

Handheld or mechanized plasma system for cutting and gouging metal

Capacity	Thickness	Cut speed	
	Handheld cut		
Recommended	1/2" (12 mm)	20 ipm (500 mm/min)	
	3/4" (19 mm)	10 ipm (250 mm/min)	
Severance	1" (25 mm)	5 ipm (125 mm/min)	
Pierce	1/2" (12 mm)*		
	* Pierce rating for handheld use or with automatic torch height control		
	Metal removal rate	Groove profile	

M	letal removal rate	Groove profile
Go	ouge capacity	
6.	2 lbs. (2.8 kg) per hour	.13" (3.3 mm) D x .22" (5.5 mm) W

Key power supply advantages

- Small size and light weight provide unmatched portability among 1/2" (12 mm) machines.
- Boost Conditioner™ (on CSA models) compensates for input voltage variations on 200 – 240 V lines, providing improved performance on low-line voltage, on motor generators and on fluctuating input power.
- CNC interface and FastConnect™ torch connection increase versatility for handheld and mechanized usage.
- Powercool[™] design cools internal components more effectively for greater system reliability and improved uptime.

Key torch advantages

- Conical Flow™ increases arc energy density for superior cut quality with little dross.
- Patented drag-cutting technology makes it easy to use even for first-time operators.
- Dual-angle design extends nozzle life and lowers operating cost.

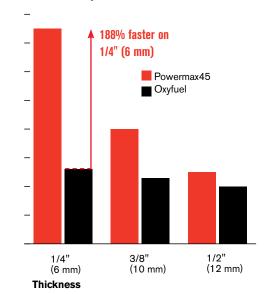


T45v hand torch

T45m machine torch



Relative cut performance on mild steel



Specifications

CSA 200 - 240 V, 1-PH, 50-60 Hz	Opecinications	
100 V 3-PH 50-60 Hz	Input voltages	CSA 200 - 240 V, 1-PH, 50-60 Hz
A00 V, 3-PH, 50-60 Hz	(+10%)	CE 230 V, 1-PH, 50-60 Hz
CE 230 V, 1-PH, 30 Å 380/400 V, 3-PH, 10.5/10 Å Rated output voltage Duty cycle @ 40° C (104° F) CSA 50% @ 45 Å, 200 - 240 V, 1-PH 60% @ 41 Å, 200 - 240 V, 1-PH 100% @ 32 Å, 200 - 240 V, 1-PH 60% @ 45 Å, 230 V, 1-PH 60% @ 45 Å, 380/400 V, 3-PH 100% @ 32 Å, 230 V, 1-PH CE 50% @ 45 Å, 380/400 V, 3-PH 100% @ 32 Å, 380/400 V, 3-PH 100% @ 35 Å, 380/400 V, 3-PH 100% @ 36 Å, 380/400 V, 3-PH 100% @ 37 Å, 380/400 V, 3-PH 100% @ 38 Å, 380/400 V, 3-PH 100	(21079)	400 V, 3-PH, 50-60 Hz
380/400 V, 3-PH, 10.5/10 A	Input current @ 5.95 kW	
Output current 20 - 45 A Rated output voltage 132 VDC Duty cycle @ 40° C (104° F) CSA 50% @ 45 A, 200 - 240 V, 1-PH 60% @ 41 A, 200 - 240 V, 1-PH 100% @ 32 A, 230 V, 1-PH 100% @ 32 A, 230 V, 1-PH 60% @ 41 A, 230 V, 1-PH 100% @ 32 A, 380/400 V, 3-PH 100% @ 32 A, 380/400 V, 3-P		
132 VDC		380/400 V, 3-PH, 10.5/10 A
Duty cycle @ 40° C (104° F)	Output current	20 – 45 A
60% @ 41 A, 200 - 240 V, 1-PH	Rated output voltage	132 VDC
100% @ 32 Å, 200 - 240 V, 1-PH	Duty cycle @ 40° C (104° F)	CSA 50% @ 45 A, 200 - 240 V, 1-PH
CE 50% @ 45 A, 230 V, 1-PH 60% @ 41 A, 230 V, 1-PH 100% @ 32 A, 230 V, 1-PH 100% @ 32 A, 380/400 V, 3-PH 60% @ 41 A, 380/400 V, 3-PH 100% @ 32 A, 380/400 V, 3-PH 13.7" (348 mm) H Weight with 20' (6.1 m) torch CSA 37 lbs (17 kg) CE 35 lbs (16 kg) CE 35 lbs (16 kg) Clean, dry, oil-free air or nitrogen Recommended gas inlet flow rate / pressure Cutting: 360 scfh, 6 scfm (170 l/min) @ 80 psi (5.5 bar) Gouging: 360 scfh, 6 scfm (170 l/min) @ 60 psi (4.1 bar) Input power cable length 10' (3 m)		, . ,
60% @ 41 A, 230 V, 1-PH 100% @ 32 A, 230 V, 1-PH 100% @ 32 A, 230 V, 1-PH CE 50% @ 45 A, 380/400 V, 3-PH 60% @ 41 A, 380/400 V, 3-PH 100% @ 32 A, 380/400 V, 3-PH 100% @ 3		, , , , , , , , , , , , , , , , , , , ,
100% @ 32 A, 230 V, 1-PH CE 50% @ 45 A, 380/400 V, 3-PH 60% @ 41 A, 380/400 V, 3-PH 100% @ 32 A, 230 V, 100% 100		, . ,
CE 50% @ 45 A, 380/400 V, 3-PH 60% @ 41 A, 380/400 V, 3-PH 100% @ 32 A, 380/400 V, 3-PH 1075 1		,,
60% @ 41 A, 380/400 V, 3-PH 100% @ 32 A, 380/400 V, 3-PH 16.75" (426 mm) D; 6.75" (172 mm) W; 13.7" (348 mm) H Weight with 20' (6.1 m) torch CSA 37 lbs (17 kg) CE 35 lbs (16 kg) CE 35 lbs (16 kg) Clean, dry, oil-free air or nitrogen Cutting: 360 scfh, 6 scfm (170 l/min) @ 80 psi (5.5 bar) Gouging: 380 scfh, 6 scfm (170 l/min) @ 60 psi (4.1 bar) Input power cable length 10' (3 m)		, ,
100% @ 32 Å, 380/400 Å, 3-PH		, , , , , , , , , , , , , , , , , , , ,
Open circuit voltage (OCV) 275 VDC Dimensions with handles 16.75" (426 mm) D; 6.75" (172 mm) W; 13.7" (348 mm) H Weight with 20' (6.1 m) torch CSA 37 lbs (17 kg) CE 35 lbs (16 kg) Gas supply Clean, dry, oil-free air or nitrogen Recommended gas inlet flow rate / pressure Cutting: 360 scfh, 6 scfm (170 l/min) @ 80 psi (5.5 bar) Gouging: 360 scfh, 6 scfm (170 l/min) @ 60 psi (4.1 bar) Input power cable length 10' (3 m)		
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@ 60 psi (4.1 bar) Input power cable length 10' (3 m)	flow rate / pressure	
Input power cable length 10' (3 m)		Gouging: 360 scfh, 6 scfm (170 l/min)
		@ 60 psi (4.1 bar)
Power supply type Inverter – IGBT	Input power cable length	10' (3 m)
	Power supply type	Inverter - IGBT

