

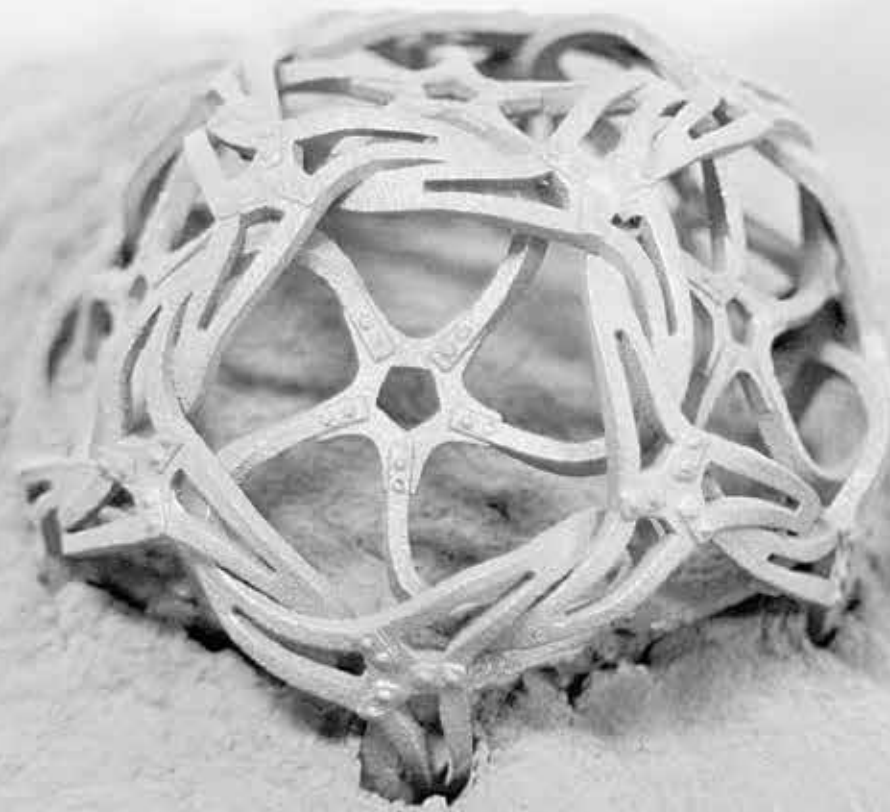
EASYMFG



EASYMFG

Streamline Manufacturing for Simplicity and Efficiency

Your Professional Partner in Binder Jet 3D Printing



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Revolutionizing Manufacturing with Binder Jetting Technology

Since its establishment in 2013, EASYMFG has been dedicated to delivering cutting-edge 3D printers that tackle complex challenges and enable transformative innovations.

Specializing in high-performance 3D printing systems for industrial applications, we have developed advanced technology that allows for the rapid transformation of various powder materials, such as metals, ceramics, and sand, into precise components.

ABOUT US

At EASYMFG, we are committed to providing industry-specific solutions that optimize manufacturing processes, enhance product quality, and drive innovation across various sectors.

Some of the industries we serve include:

- **Aerospace**
- **Automotive**
- **Hydraulics**
- **Art and Sculpture**
- **Defense and Military**
- **Dental and Orthodontics**
- **plumbing and fixtures**
- **Foundry and Casting**
- **Electronics**
- **Jewelry**
- **Medical and Healthcare**
- **Metal Injection Molding (MIM)**
- **Pumps and Valves**
- **Education and Research**

With our state-of-the-art solutions, industrial customers can achieve the following benefits:

- **Streamline production processes**
- **Enhance product quality**
- **Improve design flexibility**
- **Increase manufacturing versatility**
- **Optimize resource utilization**

As a leading expert in binder jetting technology, EASYMFG offers equipment customization and software development services. We aim to optimize printing processes and maximize efficiency. With our open-source approach, we foster a collaborative binder jetting 3D printing ecosystem.

