

Desktop Metal Introduces DM HH Stainless Steel, a High-Strength and Hardness Alloy for the Production System

New Material Enables Mass Production of Wear- and Corrosion-Resistant Components for Oil & Gas, Automotive, Consumer Products, and Medical Devices

BOSTON--(BUSINESS WIRE)-- Desktop Metal (NYSE: DM) today announced it has released DM HH Stainless Steel (DM HH-SS), a custom stainless steel alloy that combines high strength and hardness with corrosion resistance, for additive manufacturing on the Production System™ platform. Customers can now leverage the Production System's Single Pass Jetting™ (SPJ) technology to produce DM HH-SS components at scale across a range of industries where high strength and hardness are required, including oil & gas, automotive, consumer products, and medical devices. With the addition of this new alloy, the Production System can now print ten qualified metal materials.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20220112005108/en/>



Offset sockets used for manufacturing tooling are critical parts in scenarios where space is limited and a traditional tool would not be able to access a bolt. Manufacturers have traditionally warehoused and maintained a large variety of tools to accommodate the multiple socket sizes produced for each unique bolt size. With the Production System, manufacturers can instead maintain a digital warehouse of each socket size and print large quantities of

DM HH-SS is a custom, heat treatable-alloy that combines the tensile strength, ductility, and corrosion resistance of 13-8 PH stainless steel with the added benefit of improved hardness comparable to low-alloy steels, such as 4140. These attributes make DM HH-SS a key enabling material for companies looking to eliminate the use of low-alloy steels, which also require a subsequent plating step for applications needing corrosion protection. DM HH-SS is also an ideal material for

different sizes together in a single build, enabling just-in-time (JIT) manufacturing to meet demand. DM HH-SS is the ideal material for high-wear components such as these sockets, which are subjected to repeated abrasive use and expected to have a long lifetime, making high strength and hardness as well as corrosion resistance critical. (Photo: Business Wire)

conformally cooled injection tool core and cavity applications, where millions of injection strokes per

year are required.

“Our materials science team is working diligently to develop innovative materials that meet the demanding applications needs of our customers in a cost-effective way,” said Jonah Myerberg, Co-founder and CTO of Desktop Metal. “DM HH-SS is a compelling alternative to 17-4 PH stainless steel that improves upon its mechanical properties while maintaining corrosion resistance, making it suitable for critical components that previously required the use of low-alloy steels for their high hardness and strength. The Production System allows customers to go to market at scale with this material and eliminate operations, such as plating, which can create supply chain complexity and also be harmful to the environment.”

Derived from 13-8 PH stainless steel (UNS 13800) and custom-developed by Desktop Metal, DM HH-SS has been qualified and fully characterized for printing on Production System technology. An example of a key DM HH-SS application includes:

- **Tight Clearance Offset Socket**

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The Production System - World’s Fastest Way to 3D Print Metal Parts At-Scale

Created by the inventors of binder jetting and single-pass inkjet technology, the Production System is an industrial manufacturing platform powered by Desktop Metal’s patent-pending SPJ technology. It is designed to achieve the fastest build speeds in the metal additive manufacturing industry — up to 100 times those of legacy powder bed fusion technologies — and enable production quantities of up to millions of parts per year at costs competitive with conventional mass production techniques.

The Production System platform consists of two printer models: the P-1, a solution for process development and serial production applications, and the P-50, a large form factor mass production solution for end-use parts. The Production System combines Desktop Metal engineered binders with an open material platform, allowing customers to produce high-performance parts using the same low-cost metal powders used in the Metal Injection Molding (MIM) industry. An inert processing environment enables compatibility with a variety of materials, including high-performance alloys and even reactive metals, such as aluminum and titanium. To learn more about the Production System, visit:

www.desktopmetal.com/products/production.

In addition to DM HH-SS, the Production System materials library includes commercially pure copper, D2 tool steel, 420 stainless steel, nickel alloy IN625, 4140 low-alloy steel, 316L stainless steel, and 17-4 PH stainless steel. The platform also supports several customer-qualified materials, including silver and gold, and Desktop Metal plans to add additional metals to its portfolio, including tool steels, stainless steels, superalloys, and more.

To learn more about DM HH-SS and the Production System materials portfolio, visit:

www.desktopmetal.com/materials.

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, named to MIT Technology Review's list of 50 Smartest Companies, and the 2021 winner of Fast Company's Innovation by Design Award in materials and Fast Company's Next Big Things in Tech Award for sustainability. For more information, visit www.desktopmetal.com.

Forward-looking Statements

This press release contains certain forward-looking statements within the meaning of the federal securities laws. Forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks, uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this document, including but not limited to, the risks and uncertainties set forth in Desktop Metal, Inc.'s filings with the U.S. Securities and Exchange Commission. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and Desktop Metal, Inc. assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise.

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