



*Hypertherm*

***powermax***<sup>®</sup>

**Product Reference Guide**

## Contents

Introduction	1
Terminology	2
Plasma overview	3
Operation overview	4
Qualifying questions	5
General information	6
Cut performance chart	7
System specifications	8
Powermax190c	9
Powermax380	11
Powermax600	13
Powermax1000 G3 Series	15
Powermax1250 G3 Series	17
Powermax1650 G3 Series	19
Accessories	21

Hypertherm remains the first choice of the metal cutting professional because of the company's exclusive focus in making the best high-temperature and material processing technologies in the world.

Recognized as the worldwide leader in plasma technology, Hypertherm was the first plasma cutting equipment company to earn ISO 9001 registration.

- Patented technologies allow Hypertherm manual systems to maximize cut quality, speed, and consumable parts life, while advanced circuitry optimizes power delivery.
- Durability and safety are assured even in the most demanding work environments.
- Hypertherm's vast engineering resources and unparalleled product support contribute to improvements in performance, value and reliability.
- Powermax systems are backed by Hypertherm's full three-year power supply warranty and one-year torch warranty. No parts excluded. Examine competitive policies closely.



# Terminology

**Angularity:** The measurement of the plasma cut angle.

**Auto-voltage™ circuit:** Input sensing that allows the system to run on a variety of voltages with no rewiring.

**Blow-back:** Patented technology provides a pilot arc without excessive high-frequency interference. Also known as contact start.

**Boost Conditioner™ circuit:** Hypertherm technology that compensates for input voltage variations.

**CNC:** Computer Numeric Control

**Coaxial-assist™ jet:** Patented jet design boosts cutting speed as much as 20% over conventional designs.

**Lag lines:** Grooves in the cut surface that are the result of the plasma arc.

**Dross:** Molten material which solidifies on the bottom or the top of the plate.

**Dual-threshold™ pilot circuit:** Hypertherm technology that significantly reduces nozzle wear by increasing the pilot current precisely when needed.

**ETR™ (Easy Torch Removal):** A unique connector design that provides easy switching between hand and machine torches.

**FineCut™:** A line of Hypertherm consumables that deliver significant improvements in cut quality on thin-plate metals by providing a narrower kerf width, reduction in dross and virtually no heat-affected zone.

**G3 Series™:** A family of Hypertherm systems (Powermax1000, 1250, 1650) with advanced technologies in both power supply and torch that cut faster and more economically than any system available today.

**Heat-affected zone:** The area of the metal, around the cut, that has been discolored by the plasma arc.

**HyLife®:** Electrodes that last longer than ordinary designs by using the same patented technologies developed for advanced Hypertherm mechanized systems.

**Kerf:** The width of a cut made by the plasma arc.

**Plasma:** The “fourth state of matter.” The addition of sufficient heat energy causes the gas to be ionized. This ionized gas with its current-carrying properties is the fundamental basis on which plasma systems operate.

**Plasma cutting:** Process in which electrically conductive gas is harnessed and controlled. A torch holds consumable parts, which constrict and control the ionized gas stream or plasma arc for cutting most common metals.

## Plasma arc cutting requirements

Three things needed to create a plasma arc:

- Process gas; Air, N<sub>2</sub>, etc.
- Energy source; DC power supply
- Starting method; high frequency, contact start

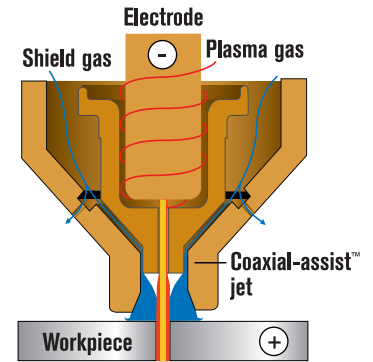
## Why plasma?

Plasma arc cutting systems can:

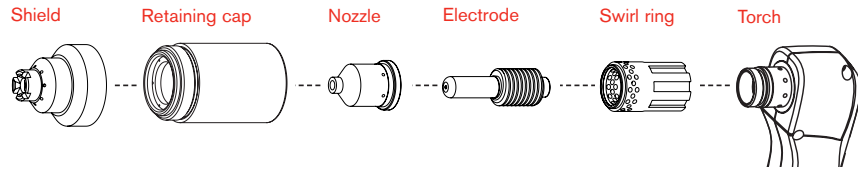
- Cut any metal that conducts electricity
- Cut with little or no warpage or clean up
- Cut much faster than other methods
- Replace many other tools
- Gouge any conductive metal
- Be used with most track-burners, shape cutters, etc.
- Operate in the field on engine-driven generators

