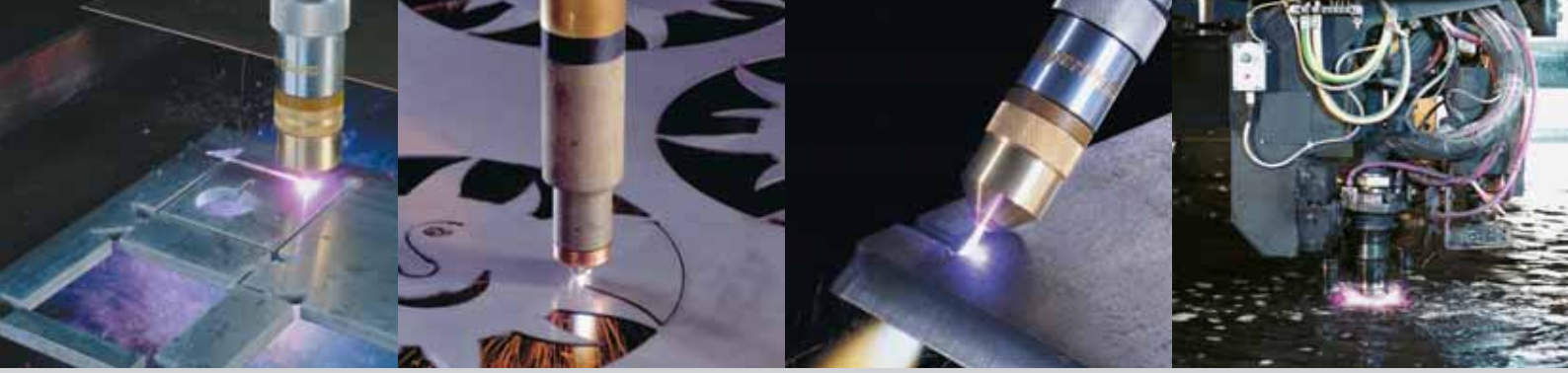


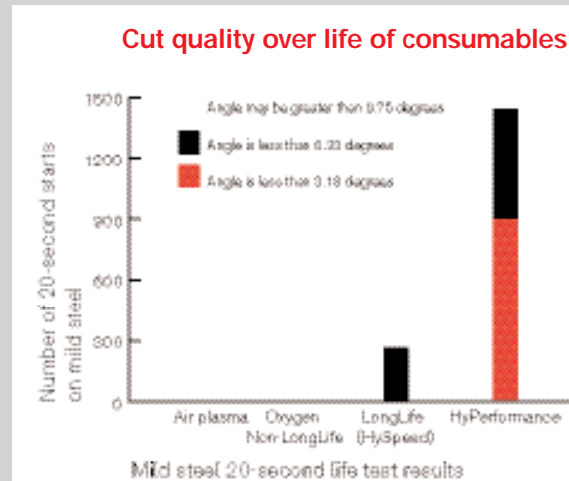


Hypertherm®

Mechanized plasma cutting systems



Hypertherm has led the advancement of plasma cutting technology for over 35 years and is the world's foremost manufacturer of plasma cutting equipment. By continually delivering breakthrough advances in cut quality, productivity and reducing operating costs, Hypertherm reaffirms and extends its position as the world's leading supplier of advanced high-temperature metal cutting technology.



