



Jordan Automation

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الأردنية للتصنيع الآلي



Advanced Cutting & Sign Making Solutions

Technical Proposal

Date. 10/01/2023

Num of pages. 9

Subject: Fiber Laser Cutting Machine

Customer: Elba House Co.

Att.: Eng. Khalid Aljabr

Hypertherm

KMT

IPG
PHOTONICS

Roland

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Cover Letter

We are looking forward to providing you with an industry-leading technology, professional services, and local expertise that will help achieve your organization's goals and intended strategy.

Continuing its trend of delivering high quality and complete high quality systems, Jordan Automation is committed to make any and all of its projects examples of service excellence in Jordan.

In the meantime, we hope our proposal would meet your minimum requirements; however, we will always be glad to meet with you to discuss our offer in further details.

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We thank you for your consideration of this proposal and look forward to hearing from you soon.

Best Regards,

الأردنية للتصنيع الآلي
نحن نقود نحن ننجز

®

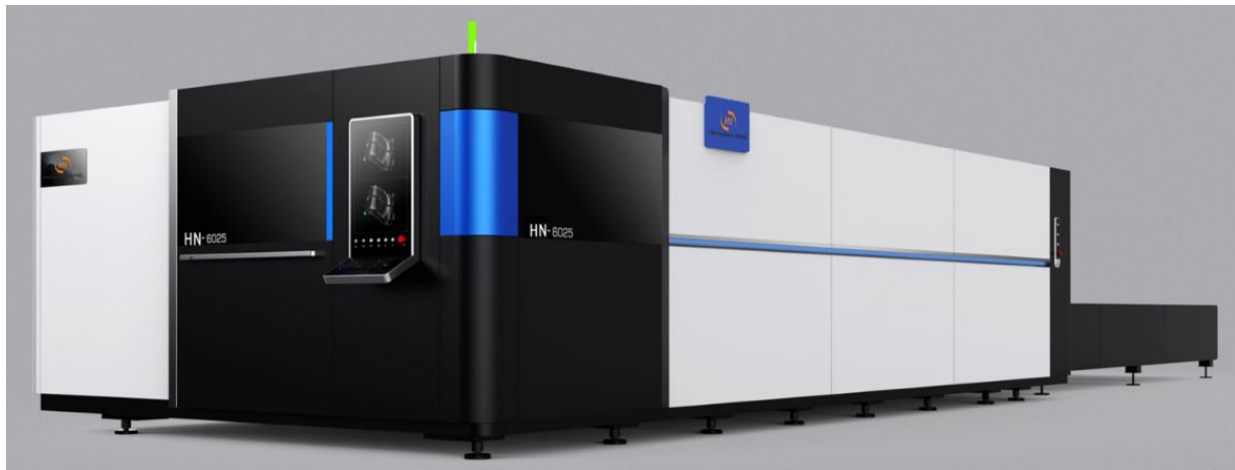
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Jordan Automation

We Lead We Achieve

Laser Cutting Machine

Shuttle table with protective cover



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Machine parts information

| | |
|---------------------------------|---------------------|
| Model Specifications | HN-H6020 |
| Fiber Laser Source | 3000W Raycus |
| Effective working length X axis | 6000mm |
| Effective working length Y axis | 2000mm |
| Max cutting thickness | MS ≤22mm SS≤12mm |
| X,Y axis positioning accuracy | ±0.02mm/m |
| X,Y Axis repositioning accuracy | ±0.02mm/m |
| X,Y Axis moving speed | ≤60m/min |
| Rated supply voltage | 380V, 3Phase |
| Frequency | 50Hz |
| Power consumption | 23KW |
| General power protection class | IP54 |
| Maximum load of workbench | 2100KG |
| Net Weight | 8800KG |
| Dimension (Length*Width*Height) | 16200*3650*2310mm |

Product details

New Fume Extraction Design:



- Using the latest cutting-edge smoke control technology, each section of the equipment is equipped with a smoke exhaust device;
- The smoke exhaust device automatically senses the laser cutting position, accurately exhausts smoke, and smart following smoking exhaust;
- Fully enclosed smoke control and clean smoke, axial flow fan wind direction surrounds blowing smoke downwards;
- Effectively purify smoke and dust, improve purification efficiency, reject lens pollution, and reduce failure rate.

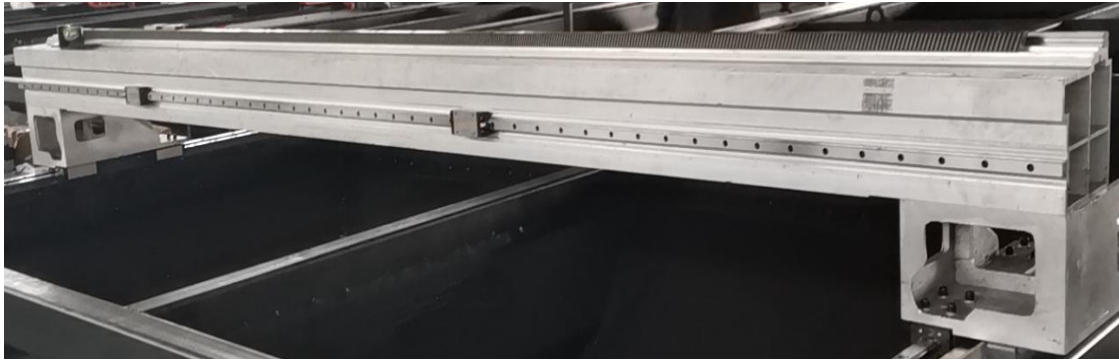
Working table

The bed body adopts the overall welded structure of steel. It is subjected to roughing after annealing to eliminate internal stress. And is finished by secondary vibration aging treatment, which better solves the stress caused by welding and processing. Thereby it greatly improved the machine tool stability.