Engine-driven generator operation

Engine drive rating (kW)	System output (amps)	Performance (arc stretch)
8	45	Full
6	45	Limited
6	30	Full

Cut chart

	Maximum				
	Thick	iness	Current	cut speed ¹	
Material	(inches)	(mm)	(amps)	(ipm)	(mm/min)
Mild steel	10 GA	3	45	175	4445
	1/4	6	45	75	1905
	3/8	10	45	40	1016
	1/2	12	45	25	635
	3/4	19	45	10	254
	1	25	45	5	127
Stainless steel	10 GA	3	45	150	3810
	1/4	6	45	55	1397
	3/8	10	45	32	813
	1/2	12	45	18	457
	3/4	19	45	9	229
Aluminum	10 GA	3	45	280	3810
	1/4	6	45	100	1397
	3/8	10	45	42	813
	1/2	12	45	25	457
	3/4	19	45	10	229

¹ Maximum cut speeds are the results of Hypertherm's laboratory testing. For optimum cut performance, actual cutting speeds may vary based on different cutting applications. Refer to the operator manual for more details.

Hypertherm[®]

Cut with confidence™

Hypertherm, Powermax, Conical Flow, Boost Conditioner, FastConnect and Powercool are trademarks of Hypertherm, Inc. and may be registered in the United States and/or other countries.

For more information, contact your authorized Hypertherm dealer or visit **www.hypertherm.com**.

Ordering information

	Handheld systems		Mechanized systems			
Input voltages	T45v torch T45v torch 20' (6 m) 50' (15 m)		T45m torch		T45m torch 50' (15 m)	
200 - 240 V CSA ²	088016	088017	088022	088023	088024	
230 V CE ³	088018	088019	088025	088026	088027	
400 V CE ³	088020	088021	088028	088029	088030	

² For use in the Americas and Asia, except China.

Custom configurations (select power supply, torch, and other components)

Power supply options

	Power supply with CPC port and 50:1 voltage ratio
200 - 240 V CSA	088013
230 V CE	088015
400 V CE	088014

Component options

Cable	Torches		Control cables			
length	T45v	T45m	Remote pendant	CNC spade plug ⁴	CNC spade plug ⁵	
20' (6 m)	088008					
25' (7.6 m)		088010	128650	228350	023206	
35' (10.7 m)		088011				
50' (15 m)	088009	088012	128651	228351	023279	

⁴ For use with automation equipment that requires divided arc voltage.

Torch consumable parts

Nozzles and electrodes are available in various quantities. Contact your distributor for more information.

Consumable type	Torch type	Amperage	Nozzle	Shield/ Deflector	Retaining cap	Electrode	Swirl ring
Drag-cutting	Hand	30	220480	220569	220483	220478	220479
		45	220671	220674	220713	220669	220670
Mechanized	Machine	45	220671	220673	220713 or 220719 (Ohmic)	220669	220670
Gouging	Hand		220672	220675	220713	220669	220670
	Machine		220012	220013	220113	220003	220010



This system meets the RoHS directive restricting the use of lead, mercury, cadmium and other hazardous compounds.



Power supplies have a 3-year warranty and torches have a 1-year warranty.

ISO 9001:2008

 $^{^{\}rm 3}\,$ For use in countries that require CE, CCC or GOST marks.

⁵ For use when divided arc voltage is not required.