		Air plasma			Oxygen Non-LongLife®	
		Powermax1000®	Powermax1250®	Powermax1650®	MAX200®	
Capacity Mild steel	Dross free	n/a	n/a	n/a	25 mm (1")	
	Production (pierce)	10 mm (3/8")	10 mm (3/8")	12 mm (1/2")	25 mm (1")	
	Severance (edge starts)	32 mm (1-1/4")	38 mm (1-1/2")	44 mm (1-3/4")	50 mm (2")	
Stainless steel	Production (pierce)	10 mm (3/8")	10 mm (3/8")	12 mm (1/2")	25 mm (1")	
	Severance (edge starts)	32 mm (1-1/4")	38 mm (1-1/2")	44 mm (1-3/4")	50 mm (2")	
Aluminum	Production (pierce)	10 mm (3/8")	10 mm (3/8")	12 mm (1/2")	25 mm (1")	
	Severance (edge starts)	32 mm (1-1/4")	38 mm (1-1/2")	44 mm (1-3/4")	50 mm (2")	
Speed* (Carbon steel)	Optimum quality	on 10 mm (3/8") 1041 mm/m (41 ipm)	12 mm (1/2") 991 mm/m (39 ipm)	12 mm (1/2") 1447 mm/m (57 ipm)	12 mm (1/2") 2159 mm/m (85 ipm)	
Cut angle	ISO 9013 range**	5	5	5	4-5	
Dross		Some, easily removed	Some, easily removed	Some, easily removed	Virtually none	
Weldability		Preparation required	Preparation required	Preparation required	Ready to weld	
Process gases by material (Plasma/shield)	Mild steel	Air	Air	Air	Air/Air, O ₂ /Air, N ₂ /CO ₂	
	Stainless steel	Air, N ₂	Air, N ₂	Air, N ₂	Air/Air, N ₂ /Air, N ₂ /CO ₂ , H35/N ₂	
	Aluminum	Air, N ₂	Air, N ₂	Air, N ₂	Air/Air, N ₂ /Air, N ₂ /CO ₂ , H35/N ₂	
Process amps	Not all processes available for all materials	20-60	25-80	30-100	40-200 beveling (200)	

*Note: Take care in comparison: Competitors often show maximum cutting speeds rather than speeds that deliver the best cuts, as shown above. Cut speeds listed above deliver best cut quality, cut speeds can be up to 50% faster.

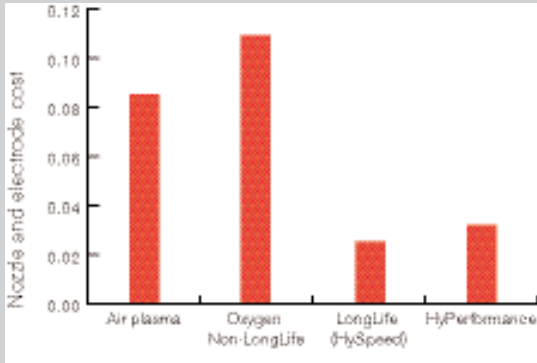
** ISO 9013 is a standard that defines cut quality of thermally cut parts. The ranges referenced in the chart and graphs above show the deviation and corresponding cut angle (edge bevel) on a part at a particular thickness as defined by ISO 9013. The lower the range (range 1 is the lowest), the smaller the angle on the cut face. Cut angle in range 4 is better than in range 5.

- Economical
- Good cut edge with some dross (easily removed)
- Applications in HVAC, decorative metal arts, light to medium duty fabrication
- Low cost solution for entry level mechanize cutting

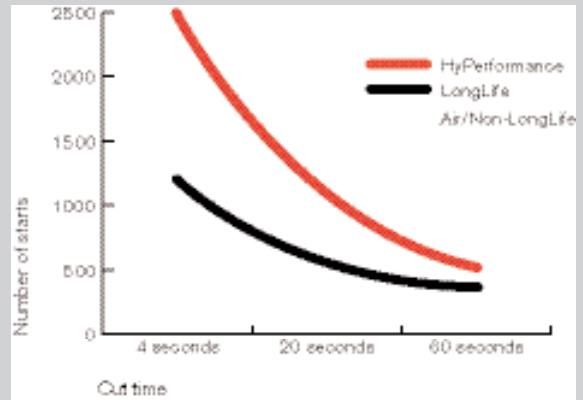
- Multi-gas, including air for economical cutting
- Water cooled, hand and machine torch
- Gouging and beveling consumables
- Medium priced system for all size shops looking for the versatility of higher priced systems