## Plasma cutting vs. oxyfuel

- Plasma can cut non-ferrous materials; oxyfuel cannot
- Plasma cuts faster for higher productivity
- Minimal secondary operations required on plasma cuts
- Lower operating costs for plasma
- Significantly smaller heat-affected zone
- Virtually no warpage with plasma
- Plasma can cut painted, rusted or dirty materials
- Safer process than oxyfuel; no flammable gases



## Typical consumable configuration



# Operation overview

## System setup

### Select the right consumables and place in torch

- Shielded or non-shielded
- Cutting or gouging
- High, medium or low-amperage
- FineCut for thin plate metals

### Before turning on the power

- Verify incoming voltage at source
- Connect torch to the power supply (if applicable)
- Connect plasma gas to the power supply
- Attach work clamp to workpiece

### Powering up the system

- Turn on the power supply
- Set gas pressure as indicated in the manual (if applicable)
- Adjust output current
- Set pilot arc controller switch to the appropriate position (if applicable)
- Begin cutting

## System operation

### Torch distance from the workpiece

- With shielded consumables the torch may be dragged along workpiece without damage to consumables. Lightly drag the torch across the workpiece to maintain a steady cut.
- With unshielded consumables maintain an approximate 1/8" (3 mm) torch-to-work distance (refer to manual).

### Proper travel speed

- Maintaining proper cutting speed is key to successful cuts.
- Watch arc beneath plate (sparks lagging 15° – 30° behind cut).
- Lag lines on finished cut edge should be about 15° – 30°.

### Cutting expanded metal

- Pilot arc controller eliminates re-triggering when cutting expanded materials (if applicable).

### Piercing

- Fire the torch at an angle to the workpiece then slowly rotate it to an upright position.
- When sparks are exiting from the bottom of the workpiece the arc has pierced through the material.

### Gouging

- Hold and maintain the torch at a 45° angle to the workpiece.
- Transfer the arc to the workpiece and feed into the gouge.

## Questions for proper system selection

### 1 Do you currently use plasma?

This is an important first question which will allow you to gauge the level of knowledge of the end user so to adjust the depth of the following questions.

### 2 What material do you cut: carbon steel, stainless steel, aluminum, other?

The Powermax line will cut all metals, but certain configurations and consumables are designed for specific applications.

### 3 Range of thickness?

The Powermax line will cut a wide range of metal thickness from thin plate to 1-3/4" (44 mm).

### 4 What electrical service do you use?

Selection of a Powermax system depends on input voltage to the system, input current and the appropriate breaker size available to the end user.

### 5 What gas supply do you use?

The Powermax line requires air or nitrogen as a gas source. If an air compressor is used then it is recommended that it be dry and free of contaminants. An optional filtering system is available to remedy these problems and to insure optimum performance.

### 6 What price range are you looking for?

Hypertherm offers a wide range of solutions for various applications. Return on investment with the Powermax systems is realized in a short period through reduction in consumable cost, increased productivity, etc.

### 7 Do you cut expanded metal or cut across holes?

If frequently cutting expanded metal or across holes then consider a system with an electronic pilot arc controller.

# General information

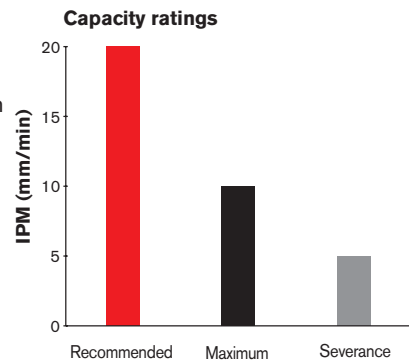
## Hypertherm capacity ratings

The recommended capacity is the target thickness of steel (other metals require an approximate 10 – 20% de-rating) allowing good productivity and quality (generally cutting speeds of 20 inches [500 mm] per minute or faster).

At the maximum capacity, a good quality cut is still possible (10 inches [250 mm] per minute), but reduced productivity means that no more than 20% of cutting should be in this thickness range.

The severance capacity indicates the thickness that can be reasonably severed, but with poor cut quality and at very slow speeds.

There is no industry standard for capacity ratings; be sure to understand the basis for competitive claims.



