

Hypertherm®

Powermax® portable automation reference guide

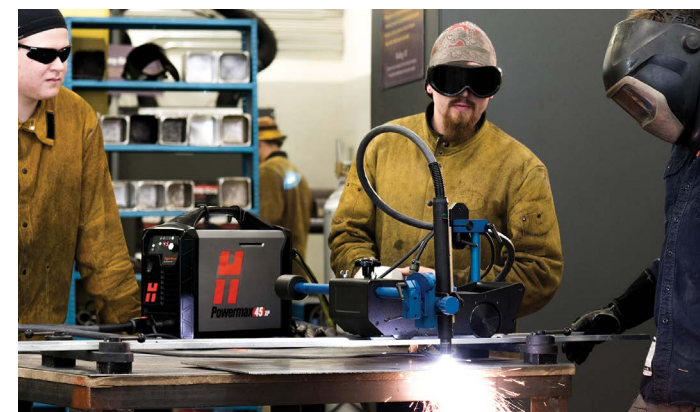


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Industrial duty cycles, low operating costs and Hypertherm reliability make Powermax® plasma systems ideal for many automated applications. They are used frequently on track cutting systems, pipe cutting and beveling machines, and portable x-y cutting tables.

Generally, any Powermax system that has a machine torch (Powermax45 XP, 65, 85, 105 and 125) can be used with automated equipment. In some limited cases, a hand torch can be used as well.



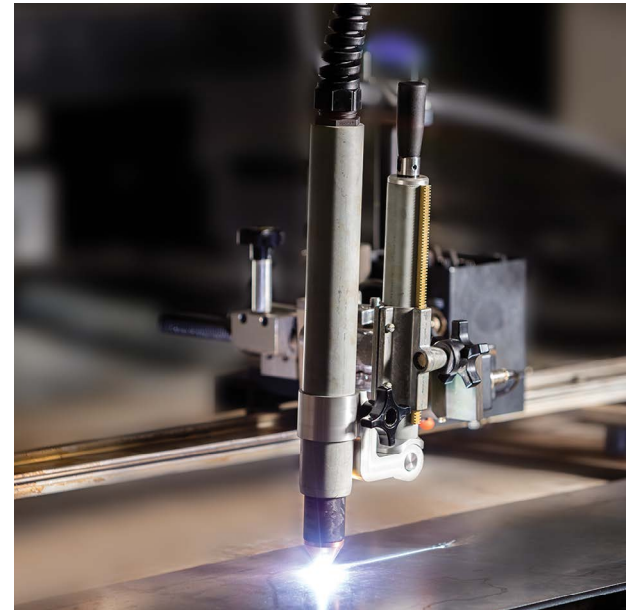
When selecting a Powermax[®] system for an automated application, consider:

- Recommended cut capacity
- Pierce capacity (for applications like pipe cutting where the material must be pierced before cutting)
- Whether a bevel or a straight cut is required
- Whether the system will run on shop power or on an engine-driven generator

System	Cut capacity	Pierce capacity*	Engine drive rating (kW)
Powermax45 XP	16 mm (5/8") at 500 mm/min (20 ipm)	1/2" (12 mm)	8
	22 mm (7/8") at 250 mm/min (10 ipm)	1/2" (12 mm)	
Powermax65	20 mm (3/4") at 500 mm/min (20 ipm)	1/2" (12 mm)	15
	25 mm (1") at 250 mm/min (10 ipm)	5/8" (16 mm)	
Powermax85	25 mm (1") at 500 mm/min (20 ipm)	5/8" (16 mm)	20
	32 mm (1-1/4") at 250 mm/min (10 ipm)	3/4" (20 mm)	
Powermax105	32 mm (1-1/4") at 250 mm/min (10 ipm)	3/4" (20 mm)	30
	38 mm (1-1/2") at 250 mm/min (10 ipm)	7/8" (22 mm)	
Powermax125	22 mm (1-1/2") at 457 mm/min (18 ipm)	1" (25 mm)	40
	44 mm (1-3/4") at 250 mm/min (10 ipm)	7/8" (22 mm)	

*Pierce capacity may vary depending on the equipment being using. For Powermax systems with two pierce capacities listed, the higher capacity can be achieved when using automatic torch height control to set independent pierce heights and cutting heights for the torch. When torch height is set manually or the torch is in a fixed position, the lower capacity applies.

