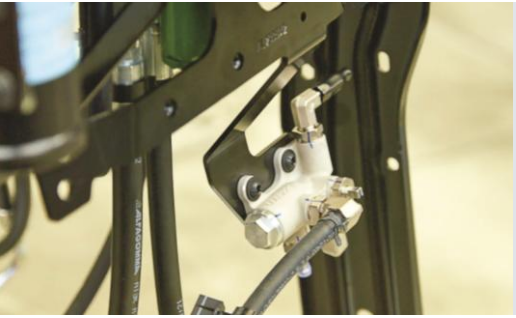
Industrial | Agricultural equipment

John Deere's Fuel Bypass Manifold





Produced by GKN

Data courtesy of John Deere

Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet compatible material: GKN 316 L

Mass: 400g

Successfully tested up to 370 bars

The company has tapped into the power of HP Metal Jet technology in its Mannheim factory to drive manufacturing innovation through cost-effective production and significant design improvements. Objective: 3D-printed thermal diverting valve for use in John Deere tractors. Approach: to refine the design and speed production of its first metal 3D-printed part.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Component innovation
- Increased performance
- Weight distribution

Supply chain
- Part consolidation
- Cost efficient

Reduced time-to-market
- Multiple iterations, earlier, on more designs
- Reduced time-to-market

JOHN DEERE

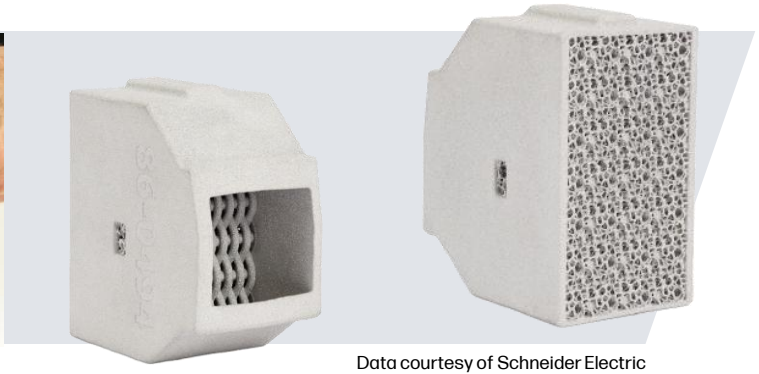
GKN ADDITIVE

Industrial | Electrical equipment

Schneider Electric's Circuit Breaker Air Filter



Produced by GKN



Data courtesy of Schneider Electric

Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet compatible material:	GKN 316 L
Mass:	100g

Schneider Electric is utilizing the innovations of HP Metal Jet technology, in partnership with GKN Powder Metallurgy, to mass produce a new electrical circuit board filter that is more efficient, more sustainable, and reduces the switchboard footprint.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Component innovation

- Optimized geometry
- Footprint reduction
- Increased performance
- Improvements on ease of use

Supply chain

- Part consolidation
- Footprint reduction
- Less labor intensive than conventional manufacturing
- Reduced costs

Reduced time-to-market

- Multiple iterations, earlier, on more parts
- Accelerate MVP testing
- Reduced time-to-market
- Several product designs in parallel

Schneider Electric

GKN ADDITIVE

Industrial & Automotive | Hydraulic Equipment

Domin's S4 Pro Servo Valve Manifold





Data courtesy of Domin

Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316 L
Mass:	100g

Hydraulic equipment – Direct drive manifold.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Component innovation
- Footprint reduction
- Increased performance
- Enhanced fluid flow in a smaller and more complex space
- Reduced CO_2 emissions

Supply chain
- Part consolidation
- Footprint reduction
- Cost reduction

Reduced time-to-market
- Multiple iterations, earlier, on more parts
- Accelerate MVP testing
- Reduced time-to-market
- Flexibility to adapt designs quickly once in production

DOMIN

Customer Goods | Fashion & Jewelry

Benchmark Designs Fashion and Jewelry



Data courtesy of Legor

Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified and qualified material:	HP Metal Jet SS 316L and Legor Silver 3DBJ-AG
Mass:	Various

Legor is an expert in jewelry design and manufacturing that has adopted HP Metal Jet to produce a wide variety of high-quality polished, complex parts at scale.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Component innovation
- Fast time to market
- Rapid design iterations
- Short limited-edition series

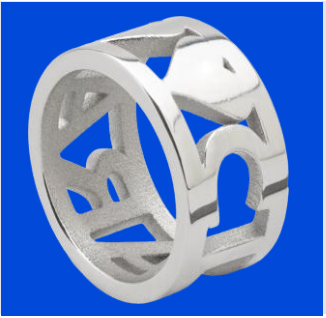
Supply chain
- Design freedom
- Mass customization
- Easy design variations

Reduced time-to-market
- Powder reusability
- Reduction of scrap waste
- Supply chain simplification

LEGOR®

Customer Goods | Fashion & Jewelry

Benchmark Designs Fashion and Jewelry





Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316L
Mass:	Various

Produce a wide variety of high-quality polished, complex jewelry parts at scale.

