

HIGH-END CNC PIPE FIBER LASER CUTTING MACHINE

高端数控版光纤激光切管机

P2060/P3080/P2060A/P3080A

应用行业 / Applicable Industry

家具, 医疗器械, 健身器材, 厨具, 汽车行业, 农林机械, 消防管道, 铜架结构, 石油勘探, 桥梁, 船舶, 构件等
Furniture, Medical Device, Fitness Equipment, Oil Exploration, Display Shelf, Farm Machinery, Fire Pipeline, Bridge, Boating, Structure Parts etc.

适用材料 / Applicable Material

圆管, 方管, 矩形管, 椭圆管, 腰圆管, D型管, 三角管, 槽钢, 角钢, T型钢, H型钢, 板条等金属管材
Specially for round, square, rectangular, oval, waist, triangle, U-bar, T-type, I-beam, steel panel and other metal tubes.



技术参数 Specifications

设备型号 Model	P2060/P3080/P2060A/P3080A
管材长度 Tube Length	6000mm/8000mm
管材直径 Tube Diameter	20mm-200mm/20mm-300mm
上料尺寸 Bundle Size	800mm*800mm*6000mm/ 800mm*800mm*8000mm
激光源 Laser Source	进口光纤激光器 Imported Fiber Laser Resonator
激光功率 Laser Source Power	700W/1000W/1500W/2000W/ 2500W/3000W/4000W/6000W
最大转速 Maximum Rotate Speed	120转/分 120r/min
重复定位精度 Repeat Position Accuracy	±0.03mm
最大定位速度 Maximum Position Speed	90m/min
加速度 Acceleration	1.5g
切割速度 Cutting Speed	视材料和激光功率而定 Depend On Material, Laser Source Power
供电 Electric Power Supply	AC380V 50/60Hz

全自动上料系统 / Automatic Bundle Loader (选配/Optional configuration)

圆管, 矩形管等管材可全自动上料, 无需人工干预。异形管可进行人工辅助半自动上料。

Round pipe, rectangular pipe and other pipes can be fully automated loading without human intervention. Other shaped pipe can be semi-automatic feeding manually.

总体细节性能 / General Performance

- 支持最大上料料型800X800mm
Max Loading Bundle 800*800mm
- 最大重量2.5吨
Max Loading Weight 2500kg
- 送料机械手与框架和料条输送环节的总宽控制在2200mm, 总高控制在2300mm, 高度最高不超过2500mm。保证可以整体进集装箱
The total width of the feeding finger with the frame and the pipe transport links is controlled within 2200mm, the total height is controlled within 2300mm, and the maximum height is not more than 2500mm, thus the auto bundle loader can be loaded into a container.
- 上料带支撑架便于拆卸
The loading belt and the supporter are easy for dismantle.
- 送料机械手主体与链条输送环节结构一体化设计, 便于调试运输
The integrated design of the feeding finger main body and the chain transport link is easy for debugging and transporting.
- 系统中设计的气动元件必须是台湾亚德客或其他同类, PLC控制, 传感器等选用欧姆龙, 施耐德等。保证系统的稳定性及外贸标准
The pneumatic components used in the laser cutting system must be AirTAC or other high-end brands; the PLC control, sensors and others must be Omron, Schneider and other well-known brands; all these high end components ensure the system stability and meet the export standards.

自动接料装置 / Automatic Collecting Device

- 自动浮动支撑, 接料入筐
The automatic floating support device collects the finished pipes
- 浮动式支撑由伺服电机控制, 快速根据管径自动调节
The floating support is controlled by the servo motor and it can adjust the support point according to the pipe diameter quickly
- 浮动板支撑对弹性大的管材有整个面的支撑, 支撑效果更好
The floating panel hold the easy-bending pipe tightly with whole sides supporting



样品展示 / Sample Demonstration



ROUND PIPE FIBER LASER CUTTING MACHINE

圆管专用光纤激光切管机

P120

应用行业/ Applicable Industry

汽车配件, 弯头连接件, 金属卫浴, 不锈钢日用品, 金属儿童推车等
Auto parts, elbow connectors, metal bathroom, stainless steel daily necessities, metal baby strollers, etc.

适用材料/ Applicable Material

不锈钢、碳钢、铝、铜等材质的圆管
Round tubes made of stainless steel, carbon steel, aluminum, copper, etc.

