

# 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 56 mm (2-1/4") thick. Powermax® systems are easy to use and portable, with faster cut speeds than oxyfuel.

### 7 reasons plasma beats 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.

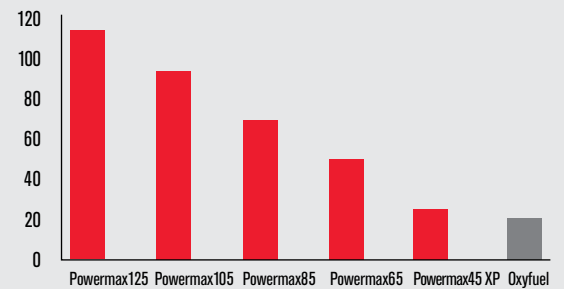
#### 6. Increased flexibility

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.

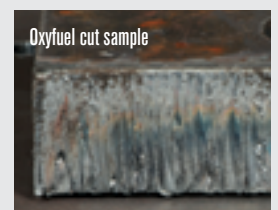
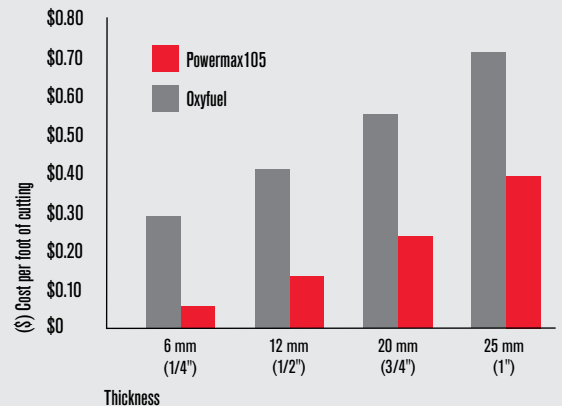
#### 7. Uses only air for improved safety

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 XP	Powermax30 AIR	Powermax45 XP	Powermax65	Powermax85	Powermax105	Powermax125
Recommended	10 mm (3/8")	8 mm (5/16")	16 mm (5/8")	20 mm (3/4")	25 mm (1")	32 mm (1-1/4")	38 mm (1-1/2")
Severance	16 mm (5/8")	16 mm (5/8")	29 mm (1-1/8")	32 mm (1-1/4")	38 mm (1-1/2")	50 mm (2")	57 mm (2-1/4")
Input voltage	CSA 120-240 V, 1-PH CE 120-240 V, 1-PH CCC 120-240 V, 1-PH	CSA 120-240 V, 1-PH CE 120-240 V, 1-PH	CSA 200-240 V, 1-PH 480 V, 3-PH CE/CCC 230 V, 1-PH CE/CCC 400 V, 3-PH	CSA 200-480 V, 1-PH 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	CSA 480/600 V, 3-PH CE 400 V, 3-PH CCC 380 V, 3-PH
Gas flow rate/ pressure	113 l/min (240 scfh, 4 scfm) @ 5.5 bar (80 psi)	Not applicable	186 l/min (400 scfh, 6.6 scfm) @ 5.9 bar (85 psi)	189 l/min (400 scfh, 6.7 scfm) @ 5.9 bar (85 psi)	189 l/min (400 scfh, 6.7 scfm) @ 5.9 bar (85 psi)	217 l/min (460 scfh, 7.7 scfm) @ 5.9 bar (85 psi)	260 l/min (550 scfh, 9.2 scfm) @ 5.9 bar (85 psi)
Duty cycle	35%	35% 240 V 20% 120 V	50%	50%	60%	80%	100%
Engine drive rating (full output)	6.8 kVA or 5.5 kW	6.8 kVA or 5.5 kW	12.5 kVA or 10 kW	20.1 kVA or 15 kW	26.8 kVA or 20 kW	40.2 kVA or 30 kW	53.6 kVA or 40 kW
Weight with torch	CSA 9.7 kg (21.4 lbs.) CE/CCC 9.5 kg (21 lbs.)	CSA 13.4 kg (29.8 lbs.) CE 13.4 kg (29.8 lbs.)	CSA 14.5 kg (32 lbs.) CE 14.5 kg (32 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)	CSA 48 V 48 kg (106 lbs.) 600 V 48 kg (105 lbs.) CE 400 V 49 kg (108 lbs.) CCC 380V 45 kg (100 lbs.)



Learn more at [www.PlasmaVersusOxyfuel.com](http://www.PlasmaVersusOxyfuel.com)

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One of Hypertherm's long-standing core values is a focus on minimizing our impact on the environment. Doing so is critical to our, and our customers' success. We are always striving to become better environmental stewards; it is a process we care deeply about.



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895700

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