Using HP 3D technology to produce this part, the customer is now benefiting from:

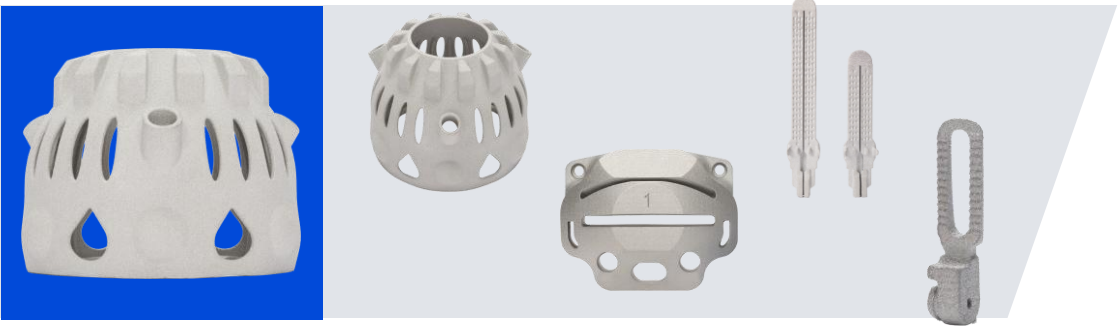
Component innovation
- Fast time to market
- Rapid design iterations
- Short limited-edition series

Supply chain
- Design freedom
- Mass customization
- Easy design variations

Reduced time-to-market
- Powder reusability
- Reduction of scrap waste
- Supply chain simplification

Medical | Medical Tools & Instruments

Benchmark Designs
Medical Tools and Instruments



Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 17-4PH
Mass:	Various

HP Metal Jet can address various medical use cases avoiding expensive and reducing lead time by eliminating the need for hard tooling.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Component innovation
- Personalization
- Different variants can be produced with the same set up process

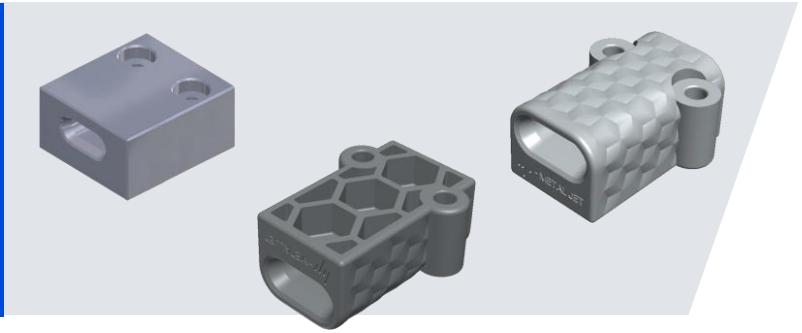
Supply chain
- Part consolidation
- Footprint reduction

Reduced time-to-market
- No tool investment
- Print different variants at once

Industrial | Mechanical Components

HP Additive Manufacturing Guidance Block





Produced by AMES

Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 17-4PH
Mass:	80 g

Lightweighting of mechanical components for industrial equipment (HP Jet Fusion 3D Printing Solutions and HP Metal Jet Printing Solutions).

Using HP 3D technology to produce this part, the customer is now benefiting from:

Component innovation

- 55% Lightweight reduction
- Customized cosmetic pattern
- Printed Logo/Lettering

Supply chain

- 10% Cost reduction compared to conventional manufacturing method (machining)
- Footprint reduction

Reduced time-to-market

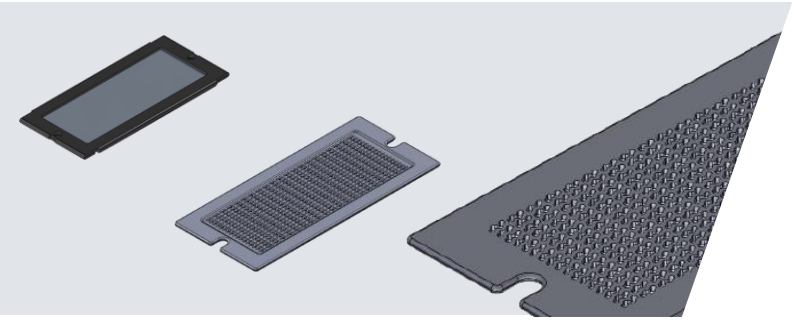
- No tool investment
- Digitally print components at scale
- Several design iterations qualified in parallel

Production:

Industrial | Mechanical Components

HP Inc. – HP on HP Case Filter Mesh





Produced by AMES

Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 17-4PH
Mass:	18 g

Unify parts to reduce labor for industrial application (HP Site Print).

Using HP 3D technology to produce this part, the customer is now benefiting from:

Component innovation

- Unify 2 parts in 1
- Conventional manufacturing: sheet metal assembled with woven mesh
- Improved flow with new pattern

Supply chain

- 17% Cost reduction compared to conventional manufacturing method (machining)
- Footprint reduction

Reduced time-to-market

- No tool investment
- Digitally print components at scale
- Several design iterations qualified in parallel

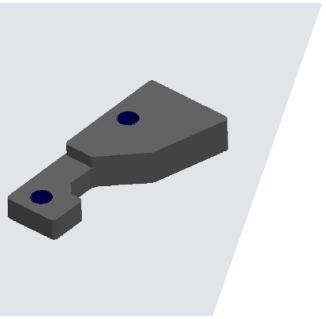
Production:

Industrial | Mechanical Components

HP Inc. – HP on HP Case Battery Wedge







Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316L
Mass:	5 g

Stainless Steel Mechanical Components: More Affordable with HP Metal Jet technology vs. Conventional Machining (HP Site Print).

Using HP 3D technology to produce this part, the customer is now benefiting from:

Sustainability

- Net-shape production: near-zero material loss by avoiding conventional machining

Supply chain

- 68% Cost reduction compared to conventional manufacturing method (machining)
- Print on demand

Reduced time-to-market

- No tool investment
- Digitally print components at scale
- Several design iterations qualified in parallel

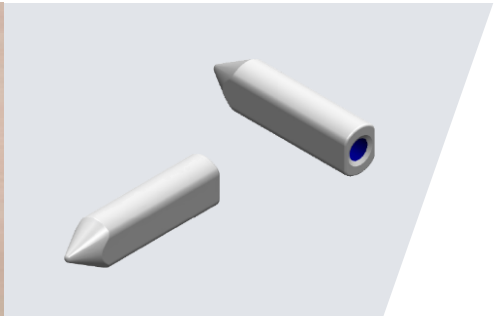
Production:

Industrial | Mechanical Components

HP Inc. – HP on HP Case Right Threaded Reflection Pin







Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316L
Mass:	22 g

Stainless Steel Mechanical Components: More Affordable with HP Metal Jet technology vs. Conventional Machining (HP Site Print).