Relative operating cost for all Hypertherm systems on 12 mm mild steel



Consumable life



	LongLife (HySpeed)		Water Injection		HyPerformance / HyDefinition		
	HySpeed® HT2000®	HySpeed® HT400®	Water Inj HT4001®	w/ slave	HyDefinition® HD4070®	HyPerformance™ HPR130™	HyPerformance™ HPR260™
	25 mm (1") 38 mm (1-1/2") 50 mm (2")	32 mm (1-1/4") 32 mm (1-1/4") 50 mm (2")	32 mm (1-1/4") 32 mm (1-1/4") 50 mm (2")	32 mm (1-1/4") 75 mm (3") 75 mm (3")	25 mm (1") 25 mm (1") 25 mm (1")	16 mm (5/8") 25 mm (1") 38 mm (1-1/2")	32 mm (1-1/4") 32 mm (1-1/4") 64 mm (2-1/2")
	25 mm (1") 50 mm (2")	32 mm (1-1/4") 50 mm (2")	32 mm (1-1/4") 50 mm (2")	32 mm (1-1/4") 75 mm (3")	20 mm (3/4") 25 mm (1")	16 mm (5/8") 25 mm (1")	32 mm (1-1/4") 50 mm (2")
	25 mm (1") 50 mm (2")	32 mm (1-1/4") 50 mm (2")	32 mm (1-1/4") 50 mm (2")	32 mm (1-1/4") 75 mm (3")	20 mm (3/4") 25 mm (1")	16 mm (5/8") 25 mm (1")	25 mm (1") 50 mm (2")
	12 mm (1/2") 3050 mm/m (120 ipm)	12 mm (1/2") 2032 mm/m (160 ipm)	12 mm (1/2") 2790 mm/m (110 ipm)	12 mm (1/2") 2540 mm/m (100 ipm)	12 mm (1/2") 2286 mm/m (90 ipm)	12 mm (1/2") 2032 mm/m (80 ipm)	12 mm (1/2") 3850 mm/m
	4-5	4	5	5	3-4	3-4	3-4
	Virtually none	Virtually none	Virtually none	Varies, depending on process	Virtually none	Virtually none	Virtually none
	Ready to weld	Ready to weld	Ready to weld	Preparation required	Ready to weld	Ready to weld	Ready to weld
	O ₂ /Air, O ₂ /O ₂ , Air/Air, N ₂ /CO ₂	O ₂ /Air	O ₂ /H ₂ O N ₂ /H ₂ O	N ₂ /H ₂ O	O ₂ /O ₂ -N ₂	O ₂ /Air, O ₂ /O ₂	O ₂ /Air, O ₂ /O ₂
	Air/Air, N ₂ /Air, N ₂ /CO ₂ , H35/N ₂	N ₂ /O ₂ -N ₂ , N ₂ /N ₂	N ₂ /H ₂ O	N ₂ /H ₂ O	N ₂ /N ₂ , H35-N ₂ /N ₂	H35/N ₂ , N ₂ /N ₂ , H35-N ₂ /N ₂ , F5/N ₂	H35/N ₂ , N ₂ /N ₂ , H35-N ₂ /N ₂ , F5/N ₂
	Air/Air, N ₂ /Air, N ₂ /CO ₂ , H35/N ₂	N ₂ /O ₂ -N ₂ , N ₂ /N ₂	N ₂ /H ₂ O	N ₂ /H ₂ O	Air/Air, Air/CH ₄ , H35-N ₂ /N ₂	H35/N ₂ , Air/Air, H35-N ₂ /N ₂	H35/N ₂ , Air/Air, H35-N ₂ /N ₂
	40-200 beveling (200)	100-400 beveling (400)	260-340 O ₂ 260-400 N ₂ beveling (all)	260-760 beveling (all)	30-200	30-130	30-260
	<ul style="list-style-type: none"> Multi-gas Long consumable life with patented LongLife oxygen process Low cost of cutting Virtually dross-free cutting Beveling consumables 		<ul style="list-style-type: none"> Water injection oxygen plasma to 1-1/4" N₂ cutting of non-ferrous material to 2" Long consumable life with patented LongLife oxygen process Beveling consumables Slave power supply available for cutting up to 3" at 760 amps 		<ul style="list-style-type: none"> Precision (HyDefinition) cut quality Multi-gas; oxygen for carbon steel, F5 and H35 for non-ferrous material Long consumable life with patented LongLife oxygen process Twice the consumable life of other "precision" plasmas tested Good alternative to laser at a fraction of the cost 		

Optimize your system with genuine consumables, CNC controllers, Command THC, and ArcWriter



Hypertherm consumables

Genuine Hypertherm parts are designed to optimize performance for each torch, power supply and application. Hypertherm continually tests, refines and upgrades consumable parts to improve cut quality and consistency, and to promote longer life.

