



CUTTING

PlateProXHD™

CNC PLASMA & OXY-FUEL CUTTING MACHINE



SIMPLY BETTER BUILT.





PLATEPROXHD: PRECISION CUTTING. PROVEN PERFORMANCE.

The PlateProXHD by Koike Aronson Inc./Ransome is built for power, accuracy, and efficiency. This automated dual-side drive plasma/oxy-fuel cutting machine utilizes the latest technology to deliver exceptional speed, versatility, and durability. Manufactured in the USA and backed by a two-year warranty, the PlateProXHD is designed to meet the demands of Steel Service Centers, Heavy Fabricators, Tank Manufacturers, Shipbuilders, and General Fabricators—offering unmatched performance at a competitive value.



Fabricated Main Beam, Rigid Steel Frame, and Floor-Mounted Rail System:

Our in-house fabricated solid steel gantry, rigid frame, and floor-mounted rail system provide exceptional stability and durability for long-term, continuous use.



Versatile Oxy-Fuel and Plasma Cutting Configurations:

Supports multi-torch Koike or IHT oxy-fuel stations, various plasma configurations, and the 3D-X Full Contour Plasma Bevel Head for precise cutting across all processes.



High-Precision Components for Smooth and Accurate Movement:

High-precision linear rails, helical rack and pinion drive, and large-diameter drive pinions ensure smooth, accurate motion with minimal vibration.

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HYPERTHERM™ EDGE® CONNECT CNC SYSTEM



Hypertherm™ EDGE® Connect CNC Platform:

The EDGE® Connect CNC by Hypertherm offers unmatched reliability, powerful performance, and flexible customization. Built on the industry-leading Phoenix® platform, it features ProNest® CNC automatic nesting with SureCut™ technology and enhanced hardware. Designed for easy setup and upgrades, it can be configured in the field to match specific cutting applications.

FEATURES AND SPECIFICATIONS

- **19-Inch Glass Touchscreen (1366 x 768 Resolution)**
With **IntelliTouch Pro PCAP (Projected Capacitive Touch)** for precise, responsive control.

- **Windows® 10 Embedded**

HARDWARE SPECIFICATIONS:

- **Intel® J1900 Quad-Core Processor (Or Equivalent)**
- **120GB SSD Hard Drive**
- **4GB DDR3 RAM (Or Better)**
- **USB 2.0 Ports (x2)**

ADDITIONAL FEATURES:

- **Built-in Wireless Communication**
Enables **remote diagnostics, troubleshooting, and monitoring** for quick error response.
- **Built-in Emergency Stop Button and Hard-Wired Switches**
- **Built-in Handles and Swivel Axis**

SOFTWARE FEATURES:

- **ProNest® CNC Automatic Nesting**
- **SureCut™ Technology**
True hole, True Bevel, Rapid Part, and Consumable Life Optimization (when applicable).
- **Intuitive Graphical Interface**
- **Auto-Gas Support**
- **DXF Input & Simple Shape Nesting**
- **CutPro® Wizard**
- **Forward & Backup on Path Function**
- **Skip to Pierce/Skip Part Function**
- **Configurable Software and Seamless Upgrades**
Configurable upgrades make **additional equipment integration** for specific job requirements simple.

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DESIGNED TO LAST: THE ROBUST BUILD OF THE PLATEPRO XHD

We've invested heavily to guarantee that the parts used in our machine meet the highest global quality standards. Our rigorous engineering and manufacturing process ensures consistent, reliable performance, even in the most demanding environments.

▪ Large Diameter Drive Pinions

Large Diameter Pinions offer smooth and accurate motion, designed to achieve **1500 IPM rapid traverse speeds**.

▪ Precision Linear Way & Helical Rack and Pinion System

25mm linear rails and AGMA 12, Dual Side Drive helical rack and pinion system ensures smooth and accurate motion for cutting operations with minimal wear and tear.

▪ Robust 5.25" Diameter Main Roller

Heavy-duty main saddle rollers provide stability for heavy loads while achieving smooth motion.

▪ Floor-Mounted Heavy Duty Rail System

A fixed-base plate floor-mounted system provides a **rigid foundation for the 22kg, triple machined rail**. Rails also allow for easy expansion to accommodate two or more machines on a common rail.

▪ Powerful AC Servo Motors & Ultra Low Backlash Planetary Gearboxes

Robust **Yaskawa Servo Motors boast 750 Watt, X-Axis movement and 1.5 Kw, Y-Axis movement** to deliver precise, smooth, and accurate motion ensuring superior cut quality.

