



JMT

STRONG ON SERVICE

PLASMA CUTTERS



**It's difficult to compete in today's
world with yesterday's technology.**

We have solutions.



JMTUSA.com

Email: JMT@JMTUSA.com

Toll Free: **855-773-7727** (855-PRESS-BRAKE)

JMT designs and sells quality metal fabrication machine tools for a wide range of sheet metal and structural steel working applications that include bending, cutting, drilling, positioning, punching, shearing and welding.

JMT machines are built to our stringent set of design and quality standards in state-of-the-art manufacturing facilities. Along with designing our own machines, **JMT** partners with manufacturers that have extensive experience building machine tools for some of the leading suppliers in the industry.

Led by President Kyle Jorgenson, **JMT** is supported by an ever expanding team of industry professionals, which include experienced product design engineers, sales consultants and veteran service engineers. **JMT** also has a resourceful parts and tooling department to keep your machines working at optimal performance.

The company has a 30,000 square foot showroom, warehouse and service center at its headquarters in Salt Lake City, Utah. **JMT** also has a sales and engineering office in Bursa, Turkey which covers Europe, Asia, and Africa.

A global network of over 30 select distributors trained to sell and service **JMT** machines are strategically located to provide the fastest response times to our customers.

JMT product designs combine accuracy, speed, flexibility, durability, reliability and advanced technology to deliver machines with the highest performance-to-price ratio in the industry.

For more information please visit www.JMTUSA.com
or call toll free **855-773-7727** (855-PRESS-BRAKE).
or email us at JMT@JMTUSA.com.



The machinery showroom at **JMT's** corporate headquarters.



The factory that builds our **JMT** lasers operates the world's largest fiber laser job shop as its R&D department, where ten lasers are in production 24/7, cutting parts for actual customers, bringing ideas to life in real time.

JMT Plasma Cutters

JMT plasma cutting machines offer quality, efficiency, lower cutting cost and a wide range of cutting mild steel, stainless steel, and aluminium.

Our high performance machines provide the best cutting angles and long life spans of consumables by using world-class plasma equipment, components, and control systems.

JMT PL Series

- Rail Type Plasma Cutting Machine
- High Definition Cutting for Heavy Duty Production



JMT PL-C Series

High definition, flexible, compact cutting solution.



Plasma Cutting Machine with optional loading and unloading system

JMT PL & PL-C Plasma Cutters

JMT uses only the best in components which include a Siemens or Hypertherm motion control system and a Hypertherm power supply. Our goal is to provide the following:

- The best cut angle
- The best edge quality
- Precise and fast positioning
- Long consumable life
- Easy programming
- Easy setup
- Reliability
- Energy efficient
- Clean operation



The **PL Series** is manufactured as a true precision machine tool. These high performance plasma cutting machines are designed to cut a wide range of mild steel, stainless steel, and aluminum. The PL is equipped with well known, reliable, and readily available components.

High positioning speeds, accelerations and automatic torch height control provide the best in high quality efficient cutting. The 2D cutting system is available in standard as well as custom lengths and widths.

The **PL-C (Compact) Series** utilizes an all in one compact frame concept, and the PL series utilizes a system where the table is independent of the two guide rails, which are floor mounted.

Dual precision rack & pinion guides for both the Y1, Y2 axis and the gantry (X axis), which houses the cutting torch. The heavy duty machine frame is welded and stress relieved. A synchronized, dual side, backlash free drive system with highly accurate planetary gears provides strict high quality and accurate cutting. The tables are partitioned and zoned for efficient removal of dust. Manual and programmable bevelling and oxyfuel cutting heads have several optional features that are also available.