Electrode after normal use, electrode after excessive use

## Hypertherm consumable life

### How long should consumables last?

It depends on the following factors:

- Air quality (presence of moisture and oil)
- Piercing technique
- Length of average cut
- Material thickness
- Material type

### Rule of thumb

A set of consumables will last an average of 1 – 2 hours of actual “arc on” time depending on above criteria.

# Cut performance chart

System	Cut capacity			Cut performance (distance per minute)								
	Recom- mended	Maximum	Severance	1/8" (3 mm)	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	5/8" (16 mm)	3/4" (19 mm)	1" (25 mm)	1-1/4" (32 mm)	1-1/2" (38 mm)
Oxyfuel	-	-	-	27" (685 mm)	26" (660 mm)	23" (584 mm)	20" (508 mm)	18" (457 mm)	17" (432 mm)	14" (356 mm)	13" (330 mm)	13" (330 mm)
Powermax190c	1/8" (3 mm)	3/16" (5 mm)	1/4" (6 mm)	22" (559 mm)	9" (229 mm)	-	-	-	-	-	-	-
Powermax380	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	63" (1,600 mm)	34" (864 mm)	17" (432 mm)	9" (229 mm)	-	-	-	-	-
Powermax600	1/2" (12 mm)	5/8" (16 mm)	7/8" (22 mm)	190" (4,826 mm)	65" (1,651 mm)	34" (864 mm)	24" (610 mm)	13" (330mm)	-	-	-	-
Powermax1000	3/4" (19 mm)	1" (25 mm)	1-1/4" (32 mm)	264" (6,706 mm)	132" (3,353 mm)	63" (1,600 mm)	42" (1,067 mm)	31" (787 mm)	22" (558 mm)	12" (305 mm)	6" (152 mm)	-
Powermax1250	7/8" (22 mm)	1-1/8" (29 mm)	1-1/2" (38 mm)	432" (10,973 mm)	161" (4,089 mm)	94" (2,388 mm)	60" (1,524 mm)	40" (1,016 mm)	31" (787 mm)	16" (406 mm)	8" (203 mm)	-
Powermax1650	1-1/4" (32 mm)	1-1/2" (38 mm)	1-3/4" (44 mm)	456" (11,582 mm)	208" (5,283 mm)	119" (3,023 mm)	88" (2,235 mm)	61" (1,549 mm)	47" (1,194 mm)	28" (711 mm)	19" (483 mm)	11" (279 mm)



# System specifications

## General specifications

System	Amps (A)	Rated output (VDC)	Input power (V)	Phase	Duty cycle	Weight lbs (kgs)	Motor generator operation		
							Engine drive rating (kW)	System output (A)	Performance (arc stretch)
Powermax190c	12	110	120 (230 CE)	1	35%	46 (20)	–	–	–
Powermax380	14 – 27	92	115/230	1	35%	55 (25)	6 5	25 25	Full Limited
Powermax600	20 – 40	140	208/240 480 (230 & 400 CE)	1 3	50%	47 (21)	8.5/9 8.5/9 8.5/9	40 40 30	Limited Limited Full
Powermax1000	20 – 60	140	200 – 600 (230 – 400 CE)	1/3 3	40 – 50%	83 (37)	15 12 12 8 8	60 60 40 40 30	Full Limited Full Limited Full
Powermax1250	25 – 80	150	200 – 600 (230 – 400 CE)	1/3 3	40 – 60%	96 (44)	20 15 15 12 12 8 8	80 70 60 60 40 40 30	Full Limited Full Limited Full Limited Full
Powermax1650	30 – 100	160	200 – 600 (230 – 400 CE)	3 3	60 – 80%	128 (58)	30 22.5 22.5 15 15	100 100 80 80 60	Full Limited Full Limited Full

## Product overview

The Powermax190c, with integrated air compressor, offers superior portability for cutting thin sheets up to 3/16" (5 mm).

## Hand torch cut capacity

**Recommended:** up to 1/8" (3 mm) at cutting speeds of 22" (558 mm) per minute

**Maximum:** up to 3/16" (5 mm) at cutting speeds of 16" (406 mm) per minute

**Severance:** up to 1/4" (6 mm) at slow speed

## Power supply features

- 120 V, 1-PH, 60 Hz
- 230 V, 1-PH, 50/60 Hz (CE)
- Integrated compressor
- 12 amps, 1.32 kW output
- Boosted open circuit voltage (335 V)
- System fault light
- Consumables storage compartment
- Active electronic pilot arc controller