▪ Fabricated Steel Beam Construction with Heat Shields

Unique design **combines a solid-steel, shielded beam with an integrated back shelf**, creating a single, highly-durable weldment.

▪ Internally Mounted Main Electrical Enclosure

Electrical enclosure is **housed inside main saddle for ample protection** against harsh sparks and heat. Additionally, all electrical components offer non-proprietary, "off-the-shelf" parts for quick, accessible service.

▪ Flexible Configuration of Rail Axis Cable Carrier

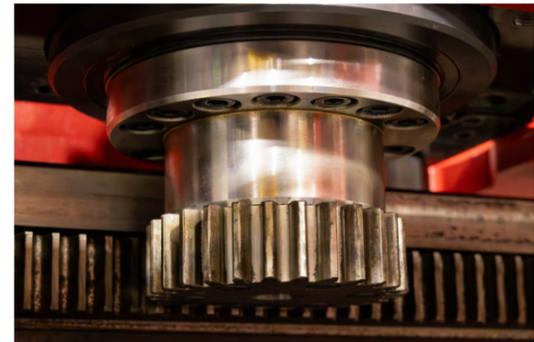
Rail Axis Cable Carrier can be **mounted on the floor or overhead** to accommodate for all spacing constraints.

▪ Integrated Limit Switches

Built-in limit switches provide **over-travel protection and machine homing assistance**.

▪ Slave Carriage Endless Loop Steel Band Clamp

Robust steel band clamp allows for **easy, accurate placement and spacing of up to 4 carriages**.



Large Diameter Drive Pinions



Integrated Limit Switch



AC Servo Motor



Heavy Duty Rail System

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▪ On-Board Plate Alignment Camera

Mounts to master carriage and enables precise plate alignment as well as surveillance of the machine's starting-point prior to initiating a cutting program.

▪ Non-Cycling Refrigerated Air Dryer

Smooth bore, copper tube-on-tube heat exchangers deliver fully automatic, low pressure dew point performance. Centrifugal separator efficiently captures liquid condensate at varying inlet loads to ensure maximum moisture removal.

▪ Two-Stage 7.5 HP Air Compressor

Used in conjunction with the optional air dryer, this durable cast iron pump features a cylindrical head with deep-grooved directional cooling fins, designed to provide 15,000 hours of continuous-duty operation.

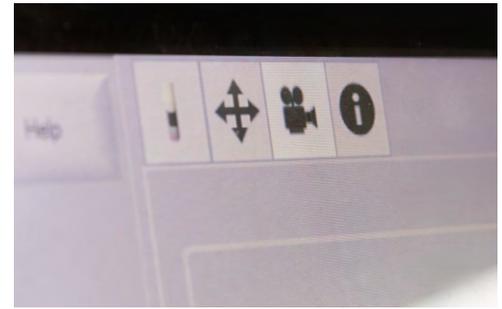
▪ Machine Collision Protection

For operators with two or more machines on a common rail, a machine collision sensor may be equipped to detect individual machine proximity and prevent contact.

▪ 360X Pipe Rotator*

Supports 2" to 16" pipe rotation and beveling with a 4-jaw chuck, steady rest with electrical actuators, and expandable 10' track sections (up to 40'). Optional Pipe Stand Support can be equipped for stabilizing longer pipes, manually positioned to avoid cutting interference (recommended one per 10').

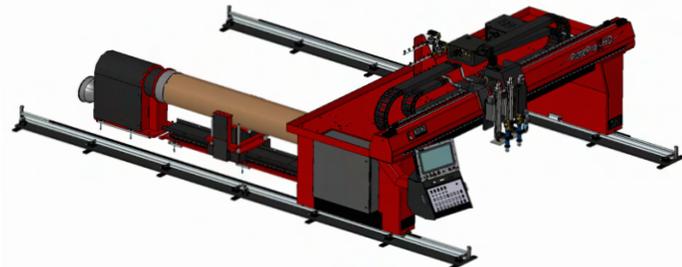
***Rotary Tube Pro 3 with Bevel Module Software License is required for operation.**



EDGE® Connect CNC Camera Interface



Machine Collision Sensor



360X Pipe Rotator Configuration

MARKING OPTIONS:

▪ Pneumatic Dot-Peen Pin Stamp Marker:

Carbide-tipped variable-speed punch for marking bend lines, layout lines, drill locations, and alphanumeric text as small as 1/4" high.