Using HP 3D technology to produce this part, the customer is now benefiting from:

Sustainability

- Net-shape production: near-zero material loss by avoiding conventional machining

Supply chain

- 68% Cost reduction compared to conventional manufacturing method (machining)
- Print on demand

Reduced time-to-market

- No tool investment
- Digitally print components at scale
- Several design iterations qualified in parallel

Production:

AMES

Industrial | Mechanical Components

HP Inc. – HP on HP Case
New Ink Delivery System







Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316 L
Mass:	12 g and 9 g

New Ink Delivery System: Lighter, Smaller, Improved Functionality (HP Site Print).

Using HP 3D technology to produce this part, the customer is now benefiting from:

Sustainability
- Miniaturized design
- Net-shape production: near-zero material loss

Supply chain
- No off the shelf solution and no viability to manufacture this size with other technology
- Print on demand
- Footprint reduction

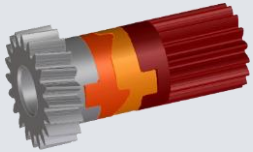
Reduced time-to-market
- No tool investment
- Digitally print components at scale
- Several design iterations qualified in parallel

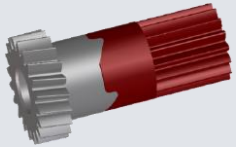
Industrial | Mechanical Components

HP Inc. – HP on HP Case Alignment Bar Gears

HP Latex R100 Printer







Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316 L
Mass:	5 g each

Smarter Gear Design: From four Components Down to two.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Sustainability

- Improved Assembly Design: smarter design allowing to move from 4 components down to 2 components
- Net-shape production: near-zero material loss

Supply chain

- Print on demand
- Footprint reduction
- 20% Cost reduction

Reduced time-to-market

- No tool investment
- Digitally print components at scale
- Several design iterations qualified in parallel

Customer Goods | Fashion & Jewelry parts

Legor demonstrators Polihug





Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet certified material: HP Metal Jet SS 316 L

Beyond extraordinary: Polihug. The new 3D product that combines both the HP Multi Jet Fusion and Metal Jet technologies.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Cost and weight reduction

- The real added value of 3D printing technology is to produce each product already assembled, with consequent reductions in costs and waste

Cost and time optimization

- Design and development to achieve cost and time optimization in production by exploiting the advantages of Design for Additive Manufacturing

Reduced time-to-market

- No tool investment
- Digitally print components at scale
- Several design iterations qualified in parallel

LEGOR Extraordinary matter · XYZ BAG .com · LEM · PUNTOZERO Design for Additive Manufacturing

Customer Goods | Fashion & Decoration parts

Legor / Taurini
Metal chess pieces





Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316 L

Developed chess pieces natively optimized for Binder Jet additive manufacturing, integrating a lattice structure to reduce weight and material usage. Key challenge: ensuring dimensional stability and preventing warping or deformation during the printing process.

Using HP 3D technology to produce this part, the customer is now benefiting from:

- **Guaranteeing replicability so that all pieces are produced identically**
- **Design freedom**
- **Scalability of production, enabling consistent quality from single prototypes to larger series**

LEGOR® Extraordinary matter

TAURINI PIANETAGEMME

Industrial | Mechanical Components

GKN demonstrators
Mixing units



GKN develops and validates industrial mixing units as technology demonstrators for the fluid distribution industry.

Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet compatible material: GKN 316L

Using HP 3D technology to produce this part, the customer is now benefiting from:

Design freedom

- Design freedom that leads to more efficient mixing units in a more compact space
- Multifunctionality: several functions into one single component

Supply Chain

- Footprint reduction
- Parts consolidation
- Design variants
- No tool investment

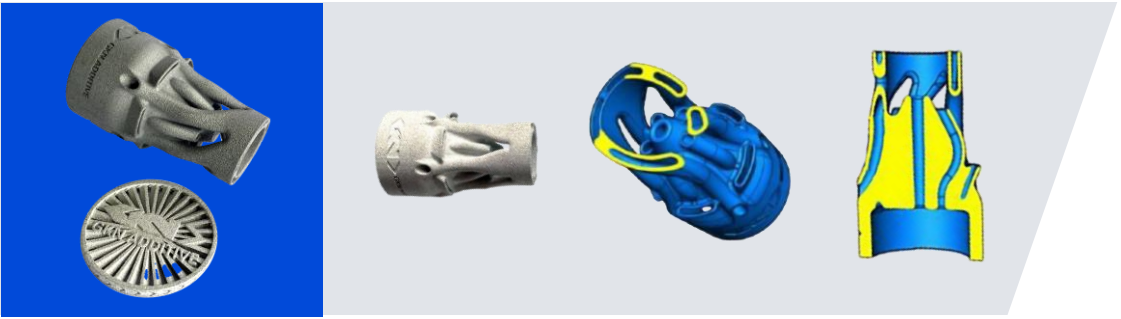
Reduced time-to-market

- Multiple iterations, earlier, on more designs
- Reduced time-to-market

GKN ADDITIVE

Industrial | Mechanical Components

GKN demonstrators
Air Nozzle



GKN develops and validates industrial mixing units as technology demonstrators for the fluid distribution industry.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Design freedom
- Complex inner structures
- Enhanced efficiency
- Increased functionality
- Combination of different functions in a compact component

