

# Hypertherm®

## 7 reasons plasma beats oxyfuel

Plasma is rapidly becoming the cutting technology of choice. Created by electrically charging a gas, plasma made from compressed air can cut metals up to 50 mm (2") thick. Powermax® systems are easy to use and portable, with faster cut speeds than oxyfuel.

1

### Better cut quality

Plasma cuts have less dross, less warping, and a smaller heat-affected zone.

2

### Cuts more parts faster

With significantly faster cut speeds, plasma outperforms oxyfuel even before you consider oxyfuel's preheat time and secondary operations.

3

### Parts cost less

With operating costs spread over more parts per hour, and with less time spent on secondary operations, you have a lower cost per part.

4

### More profitable

Lower operating costs and greater productivity result in more profit for you.

5

### Easier to use

No gases to regulate, no flame chemistry to master. And there's no standoff to maintain. Hypertherm torches are designed for dragging the torch across the plate.

6

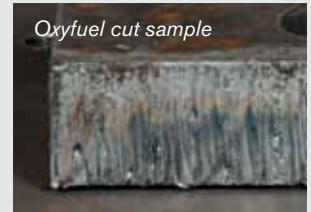
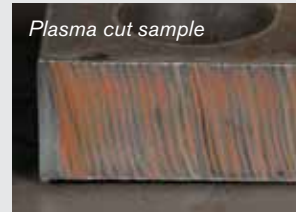
### Increased flexibility

Cut mild steel, aluminum, stainless, copper, and most other metals. Cut by hand, with a track or pipe cutter, or on an X-Y table. Cut stacked metal, metal grate, or even rusty or painted pieces.

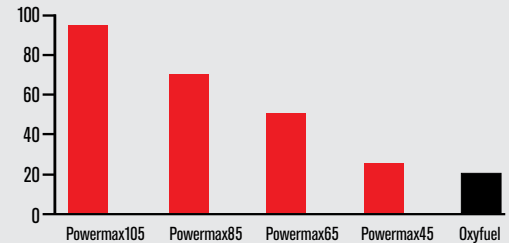
7

### Uses only air for improved safety

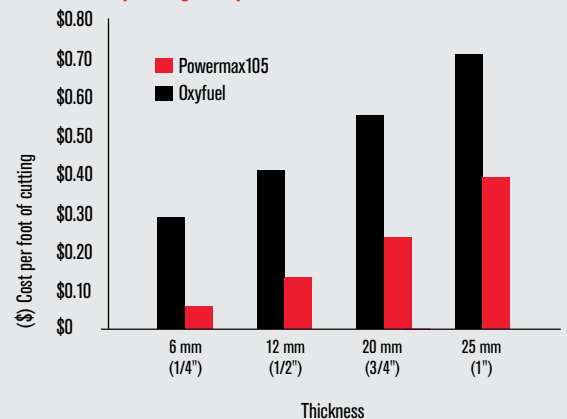
No flammable gases required. With Powermax systems, compressed air is the only gas you need. The most popular fuel gas for oxyfuel is acetylene, a highly flammable and unstable gas.



Cut speed comparison on 12 mm (1/2") mild steel



Operating cost per foot



# Which Powermax system is right for you?

**Whatever your application – cutting by hand or on a table, with a pipe cutter or a track cutter, thick metal or thin – there's a Powermax system that's right for you.**

	Powermax30	Powermax45	Powermax65	Powermax85	Powermax105
Recommended	6 mm (1/4")	12 mm (1/2")	20 mm (3/4")	25 mm (1")	32 mm (1-1/4")
Severance	12 mm (1/2")	25 mm (1")	32 mm (1-1/4")	38 mm (1-1/2")	50 mm (2")
Input voltage	CSA 120 – 230 V, 1-PH CE 120 – 230 V, 1-PH	CSA 200 – 240 V, 1-PH CE 230 V, 1-PH CE 400 V, 3-PH	CSA 200 – 480 V, 1-PHz 200 – 600 V, 3-PH CE 400 V, 3-PH	CSA 200 – 480 V, 1-PH 200 – 600 V, 3-PH CE 400 V, 3 PH	CSA 200 – 600 V, 3-PH CE 230 – 400 V, 3-PH CE/CCC 400 V, 3-PH/380 V, 3-PH
Gas flow rate/ pressure	113 l/min (240 scfh, 4 scfm) @ 5.5 bar (80 psi)	170 l/min (360 scfh, 6 scfm) @ 5.5 bar (80 psi)	189 l/min (400 scfh, 6.7 scfm) @ 5.6 bar (85 psi)	189 l/min (400 scfh, 6.7 scfm) @ 5.6 bar (85 psi)	217 l/min (460 scfh, 7.7 scfm) @ 5.9 bar (85 psi)
Duty cycle	50%	50%	50%	60%	80%
Engine Drive rating (full output)	5.5 kW	8 kW	15 kW	20 kW	30 kW
Weight with torch	CSA 9 kg (20 lbs) CE 10 kg (21 lbs)	CSA 17 kg (37 lbs) CE 16 kg (35 lbs)	CSA 29 kg (64 lbs) CE 26 kg (57 lbs)	CSA 32 kg (71 lbs) CE 28 kg (62 lbs)	CSA 45 kg (100 lbs) CE 45 kg (100 lbs) (230 – 400 V) CE/CCC 41 kg (91 lbs) (400 V/380 V)



**Hypertherm®**  
**Cut with confidence®**

[www.PlasmaVersusOxyfuel.com](http://www.PlasmaVersusOxyfuel.com)

Hypertherm and Powermax are trademarks of Hypertherm, Inc., and may be registered in the United States and/or other countries.  
©9/2012 Hypertherm, Inc. Revision 3  
893360