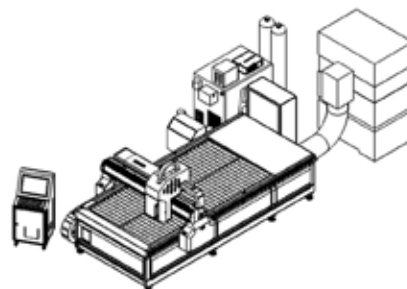
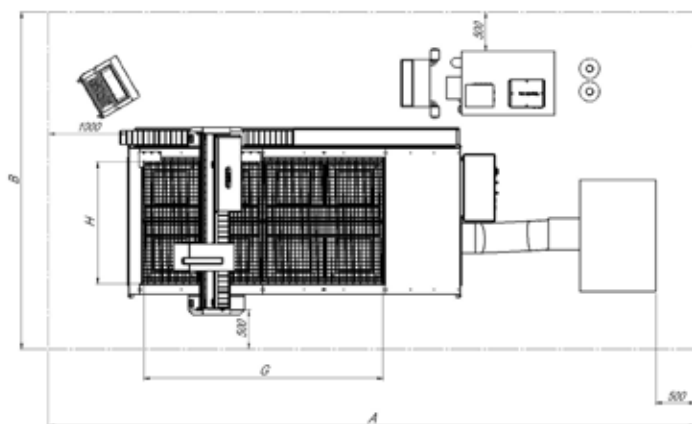
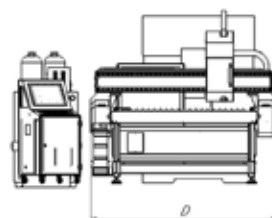
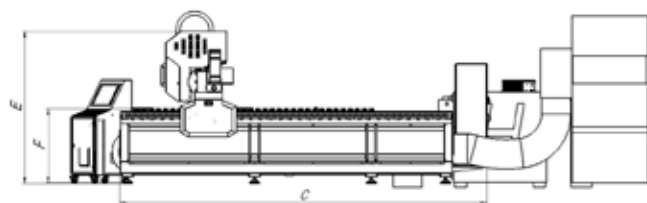
JMT PL SERIES



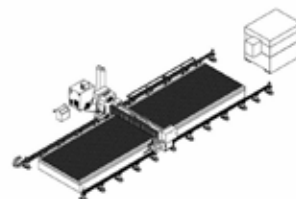
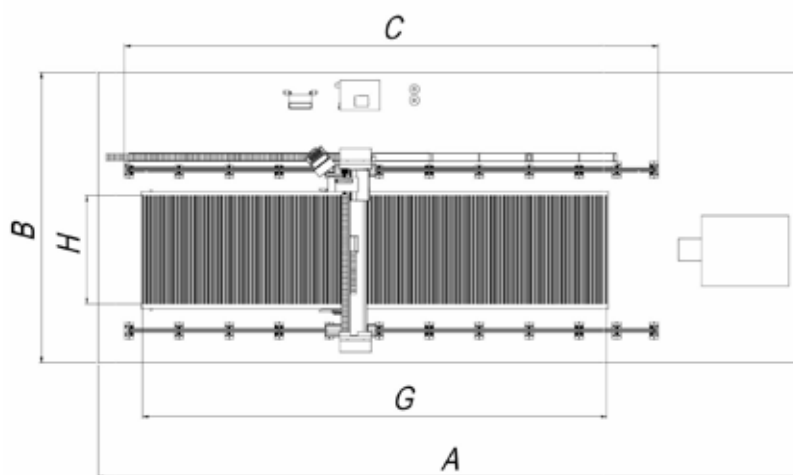
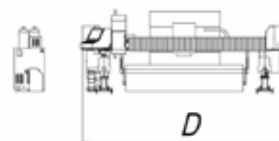
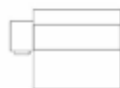
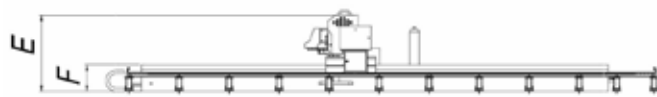
JMT PL-C SERIES



JMT PL-C SERIES (Compact)