Efficiently 3D print metal parts at scale
- Reproducible serial production at high quantity Competitive serial cost

Sustainability
- Reduction of air consumption
- Footprint reduction

Technology: HP Metal Jet technology

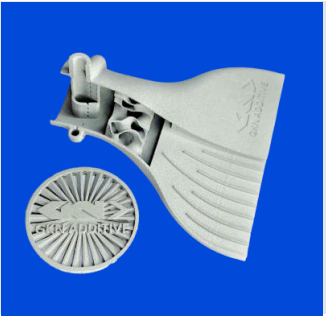
Solution: HP Metal Jet S100 Printing Solution

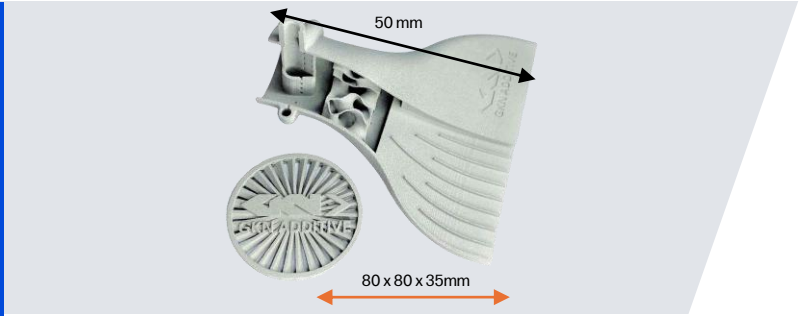
HP Metal Jet certified and qualified material:
316L
GKN 17-4PH
GKN M2 Tool Steel

GKN ADDITIVE

Industrial | Mechanical Components

GKN demonstrators
Mixing units





Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet compatible material: GKN 316L

GKN develops and validates industrial mixing units as technology demonstrators for the fluid distribution industry.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Design freedom

- Functional integration in minimal space (Mixing, noise reduction, baffles, heating, ...)
- Pressure resistance up to 370 bar validated

Efficiently 3D print metal parts at scale

- Reproducible serial production at high quantity Competitive serial cost

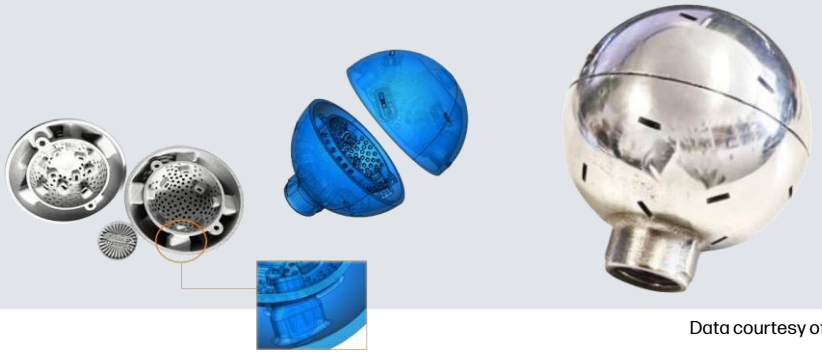
Reduced time-to-market

- Multiple iterations, earlier, on more designs
- Reduced time-to-market
- No tool investment

GKN ADDITIVE

Industrial | Cleaning nozzles

FDX GKN and HP Metal Jet technology - OsciJet Spray Ball



Data courtesy of FDX / GKN

Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet 316L HP Metal Jet SS 17-4PH
Post processing:	Shot Blasting and Polishing

FDX OsciJet Nozzles are based on the principle of fluidic oscillators. These devices create a self-induced oscillation without requiring any moving parts.

AM technology enables to combine a number of OsciJet nozzles that are able to emit sweeping and pulsating streams of fluid to almost complete spatial coverage.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Innovation

- Complex nozzle channel design which allows a sweeping or pulsating stream of fluid.

Sustainability and Supply chain

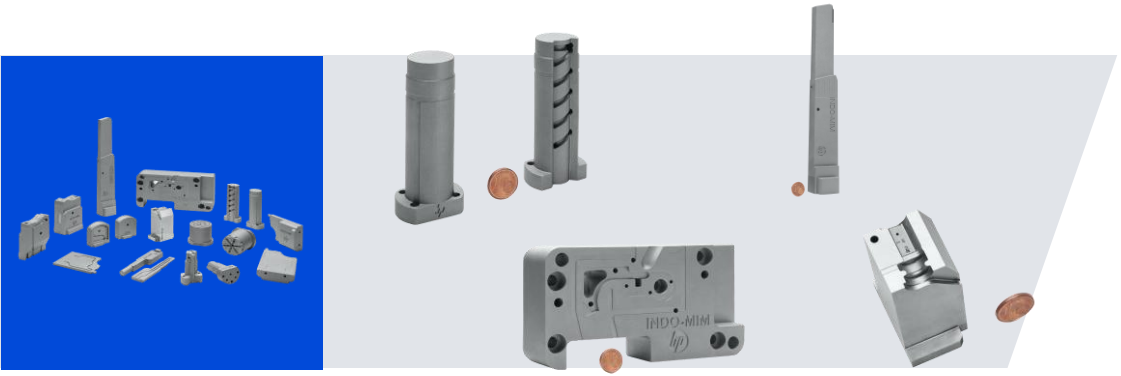
- Reduction of process steps and no moving parts in the nozzle application