主要特征/ Main Features

- ◆ 具有多种切割工艺, 截断、斜切、打孔
With multiple cutting processes, cut off, beveled, cut holes
- ◆ 圆管自动上料, 节约人工, 省时
Automatic feeding of round pipes, saving labor and time
- ◆ 具有自动除渣功能, 提高工件表面质量
With automatic slag removal function, improve the surface quality of the workpiece
- ◆ 加工效率高, 是锯床的3倍
High processing efficiency, 3 times that of sawing machine



技术参数 Specifications

设备型号 Model	P120
管材长度 Tube Length	6000mm
管材直径 Tube Diameter	20-120mm
上料尺寸 Bundle Size	800mm*400mm*6000mm
激光源 Laser Source	光纤激光器 Fiber Laser Resonator
激光功率 Laser Source Power	700W/1000W/1500W/2000W/2500W/3000W
最大转速 Maximum Rotate Speed	90转/分 90r/min
重复定位精度 Repeat Position Accuracy	±0.03mm
最大定位速度 Maximum Position Speed	60m/min
加速度 Acceleration	0.8g
切割速度 Cutting Speed	视材料和激光器功率而定 Depend On Material, Laser Source Power
供电 Electric Power Supply	AC380V 50/60Hz

STANDARD PIPE FIBER LASER CUTTING MACHINE

通用版光纤激光切管机

P2060B

应用行业/ Applicable Industry

健身器材、钢制家具、医疗器械、展架展具、农林机械等
Fitness equipment, steel furniture, medical equipment, display racks, agricultural and forestry machinery, etc.

适用材料/ Applicable Material

不锈钢、碳钢、铝、铜等材质的圆管、方管、矩形管、椭圆管、腰圆管、槽钢、工字钢、板条、异形管等
Round tube, square tube, rectangular tube, oval tube, waist round tube, channel steel, I-steel, slat, special-shaped tube, etc. made of stainless steel, carbon steel, aluminum, copper, etc.

主要特征/ Main Features

- ◆ 管材切割总线系统, 随控一体, 总线高速伺服电机, 专业管材套料软件
Pipe cutting bus system, integrated with control, bus high speed servo motor, professional pipe nesting software
- ◆ 管材上下料端均配置变径轮支撑系统
The upper and lower ends of the pipe are equipped with a variable diameter wheel support system
- ◆ 全行程夹气气动卡盘
Full stroke clamping pneumatic chuck
- ◆ 送料卡盘尾部和切割区域均有吸尘装置
Dust extraction device at the end of the feeding chuck and the cutting area



技术参数 Specifications

设备型号 Model	P2060B
管材长度 Tube Length	6000mm
管材直径 Tube Diameter	20-200mm
管材承重 Load-bearing weight	25kg/m
激光源 Laser Source	光纤激光器 Fiber Laser Resonator
激光功率 Laser Source Power	1000W/1500W/2000W
最大转速 Maximum Rotate Speed	150转/分 150r/min
重复定位精度 Repeat Position Accuracy	±0.02mm
最大定位速度 Maximum Position Speed	90m/min
加速度 Acceleration	0.8g
切割速度 Cutting Speed	视材料和激光器功率而定 Depend On Material, Laser Source Power
供电 Electric Power Supply	AC380V 50/60Hz

INTEGRATED SMALL PIPE FIBER LASER CUTTING MACHINE

极小管光纤激光切管机

P1260A

应用行业/Applicable Industry

食品医药器械、弯头连接件、钢制家具、制冷、不锈钢制品等
Food and medical equipment, elbow connectors, steel furniture, refrigeration, stainless steel products, etc.

适用材料/Applicable Material

不锈钢、碳钢、铝、铜等材质的圆管、方管、矩形管、椭圆管
Round tube, square tube, rectangular tube, oval tube made of stainless steel, carbon steel, aluminum, copper, etc.

主要特征/Main Features

- ◆ 专注小管加工特点针对性设计设备配置
Focus on the processing characteristics of small tubes and design equipment configuration pertinently
- ◆ 专业的小管上料系统，设计小巧，结构简单，上料效率比常规上料机更快
Professional small tube feeding system, compact design, simple structure, feeding efficiency faster than conventional feeding machine
- ◆ 全伺服控制浮动支撑系统应对长小管支撑难题
Full servo control floating support system to cope with the problem of long tube support
- ◆ 整机占地面积小，运输成本大大降低
The whole machine occupies a small area and the transportation cost is greatly reduced



技术参数 Specifications

设备型号 Model	P1260A
管材长度 Tube Length	6000mm
管材直径 Tube Diameter	圆管Round tube: 16mm-120mm 方管Square tube: 10mmx10mm-70mmx70mm
上料尺寸 Bundle Size	800mm*800mm*6500mm
激光源 Laser Source	光纤激光器 Fiber Laser Resonator
激光功率 Laser Source Power	1000W/1500W/2000W
最大转速 Maximum Rotate Speed	120转/分 120r/min
重复定位精度 Repeat Position Accuracy	±0.03mm
最大定位速度 Maximum Position Speed	100m/min
加速度 Acceleration	1.2g
切割速度 Cutting Speed	视材料和激光器功率而定 Depend On Material, Laser Source Power
供电 Electric Power Supply	AC380V 50/60Hz