Our mission is to empower customers with reliable solutions for advanced manufacturing.

What is **Binder Jetting** ?

Binder jetting is an additive manufacturing process that involves selectively depositing a liquid binder onto a powdered material, layer by layer, to create three-dimensional objects.

Powder

Ti Alloys, Tool Steel, SS, Ceramics, Sand, Polymer

Liquid Binder

A print head moves across the powder bed, depositing liquid binder onto specific areas where the object is to be formed. The binder selectively adheres the powder particles together, binding them to create solid layers.

Layer-by-Layer Building

- The spreading roller deposits a layer of powder into the powder bed
- The industrial print head swiftly applies the binder to the desired areas.
- A layer of fresh powder is deposited again.
- This layer-by-layer process is repeated until the part is completed

Milestones

Transforming the industry through relentless innovation, EASYMFG has evolved since its inception in 2013, becoming a pioneering force in binder jetting 3D printing.



2013

Launch of Full-Color 3D Printer

Introduction of full-color 3D printer
Acknowledged as "the most innovative enterprise" and "Top 10 most popular 3D printing industrial enterprises of 2015" by Chinese 3D printing industry media



2016

Advancing Boundaries

- Successful development of principle prototype for metal 3D printer
- Successful development of large-scale sand 3D printer



2018

Unveiling Innovation

- Official unveiling of binder jetting metal 3D printer
- Establishment of a manufacturing factory to expand production capacity



2022 - 2023

High Precision
High Speed
Low Cost
Highly Automatic

Charting the Path to Innovation / Transitioning from Decades of Experience to Binder Jetting

In 2013, our team embarked on a groundbreaking journey, leaving behind over 20 years of experience in traditional 3D printing methods such as SLS, SLM, and SLA. We embraced the potential of binder jetting technology, paving the way for a new era of additive manufacturing.
Building an R&D Team and registering EASYMFG.

2015



Entry Into Sand

Introduction of sand 3D printer utilizing binder jetting technology

2017



Accelerating Growth

- Angel investment received
- Sole company in China capable of producing binder jetting metal 3D printer at that time

2019



Fueling Expansion / Revolutionizing Production

- Received Series A investment
- Expanding R&D Center Office Space
- Launch of the 2nd generation Metal Binder Jetting Printer
- Redefining the Capabilities of Industrial Metal Printing



High Efficiency:

Utilizes Wide-format One Pass printing, covering the full width of the build box in a single pass, achieving a complete single-layer print within 10 seconds.

High Precision:

Achieves 1200x1200 DPI printing through single-axis motion, aided by high-precision linear guides to mitigate vibrations and mechanical errors from multi-axis motion.

Highly Automated:

Printhead features autonomous maintenance, self-clearing partial nozzle blockages. System includes automated material loading and depowdering.

High Print Density & Consistency:

Patented powder delivery and compaction technology increases conventional powder printing's green part density by 5-10%, ensuring uniform accuracy and density across the batch.

High Stability:

Achieves heightened stability by eliminating redundant structures.

Integrated Solutions for Metal Binder Jetting 3D Printing





M550Max

It is a flagship product designed to efficiently produce medium-sized and large-sized parts. It has garnered significant success across multiple industries.

- **Build Chamber:** L550x W370x H200 mm (L19.69 x W17.72 x H15.75 inch)
- **Build volume:** 90 Liters
- **Max build rate:** 4751cc/hour
- **Layer Height:** Adjustable from 40-200μm

M150Inno

As an entry-level model for metal binder jetting, it is designed to cater to the research and development needs of universities and institutions, focusing on material exploration, process innovation, and other related areas.

- **Build Chamber:** L150 x W70 x H70 mm (L5.91 x W2.76 x H2.76 inch)
- **Build volume:** 0.735 Liters
- **Max build rate:** 164cc/hour
- **Layer Height:** Adjustable from 40-200μm



*The images are for reference purposes only. The actual appearance of the shipped machines take precedence.