FDX Fluid Dynamix

GKN ADDITIVE

Tooling | Tool inserts

INDO-MIM's Mold Inserts for MIM



Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet qualified material:	INDO-MIM M2 Tool Steel
Mass:	90 g to 2 kg

Indo-MIM develops and manufacturers the M2 tool steel mold inserts with conformal cooling channels for metal injection molding applications.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Design freedom

- Integrating cooling channels in inserts to reduce cycle time and improve dimensional control
- ~20% to 30% lower cycle time

Supply Chain

- ~50% increase in the wear resistance
- ~30% to 50% tool life improvement
- Reduction of scrap waste

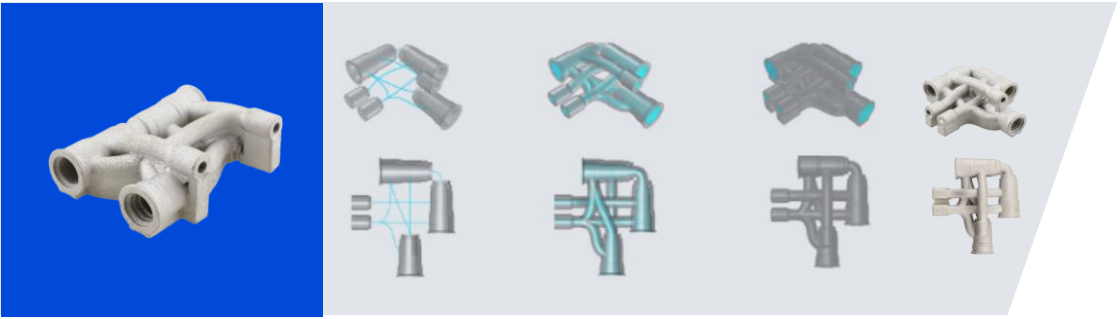
Reduced time-to-market

- Reduced time-to-market
- 5X-10X faster than L-PBF process

INDO-MIM® COMPLEXITY SIMPLIFIED

Industrial | Hydraulics & Pneumatics

ETH Zürich / Inspire
Additive Fluidics, Fluid manifolds



Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet 316L
Mass:	164 g – 174 g

Generative design algorithms allow to automatically create production-ready hydraulic manifolds. Based on the chosen interface and channel layout, the algorithm generates the detailed part design with reinforcements, supports and a sintering surface.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Automated design
- Interfaces and channels can be placed as required for the given application
- Manufacturability and structural integrity are considered automatically

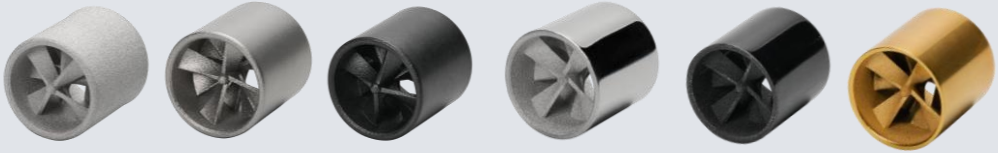
Design iterations
- Reduction of design time by 90%
- Fast design iterations within minutes

Cost-efficiency
- Generative design and HP Metal Jet enable the cost-efficient design and production from lot size 1 to series parts

ETH zürich

Industrial | Consumer Electronics / Medical

Zoltrix
Post processing Techniques



As Sintered | Sandblasted | Sandblasted PVD Black | Polished | Polished PVD Black | Polished PVD Gold

Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet certified material: HP Metal Jet 316L
HP Metal Jet 17-4PH

Zoltrix delivers end to end mass production solutions with HP Metal Jet for Consumer Electronics, Industrial and Medical applications. The final parts were post processed with different techniques to achieve best in class quality to meet end user need.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Cost and weight reduction

- The real added value of 3D printing technology is to produce each product with consequent reductions in costs and waste

Cost and time optimization

- Design and development to achieve cost and time optimization in production by exploiting the advantages of Design for Additive Manufacturing

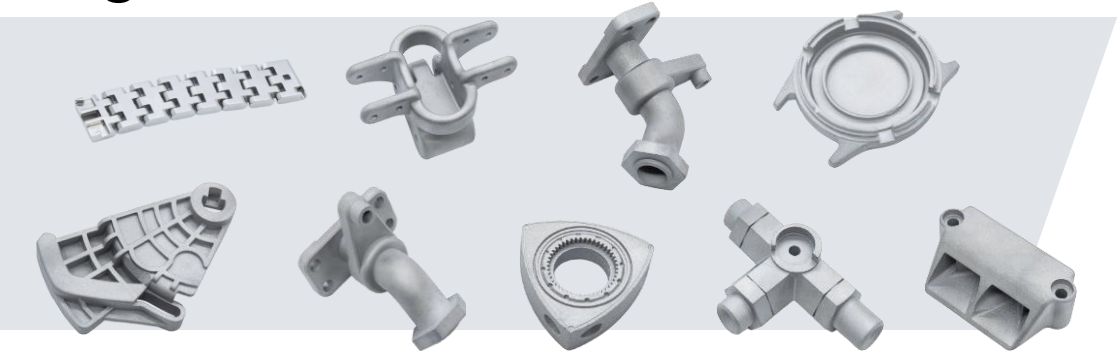
Design freedom

- Design freedom (especially for the creation of holes and internal channels), reducing the use of material and rationalizing the space to position different objects in a single construction volume. All in a short time

旭聯 — ZOLTRIX —

Industrial | Consumer Electronics

JLC
High Mix Low Volume Short Runs



Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet certified material: HP Metal Jet 316L
HP Metal Jet 17-4PH