Dot-Peen Marker Sample



Pneumatic Dot-Peen Stamp Marker

▪ Plasma Plate Marking:

Low-amperage plasma marking capability with adjustable marking depth via CNC parameters.

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HYPERTHERM

XPR™ revolutionizes cutting technology, elevating **HyDefinition®** cut quality across mild steel, stainless steel, and aluminum. Its compatibility with the same consumables enables quick changeovers, boosting productivity and slashing operating costs. With enhanced ease of use and optimized performance, **XPR™** ensures reliable operation with minimal intervention, setting new standards for precision cutting.

Features **Hypertherm® True Hole®** Technology

Bolt hole quality is delivered automatically without operator intervention allowing for a more-precise cut.

Hypertherm® XPR170® and XPR300®



NEW! Hypertherm® XPR460®



The **Hypertherm® XPR460®**, the newest addition to the **Hypertherm® XPR™** plasma systems family, offers the most consistent cut quality, thicker cutting capabilities, and faster cutting speeds in its class, all while maintaining the same consoles (Torch Connect and Gas Connect including Core, CorePlus, VWI, and OptiMix), hardware (torch and receptacle, standard leads, sleeves), and accessories (rotational sleeve, nozzle retaining cap, and shield retaining cap).

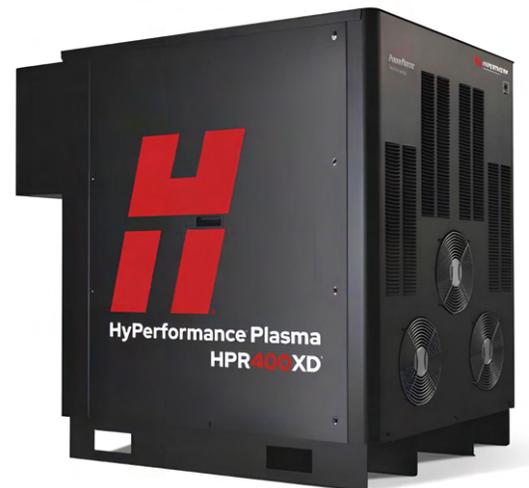
The **XPR460®** delivers over 28% more output power (kW) than the **HPR400XD®**, allowing for mild steel piercing up to 2 1/2" and boasts significant reduction in operating costs by extending the life of consumables through **Ramp Down Error Protection** which prevents excessive arc stretch, shutting down system operations when consumable blowout is detected.

The **Hypertherm® HyPerformance® (HPR)**, plasma systems deliver superior productivity in X-Y, bevel and robotic cutting and marking applications on metal ranging up to 80mm (3.2") with the **HPR400XD®** and 60 mm (6-1/4") thick with the **HPR800XD®**. The combination of faster cutting speeds, rapid process cycling, quick changeovers and high reliability boosts throughput while dramatically lowering operating costs.

Incorporating Hypertherm's proven **HyDefinition®**, **LongLife®**, **patented PowerPierce®**, **True Hole®**, and **True Bevel™** technologies, **HyPerformance®** products offer the ultimate in mild steel cutting performance, as well as excellent stainless steel and aluminum capabilities.

Only Hypertherm® XPR® and HPR® plasma systems can be used for Full Contour Beveling.

Hypertherm® HPR400XD®



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HYPERTHERM (CONT.)

Hypertherm® MAXPRO 200®



Dubbed the industry workhorse because of its power and 100% duty cycle, the **MAXPRO200® LongLife®** plasma cutting system is designed for your heavy-duty, high-capacity automated and handheld cutting and gouging applications.

The easy-to-use system operates with either air, oxygen, or nitrogen plasma gas, and combines fast cutting speeds and quick process changes to maximize productivity. Optimized cutting parameters are set and controlled in a single step for consistent, automated results, while advanced diagnostics simplify troubleshooting and maintenance. Optional serial communications can be added to enable full system control directly from the CNC controller.

Advanced Hypertherm consumable designs – including **LongLife®** technology – improve cut consistency and significantly increase consumable life to lower your cost per part.



Hypertherm® PowerMax65®, PowerMax85®, PowerMax105®, PowerMax125®

The **Hypertherm® Powermax®** series comprises of professional-grade plasma systems engineered for maximum productivity in both manual and automated metal cutting and gouging applications.

Capable of handling materials up to 38 mm (1-1/2") thick, these systems offer exceptional reliability, superior cut quality, and user-friendly operation. Innovative single-piece cartridge design extends consumable life by up to five times, reducing operating costs and downtime.