Binder Jetting Metal 3D Printers



M400Pro

It is specifically designed for rapid production of small-scale production-grade parts. It offers fast and reliable printing capabilities, catering to the needs of medium-sized products.

- **Build Chamber:** L400 x W250 x H200 mm (L15.75 x W8.66 x H7.87 inch)
- **Build volume:** 17.6 Liters
- **Max build rate:** 1915cc/hour
- **Layer Height:** Adjustable from 40-200μm

Featured by fast printing speed, high precision, and cost-effectiveness, binder jetting metal 3D printing has emerged as a vital technology for mass production. As China's leading provider of binder jetting metal 3D printing solutions, EASYMFG can cater to diverse industries, meeting intricate and demanding requirements with ease.

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Discover the Power of EASYMFG's MBJ

Flexibility

With our lineup of MBJ systems, we provide exceptional design flexibility, enabling versatile customization to suit a variety of requirements.

Material Diversity

Benefit from our extensive selection of qualified materials. Tailor your metal prints to specific application requirements and stay ahead with our continuous development of new materials.

High Efficiency

Embrace the speed and efficiency of metal binder jetting for rapid production, streamlining your manufacturing process.

Lightweight Solutions

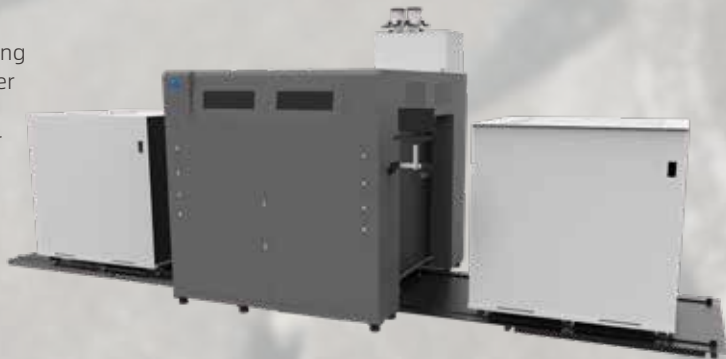
Optimize designs with internal lattice structures, delivering sturdy parts while reducing material consumption and overall weight. Ideal for aerospace, automotive, and other industries seeking enhanced energy efficiency and performance.

Binder Jetting Sand 3D Printers

S2200Mega

A highly reliable and robust sand 3D printer that is revolutionizing the metalcasting industry. With its large building size, this printer can meet the demand for printing larger objects. Furthermore, small metal casting parts can now be easily replaced by binder jetting metal 3D printers.

- **Build Chamber:** L 2,200 × W 1,000 × H 1,000 mm (L 86.6 × W 39.4 × H 39.4 in)
- **Build Volume:** 2,200 l
- **Max Build Rate:** up to 136 l/h
- **Layer height:** Adjustable from 0.2 – 0.5 mm



S500Smart

This is an entry-level automatic machine designed for production purposes. It offers support for sand printing and casting applications, catering to the production of small-sized products.

- **Build Chamber:** L 500 × W 450 × H 400 mm (L 19.69 × W17.72 × H 15.75 in)
- **Build Volume:** 90 l
- **Max Build Rate:** up to 14.9 l/h
- **Layer height:** Adjustable from 0.2 – 0.5 mm



S1200Pro

It is meticulously designed to offer customers the best choice, considering factors such as shape size, cost-effectiveness, and performance. With its emphasis on high-cost performance, this model delivers exceptional value to users. Specifically tailored for medium-sized product production, it strikes a balance between size requirements and affordability, making it an ideal solution for a wide range of applications.

- **Build Chamber:** L 1,200 × W 600 × H 600 mm (L 47.2 × W23.6 × H 23.6 in)
- **Build Volume:** 432 l
- **Max Build Rate:** up to 45.5 l/h
- **Layer height:** Adjustable from 0.2 – 0.5 mm



S400Inno

It is a dedicated research and development machine, catering to material R&D, performance testing, and process studies. It provides a robust platform for in-depth experimentation and exploration, empowering researchers and developers to push the boundaries of innovation.