JLC is specialized at providing high mix low volume short run parts service throughout customers' NPI journey. Either it is dozens or hundred of parts, JLC developed in-house data algorithms to select Metal Jet suitable ones and deliver in 5 days turn around time.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Cost and weight reduction

- The real added value of 3D printing technology is to produce each product with consequent reductions in costs and waste

Cost and time optimization

- Design and development to achieve cost and time optimization in production by exploiting the advantages of Design for Additive Manufacturing

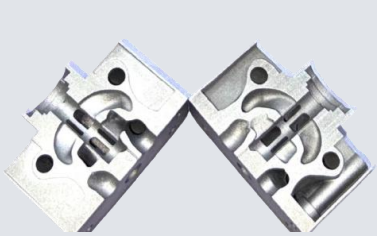
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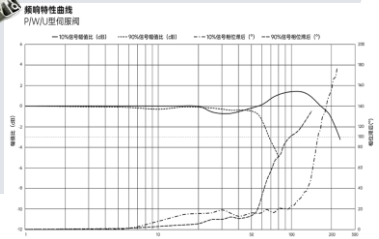
J@LC JLC3DP

Industrial & Automotive | Mechanical Micro Parts

Sino Dynamics Ltd.
S3 Servo Valve Manifold







Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 17-4PH (H900)
Mass:	320g

Successfully tested to 100Mpa

In most cases, the S3 series is the most commonly use valve(NG6). The servo valve adopts a patented rotating valve core structure, which controls the valve opening by rotating the valve core with a micro servo motor. It has extremely high dynamic performance, exceeding NAS10 level anti pollution ability and a maximum flow rate of up to 75L/min.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Design freedom

- Design freedom (especially for the creation of holes and internal channels), reducing the use of material and rationalizing the space to position different objects in a single construction volume. All in a short time

Design iterations

- Multiple design iterations for testing.
- Multiple design iterations to enrich product lines. (S1/S5)

Supply chain

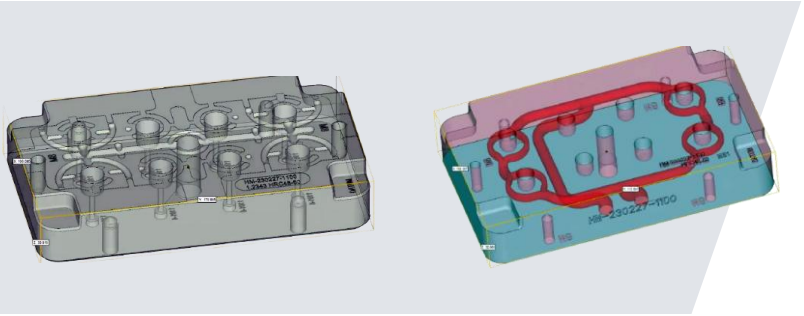
- Reduce inventory
- Manufacturing on demand
- Parts consolidation

赛诺动力
SinoDynamics Ltd

Industrial | Tooling

BJ-Tech H13 Inserts for PIM Tooling





Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
Material:	H13 Tool Steel
Mass:	Several

BJ-Tech develops H13 tool steel mold inserts with conformal cooling channels for plastic injection molding applications. Sintered in a SinterZone VF336 Furnace.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Design freedom

- Integrating cooling channels in inserts to reduce cycle time and improve dimensional control
- ~20% to 30% lower cycle time

Supply chain

- Leverage conventional tool steels unlike LPBF
- Reduction of scrap waste)

Reduced time-to-market

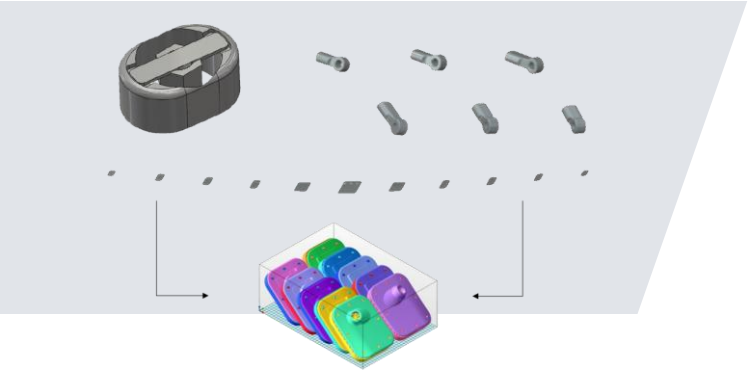
- Accelerate development cycles by prototyping with production ready tooling
- 5X-10X faster than L-PBF process

BJ TECH 必极 SinterZone

Industrial | Maritime

Orient Express Racing Team
High Mix / Low Volume





Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 17-4PH HP Metal Jet SS 316L
Mass:	2 g – 200 g

Since Dec 2023, OE team has collaborated with HP AM's engineers to design and produce 28 functional parts with HP Metal Jet Technology.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Agility
- On Demand manufacturing
- High-mix/low volume production
- Fast turnaround

Design iterations
- Fast design iterations

Design freedom
- Different designs with different curvatures per design
- No tool investment/design constraints

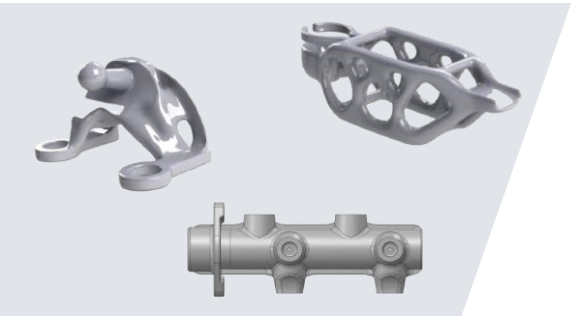
37TH AMERICA'S CUP BARCELONA

ORIENT EXPRESS RACING TEAM
OFFICIAL FRENCH CHALLENGER

Industrial | Automotive

ArcelorMittal New Steel Solutions for HP Metal Jet





Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
Material:	AdamIQ™ 17-4 PH ArcelorMittal
Mass:	16 g – 900 g

The collaboration between HP and ArcelorMittal aims at bringing new steel solutions to a sufficient TRL and then incubating new applications developed in collaboration with customers in ArcelorMittal Research Center.

