

Hypertherm[®]

Powermax[®] family catalog



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Shaping Possibility®

With the right tools and a relentless focus on innovation, partnership, and community, we believe anything is possible.

More than fifty years ago, in a small two car garage, Hypertherm® began our journey with simple, powerful ideas about business and an invention that shaped the future of industrial cutting. The same ideals that fueled our inception all those years ago are still what drive us today: a passion for challenging what is achievable with the products we create, the culture we foster, and the experience we deliver to our customers. As we look to the horizon and the next 50 years, we are proud that our people, partners, and innovations will shape the future with solutions that make anything possible for industries around the world.

At Hypertherm, we give shape to our customers' vision with the world's leading industrial cutting solutions. Every day we help individuals and companies around the world envision better, smarter and more efficient ways to produce the products that shape our world. So whether you're cutting precision parts in North America, constructing a pipeline in Norway, fabricating agricultural machinery in Brazil, cutting stone in Italy, gouging out welds in the mines of South Africa, or building a skyscraper in China, you can count on Hypertherm to help you not just cut parts but achieve your vision.

100% employee ownership matters

At Hypertherm, we are not just employees: we are all owners. Ownership is a powerful motivator that ensures our customers are our top priority. As owners, we make sure every product is built to the highest quality and that our service is second to none. And we build long-term relationships that deliver value for us, our partners and our customers.

Worldwide presence and strength

Hypertherm is a key partner for your fabrication needs and has built a global organization focused on providing high-performance cutting solutions.

Key elements of the Hypertherm formula include:

- Dedicated Associates focused on customer-centered product design and support
- Local sales and service
- Broad application experience and proven results
- Sustainable and ethical business practices benefit our customers and communities

Understanding plasma technology

Powermax systems cut metal quickly, and cleanly

Plasma, and its intense heat (up to 39,000° F or 22,000° C), is created when gas is ionized by electrical energy. Powermax® systems use plasma to melt metal, and compressed air, nitrogen or F5 gas to blow the molten metal away, leaving a good quality cut edge ready to weld in most cases. Powermax systems are also effective for gouging metal.

Cut or gouge any electrically conductive metal

Whether in a shop, factory, at home or in the field, Powermax systems cut and gouge all metal types and forms. Most models are available with a handheld or machine torch to fit the application.

Operating a plasma system requires:

- AC power source (fixed or generator)
- Compressed air – shop air, portable air compressor or bottled air. Nitrogen and F5 gas are often used for stainless steel
- Safety equipment, including shaded glasses or face shield, gloves, protective clothing and proper ventilation

Why choose Powermax over oxyfuel

Safer

Cutting with a plasma system needs no flammable gasses.

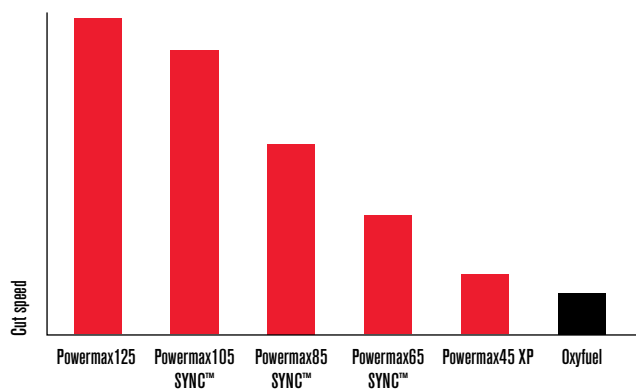
More productive

Much faster cut speeds up to 1-1/2" thick; no preheating needed; a cleaner edge with smaller heat-affected zone (HAZ) requires less grinding of the cut edge.

More versatile

Cuts and gouges all electrically conductive metal including stainless steel and aluminum; easily used with templates, cuts stacked, painted, or rusted metal.

Cut speed comparison on 1/2" mild steel



For more information, refer to product brochures or visit www.hypertherm.com/powermax/

Why choose Powermax over other cutting or gouging systems

More productive

Our consumable technology delivers faster speeds and better cut quality to help you do more in less time.

Easier to use

High portability, simple controls and a stable plasma arc make Powermax® systems easy to operate for beginners and experts.

More versatile

With the widest array of torches and speciality consumables, Powermax systems can be configured to address a wide range of applications from extended reach cutting to precision gouging and more.

