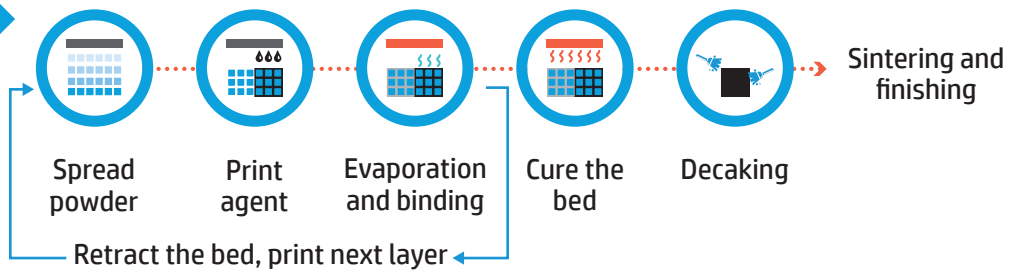
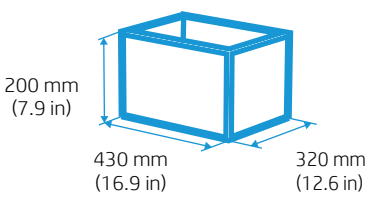
HP Metal Jet. Reinvent opportunities.

Take on new jobs and unlock new revenue streams. Produce complex parts and new applications, in cost-effective high-volume runs.

HP Metal Jet printing process



Up to 50X more productive[1]



Binder jetting build size for high volumes, large parts

Save time—no tooling

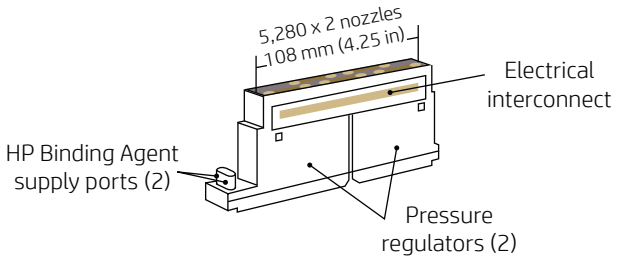
Produce complex, functional parts on-demand

Multiple design iterations in just days

Consolidate parts, simplify assembly

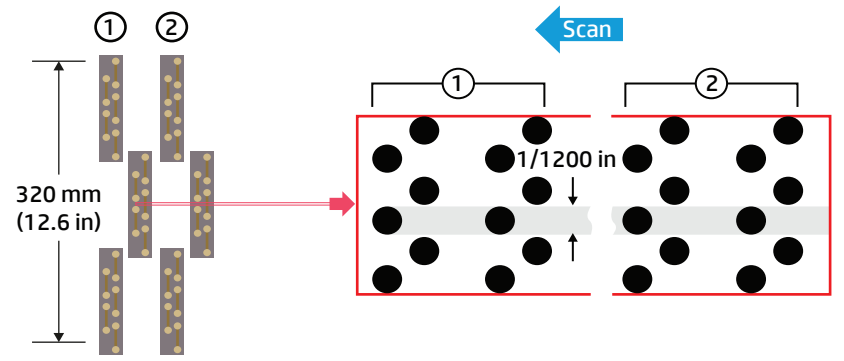
Fewer steps—no debinding required

HP Thermal Inkjet printheads—printhead and nozzle arrangement



Each printhead produces a 108-mm (4.25-inch) print swath with **two independent columns of 5,280 nozzles** that are spaced 1200/inch in each column. There are **two independent supply ports** for HP Binding Agent and **two built-in pressure regulators.**

Printhead arrangement on print carriage



HP Metal Jet printers use **six printheads arranged in two printbars** on the print carriage

Four nozzles print in the same 1/1200-inch dot row

=

4X nozzle redundancy: up to four different nozzles can print HP Binding Agent in the same 1200 dpi grid point on the powder bed

High-quality final metal parts

Get strong, functional final metal parts with **HP's isotropic mechanical properties** and **proprietary binding agent.** Compared to selective laser melting (SLM), HP Metal Jet produces more isotropic grain structure in the sintered part that results in more uniform material properties. Count on **HP Thermal Inkjet** expertise for industrial production-grade quality and consistent output at speed.

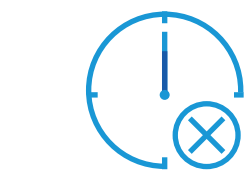
Low cost[2]

Drive new business growth by producing high-quality final metal parts at a **low cost per part.**[2] **High reusability of materials** can reduce materials cost and waste.[3] Look to **HP's Open Platform** for industry-standard, low-cost materials and sintering solution compatibility.

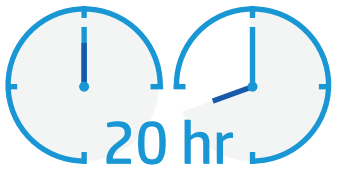
HP Binding Agent:

Key enabler for higher quality and productivity

A time-consuming debinding process is unnecessary with HP Metal Jet. With HP Metal Jet, the green part can be up to 99% metal by weight. In metal injection molding (MIM), feedstocks are typically less than 93%. MIM requires a debinding process to remove the wax that can add up to 20 hours to the MIM workflow. HP Binding Agent also allows thicker-walled parts to be produced faster as HP Metal Jet's low polymer loading effectively decomposes more rapidly than the higher load of MIM polymers under sintering temperatures.



No extra time for HP Metal Jet



MIM up to 20 extra hours

For more information visit hp.com/go/3Dmetals

keep reinventing

1. Based on comparable competitive binder jetting and selective laser melting (SLM) metals 3D printing solutions available as of July 31, 2018. Productivity claim based on: 1) up to 50 times more productive, on average, based on print speed for serial production up to 100,000 parts, and 2) solution acquisition cost.
2. Low cost based on comparable competitive binder jetting and selective laser melting (SLM) metals 3D printing solutions available as of July 31, 2018.
3. Compared to selective laser melting (SLM) and based on internal testing of HP Metal Jet technology, as of September 2018.

4AA7-3432ENW, September 2018