The Powermax45 XP/65/85/105 systems have a 35 mm (1-3/8") barrel that fits a standard oxyfuel torch holder. To use the Powermax125, which has a 44 mm (1.75") barrel, you may need the Hyamp[™] torch adapter, part number 428495, to integrate it with portable automation equipment.



The following pages list some of the light automation equipment that can be used with Powermax plasma systems.

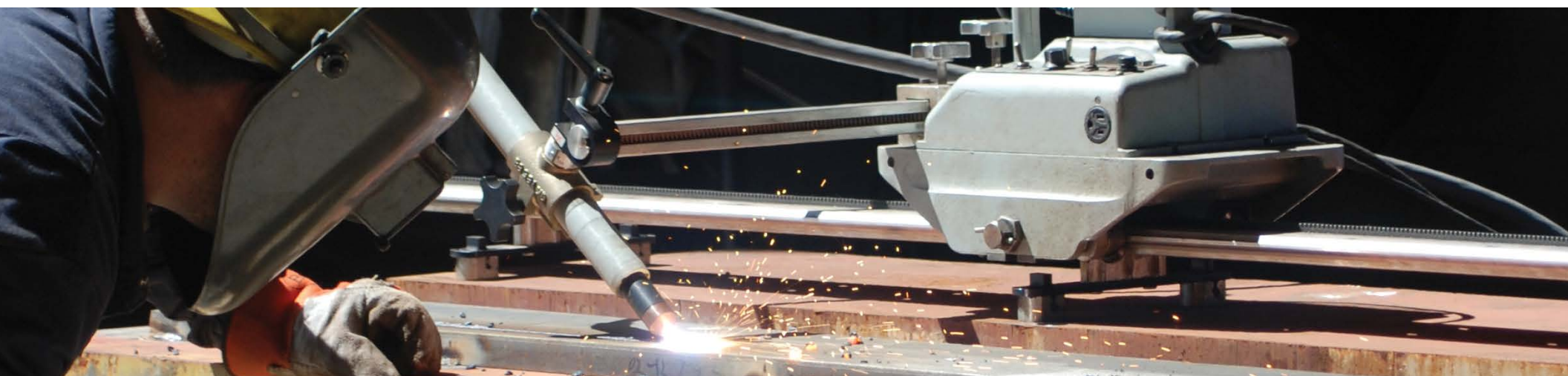
Hypertherm does not manufacture or sell any of the equipment listed in this guide and does not guarantee compatibility with Powermax systems. This reference tool should be considered simply a starting point for finding an automated solution appropriate for the application.

This guide is organized by type of equipment first and by manufacturer second. So a manufacturer may appear in more than one section.