## PAC105T torch and consumable features

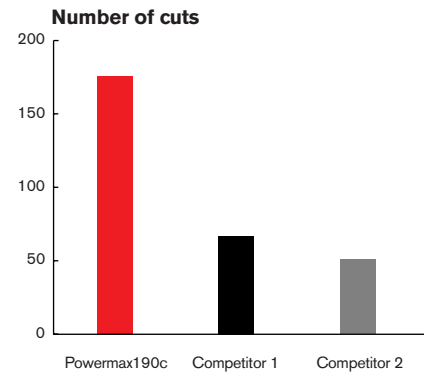
- Safety trigger
- Contact start arc initiation
- HyLife electrode technology
- Shielded front-end consumables

## Applications

- HVAC fabrication and installation
- Building contractors – metal studs
- Trade contractors – mechanical
- Auto and truck service and repair
- Factory and farm maintenance
- Art and decorative metal
- Other sheet metal applications

## Competitive performance test results

Number of 12" (305 mm) cuts per consumable set on 12 GA (2.7 mm) mild steel



Shielded  
parts

**PAC105T torch consumable parts**

Shield	120884
Shielded retaining cap	120898
Retaining cap	120883
Nozzle	120882
Electrode	120881
Swirl ring (with o-ring)	120880

**Ordering information**

**System description**

120 V, 1-PH, 60 Hz, CSA  
230 V, 1-PH, 50/60 Hz, CE

**Part numbers**

20' (6 m) torch

070783

070785



Powermax 190c

## Product overview

The Powermax380 is the ideal choice for cutting metal up to 3/8" (10 mm).

## Hand torch cut capacity

**Recommended:** up to 1/4" (6 mm) at cutting speeds of 34" (864 mm) per minute

**Maximum:** up to 3/8" (10 mm) at cutting speeds of 17" (432 mm) per minute

**Severance:** up to 1/2" (12 mm) at slow speed

## Power supply features

- Dual voltage (115/230 V, 1-PH, 60 Hz)
- 27 amps, 2.43 kW output
- Boosted open circuit voltage
- Consumables storage compartment
- Active electronic pilot arc controller

## PAC110T torch and consumable features

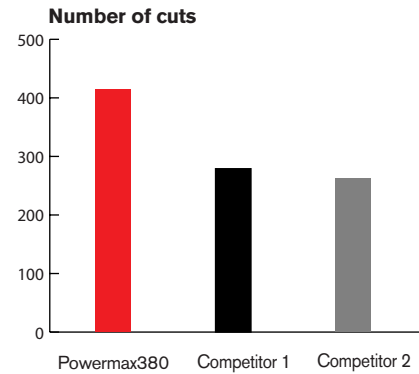
- Safety trigger
- Contact start arc initiation
- HyLife electrode technology
- Shielded front-end consumables

## Applications

- HVAC fabrication and installation
- Steel construction
- Plumbing and sprinkler installation
- Automotive repair
- Commercial kitchen installation
- Farm maintenance
- Metal artwork
- Other sheet metal applications

## Competitive performance test results

Number of 12" (305 mm) cuts per consumable set on 1/4" (6 mm) mild steel



<b>PAC110T torch consumable parts</b>		
Extended unshielded parts	Retaining cap	220016
	Nozzle, 25 amp	120504
	Electrode	020382
	Swirl ring	220013
FineCut parts	Retaining cap	220016
	Nozzle, FineCut	220331
	Electrode	020382
	Swirl ring	220013

### Ordering information

System description	Part numbers
115/230 V, 1-PH, 60 Hz, CSA	070075
115/230 V, 1-PH, 50 Hz, CE	070076



## Product overview

The Powermax600 is an extremely reliable, economical choice for 5/8" (16 mm) metal cutting applications.

## Hand torch cut capacity

**Recommended:** up to 1/2" (12 mm) at cutting speeds of 24" (610 mm) per minute

**Maximum:** up to 5/8" (16 mm) at cutting speeds of 13" (330 mm) per minute

**Severance:** up to 7/8" (22 mm) at slow speed

## Machine torch cut capacity

**Recommended:** up to 1/8" (3 mm)

**Maximum:** up to 1/4" (6 mm)  
(Cutting above requires an edge start)

## Power supply features

- 40 amps, 5.6 kW output
- Solid state design for superior reliability
- Consumables storage compartment
- Pilot arc controller with deactivation switch (CSA models only)
- Dual-threshold pilot arc circuit

## PAC123T/M torch and consumable features

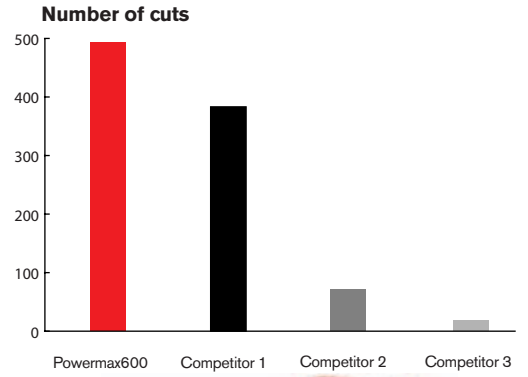
- Safety trigger
- Contact start arc initiation
- HyLife electrode technology
- Coaxial-assist jet technology
- Shielded front-end consumables

## Applications

- Manufacturing and fabrication
- Equipment maintenance and repair
- Construction and demolition
- Auto or truck modification and repair
- General welding service and repair
- Metal scrapping and salvage

## Competitive performance test results

Number of 12" (305 mm) cuts per consumable set on 1/2" (12 mm) mild steel



<b>PAC123T/M torch consumable parts</b>	
Shielded parts	Shield, hand 120828
	Shield, machine 120827
	Retaining cap 120600
	Nozzle 120826
	Electrode 120573
Swirl ring 120576	
Gouging parts	Shield, gouging 120608
	Retaining cap 120600
	Nozzle, gouging 120831
	Electrode 120573
	Swirl ring 120576
Extended unshielded parts	Deflector 120303
	Retaining cap 120600
	Nozzle, pipe saddle, 35 amp 120606
	Electrode 120574
Swirl ring 120576	
FineCut parts	Deflector 120303
	Deflector, CE, FineCut 220326
	Shield, ohmic, FineCut 220403
	Retaining cap 120600
	Nozzle, FineCut 220330
	Electrode 120574
	Swirl ring, hand, FineCut 220332
	Swirl ring, machine 120576

## Ordering information

System description	Part numbers		
	15' (4.5 m) torch	25' (7.5 m) torch	50' (15 m) torch
<b>208 – 240 V, 1-PH, 50/60 Hz, CSA</b>			
Hand system	086030	086031	086032
Machine system	086033	086034	086036
<b>480 V, 3-PH, 50/60 Hz, CSA</b>			
Hand system	086037	086038	086039
Machine system	086040	086041	086043
<b>400 V, 3-PH, 50/60 Hz, CE</b>			
Hand system	086008	086009	086010
Machine system	086011	086012	086013
<b>230 V, 3-PH, 50/60 Hz, CE</b>			
Hand system	086014	086015	086016
Machine system	086017	086018	086019

## Product overview

The Powermax1000 G3 Series cuts over 50% faster than any other competitor tested on 3/4" (19 mm) mild steel.

## Hand torch cut capacity

**Recommended:** up to 3/4" (19 mm) at cutting speeds of 22" (559 mm) per minute

**Maximum:** up to 1" (25 mm) at cutting speeds of 12" (304 mm) per minute

**Severance:** up to 1-1/4" (32 mm) at slow speed

## Machine torch cut capacity

**Recommended:** up to 3/8" (10 mm)

**Maximum:** up to 1/2" (12 mm)  
(Cutting above requires an edge start)

## Power supply features

- 60 amps, 8.4 kW output
- Auto-voltage circuit
- Boost Conditioner circuit
- Standard CNC interface
- Pilot arc controller with deactivation switch
- Dual-threshold pilot arc circuit

## T60 and T60M torch and consumable features

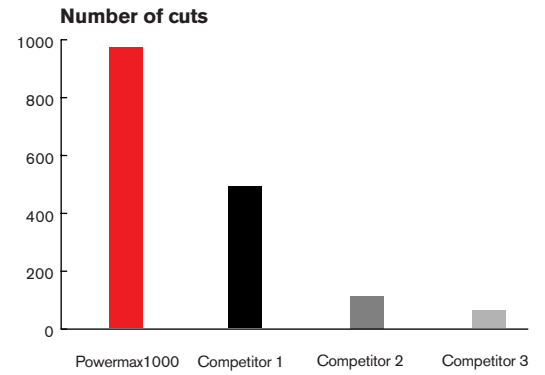
- Safety trigger
- ETR (Easy Torch Removal)
- Contact-start arc initiation
- HyLife electrode technology
- Coaxial-assist jet technology
- Shielded front-end consumables