FORMING PIPE FIBER LASER CUTTING MACHINE

成型管件光纤激光切管机

T2000

应用行业/Applicable Industry

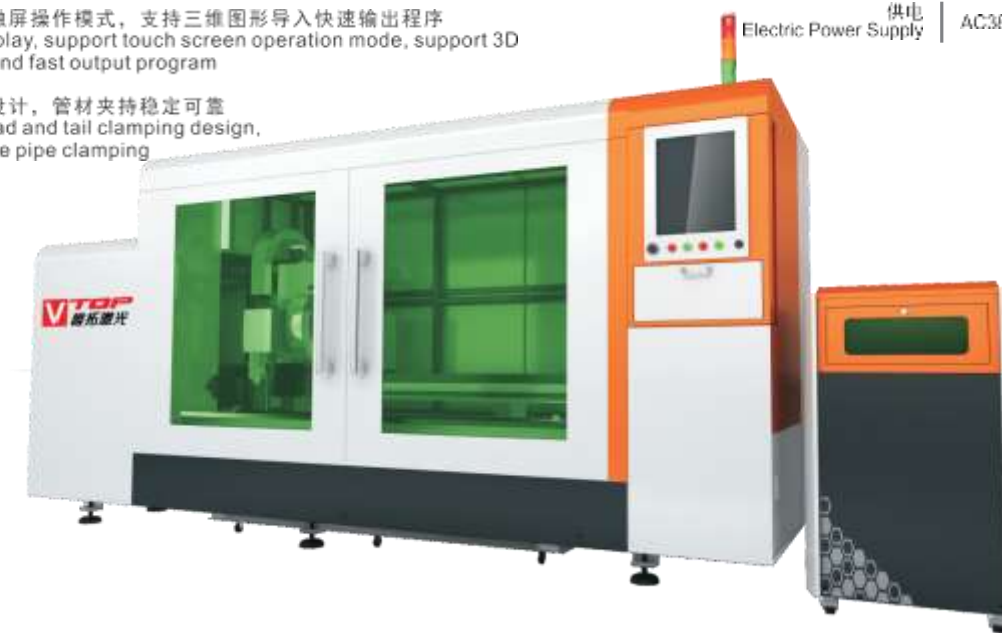
金属推车、户外帐篷、伞具、展具展架、金属接头等
Metal carts, outdoor tents, umbrellas, exhibition racks, metal joints, etc.

适用材料/Applicable Material

不锈钢、碳钢、铝、铜等材质的圆管、方管、矩形管、椭圆管、腰圆管等
made of stainless steel, carbon steel, aluminum, copper, etc.

主要特征/Main Features

- ◆ 根据成型管件特征和工艺需求针对性设计设备配置
Design the equipment configuration according to the characteristics of the forming tube and process requirements
- ◆ 高端数控切割系统，具备良好的拓展性，可与三维机械手等设备集成于一体
High-end CNC cutting system, with good scalability, can be integrated with three-dimensional manipulators and other equipment
- ◆ 大屏显示，支持触屏操作模式，支持三维图形导入快速输出程序
Large screen display, support touch screen operation mode, support 3D graphics import and fast output program
- ◆ 双卡盘首尾夹持设计，管材夹持稳定可靠
Double chuck head and tail clamping design, stable and reliable pipe clamping



技术参数 Specifications

设备型号 Model	T2000
管材长度 Tube Length	2000mm
管材直径 Tube Diameter	20-100mm(可定制customizable)
激光源 Laser Source	光纤激光器 Fiber Laser Resonator
激光功率 Laser Source Power	1000W/1500W/2000W
最大转速 Maximum Rotate Speed	60转/分 60r/min
重复定位精度 Repeat Position Accuracy	±0.03mm
最大定位速度 Maximum Position Speed	60m/min
加速度 Acceleration	0.8g
切割速度 Cutting Speed	视材料和激光器功率而定 Depend On Material, Laser Source Power
供电 Electric Power Supply	AC380V 50/60Hz

HEAVY LOADED PIPE FIBER LASER CUTTING MACHINE

重载型光纤激光切管机

P350

应用行业/Applicable Industry

工程机械、钢结构、船舶重工、桥梁等
Construction machinery, steel structure, shipbuilding industry, bridges, etc.

适用材料/Applicable Material

不锈钢、碳钢等材质的圆管、方管、矩形管、工字钢、槽钢等
Round pipe, square pipe, rectangular pipe, I-beam, channel steel, etc. made of stainless steel, carbon steel, etc.