Track burners

Company	Region	Product	Description	Specs	Power specs	Notes
Bug-o Systems	Worldwide					
Canonsburg, PA USA http://www.bugo.com/		Trac-bug	Straight-line track cutter for standard 152 mm (6") v-shaped track.	Travel speed: 102-1829 mm/min (4-72 ipm) Torch holder: BUG-2195	TRB-1500-120 VAC/50-60 Hz/1-PH TRB-1502-240 VAC/50-60 Hz/1-PH TRB-1504-42 VAC/50-60 Hz/1-PH	
		Go-fer IV	Straight-line track cutter with magnet assemblies or vacuum cups.	Travel speed: 63.5-2540 mm/min (2.5-100 ipm) Torch holder: BUG-5188	GOF-PL4000-120 VAC/50-60 Hz/1-PH GOF-PL4002-240 VAC, 50-60 Hz/1-PH	GOF-1342 accessory for cutting circles.
GullCo International	Worldwide					
Newmarket, Ontario CA http://www.gullco.com/index.html		Kat Flexible Track system	Track cutter designed mainly for curved surfaces, such as pressure vessels.	Travel speed: 107-3533 mm/min (4.2-139.1 ipm)	GK-200-FHA-42 VAC/1-PH GK-200-FHB-115 VAC/1-PH GK-200-FHC-230 VAC/1-PH	GK-165-68B torch holder needed. Holds standard 35 mm torch with 32 pitch rack.
		Kat Rigid Track system	Track cutter for flat, and some curved, surfaces.	Travel speed: 69-2245 mm/min (2.7-88.4 ipm)	GK-200-RHA-42 VAC/1-PH GK-200-RHB-115 VAC/1-PH GK-200-RHC-230 VAC/1-PH	GK-165-68B torch holder needed. Holds standard 35 mm torch with 32 pitch rack.
Koike	Worldwide					
Koike Aronson Arcade, NY, USA http://www.koike.com/ Koike Europe B.V. Zaandam, The Netherlands http://www.koike.nl		IK-12 MAX3P	Track cutter for straight and bevel cutting. Circle track option for cutting circles.	Travel speed: 102-2997 mm/min (4-118 ipm)	ZA405-1703-High/low speed machine unit. ZM405-1753-Above unit, plus plasma interface and torch holder with 32 pitch rack.	
Messer Cutting systems	Europe					
Groß-Umstadt, Germany http://www.messer-cw.de/		Secator™ SN	Track cutting attachment used on linkable rails or heavy-duty track.	Travel speed: 200-3000 mm/min (8-118 ipm)	220 V /50 W	Beam splitter unit available, circle cutting trammel included.
		Quicky®	Track cutter for straight cutting.	Travel speed: 100-1000 mm/min (4-39 ipm)	230 V /40 W	Circle and i-beam cutting options available.



Track burners continued

Company	Region	Product	Description	Specs	Power specs	Notes
Zinser Schweistechnik GmbH	Europe North America					
Albershausen, Germany http://www.zinser.de/		Favorit I and Favorit II	Track cutter for straight and bevel cutting.	Travel speed: 50–900 mm/min (2–35 ipm)	230 VAC, optional 120 VAC	The Favorit II has a wider track – 80 mm (3.15") versus 150 mm (6").
Hugong Welding and Cutting	Asia					
Shanghai, China http://www.hugongwelds.com		GD1-3050	Straight-line track cutter.	Travel speed: 50–2800 mm/min (2–110 ipm)	220 VAC, 50 Hz	Torch can be angled for bevel cuts; convex and concave track sections available.
Rapid Welding and Industrial Supply	Europe					
Cosham, Hampshire, United Kingdom http://www.rapidwelding.com		Plasmaboy	Straight-line track cutter with bevel and circle cutting attachments.	Travel speed: 300–2800 mm/min (12–110 ipm)	110 VAC/240 VAC	1.8 m (6') track included, additional track available.
Shanghai Huawei Welding & Cutting Machine Ltd.	Asia					
Shanghai, China http://www.huawei.sh.cn/		CG1-30K plasma cutting machine	Straight-line track cutter for plasma cutting	Travel speed: 50–4500 mm/min (2– 177 ipm)		For straight-line and circle cutting.
Sarang HiTech Rectifiers	Asia					
Mumbai, India http://www.saranghitechrectifiers.com/		Portable Automatic Trolley System	Automatic cutting system for straight-line, circle, or bevel cutting.	Travel speed: 100–1600 mm/min (4–63 ipm), two modes Bevel angle: up to 45 degree	220 V, 50 Hz	Track length in 2 meter increments. Optional plasma torch holder available for a variety of torch diameters.

