

# **HBD 150D FLEX EDITION**

Metal Additive Manufacturing System for Dentistry

Streamlining Operations for Effortless Results



# WHY HBD 150D FLEX EDITION?

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#### **Faster Turnaround**

With industry-leading print speeds, it significantly reduces production time, allowing you to handle more cases daily and meet tight patient deadlines.

**Simplified Workflow** 

An intuitive UI and streamlined consumable replacement process minimize manual intervention and downtime, ensuring a smooth,

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#### **Compact Design**

Featuring a smaller footprint while maintaining the same large build area, it optimizes lab space and increases productivity per square meter.



#### **Reliable Performance**

Designed for 24/7 operation, it offers exceptional reliability and is backed by comprehensive support, ensuring maximum uptime and peace of mind for your lab.



#### **Dental-Grade Precision**

Delivering unmatched accuracy, it ensures every crown, bridge, and implant framework is crafted to perfection, meeting the stringent demands of dental applications.

### HBD 3D Printing Process for Dental Applications



efficient workflow.

Preparing the Print Model Data orientation and slicing



**3D Printing** Laser powder bed fusion



Heat Treatment Heat treated for stress release and enhanced robustness







Cutting

Post-processing

# 3D Print Cases



#### **Dental Framework**

Industry : Dental Material : Cobalt-Chrome Size : 41\*61\*35.3mm Weight : 8g/pcs Quantity : 16 Time : 3h 20min

Metal 3D printing technology can achieve the printing of complex lattice structure framework, thereby improving strength-to-weight ratio, and precisely adapting to the individual oral structure of patients, ultimately enhancing the comfort, functionality, and lifespan of dental restorations.



#### **Dental Crown**

Industry : Dental Material : Cobalt-Chrome Size : 12\*12\*8mm Weight : 0.88g/pcs Quantity : 189 Time : 2h 58min

The HBD 150D FLEX EDITION delivers consistent accuracy, making it an ideal solution for printing dental crowns with a precise fit and high-quality finish. Its advanced capabilities ensure that each crown meets the required standards for both function and comfort.

## Technical Parameters

| Build Volume                    | φ158mm × 100mm(height incl. build plate)   |
|---------------------------------|--|
| Laser Power                     | 2 Lasers, 300W   |
| Layer Thickness                 | 30µm-50µm  |
| Scanning Track Width            | 40µm-80µm  |
| Scanning Speed                  | ≤ 10m/s  |
| Oxygen Content                  | ≤ 100ppm   |
| Protective Atmosphere           | Integral sealed, automatic monitoring of oxygen content, recycling cleaning and collection coefficient 2 99% |
| Typical Accuracy                | 0.05-0.1mm   |
| Metal Powder                    | Cobalt-chrome alloy  |
| Relative Density                | 99.9%+   |
| Process Parameter Configuration | Tailored parameter set for the specific application, user-modifiable   |
| Weight                          | Est. 500kg   |
| External Dimensions             | 850mm × 950mm × 1600mm   |
| Power Supply                    | AC220V, 50Hz, peak power <5kW, average power <3kW  |

# About Us



#### **Global Leader**

Recognized globally for developing and manufacturing metal additive manufacturing equipment, with over 200 patents and prestigious certifications.



#### Innovation and Quality

Continuous improvement and technological advancements to keep customers ahead.



#### Tailored to Industries

Customized metal additive manufacturing solutions for dental, orthopedic, automotive, aerospace and more.



#### **Cutting-edge Solutions**

Acclaimed metal 3D printing machines installed in 37 countries, offering advanced capabilities.

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