

Fiber laser material pulling and pipe cutting machine

As a professional laser pipe cutting equipment, the fiber laser material pulling and cutting machine is a high-tech product that integrates laser cutting, precision machinery, and CNC technology. For pipes below 90mm, the efficiency is higher than that of large laser pipe cutting machines. The standard equipment is a pneumatic self centering chuck with ultra-high standards and strong clamping, which has small rotational inertia and low energy consumption. The four claw roller type automatic clamping, automatic centering, does not scratch the workpiece, and is close to zero tailings processing. There is almost no pipe waste, and the auxiliary claw/collet can be quickly replaced, making it flexible and convenient to process various specifications of pipes. It works in conjunction with the automatic feeding system, It can load and unload materials without stopping the machine, with fast production speed and high production capacity, achieving various types of metal pipe laser cutting. It has the characteristics of high speed, high precision, high efficiency, and high cost-effectiveness, and is easy to operate, adapting to the flexible and ever-changing industrial production needs, and providing convenience for laser entry-level customers.



Main features:

- ✧ Suitable for efficient cutting of small pipes and short parts within 90mm;
- ✧ Suitable for batch standard round tubes (φ 10-90mm), square tube (side length 10-60mm) cutting;
- ✧ Ultra high standard chuck, super strong support, different specifications of pipe fittings only need to replace the chuck;
- ✧ Front card avoidance cutting, tail material length 30-100mm;
- ✧ Fast speed, greatly saving multiple processes, labor and time costs, and improving efficiency;
- ✧ The human-machine interface is all in Chinese, easy to operate and edit;
- ✧ Embedded rich cutting process database, which can be called or modified with one click;
- ✧ Strong scalability, can be equipped with fully automatic loading and unloading devices;
- ✧

Ordering Guide

Model STC-XXXX-YY-AABB

| STC | XXXX Laser power (W) | YY model | AA Square tube diameter | BB Square tube length |
|---------------|----------------------------------|--|-------------------------------|-----------------------------|
| laser cutting | one thousand and five hundred | DS: Material pulling and pipe cutting | 06:60mm | 20: 2000mm |
| | two thousand | | | 40:4000mm |
| | three thousand | | | 60:6000mm |

Main technical parameters:

| | |
|--------------------------------|--|
| Laser generator | High performance anti high reflection fiber laser |
| Laser power | 1500W/2000W/3000W |
| Cutting range of pipe fittings | Round tube: φ 12-85mm; Square tube: side length 12-60mm |
| Standard cutting length | 6000mm |
| Cutting accuracy | ± 0.2 mm; Pipe bending ≤ 2 mm/m |
| Accuracy of chuck drum | 0.005mm |
| Chuck clamping accuracy | < 0.1 mm |
| Loading method | Automatic/Manual |
| Loading length range | 2m/4m/6m |
| Weight of disposable filler | Maximum load-bearing capacity 0.8t |
| Overall weight | ≈ 1.5 t |
| Power requirements | Three phase five wire system AC380V 50HZ |
| Equipment size | 2200 * 1400 * 1800mm |
| Optional feeding rack size | 5800 * 1450 * 1800mm (adjustable length for manual feeding rack) |

Note: 1. This device system supports bus control and can be customized non-standard according to customer requirements. The configuration and parameters of each model are subject to the technical solution provided by our company; 2. Although the processed workpiece belongs to the same specification variety, there may be differences in processing performance and quality due to differences in actual processing parts, surface conditions, material composition, or processing shapes.

Application field:

Mainly designed for fast and efficient cutting of various metal fittings such as square pipes, circular pipes, and shaped pipes below 90mm, it is widely used in industries such as metal furniture, hardware plumbing, electric vehicles, fitness equipment, municipal guardrails, office furniture, medical equipment, agricultural machinery, advertising decoration, etc.

Sample display:

