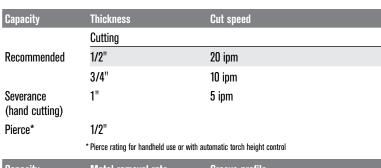# Hypertherm®

Powermax45®

Professional-grade plasma metal cutting and gouging system for handheld cutting 1/2".

Capacity	Thickness	Cut speed
	Cutting	
Recommended	1/2"	20 ipm
	3/4"	10 ipm
Severance (hand cutting)	1"	5 ipm
Pierce*	1/2"	

* Pierce rating for handheld use or with automatic torch height control

Capacity	Metal removal rate	Groove profile
	Gouging	
Typical gouge	6.2 lbs per hour	.13" D x .22" W

Easy-to-use with versatile design

- Small size and light weight provides exceptional portability for a 1/2" rated cutting system.
- Handheld and mechanized usage with CNC interface and FastConnect™ torch connection.
- Patented drag-cutting technology makes it easy to use – even for first time operators.
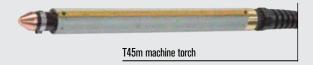
Finish jobs faster

- Less edge preparation – patented consumables designs provide superior cut and gouge quality.
- Cut speeds 188% faster than oxyfuel on 1/4" mild steel.

Rugged and reliable
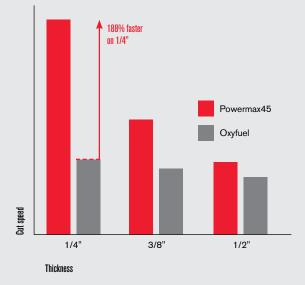
- Hypertherm Certified™ reliability ensures performance in the most demanding environment.
- Powercool™ design cools internal components more effectively for long system life and improved uptime.

T45v hand torch

T45m machine torch

Relative cut performance on mild steel

188% faster on 1/4"

Powermax45

Oxyfuel

Cut speed

1/4"   3/8"   1/2"

Thickness

Specifications

Input voltages (±10%)	200–240 V, 1-PH, 50–60 Hz 480 V, 3-PH, 50–60 Hz
Input current @ 5.95 kW	200/230 V, 1-PH, 34/28 A 480 V, 3-PH, 9 A
Output current	20–45 A
Rated output voltage	132 VDC
Duty cycle @ 104° F	50% @ 45 A, 200–240 V, 1-PH 60% @ 41 A, 200–240 V, 1-PH 100% @ 32 A, 200–240 V, 1-PH 50% @ 45 A, 480 V, 3-PH 60% @ 41 A, 480 V, 3-PH 100% @ 32 A, 480 V, 3-PH
Open circuit voltage (OCV)	275 VDC
Dimensions with handles	16.75" D; 6.75" W; 13.7" H
Weight w/20' torch	37 lbs
Gas supply	Clean, dry, oil-free air or nitrogen
Recommended gas inlet flow rate/pressure	Cutting: 360 scfh; 6 cfm @ 80 psi Gouging: 360 scfh; 6 cfm @ 60 psi
Input power cable length	10'
Power supply type	Inverter–IGBT
Engine drive requirement	8 kW for full 45 A output
Certifications	CSA-certified for use in the Americas and Asia, except China.
Warranty	Power supply: 3-year Torch: 1-year

Ordering information

Below are some of the most common system configurations which include a power supply, torch and work cable.

	Handheld systems		Mechanized systems		
	T45 v torch 20'	T45 v torch 50'	T45m torch 25'	T45m torch 35'	T45m torch 50'
200–240 V CSA	088016	088017	088022	088023	088024
480 V CSA	088072	088073			

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
480 V CSA	088068

Cable options

	Torches		Control cables		
Cable length	T45v	T45m	Remote pendant	CNC spade plug[1]	CNC spade plug[2]
20'	088008				
25'		088010	128650	228350	023206
35'		088011			
50'	088009	088012	128651	228351	023279

[1] For use with automation equipment that requires divided arc voltage.
[2] For use when divided arc voltage is not required.

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 Machine		220672	220675	220713	220669	220670
HyAccess™	Hand	45	420144 (cutting) 420147 (gouging)		420148	420137	220670

Consumable kits

All-in-one consumable kit

All-in-one kits provide a convenient assortment of standard consumables for your Powermax system. Experience the versatility of your system, while purchasing consumables at a lower cost. Made in USA.

850490 Powermax45 CSA kit

HyAccess consumable kit

Uniquely designed for accessibility, the patented HyAccess™ extended consumables provide the extra reach needed when cutting or gouging in hard to reach or confined spaces.

428337 HyAccess consumable kit

Recommended Hypertherm genuine accessories

Face Shield

Clear face shield with flip-up shade for cutting and grinding. Safety shield included. ANSI Z87.1, CSA Z94.3, CE

127239   Face shield shade 6
127103   Face shield shade 8

Durafit cutting gloves

Designed to offer maximum dexterity and fine-motor control. Fire resistant goatskin leather and stretch Nomex® backhand. Reinforced leather in wear areas.

017037   Medium
017038   Large
017039   X-large
017040   2X-large

Circle cutting guides

Quick and easy set up for accurate circles up to 28" diameter. For optional use as a stand-off guide for straight and bevel cuts.

127102   Basic kit – 15" arm, wheels and pivot pin
027668   Deluxe kit – 11" arm, wheels, pivot pin, anchor base and plastic case

Air filtration kit

A ready-to-install kit with a 1-micron filter and an auto drain moisture separator protects against contaminated air.

128647   Eliminizer filter

System dust cover

Made from a flame-retardant vinyl, a dust cover will protect your Powermax system for years.

127219   Cover, Powermax45

Leather torch sheathing

Available in 25' sections, this option provides additional protection for torch leads against burn-through and abrasion.

024548   Brown leather
024877   Black leather with Hypertherm logos

Engineered and assembled in the USA

ISO 9001:2008

Hypertherm®

Cut with confidence®