## Applications

- Metal service centers
- Metal scrapping and dismantling
- Industrial construction
- Welding repair services
- Industrial equipment manufacturing and repair
- Commercial ship manufacturing and repair
- Truck and trailer manufacturing and repair
- Farming and logging
- Vocational training

## Competitive performance test results

Number of 12" (305 mm) cuts per consumable set on 1/2" (12 mm) mild steel





<b>T60 and T60M torch consumable parts</b>	
Shielded parts	Shield, hand 120929
	Shield, machine 120930
	Retaining cap 120928
	Retaining cap, ohmic 220061
	Nozzle, 60 amp 120931
	Nozzle, 40 amp 120932
Shielded gouging parts	Electrode 120926
	Swirl ring 120925
	Shield, gouging 120977
	Retaining cap 120928
	Nozzle, gouging 220059
	Electrode 120926
Extended unshielded parts	Swirl ring 120925
	Deflector 120979
	Retaining cap 120928
	Nozzle, 60 amp 220007
	Nozzle, 40 amp 220006
	Electrode 120926
FineCut parts	Swirl ring 120925
	Deflector 120979
	Deflector, CE, FineCut 220325
	Shield, ohmic, FineCut 220404
	Retaining cap 120928
	Retaining cap, ohmic, FineCut 220061
	Nozzle, FineCut 220329
	Electrode 120926
	Swirl ring, hand, FineCut 220327
Swirl ring, machine 120925	

## Ordering information

System description	Part numbers		
	25' (7.5 m) torch	50' (15 m) torch	75' (23 m) torch
<b>200 – 600 V, 1/3-PH, 50/60 Hz, CSA</b>			
Hand system	083178	083179	083210
Machine system	083182	083183	083212
<b>230 – 400 V, 3-PH, 50/60 Hz, CE</b>			
Hand system	083192	083193	083211
Machine system	083194	083195	083213



## Product overview

The Powermax1250 G3 Series cuts 80% faster than any other competitor tested on 1" (25 mm) mild steel.

## Hand torch cut capacity

**Recommended:** up to 7/8" (22 mm) at cutting speeds of 23" (584 mm) per minute

**Maximum:** up to 1-1/8" (29 mm) at cutting speeds of 10" (254 mm) per minute

**Severance:** up to 1-1/2" (38 mm) at slow speed

## Machine torch cut capacity

**Recommended:** up to 3/8" (10 mm)

**Maximum:** up to 5/8" (16 mm) (Cutting above requires an edge start)

## Power supply features

- 80 amps, 12 kW output
- Auto-voltage circuit
- Boost Conditioner circuit
- Standard CNC interface
- Pilot arc controller with deactivation switch
- Dual-threshold pilot arc circuit

## T80 and T80M torch and consumable features

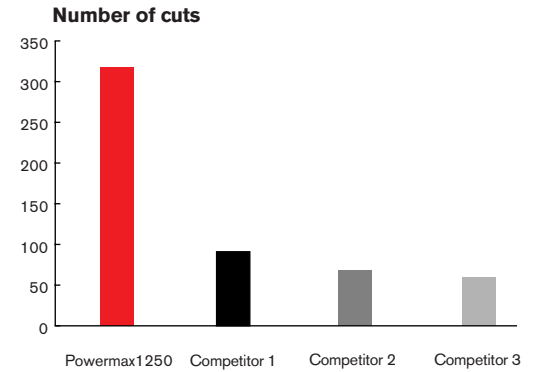
- Safety trigger
- ETR (Easy Torch Removal)
- Contact-start arc initiation
- HyLife electrode technology
- Coaxial-assist jet technology
- Shielded front-end consumables

## Applications

- Metal service centers
- Metal scrapping and dismantling
- Industrial construction
- Welding repair services
- Industrial equipment manufacturing and repair
- Commercial ship manufacturing and repair
- Truck and trailer manufacturing and repair
- Farming and logging
- Vocational training