Pipe cutters

Company	Region	Product	Description	Specs	Power specs	Notes
Bug-o Systems	Worldwide					
Canonsburg, PA, USA www.bug-o.com		SE-4PTD	Programmable pipe cutter with 330 mm (13") pass through capability for plasma or oxyfuel.	Pipe diameter: 25 mm–300 mm (1"–12") Max pipe length: 450 mm (18")	110/220 VAC	
Koike Aronson	Worldwide					
Arcade, NY, USA http://www.koike.com/ Koike Europe B.V. Zaandam, The Netherlands http://www.koike.nl		Auto Picle-P	Motorized, portable pipe cutting system.	pn ZM33388 Pipe diameter: 150 mm–244 mm (6"–24") Travel speed: 500–3000 mm/min (20–118 ipm)	110 VAC	
Mathey-Dearman	Worldwide					
Tulsa, OK, USA www.mathey.com		CNC saddle system	A CNC-controlled saddle-style pipe cutter for cutting and beveling.	Pipe diameter: 38 mm–305 mm (1-1/2"–12")	110/220 VAC	Includes CNC software specifically designed for pipe cutting.
		Motorized saddle machine	A saddle-style pipe cutter with either spacer bolts or step spacers.	Pipe diameter: 38 mm–1016 mm (1.5"–40") Speed: 102–203 mm/min to 914–3581 mm/min, (4–8 ipm to 36–141 ipm) depending on model.	115 V, 50/60 Hz	Pn 03-0100-M00 to 03-0106-M00, depending on pipe size. 230–115 VAC step-down transformer available as an option (pn 01-0759-008).
		Mini-Mag	Magnetic pipe cutter with guide strip.	05-0550-MINI with permanent magnets for pipe or plate up to 50 mm (2") thick. 05-0550-MINIXM with rare earth magnets for pipe or plate up to 75 mm (3") thick. Bevel angle: up to 45 degree Travel speed: 51–1016 mm/min (2–40 ipm)	115 V, 50/60 Hz	230–115 VAC step-down transformer available as an option (pn 01-0759-008). Can also be used for plate cutting.
		MagnaCut XM	Magnetic pipe cutter.	005-0550-000XM	115 V, 50/60 Hz	230–115 VAC step-down transformer available as an option (pn 01-0759-008). Can also be used for plate cutting. Plasma torch adapter required (pn 05-0510-301).
		Monarch Band Crawler	Flexible stainless steel band with motorized cutting attachment.	Pipe diameter: up to 1524 mm (60")	115 or 230 V, 50/60Hz	The Band Crawler is designed for situations where there is minimal clearance around the pipe. However, the plasma torch will require a more clearance than the carriage.

