

Hypertherm®

powermax 30®

Handheld plasma system for cutting metal

Operating data

<i>Cut capacity</i>	<i>Handheld</i>
Recommended	1/4" (6 mm)
Maximum	3/8" (10 mm)
Severance	1/2" (12 mm)

Key advantages

- Small size and light weight provide excellent portability.
- Tapered 75-degree torch provides excellent arc visibility, control, and access to hard-to-reach applications.
- Boost Conditioner™ compensates for input voltage variations, providing improved performance on low-line voltage, on motor generators and on fluctuating input power.
- Auto-voltage™ automatically adapts to any incoming power from 120 V – 230 V, single phase.
- Plug adapters provide improved versatility from the shop, to home, to the field.

Applications

- Hand cutting

Standard system components

- Power supply
- Shoulder strap
- T30v hand torch
- Extra consumables for cutting
- Work cable with clamp, 15' (4.5 m)
- CSA units include 240 V/20 amp plug with adapter plugs for 120 V/15 amp and 240 V/20 amp circuits

Deluxe system components

All standard system components plus:

- Rugged carrying case
- Enhanced consumable kit
- Plasma cutting guide
- Cutting gloves



T30v hand torch

Specifications

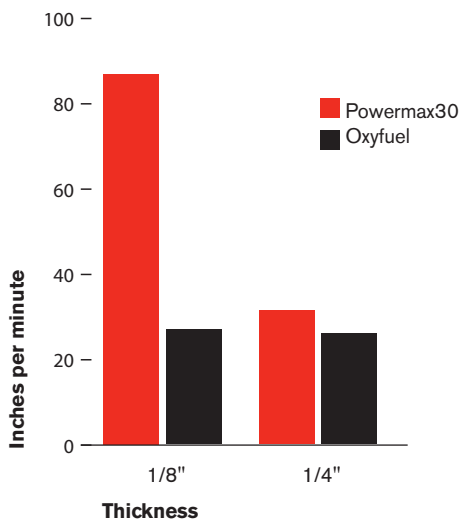
Input voltages	120 – 230 V, 1PH, 50/60Hz
Input current @ 2.49 kW	120 – 230 V, 1PH: 26–13.5 A
Rated output voltage	83 VDC
Output current	15 – 30 A
Duty cycle @ 40°C (104°F)	35% @ 30 A, 115 V 50% @ 30 A, 230 V
Output for 100% duty cycle @ 40°C (104°F)	18 A @ 120 V 21 A @ 230 V
Maximum OCV	240 VDC
Dimensions with handle	12" H (305 mm); 6.6" W (168 mm); 14" D (356 mm)
Weight with torch	20 lbs (9 kg)
Gas supply	Clean, dry, oil-free air or nitrogen
Flow rate	3.5 scfm @ 65 psi (99.1 l/min @ 4.5 bar)
Flow pressure	80 – 100 psig (5.5 – 6.9 bar)
Input power cable length	10' (3 m)
Work cable length	15' (4.5 m)
Warranty period	Full 3-year power supply warranty and a 1-year torch warranty.

Engine-driven generator operation

Engine drive rating (kW)	System output (amps)	Performance (arc stretch)
5.5	30	Full
4	25	Limited

Powermax30 versus oxyfuel

Cut speed on mild steel



Cut chart

Material	Thickness		Current (amps)	Maximum cut speed*	
	(inches)	(mm)		(ipm)	(mm/min.)
Mild steel	18 GA	1.3	30	394	10007
	10 GA	3.4	30	87	2210
	3/16	4.8	30	52	1321
	1/4	6.4	30	33	838
	3/8	9.5	30	15	381
Aluminum	18 GA	1.3	30	399	10135
	10 GA	3.4	30	78	1981
	1/4	6.4	30	26	660
	3/8	9.5	30	11	279
	Stainless steel	18 GA	1.3	30	221
10 GA		3.4	30	55	1397
1/4		6.4	30	24	610
3/8		9.5	30	11	279

*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.

Ordering information

		System part numbers with 15' (4.5 m) torch
120 – 230 V, 1PH, CSA ¹	Standard system	088003
	Deluxe system	088004
230 V, 1-PH, CE ²	Standard system	088005
	Deluxe system	088006

¹ For use in the Americas and Asia, except China.

² For use in countries that require CE, CCC or GOST marks.



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

Capacity ratings

There is no industry standard for rating plasma systems, so it is important to take care when comparing products from different manufacturers.

Handheld cutting

Recommended – The thickness of mild steel on which the system delivers good cut quality and speeds at or greater than 20" (500 mm) per minute. Eighty percent or more of cutting should be at the recommended thickness.

Maximum – The thickness of mild steel on which the system delivers good cut quality but at reduced speeds of 10" (250 mm) per minute. Twenty percent or less of cutting should be at the maximum thickness.

Severance – The thickness of mild steel that can be reasonably severed, but with poor cut quality and at slow speed. Cutting the severance thickness should be infrequent.

Hypertherm®

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