## Competitive performance test results

Number of 12" (305 mm) cuts per consumable set on 3/4" (19 mm) mild steel



	<b>T80 and T80M torch consumable parts</b>	
Shielded parts	Shield, hand	120929
	Shield, machine	120930
	Retaining cap	120928
	Retaining cap, ohmic	220061
	Nozzle, 80 amp	120927
	Nozzle, 60 amp	120931
	Nozzle, 40 amp	120932
Shielded gouging parts	Electrode	120926
	Swirl ring	120925
	Shield, gouging	120977
	Retaining cap	120928
	Nozzle, gouging	120978
Extended unshielded parts	Electrode	120926
	Swirl ring	120925
	Deflector	120979
	Retaining cap	120928
	Nozzle, extended, 80 amp	120980
	Nozzle, extended, 60 amp	220007
FineCut parts	Nozzle, extended, 40 amp	220006
	Electrode	120926
	Swirl ring	120925
	Deflector	120979
	Deflector, CE, FineCut	220325
	Shield, ohmic, FineCut	220404
	Retaining cap	120928
	Retaining cap, ohmic, FineCut	220061
	Nozzle, FineCut	220329
Electrode	120926	
Swirl ring, hand, FineCut	220327	
Swirl ring, machine	120925	

## Ordering information

System description	Part numbers		
	25' (7.5 m) torch	50' (15 m) torch	75' (23 m) torch
<b>200 – 600 V, 1/3-PH, 50/60 Hz, CSA</b>			
Hand system	087008	087009	087049
Machine system	087012	087013	087051
<b>230 – 400 V, 3-PH, 50/60 Hz, CE</b>			
Hand system	087020	087021	087050
Machine system	087022	087023	087052



## Product overview

With uncompromised power and performance, the Powermax1650 delivers superior cut capabilities on metals up to 1-1/2" (38 mm).

## Hand torch cut capacity

**Recommended:** up to 1-1/4" (32 mm) at cutting speeds of 19" (483 mm) per minute

**Maximum:** up to 1-1/2" (38 mm) at cutting speeds of 11" (279 mm) per minute

**Severance:** up to 1-3/4" (44 mm) at slow speed

## Machine torch cut capacity

**Recommended:** up to 1/2" (12 mm)

**Maximum:** up to 3/4" (19 mm)  
(Cutting above requires an edge start)

## Power supply features

- 100 amps, 16 kW output
- Auto-voltage circuit
- Boost Conditioner circuit
- Standard CNC interface
- Pilot arc controller with deactivation switch
- Dual-threshold pilot arc circuit
- Gouging metal removal rate of 22 lbs (10 kgs) /hr

## T100 and T100M torch and consumable features

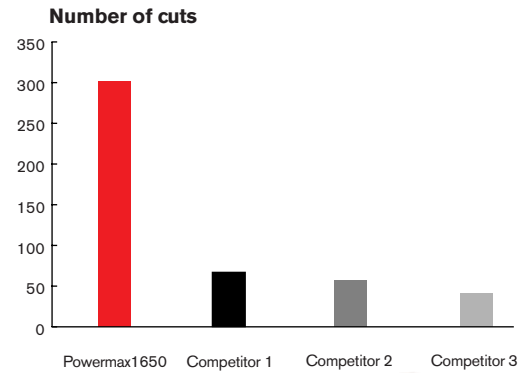
- Safety trigger
- ETR (Easy Torch Removal)
- Contact-start arc initiation
- HyLife electrode technology
- Coaxial-assist jet technology
- Shielded front-end consumables

## Applications

- Metal service centers
- Metal scrapping and dismantling
- Industrial construction
- Welding repair services
- Industrial equipment manufacturing and repair
- Commercial ship manufacturing and repair
- Truck and trailer manufacturing and repair
- Farming and logging
- Vocational training

## Competitive performance test results

Number of 12" (305 mm) cuts per consumable set on 1" (25 mm) mild steel



### T100 hand torch consumables

	100 amp	80 amp	60 amp	40 amp	
Shielded parts	Shield, hand	220065	120929	120929	120929
	Retaining cap	220048	120928	120928	120928
	Nozzle	220011	120927	120931	120932
	Electrode	220037	120926	120926	120926
	Swirl ring	220051	120925	120925	120925
Unshielded parts	Deflector	120979	120979	120979	120979
	Retaining cap	220048	120928	120928	120928
	Nozzle	220064	120980	220007	220006
	Electrode	220037	120926	120926	120926
	Swirl ring	220051	120925	120925	120925
Gouging parts	Shield, hand	120977	120977	120977	NA
	Retaining cap	220048	120928	120928	NA
	Nozzle	220063	120978	220059	NA
	Electrode	220037	120926	120926	NA
	Swirl ring	220051	120925	120925	NA
FineCut parts	Deflector				120979
	Deflector, CE, FineCut				220325
	Shield, ohmic, FineCut				220404
	Retaining cap				120928
	Retaining cap, ohmic, FineCut				220061
	Nozzle, FineCut				220329
	Electrode				120926
	Swirl ring, hand, FineCut				220327
	Swirl ring, machine				120925