Using HP 3D technology to produce this part, the customer is now benefiting from:

1

Component innovation

- Component in combustion engines, link between camshaft and valves for proper engine timing
- 36% weight reduction
- Stronger design

2

Component innovation

- This part holds the strut keeping a car's tailgate open
- Assembly consolidation
- 20% weight reduction

3

Component innovation

- Braking systems component
- Switching from casting reduces the scrap waste and machining operations

ArcelorMittal

Mobility & Transportation | Automobiles

Blazin Rodz Steering Wheel



Data courtesy of Blazin Rodz

Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet certified material: HP Metal Jet SS 17-4PH

Building an interior that matches the soul of "Doughboy" was critical to making a comprehensive vehicle. The design team relied on the 3D components to complete the aesthetic and functional performance required to carry the Blazin Rodz badge.

Using HP 3D technology to produce this part, the customer is now benefiting from:

- High quality Metal Jet parts allow for flawless bespoke metal accessories
- Design freedom allowed top designers to flex their skills, incorporating cosmetic metal components

Blazin' Rodz CUSTOM AUTOWORKS

Mobility & Transportation | Automobiles

Blazin Rodz Exhaust Components



Data courtesy of Blazin Rodz

Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet certified material: HP Metal Jet SS 316L

Building an innovative custom-made exhaust worthy of inclusion in "Doughboy" was no small feat. The design team utilized 3D printed metal components to enable a functional and inventive exhaust system.

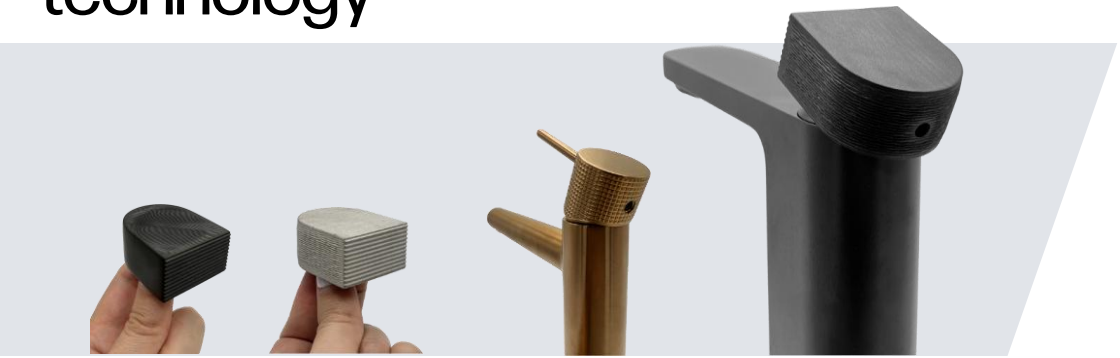
Using HP 3D technology to produce this part, the customer is now benefiting from:

- Design freedom allowed the team to create designs that would not be manufacturable any other way
- The corrosion resistance of SS316L will ensure longevity of the parts

Blazin' Rodz CUSTOM AUTOWORKS

Consumer Goods | Bathroom Applications

Roca Group and HP Metal Jet technology



Data courtesy of Roca Group

Technology:	HP Metal Jet technology
Solution:	HP Metal Jet S100 Printing Solution
HP Metal Jet certified material:	HP Metal Jet SS 316L
Post-processing:	Polishing and PVD Coating

Roca Group is exploring HP's Metal Jet S100 technology to drive innovation in bathroom products through metal additive manufacturing. This collaboration examines how HP Metal Jet can enhance design freedom and creativity in components such as, but not limited to, faucet handles.

The handles displayed here were customized using HP's Digital Texture Library, demonstrating the potential of 3D printing to deliver distinctive aesthetics and enhanced functionality.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Innovation

- Greater design freedom for distinctive and personalized bathroom products

Sustainability and Supply chain

- Reduction of material waste and fast prototyping without tooling, qualifying multiple concepts simultaneously

ROCA GROUP

Consumer Goods | Loop Earplugs for Noise Reduction

Loop Earplugs & Swarovski



Data courtesy of Loop Earplugs and Swarovski

Technology: HP Metal Jet technology

Solution: HP Metal Jet S100 Printing Solution

HP Metal Jet certified material: HP Metal Jet SS 316L

Post-processing: Polishing and PVD Coating

Loop Earplugs joins forces with Swarovski to celebrate the Austrian house's 130th anniversary with the Loop x Swarovski Experience 2. Created in partnership with the Swarovski Creators Lab and crafted using HP Metal Jet Technology, these limited-edition earplugs are hand-finished with Swarovski Crystals and feature Loop's award-winning sound filtration. Blending bold design with cutting-edge innovation, they reimagine earwear as jewelry—the ultimate fashion meets function.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Innovation

- Greater design freedom that enables intricate designs

Sustainability and Supply chain

- Reduction of material waste and fast prototyping without tooling, qualifying multiple concepts simultaneously, delivering consistent, premium parts that combine innovation, aesthetics and performance