Built to withstand extreme conditions, **Powermax®** systems are tested for durability, ensuring consistent performance over a lifespan exceeding ten years. With a wide array of torch and cartridge options, users can easily tackle diverse cutting and gouging tasks, enhancing versatility across various applications.

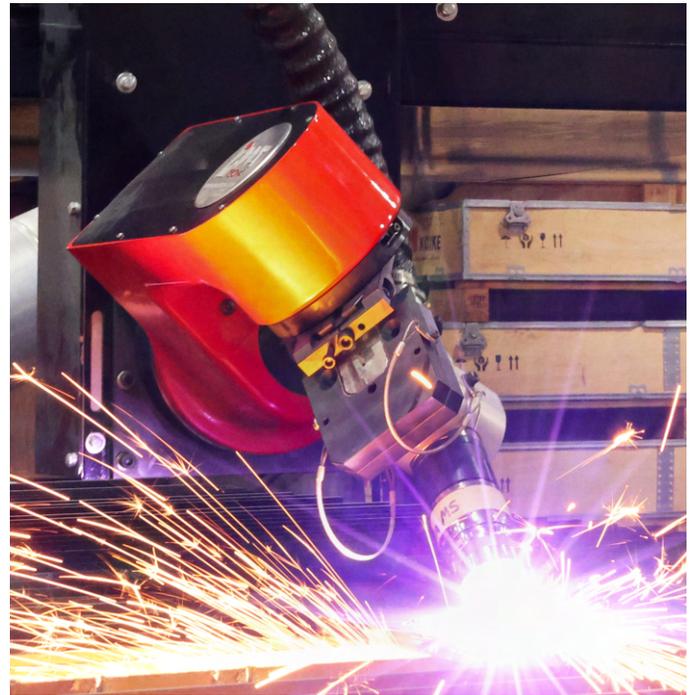
SIMPLY BETTER BUILT.

■ 3D-X Full Contour Bevel Head

Our 3D-X Full Contour Bevel Head enables sophisticated 3D bevel cutting, facilitating precise angle cuts in multiple dimensions, performing A, V, X, Y, and K bevels.

The 3D-X design incorporates a helical rack and pinion lifter for fast, smooth, and precise motion, that delivers smaller corner loops and better hazard clearance at Y-axis 45 degrees.

Its advanced features ensure efficiency and precision, with one-touch homing and alignment capabilities, integrated torch breakaway, and concealed A/B axis motor and encoder cables.



3D-X Full Contour Bevel Head



Integrated Sensor THC
(Torch Height Control)

■ Koike Integrated Sensor THC (Torch Height Control)

With a 12" (340.8 mm) lifter travel and a programmable lifter speed of 1,000 IPM, the Koike THC ensures swift and accurate adjustments during the cutting process.

Its adjustable stroke retract between cuts enhances operational efficiency, while dynamic positioning capabilities further optimize performance, enabling seamless adaptation to varying cutting conditions for consistent results.

■ Manual Plasma Bevel Station

Allows for plasma beveling in the rail axis with non-contour mechanical adjustment from +/- 0 to 45°.

■ Laser Pointer

Provides a visual indicator for plate alignment and torch positioning.



Manual Plasma
Bevel Station

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IHT Intelligent Oxy-Fuel Cutting Torch

- IHT Torch Station:

Designed for precision and efficiency, the IHT Intelligent Oxy-Fuel Cutting Torch features many best-in-its-class features such as an **auto capacitive height sensing system, automatic flame ignition, a tool-free nozzle & sensor exchange** to minimize downtime, and a **flashback detection system** to enhance safety and extend torch lifespan.

Integrated control valves ensure faster installation, while a **built-in pressure gauge** optimizes oxygen pressure for superior cut quality.

- Oxy-Fuel Torch Station (Holds Up to 4 Torches):

Model "G" motorized lifter, 6" (150 mm) stroke at 40 IPM. All stations are controlled from the Operator console. Includes three cutting tips and standard **500L Koike Torch**, offering plate cutting from 1/8" to 12" (3mm to 300mm) thick.

- Manual Oxy-Fuel Bevel Attachment for Koike 500L Torch:

Used for bevel cutting operations, including top and bottom level bevel cuts.

- Koike Twin Tip Holder:

Converts single oxy-fuel cutting torch into dual cutting torches. Allows strip cutting and a closer distance between small parts.