### T100M machine torch consumables

	100 amp	80 amp	60 amp	40 amp	
Shielded parts	Shield, machine	220047	120930	120930	120930
	Retaining cap	220048	120928	120928	120928
	Retaining cap, ohmic	220206	220061	220061	220061
	Nozzle	220011	120927	120931	120932
	Electrode	220037	120926	120926	120926
Swirl ring	220051	120925	120925	120925	
Unshielded parts	Deflector	120979	120979	120979	120979
	Shield cap	220048	120928	120928	120928
	Nozzle	220064	120980	220007	220006
	Electrode	220037	120926	120926	120926
	Swirl ring	220051	120925	120925	120925

### Ordering information

System description	Part numbers		
	25' (7.5 m) torch	50' (15 m) torch	75' (23 m) torch
<b>200 – 600 V, 3-PH, 50/60 Hz, CSA</b>			
Hand system	059275	059276	059301
Machine system	059279	059280	059303
<b>230 – 400 V, 3-PH, 50/60 Hz, CE</b>			
Hand system	059288	059289	059302
Machine system	059290	059291	059304

### Air filtration kit

A ready-to-install kit with a .85 micron filter to protect against contaminated air, as well as an auto-drain moisture separator.



### Hand gouging heat shield

Provides additional protection in gouging operations.



### Circle cutting guide

Facilitates consistent and accurate measured circles in work pieces. Also used as a stand-off guide and in beveling applications.



### Wheel kit

A complete, pre-assembled kit for added mobility when the machine must be moved.



### FineCut consumables kit

For superior cut quality on thin plate, mild and stainless steel.



### Leather torch sheathing

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



## Accessories

	Powermax190c	Powermax380	Powermax600	Powermax1000	Powermax1250	Powermax1650
Air filtration kit	NA	128647	128647	128647	128647	128647
Hand gouging heat shield	NA	NA	NA	128658	128658	128658
Wheel kit/Stationary mounting kit*	NA	NA	128378	128646	128646	128788*
Circle cutting guide	027668	027668	027668	027668	027668	027668
Leather torch sheathing	024548	024548	024548	024548	024548	024548
FineCut consumable kit	NA	NA	128886 (CE:128887)	← 128888 (CE: 128889) →		

**Hypertherm, Inc.**

Hanover, NH 03755 USA  
603-643-3441 Tel  
800-643-0030 Tel (Toll-free USA and Canada)  
603-643-5352 Fax

Manual product  
manual.plasma@hypertherm.com

Torch and Consumable product  
consumable.info@hypertherm.com

Return Materials  
800-643-9878 Tel (Toll-free USA and Canada)  
return.materials@hypertherm.com

Technical Service  
800-643-9878 Tel (Toll-free USA and Canada)  
technical.service@hypertherm.com

Customer Service  
800-737-2978 Tel (Toll-free USA and Canada)  
customer.service@hypertherm.com

Literature  
800-643-0030 Tel (Toll-free USA and Canada) ext. 1294  
literature.request@hypertherm.com

**www.hypertherm.com**

© Copyright 7/04 Hypertherm, Inc. Revision 0  
891430

**Hypertherm (S) Pte Ltd.**

417847, Republic of Singapore  
65 6 841 2489 Tel  
65 6 841 2490 Fax  
HTSingapore.info@hypertherm.com

**Hypertherm (Shanghai) Consulting Co., Ltd.**

Shanghai 200120  
86-21-5835-5362 /3 Tel  
86-21-5835-5220 Fax  
HTChina.info@hypertherm.com

**Hypertherm Brasil Ltda.**

Vila Isabel, RJ Brasil CEP 20560-120  
55 21 2278 6162 Tel  
55 21 2578 0947 Fax  
HTBrasil.info@hypertherm.com

**Hypertherm Europe B.V.**

4704 SE Roosendaal, Nederland  
31 165 596907 Tel  
31 165 596908 Tel (Marketing)  
31 165 596901 Fax  
HTEurope.info@hypertherm.com

ETSO – Technical Service  
31 165 596900 Tel  
00 800 49 73 7843 Tel (Toll-free in Europe)  
euroservice@hypertherm.com

Hypertherm, Powermax, Auto-voltage, Boost Conditioner, Coaxial-assist, Dual-threshold, ETR, FineCut, G3 Series and HyLife are trademarks of Hypertherm, Inc. and may be registered in the United States and/or other countries.