Genuine Hypertherm parts are one of the easiest ways to safeguard your system, and to reduce rework costs and time spent changing parts. Using anything other than genuine Hypertherm consumable parts poses risks to your cutting system's reliability. Imperfect dimensioning may lead to expensive problems such as torch shorting, overheating and system failure.

Hypertherm Automation's family of CNC controllers

Hypertherm Automation's family of CNC controllers offers a comprehensive motion-control solution. From the MicroEDGE™ through the Mariner™, all offer a rich assortment of features allowing system integrators and end users to take advantage of the "Hypertherm edge." Each Hypertherm Automation controller is PC-based and occupies a unique niche in the industry, and each sets the standard for ease of use, features and productivity options.

The MicroEDGE™ CNC controller

The MicroEDGE control is the lowest-cost PC-based motion control by Hypertherm Automation, providing a unique combination of flexible table configurations, expandable features and unparalleled ease of use. MicroEDGE utilizes proprietary Graphical

User Interface (GUI) and SoftMotion technology with motion control operation of up to four axes with 24 digital I/O signals.

This product allows the table manufacturer/system integrator to customize the final package by adding their own monitor, keyboard and mouse. Additional features such as joystick, speed pots, networking, CAD/CAM software and nesting software provide unlimited combinations of productivity options.

The EDGE II® CNC controller

The EDGE II control is specifically designed for the unique demands of the metal cutting industry. EDGE II utilizes proprietary Graphical User Interface (GUI) and SoftMotion technology, with motion control operation of up to four axes with 24 digital I/O signals.

The Voyager II™ CNC controller

The Voyager II is Hypertherm's expanded-capability CNC for the metal cutting industry. It utilizes proprietary Graphical User Interface (GUI) and SoftMotion technology and offers motion control of up to six axes with 64 I/O signals to provide a high degree of flexibility in operation and table configuration. The Voyager II control system supports bevel cutting, multiple Sensor™ Torch Height Controls, and direct communication to Hypertherm's HD3070 and HD4070 HyDefinition plasma, HyPerformance HPR130 and ArcWriter.

Mariner™ CNC controller

The MARINER Shape Cutting Control is specifically designed for the unique demands of the metal cutting industry. MARINER offers motion control operation of up to twelve axes of motion through use of an expandable SERCOS™ fiber-optic ring. Add-on modules for standard I/O and analog I/O are supported through the SERCOS ring for increased flexibility.

Command® THC

The Hypertherm Command THC controls pierce height and torch-to-work distances within the tightest tolerances in the industry. Designed to enhance the performance of your Hypertherm plasma system, Command THC can be bundled with Hypertherm systems or retrofitted on non-Hypertherm equipment.

A properly positioned torch minimizes dross and ensures the best possible cut angles. The Command THC adjusts its height at speeds faster than 200 inches per minute (5.0 m/min). The system responds to arc voltage fluctuations of less than one volt to insure consistent and quality cutting.

The Command THC prevents collisions between the torch and workpiece by sensing touch and compensating for extreme voltage fluctuations when crossing kerfs and cutting at the edge of the plate. Sealed microprocessor controls and self-testing system diagnostics extend the life of your investment.

ArcWriter®

Use the Hypertherm ArcWriter to label parts, create dimples for drill starts or any other application where you mark, score or punch metals. Unlike other marking systems, it works on wet or oily plate and has no powders to clog. You control width and depth of all marks.

Amperage

4 – 19 A

Duty cycle

100% @ 19 A

Other applications

Scoring/scrubbing

Other metals

Painted, galvanized and wet surfaces

Hypertherm®

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