Lower operating cost

Faster speeds and longer consumable life lower your cost of cutting and gouging metal.

More reliable

Smart design and intense testing during product development and manufacturing keep you up and running.

Confidence

Hypertherm's focus on plasma by our associate-owners, and the proven performance of our global installed base of systems give you confidence that you are buying the best.



To choose the Powermax system that will best suit your long-term needs, please consider the following questions

What thickness of metal will you be cutting?

Powermax plasma can cut from sheet metal to 2-1/4". Choose the Powermax system with the recommended capacity for the thickness of metal you expect to cut 80% of the time or more.

Will the cutting or gouging be done by a handheld torch or with an automated machine?

For automated cutting, select a machine-torch compatible Powermax system with interface options for automation equipment including CNC tables, robots, and track cutters.

What electrical service do you use?

Knowing the incoming line voltage, phase and breaker size where the system will be used ensures your electrical service can support the Powermax system you choose.

Will the plasma system be powered by an engine-drive generator?

Each Powermax system requires a minimum kilowatt output to deliver full performance. For specific generator requirements refer to the Powermax specification tables within.

What is your compressed gas source?

Powermax systems require compressed air, nitrogen, or F5 gas for operation. The gas must be dry and free of contaminants. An optional filter is available to ensure clean and dry gas. For specific gas flow rate and pressure requirements refer to the Powermax specification tables within.

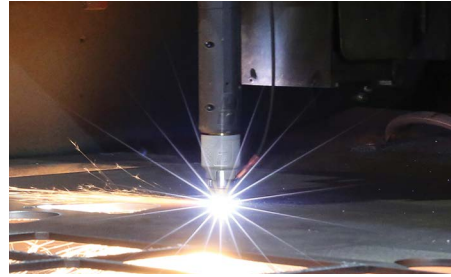
Genuine Hypertherm consumables

Hypertherm designs and manufactures an extensive array of innovative consumable technologies for Powermax® systems. This versatility of application capabilities is what distinguishes Powermax from other plasma systems.



Drag cutting

For consistent torch motion and improved cut edge quality



Mechanized cutting

For a variety of automated cutting applications with machine torches



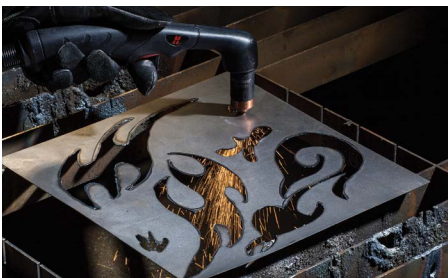
Gouging

Max removal, max control or precision gouging options to achieve the optimal gouge profile



FlushCut™

FlushCut consumables feature an angled nozzle bore design for cutting close to base material



FineCut®

For intricate and fine feature cutting with minimal dross



Marking

Marking consumables for the Powermax45 XP



HyAccess™

For cutting or gouging in hard to reach or confined spaces



Hypertherm cartridge










A dramatically simplified single-piece consumable platform. Optimized for performance and cut quality.

To determine which Powermax systems are compatible with the specific applications being referred to above see the table on page 7.

Powermax®

Product line overview



		Powermax30 XP	Powermax30 AIR	Powermax45 XP	Powermax65 SYNC™	Powermax85 SYNC™	Powermax105 SYNC™	Powermax125
Cut capacity	Recommended	3/8"	5/16"	5/8"	3/4"	1"	1-1/4"	1-1/2"
	Severance	5/8"	5/8"	1-1/8"	1-1/4"	1-1/2"	2"	2-1/4"
	Output range	15-30	15-30	10-45	20-65	25-85	30-105	30-125
	Input phase	Single	Single	Single or three	Single or three	Single or three	Three	Three
Application capabilities	 Mechanized cutting			●	●	●	●	●
	 Drag cutting	●	●	●	●	●	●	●
	 FineCut®	●		●	●	●	●	●
	 Marking			●				
	 Precision gouging			●				
	 Max control gouging			●	●	●	●	●
	 Max removal gouging				●	●	●	●
	 HyAccess™	●		●	●*	●*	●*	
	 FlushCut™			●	●	●	●	●

*HyAccess cartridges available for Powermax SYNC systems in 2022.