- Koike Auto-Gas Control System For 500L & IHT Torch:

This built-in CNC controlled system automates the setting and regulation of cutting oxygen, preheat oxygen, and the fuel gas pressures for oxy-fuel cutting while continuously monitoring and maintaining precise gas flow and pressure.

- HI-LO Oxy-Fuel Gas System with Auto Ease-On:

HI-LO system initiates faster preheating of plate, delivering superior cutting quality and precise piercing on thicker plate. Features auto ease-on pierce control for cut oxygen.



500L Oxy-Fuel Torch Station with Manual Bevel



Hi-Lo Oxy-Fuel Gas System



Built-In Koike Auto-Gas Control System

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Water Cutting Table:

An economic solution to reducing smoke, sparks, and dust into the environment.

FEATURES:

- Can be used for both oxy-fuel and plasma cutting.
- Constructed out of 1/4" thick steel.
- Steel tank air bladder allows raising and lowering the water level with air.
- Designed for leveling plates up to 6" thick.
- 1/8" thick slats spaced 3" apart prevent small parts from falling into the table and reduce slag.
- Easy lift lugs for quick access to collector pans.



Klean Sweep Self Cleaning Downdraft Table:

Automatic self-cleaning table for high-performance dust and slag collection.

FEATURES:

- No need to stop production; removes slag and scrap while you cut on demand or on programmed intervals. Slag disposal method can be dumped into embedded floor containers or conveyed into portable collection unit.
- Engineered for optimal fume extraction based on your cutting processes. Exhaust channel ducts can be internal or external based on the application.
- Standard table design allows materials up to 6" in thickness.

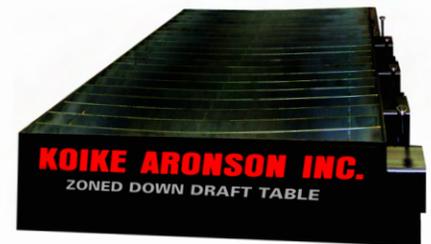


Koike Zoned Downdraft Cutting Table:

A modular design featuring optional expansion capabilities to extend the cutting area.

FEATURES:

- No electronic components.
- Slat frames and slag pans remove easily for cleaning.
- Multiple zones for optimal fume extraction.



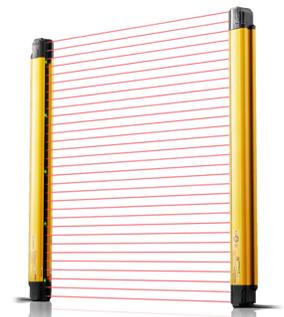
SAFETY OPTIONS:

Safety Light Curtain:

Safeguards personnel from the potential dangers of moving machinery. Seamless integration allows the system to shut-off machine if anything comes within the path of the light curtain while in motion.

Built-in status indicators can be illuminated in three colors – green, red, and orange – by activating an external input, making it possible to use them as work instruction lights.

Additionally, the indicators are visible at a wide viewing angle, allowing for easy recognition of the curtain's status.



Pull Rope E-Stop:

Lifeline™ 3 cable switch delivers constant access to immediate emergency stop functionality, ceasing all cutting operations with a simple pull.

Meets the stringent requirements of ISO-13850 safety standards (safety of machinery-emergency stop equipment).



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Effective Cutting Width:

Effective Cutting Length:

Material Types:

MATERIAL THICKNESS RANGE

Plasma Thickness:

Oxy-Fuel Thickness:

PLASMA TYPE

Quantity: Hi-Definition

Voltage:

RAIL AXIS CABLE CARRIER

Floor Mounted

Overhead Mounted

PLASMA SYSTEM

Hypertherm®

CNC CONTROLLER

Hypertherm® EDGE® Connect

PLASMA BEVEL

Manual Bevel Station

3D-X Full Contour Bevel Head

OFFLINE SOFTWARE

Hypertherm® CAM Solutions

PLASMA HEIGHT CONTROL

Koike Sensor - THC

OXY-FUEL

Quantity: Fuel-Gas Type:

