

X MASTER

HD PLASMA CNC GANTRY CUTTING MACHINE



Cutting function:
High definition plasma cutting



Cutting Size:
3000x12000mm



Cutting Tolerance:
Within iso range 3



X Mark + Hypertherm XPR
Integrated solution



High Definition Plasma, one step in place!

The Gantry plasma cutting machine - X Master, available exclusively from Arcbro, challenges the concept of the traditional plasma cutting industry: High productivity, high cutting quality, Precise cuts at fast speeds reduce secondary operations and streamline your manufacturing processes, which in turn reduces costs and increases production, built-in integrated cutting process, perfect round hole for one-button cutting, and reliance on worker skills. The new process is called high definition plasma cut, which is a leap in every aspect in plasma.

Unbeatable Plasma Power Source – ArcBlitz™

Unbeatable HD plasma power source - ArcBlitz. ArcBlitz is the latest system ARCBRO plasma power supply product line, challenging the traditional plasma cutting industry concept. ArcBlitz can increase cutting speed, significantly increase productivity and reduce operating costs. New ease-of-use features and engineered system optimization capabilities make ArcBlitz easier to run with minimal operator intervention, while ensuring optimal performance and unparalleled reliability.

High Definition Plasma

High definition plasma cutting is a new technology that has been around for less than a year. It is completely different from traditional plasma cutting.

Experts in the cutting industry know that plasma cutting quality is affected by six factors: current, gas, Pierce technology, led in/out technology, cutting speed, timing. These six factors are independent of each other in traditional cutting. Only experienced and skilled workers can combine them and complete a high-quality cutting.



The high definition cutting completely eliminates the requirements of the craftsmanship of the workers. It classifies and integrates all the factors affecting cutting.

And it is controlled by the system to match the world's cutting-edge equipment, so that anyone can cut the best quality work-pieces at the lowest cost in the shortest time.



True Hole Technology

The most troublesome problem for traditional plasma cutting technology is that it cannot cut a satisfactory small hole.



No matter how skilled the craftsman of a craftsman is, due to the shape of the plasma flame itself, there is always a taper in the small hole. The upper and lower edges of the metal have different apertures, which necessitates that the holes must be cut to fit into the bolts. Small holes and bolts are the most widely used plasma cutting applications.



The birth of the small hole technology finally solved this big problem.

Nesting software or CNC software automatically applies True Hole fine bolt hole technology when perforating sheets up to 25 mm thick. The perforated hole to sheet thickness ratio can be as low as 2:1 to 1:1.

The advantage of the small hole technology is obvious:

it does not require manual intervention by the operator and automatically ensures the quality of the bolt holes. It narrows the gap with the quality of laser perforations, allowing the plasma cutting process to be used in many previous jobs that require laser cutting systems.

Unbeatable HD plasma power source – ArcBlitz™

A real transformative advances in industrial cutting operations.



High definition cut, one step in place.

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Mild steel	mm	inches
Pierce capacity	30	1.2
Severance	50	2
Stainless steel		
Pierce capacity	25	1
Severance	20	3/4
Aluminum		
Pierce capacity	25	3/4
Severance	25	1

Unbeatable productivity

- Four times faster than flame cutting.
- Compared to the 4,000 watt laser on the market, ArcBlitz cuts 44% faster on 8mm material and 50% faster on materials 10mm thick and above. And there is no residue on the part, which meets the tolerance requirements for most difficult parts.

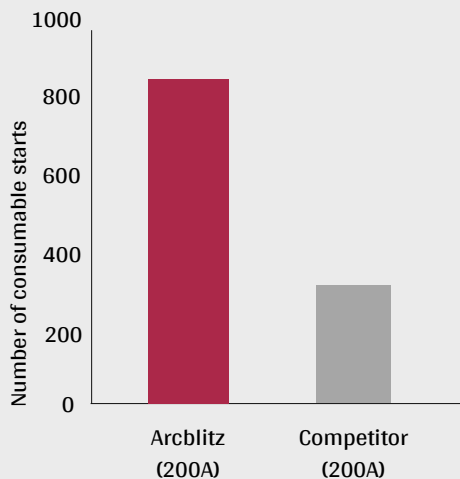
Cost Reduction

- Achieve optimal consumables life without operator adjustment.
- The nozzle uses rapid liquid cooling technology to protect the torch and consumables.
- Precision cutting eliminating cost of secondary operations.

Precise Cuts

- The outer contour cutting adopts the oxygen / air process, and the cutting quality is stable within the ISO range 3.
- The perfect hole cutting uses oxygen / air technology to eliminate taper.
- Gas control box for automatic ventilation cutting of outer contours and small round holes.

Cut Quality over life
20mm mild steel



SPECIFICATIONS

Cutting mode	high definition plasma cutting for true hole technology
Effective cutting area	Width 2.5- 5m Length minimum 6m (Length and width can be optional)
Number of torches	a set of automatic plasmas, a set of automatic flames
Drive mode	Longitudinal – 1000Wx2 large inertia; horizontal – 750Wx1 large inertia; lifting 400 W; Japan Panasonic servo system, dual drive mode
Reducer	1:40 Nidec
Vertical orbit	Silver 38 kg rail on the longitudinal rail; silver (silver) 20 linear rail in the horizontal direction;
Rack and pinion specifications	2-mode helical tooth
Height control	Auto Hypertherm PHC (plasma); magnet anti-collision device; high-speed capacitor high-definition HDY (flame)
Cutting thickness	0 – 45 mm perforation cutting (plasma); flame cutting thickness 0–200mm (for thicker optional)
Plasma power source	Hypertherm XPR300, US Hypertherm
Small hole technology nesting software	Sigma nesting / lantek / pronest
Running speed	0–20000mm/min
Cutting speed	0-12000mm/min (base on material thickness and plasma power source)
Positioning speed	10000mm/min
positioning accuracy	±0.08 mm
Machining part deviation	±0.5mm
CNC control mode	Hypertherm EDGE Connect TC / Feimat ICNC (can be optional)
Machine input voltage	220V single phase

ARCBRO SUPPORT

ARCBRO LEARN CAMPUS

Learn the machines before you get them.

ARCBRO Learning campus is comprehensive online university for CNC plasma cutting machine. Considering difficulty of training new operator from zero to an expert level, in order to improve all customers operation skill and effectiveness, ARCBRO provide a exchange learning platform. Here, whether CAD auto nesting software or practical operation, all customers would find documents or videos they need. The best part is that these videos will always be updated with the latest software updates so that customers can be always at the cutting edge of CNC plasma cutting technology.

Link: <https://www.arcbro.com/support/learncampus/>



ARCBRO TROUBLESHOOTING

You can buy any arcbro product without any hassle!

This part is focus on fast and efficient after-service. We have professional engineers who can perform online machine diagnostics in 24 hours and provide suitable solution about any problem customers meet but not solve. Besides, in order to increase efficiency, we have organized some common questions that customers have asked us and gave answers to help you solve the problem as quickly as possible. Furthermore, our product pass the strict test before shipping, and we support our customers longer warranty up to 18 months. During the period, we bear the cost of any parts failure or damage to eliminate your worries completely. Want to know more, just browse our official website, click support, enter Arcbro troubleshooting system. Link: <https://www.arcbro.com/support/troubleshooting/>



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