



HP6018D Tube Laser Cutting Machine

Renderings





Pictures









Brief Introduction-1

Laser pipe cutting machine is the best choice for pipe processing industry, to replace the traditional sawing machine and punch machine. No need to open new mold, no turnover process, simple processing operation, low operating costs, save time and labor cost.

Equipment are widely used in: automotive production, agricultural machinery equipment, forklift equipment, fitness equipment production, electrical production, pressure vessels, medical equipment, furniture, building materials, high-speed rail, aerospace and other pipe industry. Not only suitable for individual external machining, but also for large-volume enterprises for continuous production.

Cutting tubes including square tube, rectangular tube, waist tube, oval tube and other profiles with material of carbon steel, stainless steel, aluminum etc. The cutting section with no burrs, Any graphics cutting can be realized due to diversified cutting graphics.



Brief Introduction-2

Hymson laser pipe cutting machine adopts simple gantry + horizontal semi-enclosed mechanical structure, the CNC system adopts open system-Beckhoff TWINCAT, five-axis four linkage, $X \setminus A \setminus B$ motor gear + $Y \setminus Z$ screw drive, all imported original German Beckhoff servo motor, transmission parts using APEX reducer, HWIN rails and APEX rack, with structural stability, good rigidity, light weight, high dynamic response.

Guangzhou Hymson is the first Chinese company using Beckhoff TWINCAT system on pipe cutting machine, to achieve as one-control function, with complete independent intellectual property rights, and master the core technology. CNC-Host and first-class high-power laser generator, making it a set of high stability, high precision, high performance in one of the advanced CNC laser pipe cutting machine.



Model Name

HP6018D-naming rules

H- HYMSON

P-PIPE

60- means Max. auto load pipe length is 6m, 6.2m in real use

18- means Max. pipe outer dimension is 180mm.

D- means number of chucks, DOUBLE-D, THREE-T



Parameters

| | HP6018D Parameter | | | | |
|----|---------------------------------------|--|--|--|--|
| 1 | Pipe processing area(Length*diameter) | 6200mm*(20mm≤outer circle diameter ∠ ≤180mm) | | | |
| 2 | X axis stroke | 6000mm | | | |
| 3 | Y-axis stroke | 180mm | | | |
| 4 | A&B axis stroke | ±590r | | | |
| 5 | Z axis stroke | 160mm | | | |
| 6 | X&Y-axis positioning accuracy | ±0.05mm | | | |
| 7 | X&Y-axis repeatability | ±0.03mm | | | |
| 8 | X&Y-axis max positioning speed | 80m/min(1G) | | | |
| 9 | A&B-axis max positioning speed | 70rpm(1G) | | | |
| 10 | Z- axis max positioning speed | 60m/min(1G) | | | |
| 11 | Loading length | 6200mm | | | |
| 12 | Unloading length | ≤3000mm | | | |
| 13 | Leftover length | 220mm | | | |
| 14 | Weight | 9000KG | | | |
| 16 | Controller | TwinCAT-Beckhoff | | | |
| 17 | IP Level | IP54 | | | |



Configuration

| HP6018D Configuration | | | | | |
|-----------------------|-----------------|----------------------|-----------|--|--|
| NO. | Name | Model | Brand | | |
| 1 | Machine bed | HP6018D | HYMSON | | |
| 2 | Laser generator | 2200W | IPG | | |
| 3 | Water chiller | Standard | TONGFEI | | |
| 4 | Cutting head | PRECITEC-Lightcutter | PRECITEC | | |
| 5 | Controller | TwinCAT | BECKHOFF | | |
| 6 | Servo | BECKHOFF | BECKHOFF | | |
| 7 | Reducer | APEX | APEX(TW) | | |
| 8 | Rack & pinion | APEX | APEX(TW) | | |
| 9 | Guide | HIWIN | HIWIN(TW) | | |
| 10 | Gas regulator | REXROTH | Bosch | | |
| 11 | Stabilizer | WENLIDA | China | | |
| 12 | CAD | RADAN | RADAN | | |



Capacity (2KW)

| Thickness(mm) | Material | Max. Speed(m/min) | Cutting gas |
|---------------|------------------|-------------------|-------------|
| 1 | Mild steel | 7.0-9.0 | |
| 2 | | 4.0-5.0 | |
| 3 | | 2.5-3.5 | |
| 4 | | 2.2-3.0 | O2 |
| 5 | | 1.5-2.2 | 1 |
| 6 | | 1.3-2.0 | |
| 8 | | 0.8-1.2 | |
| 1 | Stainless steel | 9.0-11.0 | |
| 2 | | 4.0-5.0 | |
| 3 | | 2.0-3.0 | |
| 4 | | 1.2-1.6 | N.O. |
| 1 | - Aluminum alloy | 7.0-9.0 | N2 |
| 2 | | 3.8-4.5 | |
| 3 | | 1.4-2.0 | |
| 4 | | 0.5-0.8 | |



Samples

