- **Build Chamber:** L 400 × W 220 × H 200 mm (L 15.75 × W8.66 × H 7.87 in)
- **Build Volume:** 17.6 l
- **Max Build Rate:** up to 5.5 l/h
- **Layer height:** Adjustable from 0.2 – 0.5 mm



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EASYMFG: Redefining Metalcasting with Binder Jetting

Experience the future of metalcasting with EASYMFG. Our advanced binder jetting 3d printing eliminates the need for tools, offering unparalleled design freedom and rapid results.

Key advantages include:

- **Tool-Free Manufacturing:** No tools required.
- **Design Freedom:** Print complex sand molds and cores as a whole, enabling high design flexibility.
- **Rapid Results and Iterations:** Get parts faster without the need for tools production. Swiftly produce molds and cores and iterate quickly for faster validation.

- **PhenolSol**

A solvent-based binder with low viscosity that demonstrates excellent compatibility with both metallic and non-metallic powders.

- **HydroBond**

A water-based resin binder that exhibits exceptional performance with metallic and non-metallic powders.

- **CleanBond**

An advanced binder formulation that leaves behind minimal carbon residue, making it ideal for metallic powders sensitive to carbon presence.

- **NanoBond**

Our ongoing research and development efforts focus on incorporating nanoparticles into the binder formulation.

This innovative approach aims to enhance part quality.

Stay tuned for future updates on this exciting development.

- **FuranBond**

A specialized binder designed specifically for sand applications.

With our comprehensive range of binders, EASYMFG empowers you to achieve remarkable results across a diverse range of powder materials, delivering exceptional 3D-printed parts for your specific needs.

EASYMFG Self-developed Binder Portfolio

Essential for Diverse Powder Materials

Our EASYMFG binders are essential for achieving a wide range of powder materials in 3D printing. They deliver specific characteristics, considering factors like viscosity, saturation, and penetration. Continual optimization ensures improved green strengths and tailored properties for superior printing results.





Introducing EasyClean: The Advanced Solution for Printhead Cleaning and "Ink" Management

Printhead Cleaning:

Maintain excellent printhead performance effortlessly with our state-of-the-art cleaning capabilities. Our system aims to minimize clogs and disruptions, ensuring optimal "ink" flow for a more seamless printing experience.

"Ink" Management:

Maximize "ink" efficiency and quality with our user-friendly solution, offering features such as negative pressure control, automatic circulation, humidity control, and automated cleaning.

With EasyClean, you can simplify, optimize, and enhance your printing experience.

Professional 3D Printing Inkjet Control System: Empowering Your Binder Jetting Journey

More than just a provider of cutting-edge equipment, EASYMFG offers a comprehensive system that includes advanced software, precise printhead control cards, and integrated printhead modules.

- **Flexible design of inkjet printing actions**
- **Resolution at your fingertips**
- **Support for scanning-based and single pass printing**
- **Editable printhead drive waveforms**
- **Bidirectional and blockage-tolerant capabilities**

Materials Versatility: Expanding the Materials Portfolio



Metals

- 17-4PH SS
- 304L SS
- 316L SS
- 420 SS
- Inconel 625
- Inconel 718
- Ti Alloys
- Tool Steel
- Copper



Non-metallic material

- Ceramics
- Polymer



Sand (Natural and Synthetic)

- Quartz sand
- Silica sand
- Precoated sand



Ongoing Research

- Tungsten Carbide
- Aluminum
- Magnesium
- ...

Enhanced by
EasyCreate software,
our system offers:

- Stable high-speed data transmission and storage
- Real-time parameter customization
- Swift slicing for rapid preparation
- Online RIP for precise ink control
- Complimentary software updates for ongoing enhancements

Experience the pinnacle of control, efficiency, and innovation in binder jetting printing with our integrated system and EasyCreate software.