Auto Ignition

Capacitive Height Control

Manual Bevel Attachment

IHT Torch

PLATE MARKING

Pneumatic Dot Peen Pin Stamp

Low-Amperage Plasma Marking

CUTTING TABLES

Pneumatic Water

Dry

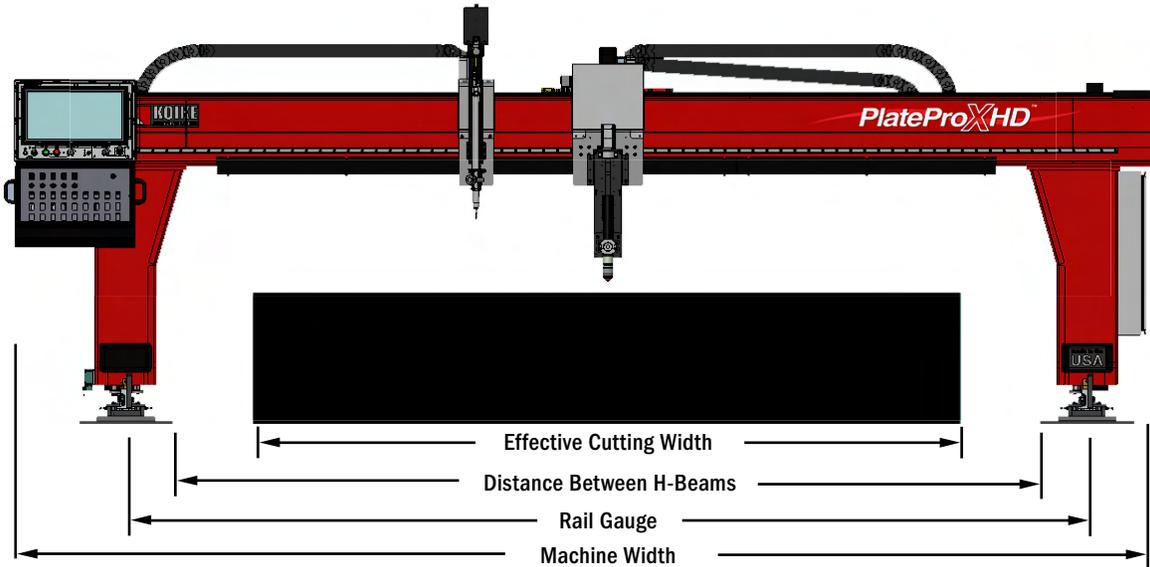
Downdraft

Klean Sweep Self-Cleaning Downdraft

Fume Collector

SCAN TO FILL ELECTRONIC FORM
(Select Click to Request Quote):





*For Exact Dimensions, See Final Assembly Drawing.

PlatePro XHD MODELS	PLPXHD 2000	PLPXHD 2500	PLPXHD 3100	PLPXHD 3700
Effective Cutting Width (MASTER)	72 in	96 in	120 in	144 in
Distance Between Rail Pads	98 3/4 in	122 3/4 in	146 3/4 in	170 3/4 in
Machine Rail Gauge	114 3/4 in	138 3/4 in	162 3/4 in	186 3/4 in
Machine Width	160 in	184 in	208 in	232 in
Table Height	30 in	30 in	30 in	30 in
Distance Between Heat Shield & Floor	44 7/16 in	44 7/16 in	44 7/16 in	44 7/16 in
Effective Cutting Length (Expandable)	168 in	168 in	168 in	168 in
Machine Rail Support H-Beam	22 kg Floor Mount	22 kg Floor Mount	22 kg Floor Mount	22 kg Floor Mount
Rapid Traverse Speed	1500 IPM	1500 IPM	1500 IPM	1500 IPM
Contour Speed (Maximum)	400 IPM	400 IPM	400 IPM	400 IPM
Machine CNC	Hypertherm® Edge Connect	Hypertherm® Edge Connect	Hypertherm® Edge Connect	Hypertherm® Edge Connect
Machine Drive System	AC Servo	AC Servo	AC Servo	AC Servo
Maximum Number of Slave Stations	3	3	3	3
Maximum Plasma or Marker Stations	2	2	2	2
Maximum Oxy-Fuel Stations	4	4	4	4
Oxy-Fuel Gas System	Hi-Lo/Autogas	Hi-Lo/Autogas	Hi-Lo/Autogas	Hi-Lo/Autogas
Machine Voltage	208-230/1 or 3-phase/60 AMP			

*Specifications are subject to change.

SIMPLY BETTER BUILT - FOR OVER 100 YEARS.

OUR STRICTLY CONTROLLED MANUFACTURING AND PRODUCTION PROCESSES ENSURE WE HAVE THE HIGHEST-QUALITY MACHINES WITH THE MOST RELIABLE PERFORMANCE. WE COLLABORATE WITH OUR CUSTOMERS TO PRODUCE THE RIGHT MACHINE FOR THEIR NEEDS WITHIN A RANGE OF BUDGETS.



WELDING & POSITIONING



CUTTING



PORTABLES & GAS APPARATUS



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