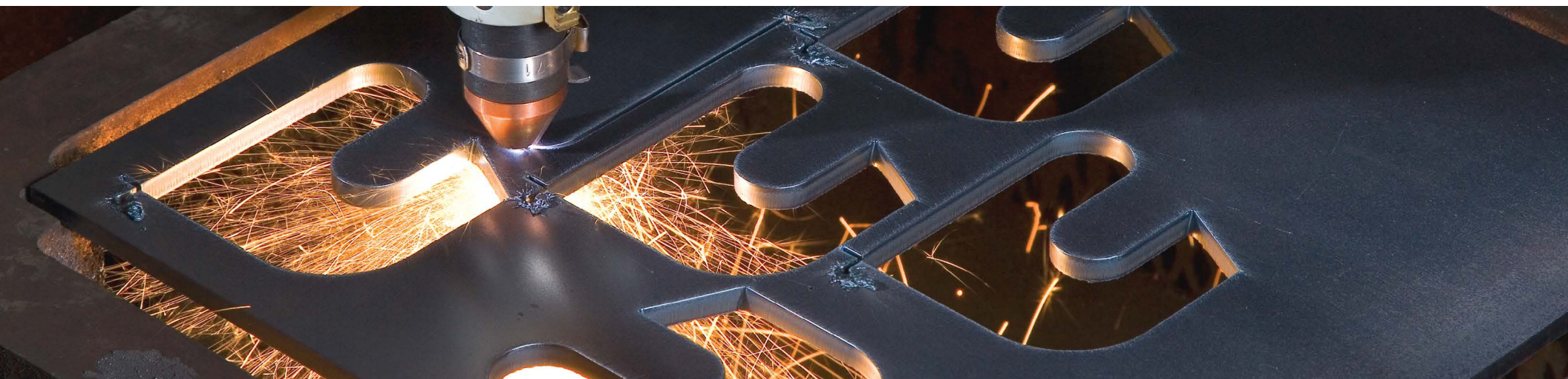


Pipe cutters continued

Company	Region	Product	Description	Specs	Power specs	Notes
Prestige Industrial Pipework Equipment Ltd.	Worldwide					
Bicester, Oxfordshire, UK http://www.pipe-ltd.com		E-Z Cut	Hand-crank, chain-style pipe cutter.	Pipe diameter: 46 cm–203 cm (18"–80")	Unknown	Optional motor drive.
		Short saddle machines	Single piece, short saddle pipe cutters.	Pipe diameter: 38 mm–1219 mm (1.5"–48")	Unknown	Optional motor drive, optional contour cutting attachment.
Zinser Schweistechnik GmbH	Europe North America					
Albershausen, Germany http://www.zinser.de/		RSV line	Ring-style pipe cutters.	Pipe diameter: 70 mm–1600 mm (2.75"–63") Travel speed: up to 1524 mm/min (60 ipm)	230 V, 50 Hz	Motor drive is optional.
H&M Pipe	North America					
Tulsa, OK, USA http://www.hmpipe.com/		Band-type Pipe Beveling and Cutting Machine	Stainless steel bands, torch holder, and motor for cutting and beveling.	Pipe diameter: 254 mm–2438 mm (0"–96") Speed: optional motor kit required for plasma speeds.	115 V, optional 220 V	Standard motor handles speeds from 51–610 mm/min (2 ipm–24 ipm). Optional motor kit required for good plasma cuts.
HiTec Engineering Co.	Asia					
Mumbai, India http://www.hitecengineering.com		Auto-pipe cutter with guided rail track	Chain-driven pipe cutter with an aluminum track.	Pipe diameter: 600 mm (24" and up) Max torch adjustment: V–70 mm (2.75"), H–200 mm (7.75") Travel speed: 75–450 mm/min (3–16 ipm)	220 VAC–50 Hz	Designed for oxyfuel but can be used with plasma, although speeds are very slow.
North Alabama Pipe Corp.	North America					
Guntersville, AL, USA http://www.nalapipe.com/default.aspx		Big Cut Machine	A roller table with torch holder and power head to rotate pipe.	Pipe diameter: 63 mm–610 mm (2.5"–24") Bevel: 37.5 degree		For 80–100 A plasma systems.
		Quick Cut Machine	A roller table with torch holder and power head to rotate pipe.	Pipe diameter: 51 mm–302 mm (2"–8") Travel speed: up to 1651 mm/min (65 ipm)		For plasma systems set at 40 amps.
Sarang HiTech Rectifiers	Asia					
Mumbai, India http://www.saranghitechrectifiers.com		Auto Pipe Super	Motorized pipe cutting and beveling.	Pipe diameter: 100 mm (4") and up Travel speed: Unknown Bevel angle: up to 45 degrees	220/250 V, 50 Hz	For use with plasma, torch holders to suit various plasma torch diameters are available.
		Auto Pipe	Manual pipe cutting and beveling.	Pipe diameter: 100 mm (4") and up Travel speed: Unknown Bevel angle: up to 45 degrees	Manual	For use with plasma, torch holders to suit various plasma torch diameters are available.
Watts Specialties	North America					
Pullayup, WA USA http://www.watts-specialties.com		W-60-20	Smaller, straight pipe cutter.	Pipe diameter: 32 mm–305 mm (1¼"–12") Travel speed: Unknown Bevel angle: 30, 37.5 and 90 degree	110 V, 4 A	

