific level of porosity, which is helpful for filtration, tooling, and other applications.

ExOne and Shapeways will be hosting a webinar today at 10 a.m. ET about 3D printing 316L and X1 Metal 420i for consumer and industrial parts using ExOne's exclusive approach to binder jet 3D printing.

What is Binder Jet 3D Printing?

Widely regarded as the fastest method of metal 3D printing for high-volume output, binder jetting is highly similar to paper printing. An industrial inkjet printhead selectively deposits a binder into a bed of powder particles creating a solid part one thin layer at a time. Binder jetting can create 3D objects in metal, sand, ceramic or other powders. When printing metals, the final part must be sintered in a furnace to fuse the particles together into a high-density solid object.

ExOne has qualified more than 20 metal, ceramic, and composite materials for its binder jetting process. More than half of those materials are single-alloy metals, such as 17-4PH, 316L, 304L, M2 Tool Steel, Inconel 718, and more. Most recently, ExOne announced that 6061 aluminum is now a Customer-Qualified material, and titanium is now fast-tracked for qualification in partnership with a global medical device firm.

To have your part metal 3D printed with ExOne technology, contact one of our service bureau partners or visit www.exone.com/quickship for more information.

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™.

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