

QL-Plasma Pro CNC Plasma Cutting Machine

**Precision Metal Cutting. Industrial
Durability. Intelligent Control.** Engineered by
QuakeLogic Inc.



The **QL-Plasma Pro** is an industrial-grade **CNC plasma cutting system** designed for high-precision cutting of carbon steel, stainless steel, aluminum, and other conductive materials. Built on a **rigid welded steel structure**, it combines advanced motion control, intelligent height tracking, and seamless CAD/CAM workflow for dependable production in manufacturing, research, and educational environments.

 **QUAKELOGIC**

Key Features

Cutting Area

1300 × 2500 mm (X × Y)

Powerful Plasma Source

200A high-current cutting for up to 25 mm steel plate thickness

Precision Motion System

HIWIN linear guideways and rack-and-pinion drive

- **Intelligent Control:** STARFIRE controller with integrated THC (Torch Height Control)
- **CAD/CAM Integration:** FASTCAM nesting software included
- **Safety & Efficiency:** Collision-avoidance Z-axis and water-cooling table
- **Heavy-Duty Construction:** Reinforced frame ensures long-term accuracy and stability



Technical Specifications

Parameter	Specification
Model	QL-Plasma Pro
Working Area (X × Y)	1300 mm × 2500 mm
Cutting Speed	0–8 m/min
Rapid Traverse Speed	0–50 m/min
Cutting Precision	±0.5 mm
Repeatability	±0.05 mm
Plasma Source	125A / 200A (Huayuan or equivalent)
Total Power	8.5 kW
Input Voltage	3-Phase 220/480 V AC, 60 Hz
Drive System	Leadshine stepper motors & drivers
Controller	STARFIRE CNC with automatic height control
Software	FASTCAM nesting and G-code generation
Start Method	Non-contact arc striking
Cooling	Water-cooled table with smoke exhaust
Transmission	Rack & pinion + linear guideways
Data Transfer	USB port
Machine Dimensions (L × W × H)	3550 × 1900 × 1300 mm (approx.)
Machine Weight	~1200 kg

System Components

STARFIRE CNC controller with touch interface

Huayuan plasma power supply (125A or 200A)

Torch height controller (THC)

Industrial water table with smoke extraction duct

FASTCAM CAD/CAM software with automatic nesting

Heavy-duty plasma torch with electrode & nozzle kit

Leadshine stepper motors and drivers

Schneider electrical components

HIWIN linear guideways

Standard transformer (480V, 3-Phase, 60 Hz)



Applications



Shipbuilding & Marine Fabrication



Construction & Structural Steel



Automotive & Aerospace Components



Boiler, Pipeline, and Tank Manufacturing



Agricultural & Mining Machinery



Educational and Research Laboratories

Materials: Carbon steel, stainless steel, aluminum, copper, galvanized sheet, titanium, and other conductive metals.



Control System

1

STARFIRE CNC Controller

- Intuitive graphical interface with USB support
- Real-time display of cutting path and coordinates
- Automatic torch height adjustment for smooth cutting
- Arc voltage feedback for consistent kerf quality

2

FASTCAM Nesting Software

- Automatic nesting optimization to minimize waste
- DXF import for CAD drawings
- Integrated G-code output compatible with STARFIRE

Construction & Design

Reinforced Welded Frame

Designed for vibration damping and accuracy retention

Industrial Electrical Components

Schneider, AirTAC, and Huayuan systems

Exhaust Fan System

Extracts smoke and particulate efficiently

Collision-Protection Z-Axis

Protects torch assembly from impact

Water-Cooled Cutting Table

Improves safety and reduces fumes

Included Accessories

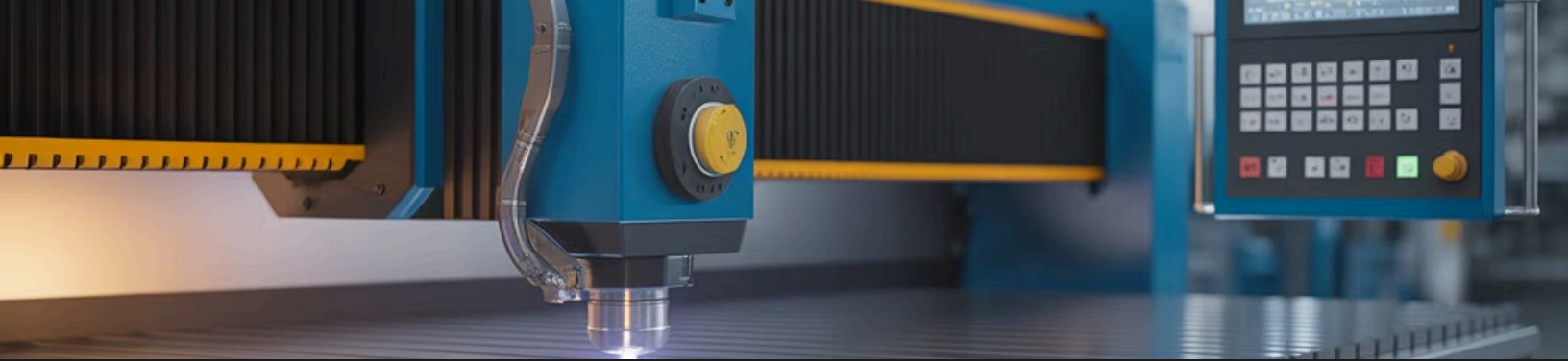
- CNC controller with USB cable
- Complete plasma torch assembly
- Water-cooling and exhaust system
- Standard consumables (nozzles, electrodes)
- Power transformer (480V/3-Phase)
- Tool and accessory kit
- Operation and maintenance manual

Optional Accessories

- Flame cutting head for dual-process plasma/flame operation
- Automatic air filtration system
- High-speed dust collector and exhaust ducting
- Additional nozzle and electrode sets
- Work table extension for large panels

Utility Requirements

Parameter	Requirement
Power Supply	380 V AC ±10%, 50/60 Hz, 3-Phase
Compressed Air	≥ 0.6 MPa (dry, oil-free)
Cooling System	Integrated water-cooled table
Operating Temperature	0–40°C
Relative Humidity	≤ 85% non-condensing



Warranty & Support

Standard Warranty

12 months covering all parts and labor under normal operation

On-Site Installation & Training

Setup, calibration, and operator instruction by QuakeLogic technicians

Remote Technical Assistance

Software and troubleshooting support

Spare Parts Availability

Full supply of consumables and replacement components

Contact Information



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Live Datasheet