JMT PL SERIES



JMT Plasma Cutters Specifications

	A	B	C	D	E	F	G	H	WEIGHT (Lbs.)
PL-C 1530	26'	14'	15'	8'	6' 3"	37"	10'	5' 2"	11,245
PL-C 2040	33'	16'	19'	9'	6' 4"	37"	13' 4"	6' 9"	13,000
PL-C 2060	38'	16'	25'	9'	6' 4"	37"	20'	6' 9"	17,196
PL 20120	60'	21'	47'	14'	7' 2"	28"	40' 6"	6' 10"	28,000
PL 2580	47'	25'	33'	17'	7' 2"	28"	27'	8' 6"	23,611
PL 25120	60'	25'	47'	17'	7' 2"	28"	40' 6"	8' 6"	31,768
PL 25260	106'	25'	93'	17'	7' 2"	28"	87' 10"	8' 6"	49,600
PL 3080	47'	25'	33'	17'	7' 2"	28"	27'	10' 2"	25,375
PL 30120	60'	25'	47'	17'	7' 2"	28"	40' 6"	10' 2"	34,413
PL 30140	66'	25'	53'	17'	7' 2"	28"	47' 4"	10' 2"	38,690
PL 3580	47'	28'	33'	20'	7' 2"	28"	27'	11' 10"	28,000
PL 35100	53'	28'	40'	20'	7' 2"	28"	34'	11' 10"	33,091
PL 35120	60'	28'	47'	20'	7' 2"	28"	40' 6"	11' 10"	38,161
PL 35140	66'	28'	53'	20'	7' 2"	28"	47' 4"	11' 10"	43,232
PL 4080	47'	28'	33'	20'	7' 2"	28"	27'	13' 9"	33,750
PL 40100	53'	28'	40'	20'	7' 2"	28"	34'	13' 9"	40,145
PL 40120	60'	28'	47'	20'	7' 2"	28"	40' 6"	13' 9"	46,540
PL 40140	66'	28'	53'	20'	7' 2"	28"	47' 4"	13' 9"	52,930
PL 50180	80'	31'	66'	20'	7' 2"	28"	60' 10"	17'	66,138
PL 60260	106'	34'	93'	23'	7' 2"	28"	87' 10"	20' 4"	105,820

STANDARD EQUIPMENT

Siemens 840 D-ISL CNC motion control system
Solid, CNC machined steel frames
Robust bridge
CAD/CAM Software with Auto nesting (*standard*)
Cutting plate alignment function with Laser diode
Plasma ignition console
Command Torch High Control (THC)
Two side motion control system (low backlash reducers + rack & pinion)
AC Digital Servomotors on axes
Marking system
CNC control outputs/inputs for filter unit
Spare parts and consumables starter kit
High mechanical accuracy to $\pm 0.0039"$
Axis positioning speed 1380 IPM
Torch height control travel with ballscrew on dual linear guides
Independent cutting tables
Speed control device
Table included in PL-C series
Remote diagnostics via Ethernet
Rack & pinion with linear guide (PL-C Series)
Thick slats on table
Tables suitable for right suction (multiple ventilation zones)
Web cam for service

OPTIONAL EQUIPMENT

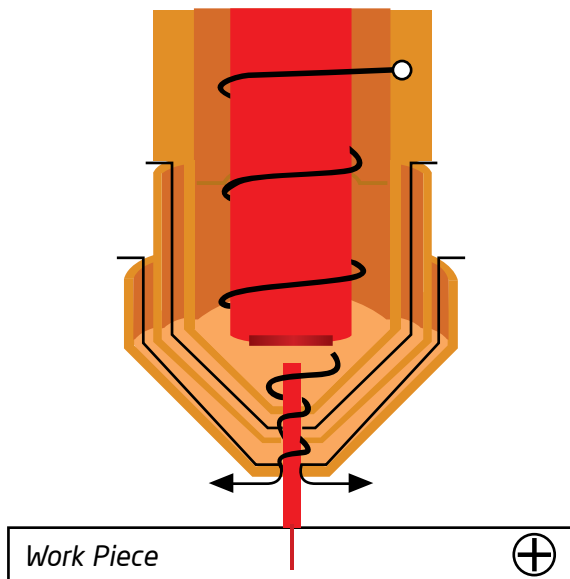
Hypertherm motion control system
Hypertherm power supply (plasma source)
Hypertherm True Hole™ cutting technology
Table for PL series
Automatic gas console
Manual gas console
Filter
Plasma torch break-away system
Additional plasma torch (can include torch height control [THC] and ignition console)
Up to 2 additional oxy-fuel torches (can include oxy torch height control and oxy torch height sensor)
Bridge preparation for additional torch (plasma or oxy)
Manual torch tilting system $\pm 45^\circ$
CNC controlled torch tilting system $\pm 45^\circ$
3D cutting and rotator (for cutting pipe and tube)
Safety light barrier
Fault and program end signal lamp
Air dryer
Arcglide THC torch height control (instead of Command THC)
Drilling spindles
Loading and unloading systems
Special applications
Consumables