Powermax30[®] XP

Professional-grade plasma system for handheld cutting 3/8" metal.



Easy-to-use, two-in-one design

- High-power cutting on thick metal plus FineCut[®] consumables for detailed, thin metal cutting.
- Plug into any 120 or 240 V power with Auto-Voltage™ technology and included plug adapters.

Finish jobs faster

- 50% increase in cutting power* for fast cut speeds.
- Less edge preparation – patented consumables designs provide superior cut quality.
- Twice the consumable life* and 70% more efficient on average for lower cost of cutting.

Rugged and reliable

- Duramax[®] LT torch designed to withstand impact and heat.
- Hypertherm Certified™ reliability ensures performance in the most demanding environments.
- Durable carrying case protects the system and gear.



Duramax LT hand torch



Capacity	Thickness	Cut speed
	Cutting	
Recommended	3/8"	20 ipm
	1/2"	10 ipm
Severance	5/8"	5 ipm

Specifications

Input voltages	120-240 V, 1-PH, 50/60 Hz
Input current @ 38 kW	120-240 V, 1-PH, 25.5-18.8 A
Output current	15-30 A
Rated output voltage	125 VDC
Duty cycle @ 104° F	35%, 240 V 20%, 120 V
Open circuit voltage (OCV)	256 VDC
Dimensions with handles	14.0" D; 5.5" W; 11.5" H
Weight with 15' torch	21.4 lbs.
Gas supply	Clean, dry, oil-free air or nitrogen
Recommended gas inlet flow rate/pressure	4 scfm @ 80 psi
Input power cable length	10'
Power supply type	Inverter – IGBT
Engine drive requirement	5.5 kW for full 30 A output
Certifications	CSA-certified for use in the Americas and Asia, except China.
Warranty	Power supply: 3-year Torch: 1-year

Cutting with 120 V input power

Use FineCut nozzle and deflector for cutting at 120 V input power. When operating at the maximum recommended output of 25 A, the cut capacities are:

- 1/4" at 19 ipm
- 3/8" at 8 ipm
- 1/2" at 3 ipm

*compared to Powermax30

Hand systems	
088080	Powermax30® XP system, 120–240 V 1-PH, CSA, plus 75° handheld torch w/consumables, 15' lead w/carry case
088081	Powermax30 XP system, 120–240 V 1-PH, CSA, plus 75° handheld torch w/consumables, 15' lead
088079*	Powermax30 XP system, 120–240 V 1-PH, CSA, plus 75° torch w/consumables, 15' lead, "American Built" edition w/case

*"American Built" edition comes with special graphics, carry case, shade 5 glasses and cutting gloves.

Torch assembly	
428174	Duramax® LT Hand Torch Assembly with 15' leads

Consumable kits and packs	
851479	Consumable kit, Powermax30 XP Essential handheld, 30 A, cutting
428244	Dual pack, electrode and nozzle, Duramax LT, 15–30 A, FineCut, qty. 2 each of 420120 and 420117
428243	Dual pack, electrode and nozzle, Duramax LT, 15–30 A, standard cutting, qty. 2 each of 420118 and 420120
428337	Consumable kit, HyAccess, 15–45 A, cutting and gouging
428443	Starter pack, HyAccess, 15–45 A, Cutting, qty. 1 each 420148, 420144 and 420137
428444	Starter pack, HyAccess, 15–45 A, gouging, qty. 1 each 420148, 420147 and 420137

Optional system accessories	
127410	System carry case, Powermax30 XP or Powermax30
017060	Rolling tool bag, 19.5" x 17.5" x 12.5"
127144	System storage dust cover, Powermax30 XP or Powermax30
229132	Extension power cord: 120 V/15 A Adapter
229133	Extension power cord: 240 V/20 A Adapter
229134	Extension power cord: 120 V/20 A Adapter
128647	Eliminizer air filtration kit, 1-micron filter and auto-drain moisture separator
011092	Replacement filter element for eliminizer air filter
428719	Oil removal air filtration Kit, 0.01-micron coalescing oil extracting filter
428718	Wall mounting bracket kit for eliminizer air filter or oil removal air filter
428720	Replacement filter element for oil removal air filter kit
024877	Leather torch lead cover with hook and loop closure, black, 25' section
027668	Plasma circle cutting guide, deluxe kit with magnetic base
127102	Plasma circle cutting guide, basic
017041	Plasma angle cutting guide
017042	Magnetic straight edge
017059	Bevel guide
017043	Magnetic block 2-pack
017044	Pocket level and measuring tape holder