主要特征/Main Features

- ◆ 德国PA总线触屏式数控切割系统
German PA bus touch-screen CNC cutting system
- ◆ 可调节式三卡盘夹持设计，全伺服控制浮动支撑系统
Adjustable three-chuck clamping design, full servo control floating support system
- ◆ 上下料采用链式传动方式，无需人工干预
The loading and unloading adopts chain drive mode, without manual intervention
- ◆ 床体模块化设计，设备拆卸安装方便
Modular design of the bed, easy to disassemble and install



技术参数 Specifications

设备型号 Model	P350
管材长度 Tube Length	6000mm/12000mm
管材直径 Tube Diameter	20-350mm
上下料数量 Loading and unloading capacity	6根/6 pieces
激光源 Laser Source	光纤激光器 Fiber Laser Resonator
激光功率 Laser Source Power	1500W/2000W/2500W/ 3000W/4000W/6000W
最大转速 Maximum Rotate Speed	70转/分 70r/min
重复定位精度 Repeat Position Accuracy	±0.02mm
最大定位速度 Maximum Position Speed	60m/min
加速度 Acceleration	1.0g
切割速度 Cutting Speed	视材料和激光器功率而定 Depend On Material, Laser Source Power
供电 Electric Power Supply	AC380V 50/60Hz

3D-5AXIS PIPE FIBER LASER CUTTING MACHINE

三维五轴光纤激光切管机

P2060A-3D

应用行业/Applicable Industry

家具、医疗器械、健身器材、石油勘探、汽车制造、农林机械、展具展架等
Furniture, medical equipment, fitness equipment, petroleum exploration, automobile manufacturing, agricultural and forestry machinery, exhibition racks, etc.

适用材料/Applicable Material

不锈钢、碳钢、铝、铜等材质的圆管、方管、矩形管、椭圆管、腰圆管、槽钢、工字钢、板条、异形管等
Round tube, square tube, rectangular tube, oval tube, waist round tube, channel steel, I-steel, slat, special-shaped tube, etc. made of stainless steel, carbon steel, aluminum, copper, etc.

主要特征/Main Features

- ◆ PA总线触屏式数控切割系统
PA bus touch-screen CNC cutting system
- ◆ 全进口德国工艺三维切割头，实现坡口切割工艺，管材拼接无缝对接，实现坡口切割技术，无缝管对接
Fully imported German craftsmanship three-dimensional cutting head, realize bevel cutting technology, seamless pipe splicing
- ◆ Rapidcut 风暴切割模式，高效切割
Rapidcut storm cutting mode, efficient cutting
- ◆ 全自动上下料方式
Automatic loading and unloading method



技术参数 Specifications

设备型号 Model	P2060A-3D
管材长度 Tube Length	6000mm
管材直径 Tube Diameter	20-200mm
管材承重 Load-bearing weight	25kg/m
激光源 Laser Source	光纤激光器 Fiber Laser Resonator
激光功率 Laser Source Power	1000W/1500W/2000W/ 3000W/4000W
最大转速 Maximum Rotate Speed	120转/分 120r/min
重复定位精度 Repeat Position Accuracy	±0.02mm
最大定位速度 Maximum Position Speed	100m/min
加速度 Acceleration	1.2g
切割速度 Cutting Speed	视材料和激光器功率而定 Depend On Material, Laser Source Power
供电 Electric Power Supply	AC380V 50/60Hz

AUTOMATIC & FLEXIBLE PIPE FIBER LASER PRODUCTION LINE

光纤激光切管自动化柔性生产 线

食品包装行业紫铜管自动化加工案例
Cases of automated processing of copper tubes in the
food packaging industry



自动化加工流程：成捆紫铜管全自动上料送料，激光切管机自动切割，履带收料分料，机械手清洗工件，机械手成品码垛。

Automated processing flow: automatic feeding and feeding of bundles of red copper tubes, fiber laser pipe cutting machine automatic cutting, crawler receiving and distributing materials, robot cleaning workpieces, and robot palletizing finished products.

AUTOMATIC & FLEXIBLE PIPE FIBER LASER PRODUCTION LINE

光纤激光切管自动化柔性生产 线

汽车制造弯管件自动化加工案例
Automated processing case of automobile elbow fittings



自动化加工流程：成捆圆管上料或者成型管件机械手1上料，激光切管机自动切割，机械手2抓取管件到冲床，冲床冲压凹槽，机械手3抓取管件到弯管机，弯管机自动弯曲管件，机械手4抓取管件到弯管搁置平台，机械手5自动切割管件弯曲部分上面的孔，机械手4码垛成品工件。

Automated processing flow: feeding of bundled round pipes or forming pipe fittings by robot 1, automatic cutting by laser pipe cutting machine, and robot 2 grabbing the pipes to Punch, punch punching groove, robot 3 grabs the pipe fittings to the pipe bender, the pipe bender automatically bends the pipes, robot 4 grabs the pipe fittings to the pipe bending machine On the platform, the manipulator 5 automatically cuts the hole on the curved part of the pipe, and the manipulator 4 pallets the finished workpiece.