

riton

MLab

桌面级牙科金属3D打印机

Desktop Dental Metal 3D Printer

小体积 大作为

Small in Size Big in Performance

广州瑞通增材科技有限公司 RITON ADDITIVE TECHNOLOGY CO., LTD



桌面级金属3D打印机

MLab是瑞通增材专为义齿厂量身打造的高性能桌面级金属3D打印机。 小巧简约的身形适配义齿厂场地局限问题,搭载瑞通自主研发的软硬件控制系统,协同瑞通高效高质的服务,为义齿加工厂强劲赋能。

Desktop Metal 3D Printer

MLab is a high-performance desktop metal 3D printer tailored by Riton 3D for dental labs. Its compact and streamlined design addresses the spatial constraints in dental labs. Equipped with Riton's independently developed hardware and software control system, in collaboration with Riton's efficient and high-quality services,

MLab provides robust empowerment for dental processing labs.





更经济 More Economical

・义齿厂布局最优解

60×60×80cm的小巧外形,支持高灵活性的布局,有效解决义齿厂场地局限问题

・气电双降,双省双优

小体积、低功耗,进一步降低生产成本

Optimal layout for dental labs

With a compact size of 60×60×80cm, it supports highly flexible layouts, effectively addressing spatial constraints in dental labs

• Dual reductions in air and power consumption, offering double savings and advantages

Small in size, low in power consumption, further reducing production costs



更安全 Safer

・预浸润系统

清理滤芯可预注水,提前浸润避免爆燃,杜绝安全隐患

· 人体工程学设计

80cm高度置于桌面,工作时无需俯身,减少职业劳损

Pre-soaking system

The filter cartridge can be pre-soaked during cleaning, avoiding spontaneous combustion and eliminating safety hazards

Ergonomic design

Placed at a height of 80cm on the desktop, eliminating the need for bending during operation, reducing occupational strain

精工细作 只为齿科 个性化生产触手可及

Fine craftsmanship tailored exclusively for dentistry Personalized production at your fingertips

三个维度助您高效生产

Three dimensions to assist you in efficient manufacturing



更高效 More Efficient

· 针对齿科 量身定制

φ100×80mm的打印幅面,打印100颗金属牙冠或7个金属支架最快仅需2.5小时(实际时间因不同条件制约可能会存在差异)

・双模块控制

采用PLC与工控机双模块控制,有效提高设备稳定性

・散热系统布局优化

配置6个风扇高效散热, 使热力循环达到理想状态

・上送粉结构设计

可实现打印中途加粉, 有效降低废件率

・设备状态一目了然

10.1寸触摸屏, 鸟瞰式面板, 随时掌控设备工作状态

・智能衔接生产设备

无线传输打印数据, 实现远程操作打印

Customized for dentistry

Print area of ϕ 100×80mm. In the fastest case, it only takes 2.5 hours to print 100 metal C&Bs or 7 metal RPDs (Actual time may vary due to different conditions)

· Dual-module control

Utilizing PLC and industrial computer dual-module control to effectively enhance equipment stability

· Optimized layout of the cooling system

Equipped with 6 fans for efficient heat dissipation, achieving an ideal thermal circulation state

Upward powder feeding structure design

Allows for mid-print powder addition, effectively reducing the rate of discarded prints

Clear equipment status

10.1-inch touchscreen, bird's-eye-view panel, providing real-time control of the device's working status.

· Intelligent connection to production equipment.

Wireless transmission of printing data enables remote operation of printing.

操作界面方便快捷设备状态尽在掌握

Convenient and Fast User Interface Full Control over Equipment Status





智能监测与反馈

整机运行状态监测: PLC连接状态、激光器状态、急停、成型仓升降轴状态、落粉转轴状态、刮刀轴状态、 是否缺粉,部件状态了如指掌

Intelligent monitoring and feedback

Monitoring of the overall machine operation status: PLC connection status, laser status, emergency stop, lifting axis status of the forming chamber, powder falling axis status, scraper axis status, and powder shortage status, providing a comprehensive understanding of component status



实时记录与回溯

记录界面增设「一键筛选」功能: 错误、警告以及正常执行信息

Real-time recording and traceability

The interface now includes a "One-Click Filter" function: errors, warnings, and normal execution information



界面直观,易于上手

操作界面简单直观且易操作

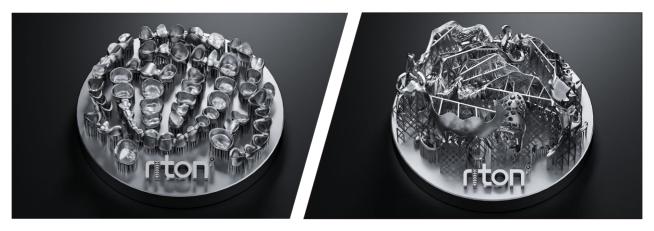
Intuitive and easy to use

The user interface is simple, intuitive, and easy to operate

技术参数 Technical Specifications

激光光源	单光纤激光器
激光功率	250W
最大扫描速度	11200 mm/s
打印层厚	20-60µm
保护气体	氮气或氩气
打印材料	钴铬合金/钛合金/不锈钢
主机重量	135kg
输入电压	220V
安装环境	15℃-35℃,湿度:≤95%,无振动
Laser Source	Single-fiber laser
Laser Power	250W
Maximum Scanning Speed	11200 mm/s
Layer Thickness	20-60µm
Protective Gas	Nitrogen or Argon
Printing Materials	Cobalt-chromium alloy / Titanium alloy / Stainless steel
Printer Weight	135kg
Input Voltage	220V

打印样品 Printed Samples



AUXILIARY EQUIPMENT

辅助设备

小身材 大作为

SMALL IN SIZE BIG IN PERFORMANCE



吸尘器 Vacuum Cleaner φ28.5×50cm (H)



制氮机 Nitrogen Generator 55×55×85cm (L×W×H)



- 石英管式炉 Tube Annealing Furnace Diameter 200*Heating zone 300mm



小锯床 Mini Sawing Machine 68×37×30cm (L×W×H)

TECHNICAL SERVICES

技术服务



安装咨询服务

- ·设备咨询
- ·场地空间咨询
- ·上门安装

Installation Consultation Service

- · Equipment Consultation
- · Site Space Consultation
- · On-site Installation



专业培训服务

- ·设计培训
- ·打印机操作培训
- ·后处理培训

Professional Training Services

- · Design Training
- · 3D Printer Operation Training
- · Post-Processing Training



无忧售后服务

- ·在线技术支持
- ·48小时内上门维修
- ·设备维护期间提供代打印

Worry-Free After-Sales Service

- · Online Technical Support
- \cdot On-site Repair within 48 Hours
- · Providing Proxy Printing Services during Equipment Maintenance Period