Plasma Source

- HPR Series is used as the plasma source. It is available in 130, 260, 400 and 800 amp capacities.
- Manual or Automatic gas control consoles are available to assure the best cutting gas ratio is achieved.
- For labelling and identification purposes, a marking feature is included.
- The system is supplied with laser locating device. A laser beam is used to locate the x and y coordinates of the sheet. This allows the cutting axis to know exactly where it is positioned with respect to the target sheet.
- All these features result in faster setup and more accurate cutting.

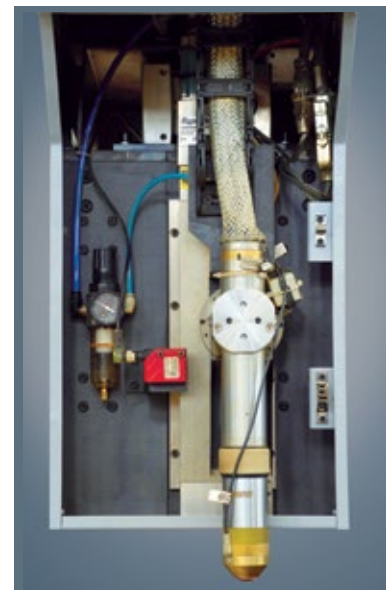


Specifications		HPR130XD	HPR260XD	HPR400XD	HPR800XD
Mild steel cut capacity	Dross free	5/8"	1-1/4"	1-1/2"	1-1/2"
	Production pierce	1-1/4"	1-1/2"	2"	2"
	Maximum cutting capacity	1-1/2"	2-1/2"	3.2"	3.2"
Stainless steel cut capacity	Production pierce	3/4"	1-1/4"	1-3/4"	3"
	Maximum pierce	—	—	3"	4"
	Maximum cutting capacity	1"	2"	3.2"	6-1/4"
Aluminum cut capacity	Production pierce	3/4"	1"	1-3/4"	3"
	Maximum cutting capacity	1"	2"	3.2"	6-1/4"
Speed (Mild Steel)	Book specification at highest output current	80 ipm (1/2")	145 ipm (1/2")	170 ipm (1/2")	170 ipm (1/2")
Cut angle	ISO 9013 range	2-4	2-4	2-4	2-5
Process amps (Cutting)	Not all processes available for all materials	30-130	30-260	30-400	30-800



High-Definition Cutting

- Patented HyDefinition technology aligns and focuses the plasma arc, improving arc stability and energy for more powerful precision cutting.
- Narrow kerf width enables fine feature cutting and minimizes material waste.
- Robust, dross-free cutting minimizes equipment clean-up.
- Repeatable cut-edge quality eliminates scrap and rework.
- Improved hole and internal shape cuts rival laser quality at lower cost.



Torch Height Control

- Hypertherm's X-Y Command THC is a torch height control system designed for plasma cutting applications on an X-Y cutting table. The system uses the plasma arc voltage to control the physical stand-off (distance) between the torch and work piece during plasma arc cutting.
- Initial height sensing (IHS) is accomplished by ohmic contact sensing or by a limited force stall detection method.
- There is also a 'Breakaway' feature that protects the plasma torch from impact by sending a direct interrupt signal.

True Hole™ Technology (OPTIONAL)

Hypertherm's patent-pending True Hole cutting technology for mild steel produces significantly better hole quality than what has been previously possible using plasma. This is achieved automatically without operator intervention, to produce unmatched hole quality that surpasses any competition.