HP Metal Jet Materials Expansion | Continuum M247LC

Nickel Superalloy: Continuum M247LC



Data courtesy of HP AM, Continuum, and Tecnalia

Technology: HP Metal Jet technology

Segment: Aerospace, Defense, Energy

Properties: High temperature
High corrosion resistance performance

HP AM Solutions, in collaboration with Continuum Powders and TECNALIA, is advancing the development of OptiPowder M247LC, a low-carbon, nickel-based superalloy designed for high-temperature applications where both strength and corrosion resistance are essential, making it an excellent fit for aerospace and energy sectors. Once qualified, the work will extend to include additional high-performance nickel specialty alloys, further advancing binder jet technology as a scalable and production-ready solution.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Sintered Based Technology

- Expand application reach and designs utilizing non-weldable alloys

Reduced time-to-market

- Accelerate development cycles by prototyping with production ready tooling
- Applying design for AM concepts to improve productivity

tecnalia continuum

HP Metal Jet Materials Expansion | Continuum Ni718

Nickel Superalloy: Continuum Ni718





Data courtesy of HP AM and Continuum

Technology: HP Metal Jet technology

Segment: Aerospace, Defense, Energy

Properties: High temperature performance

HP AM is strengthening its Metal Jet ecosystem through new material qualifications and industry collaborations. Continuum Powders has qualified OptiPowder Ni718 for use on the HP Metal Jet S100, delivering sintered components exceeding 98% density.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Supply Chain

- Footprint reduction
- Parts consolidation
- Design variants
- No tool investment

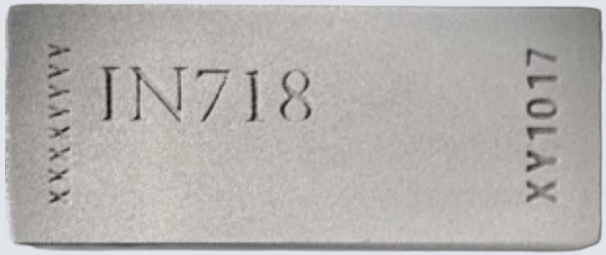
Reduced time-to-market

- Accelerate development cycles by prototyping with production ready tooling
- 5X-10X faster than L-PBF process

continuum

HP Metal Jet Materials Expansion | INDO-MIM IN718

Nickel Superalloy: INDO-MIM IN718



Data courtesy of INDO-MIM

Technology: HP Metal Jet technology

Segment: Aerospace, Defense, Energy

Properties: High temperature performance

HP AM continues to strengthening its Metal Jet ecosystem through new material qualifications and collaborations with leading manufacturing partners. INDO-MIM has qualified their IN718 for use on the HP Metal Jet S100 delivering sintered components exceeding 98% density.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Supply Chain

- Footprint reduction
- Parts consolidation
- Design variants
- No tool investment

Reduced time-to-market

- Accelerate development cycles by prototyping with production ready tooling
- 5X-10X faster than L-PBF process

INDO-MIM® COMPLEXITY SIMPLIFIED

HP Metal Jet Materials Expansion | Hyperion WC-Co

Hard metal: Hyperion WC-Co



Data courtesy of Hyperion Materials and Technologies Inc.

Technology: HP Metal Jet technology

Segment: Tooling, Nozzles, Precision cutting

Properties: High hardness, excellent wear resistance, thermal stability

HP AM & Hyperion are partnering to expand application reach and designs utilizing non-weldable, high hardness materials. The first milestone achieved was WC-Co compatibility (Printer, Binder, Process) on HP Metal Jet S100 Printing Solution with the next step being qualification. Utilizing Hyperion's expertise enables HP Metal Jet technology to produce precision tooling parts.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Sintered Based Technology

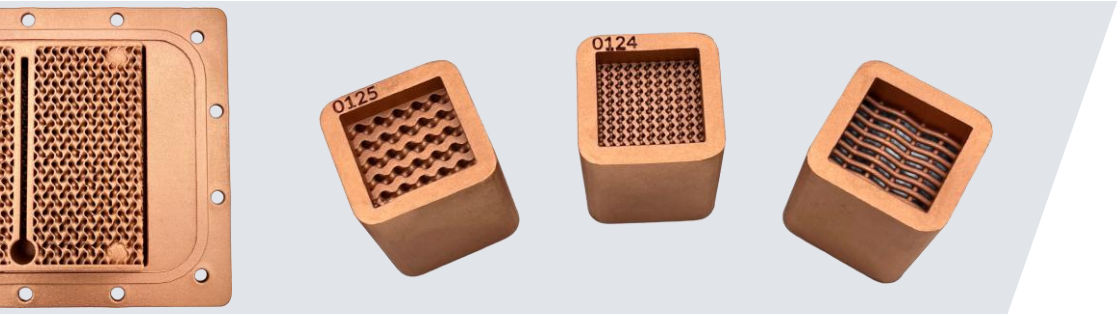
- Expand application reach and designs utilizing non-weldable alloys

Reduced time-to-market

- Accelerate development cycles by prototyping with production ready tooling
- Applying design for AM concepts to improve productivity

HYPERION
Materials & Technologies

HP AM Copper production via GKN Additive



Technology: HP Metal Jet technology

Segment: Energy, Heat management

Properties: High energy and thermal conductivity performance

HP AM is collaborating with GKN Additive to expand access to copper applications, enabling production of advanced components for cloud computing, electrification, and thermal management. Leveraging HP Metal Jet technology, the collaboration will drive measurable efficiency gains and operational savings projected in the millions over five years.

Using HP 3D technology to produce this part, the customer is now benefiting from:

Supply Chain

- Footprint reduction
- Parts consolidation
- Design variants
- No tool investment

Reduced time-to-market

- Accelerate development cycles by prototyping with production ready tooling
- 5X-10X faster than L-PBF process

GKN ADDITIVE