Tensile Aluminum Cross Beam


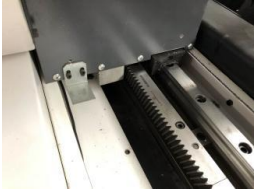



Better performance and looks brighter than cast aluminum, stable and not easy deformed, light in weight and good in dynamic performance. After secondary vibration and aging treatment, it is finished to ensure the strength, rigidity and stability of the beam.



Main configuration

| | | |
|---------------------------|--|---|
| <p>Fiber Laser</p> | <p>3000W Raycus Raycus is the first Chinese enterprise engaged in the research, development and scale production of high-power fiber lasers and core devices and the largest fiber laser R&D and production base with global influence in China.</p> |  |
| <p>Laser Head</p> | <p>Raytools (Switzerland) Automatic focus, high effectiveness, save your time; Anti-collision design, height adjustment; Easy protective lens maintenance and Focus lens adjustment. Locates edges and improves processing efficiency. Improves cutting efficiency. High Precision: without manual adjust, 0 fault cutting.</p> |  |

| | | |
|----------------------------|--|---|
| <p>CNC System</p> | <p>FSCUT hardware and Cypcut software FSCUT laser cutting system is a full-solution specially designed for sheet metal fabrication industry, easy to install and adjust, excellent performance and fully integrated solutions. CypCut cutting software is an in-depth design for fiber laser cutting industry. It simplifies complex CNC machine operation and integrates CAD, Nest and CAM modules in one. From drawing, nesting to workpiece cutting all can be finished by a few clicks.</p> |  |
| <p>THC</p> | <p>BCS100 BCS100 capacitance height controller provides excellent performance in distance control. It served as height follow unit for FSCUT laser cutting control system via Ethernet communication, can realize functions including height sensing, segmented and stepping pierce process, detect and find workpiece edge, vibration suppression etc. Latest anti-collision function can effectively avoid tip-up collision risk in production.</p> |  |
| <p>Servo System</p> | <p>YASKAWA servo motor (Japan) Enhanced vibration suppression function: Improve follow performance and reduce response time; Reduce the vibration; Improve mechanical performance by combining inertia motors; Low motor heat.</p> |  |
| <p>Reducer</p> | <p>MOTOVARIO (Italy) High output torque with small rotation clearance; PCS-2 standard configuration, efficiency up to 98%; High gear meshing accuracy; Low noise (less than 58 decibels)</p> |  |

| | | |
|---|--|---|
| <p>Gear Rack</p> | <p>YYC High precision, long life, can provide rigorous support for quenching helical gears and grinding helical gears, so that the load drive structure is compact, can effectively reduce the driving torque.</p> |  |
| <p>Linear Guide Rail</p> | <p>THK (Japan) Low noise, wear-resistant, smooth to keep fast moving speed of laser head. The linear transmission system comprises of from Helical Rack and Linear guides which improves accuracy and efficiency.</p> |  |
| <p>Water Chiller</p> | <p>Tongfei Water Chiller Main components made from stainless steel features large flow, high head, low noise and long service life. control system adopts a controller with English LCD and fully automatic CPU, making it visual and easy-to-operate. Water temperature precision can reach $\pm 1^{\circ}\text{C}$.</p> |  |
| <p>Electric Apparatus Elements</p> | <p>Schneider (France) 1. Circuit protection against short-circuit currents, Circuit protection against overload currents, Breaking and industrial disconnection as per standards IEC/EN 60947-2. 2. Over voltage resistance, high performance limitation to fast closing independent of the speed of actuation of the toggle.</p> |  |
| <p>Auto Lubricate</p> | <p>Automatic Lubrication System for both X Y axis guide rails and Z ball screw. We can set the adding oil's frequency and quantity by adjusting the relevant parameters on computer, so it largely improves the machine's lifetime, save manpower.</p> |  |

Terms & Conditions

General Terms

- ❖ Customer is responsible for providing all electrical, air, and other utility connections to the machine.
- ❖ Customer must attain an earth ground with a measured value < 1 volts to earth ground or less.
- ❖ Customer is to provide placement of machine components via forklift or over-head crane.

Installation & Training

- ❖ Our Engineers will install the machine and train operators in customer's facility.
- ❖ Our Engineers will Maintain the machine during the warranty period without extra fees

Warranty

- ❖ According to our warranty conditions 12 months parts and labour and doesn't include Consumables.

Hope that our offer will be up to your satisfactory

If you have any questions or requirements, please let me know at any time. It will be our big pleasure if we have opportunities to be on service of you in near future.