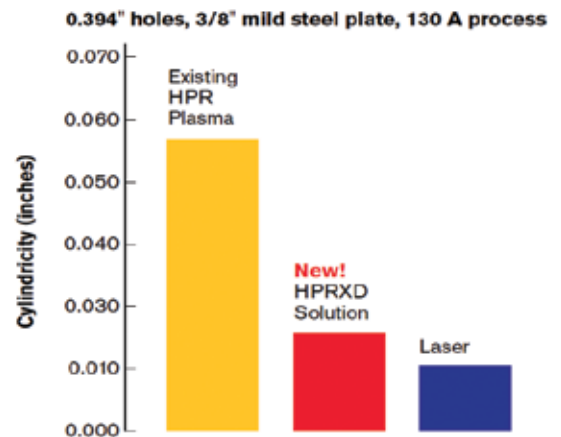
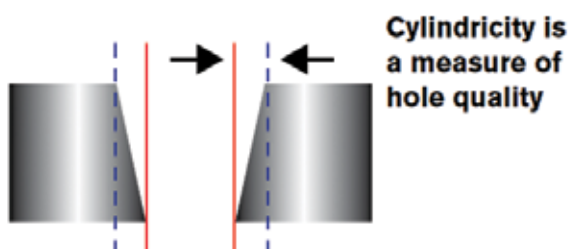


1/2" hole with True Hole technology cut with HPRXD® Plasma



1/2" hole without True Hole technology cut with HPRXD® Plasma

Cross section of a hole



Hypertherm's True Hole cutting technology for mild steel is exclusively available for use on Hypertherm's HPRXD auto gas plasma systems and is automatically applied by our cutting optimization and nesting software and CNC software to holes up to 1" with hole diameter to thickness ratios as low as 1:1.

True Hole technology is a specific combination of the following parameters, and linked to a given amperage, material type, material thickness and hole size:

- Process gas type
- Gas flow
- Amperage
- Piercing methodology
- Lead in/out technique
- Cut speed
- Timing

True Hole Technology requires a HyPerformance Plasma HPRXD auto gas system along with a True Hole enabled cutting table, nesting software, CNC, and torch height control.

Control System



CNC Control Unit

The SINUMERIK 840 D-ISL from Siemens is a fully PC-integrated numerical control system for up to 20 axis, networking with the SINAMICS S120 drive system.

The control has open hardware and software functions and is ideally suited for users requiring distributed automation solutions with regard to PLC I/Os and drives and/or prefer a fully PC-integrated control system.

JMT has proprietary plasma software on the Sinumerik controller. The operator can easily load the operation parameters to the power supply. Simple shapes can also be loaded from the included and expandable library.

The cutting operations are shown on-screen during cutting, and the controller can also be connected to the computer or a LAN via Ethernet connection.

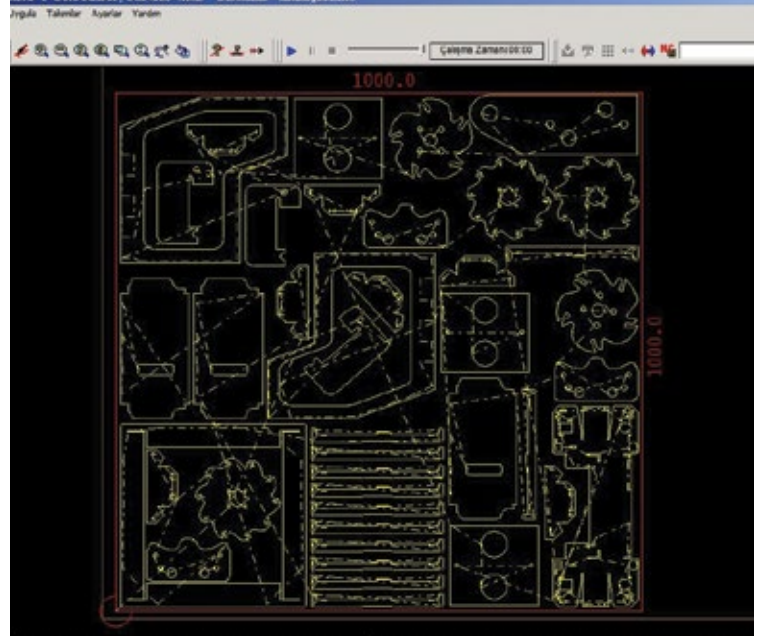
If the customer desires, they can control the plasma filter unit by pressing any button on the control panel or automatically when the cutting starts.

The machine searches the plate, finds the Operation Zero position and calculates the Plate Angle automatically.