Shape cutters

Company	Region	Product	Description	Specs	Power specs	Notes
Bug-o Systems	Worldwide					
Canonsburg, PA USA http://www.bugo.com/		Programmable shape machine	Portable system for cutting shapes. Uses track and magnets for positioning.	Travel speed: 102–2032 mm/min (4–80 ipm) Max segment dimension: 1829 mm (72") Torch holder: BUG-6155	BUG-6210–120 VAC/50–60 Hz/1-PH BUG-6212–240 VAC/50–60 Hz/1-PH BUG-6214–42 VAC/50–60 Hz/1-PH	Rails not included.
		Modular drive system programmable shape package	Portable, track-driven system for automating the cutting of shaped holes or parts.	Travel speed: 51–3048 mm/min (2–120 ipm) Max segment dimension: 1829 mm (72") Torch holder: BUG-5188	MPD-1000–120 VAC/50–60 Hz/1-PH MPD-1000–240 VAC/50–60 Hz/1-PH MPD-1000–42 VAC/50–60 Hz/1-PH	Track attaches to vertical surfaces with magnets or vacuum bars. Programmable shape module available (MDS-1165).
Koike Aronson	Worldwide					
Arcade, NY, USA http://www.koike.com/ Koike Europe B.V. Zaandam, The Netherlands http://www.koike.nl		Pla-handy	Motorized attachment for plasma torch to facilitate straight line cutting, circle cutting, and shape cutting.	Travel speed: 203–2032 mm/min (8–80 ipm)	BSB21520	Requires 35 mm (1 3/8") plasma torch with no rack. Hypertherm Powermax1650 systems should be ordered without the gear rack. Otherwise it must be ground off. Circle cutting attachment (60030103 small, 60030106 large), bevel cutting attachment, rail for straight cutting (60030104) available.
North Alabama Pipe Corp.	North America					
Guntersville, AL, USA http://www.nalapipe.com/default.aspx		Hole System	A torch guide for cutting holes or saddle cuts in pipe.	Manual Multiple hole sizes		Ideal for fire sprinkler holes.
Sarang HiTech Rectifiers	Asia					
Mumbai, India http://www.saranghitechrectifiers.com/		Ostrich 1300	Heavy-duty, base-mountable shape cutting machine.	Travel speed: 50–2000 mm/min (2–79 ipm)	220/250 V, 50 Hz	



Portable CNC

Company	Region	Product	Description	Specs	Power specs	Notes
Koike Aronson	Worldwide					
Arcade, NY, USA http://www.koike.com/ Koike Europe B.V. Zaandam, The Netherlands http://www.koike.nl		PNC-12 Extreme	Portable CNC cutting machine for plasma cutting	Travel speed: 0–4000 mm/min (0–157 ipm) Range: X-axis 1500 mm (59") Y-axis 3000 mm (118")	200–240 VAC, 1-PH, 50/60 Hz	35 mm torch diameter
Teishan Light Co. (Schiands)	Asia					
Beijing, China http://www.scihands.com		Scihands SCI-P-1200200 Portable CNC cutting system	Portable, ground-level CNC cutting system.	Travel speed: Unknown Weight: 70.5 kg (353 lbs) Cutting area: 1200 mm (47") x 2000 mm (79")	110/220 V, 50/60 Hz	
C&G Systems	North America					
Libertyville, IL, USA http://www.cgssystems.com		Shuttle	Portable, programmable cutting system.	Travel speed: 254–3048 mm/min (10–120 ipm) Cutting area: 1245 mm x 1981 mm (49" x 78")	110 VAC, 60 Hz	Nesting software, height control, rail extensions, and other options available.
Lamba Press	India					
New Delhi, India http://lambaps.tradeindia.com/Exporters_Suppliers/Exporters/hp/1022/home_page.html		XCF2005LCD Portable CNC cutting system	Portable, ground-level CNC cutting system.	Travel speed: Unknown Weight: 70.5 kg (353 lbs) Cutting area: 1200 mm x 2000 mm (47" x 79"), expandable	110/220 V, 50/60 Hz	
Neotech	India					
Chennai, India www.neotech-wild.com		Neotech CNC	Portable, programmable cutting system.	Travel speed: 50–2000 mm/min (2–79 ipm) Cutting area: 1250 mm x 2000 mm (49" x 79")	230 VAC, 50 Hz	Includes nesting software.

For location nearest you, visit:
www.hypertherm.com

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