Hypertherm Control Unit (OPTIONAL)



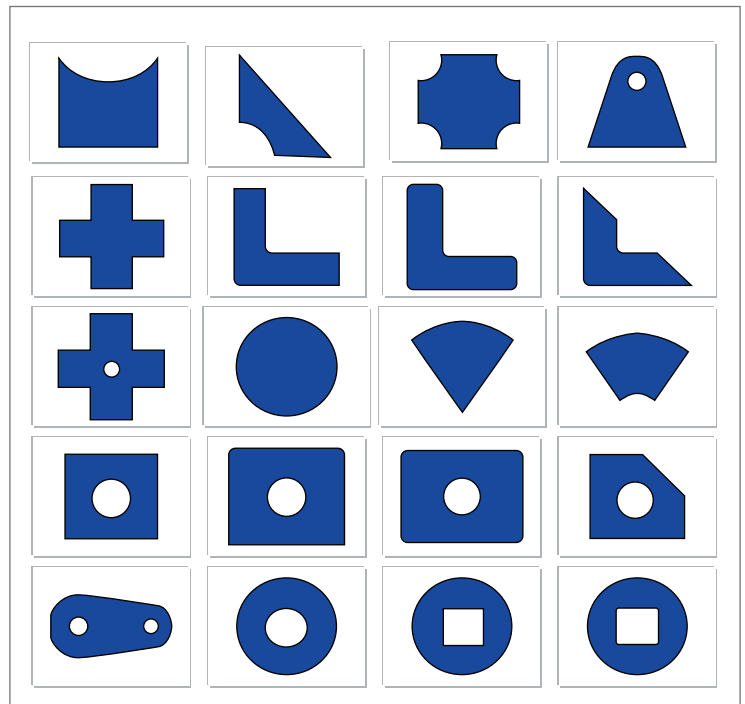
Hypertherm motion control units such as the *EDGE Pro* are available in lieu of the Siemens controls for JMT plasma tables.



CAD Cam Software

Metalix software is available for easy programming and drawing of parts. It also easily and quickly converts DXF and DWG files to machine language for cutting.

The automatic nesting feature looks at the multiple parts to be cut from the sheet, and then organizes them on the sheet in the most efficient way. This automated process greatly reduces waste, and material costs.



Features and Options



Fume Extraction System

During the thermal cutting process, a large amount of harmful fumes & dust particles are created. This dust is harmful to personnel, the environment, and the machines. Therefore it is important to use a filtration system for optimum extraction of these particles and provide a clean air working environment.

Oxy-fuel cutting heads are available to allow the cutting of thicker mild steel.



OXY Cut

All cutting tables are partitioned into different zones. Each zone is equipped with an electro-pneumatic switch which is automatically controlled by the CNC when the torch is cutting in that zone. This enhances exhaust capabilities and reduces the size requirement of the filtration system.



Cutting Tables

Air Dryer

Our plasma technology uses air for cutting and/or shield gas. This air must be clean, dry, and oil free. In this case an air dryer can be used.

THC Pendant Panel

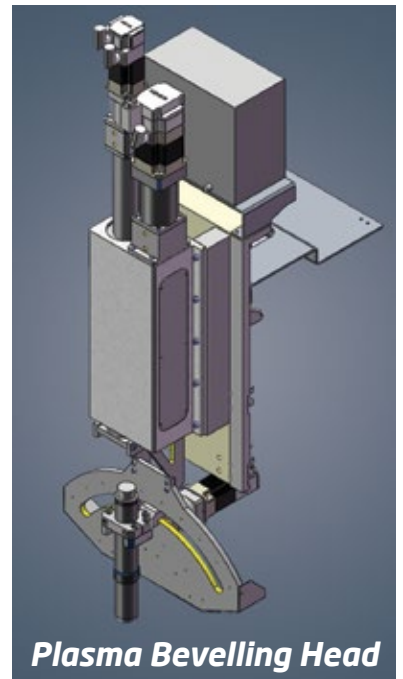
A remote control pendant for Hypertherm THC (torch height control) Command System.

Longer Consumable Life

Patented "LongLife" technology significantly improves consumable life.

Exceptional cutting speeds also produce more finished parts per set of consumables.

Hypertherm's "HyPerformance" consumables are engineered for higher quality with lower cost.



Plasma Beveling Head



Drilling Head



JMTUSA.com

Email: **JMT@JMTUSA.com**

Toll Free: **855-773-7727**
(855-PRESS-BRAKE)