Torch consumable stack-up



Consumable type	Torch type	Amperage	Shield/Deflector	Retaining cap	Nozzle	Electrode	Swirl ring
Standard	Hand	15–30	420116	420114	420118	420120	420211
FineCut®	Hand	15–30	420115	420114	420117	420120	420211
HyAccess™	Hand	15–30		420148	420144 (cutting) 420147 (gouging)	420137	220670

Powermax30[®] AIR

Professional-grade plasma system with internal air compressor for high portability and easy metal cutting.



Easy-to-setup and operate

- Operate it anywhere with the internal air compressor.
- Plug into any 120 or 240 V power with Auto-Voltage™ technology and included plug adapters.
- Highly portable. The smallest, lightest weight system in its class.

Finish jobs faster

- Do more in less time. Fast cutting speeds and superior cut quality result in less secondary operations.
- Quickly cut metal grate or rusted metal without retriggering with the continuous pilot arc feature.
- One tool to cut a variety of metal types and thicknesses.

Rugged and reliable

- AIR T30 torch is rugged and designed to withstand the toughest environments.
- Robust internal air compressor eliminates the costs associated with an external compressor.
- Hypertherm Certified™ reliability ensures performance in the most demanding environments.



AIR T30 hand torch

Capacity	Thickness	Cut speed
	Cutting	
Recommended	5/16"	20 ipm
	3/8"	10 ipm
Severance	5/8"	5 ipm

Specifications

Input voltages	120-240 V, 1-PH, 50/60 Hz
Input current @ 2.5 kW	120-240 V, 1-PH, 29-15 A
Output current	15-30 A
Rated output voltage	83 VDC
Duty cycle @ 104° F	35%, 240 V 20%, 120 V
Open circuit voltage (OCV)	256 VDC
Dimensions with handles	16.5" D; 7.7" W; 13.1" H
Weight with 15' torch	29.8 lbs.
Input power cable length	10'
Power supply type	Inverter – IGBT
Engine drive requirement	5.5 kW for full 30 A output
Certifications	CSA-certified for use in the Americas and Asia, except China
Warranty	Power supply: 3-year Torch: 1-year

Hand systems	
088097	Powermax30® AIR system, 120–240 V 1-PH, CSA, plus 75° handheld torch w/consumables, 15' lead
088096	Powermax30 AIR system, 120–240 V 1-PH, CSA, plus 75° handheld torch w/consumables, 15' lead, "American Built" ed

Torch assembly	
428393	Air T30 hand torch assembly with 15' lead

Consumable kits and packs	
428350	Dual pack, electrode and nozzle, T30 AIR, 15–30 A, cutting
851462	Consumable kit, Powermax30 AIR Essential handheld, 30 A, cutting

Optional system accessories	
127469	System storage dust cover, Powermax30 AIR
017060	Rolling tool bag, 19.5" x 17.5" x 12.5"
229132	Extension power cord: 120 V/15 A adapter
229133	Extension power cord: 240 V/20 A adapter
229134	Extension power cord: 120 V/20 A adapter
024877	Leather torch lead cover with hook and loop closure, black, 25' section
027668	Plasma circle cutting guide, deluxe kit with magnetic base
127102	Plasma circle cutting guide, basic
017041	Plasma angle cutting guide
017042	Magnetic straight edge
017059	Bevel guide
017043	Magnetic block 2-pack
017044	Pocket level and measuring tape holder

Torch consumable stack-up



Consumable type	Torch type	Amperage	Shield/Deflector	Retaining cap	Nozzle	Electrode	Swirl ring
Standard	Hand	15–30	420399	420135	420134	420132	420133

Powermax45[®] XP

Professional-grade plasma system for cutting 5/8" thick metal, gouging, and marking.



Easy-to-use with versatile design

- Small size and light weight provides exceptional portability for a 5/8" 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.
- Tackle different jobs with multiple, easy-to-use torch and consumable styles.
- No need to change the air pressure. Smart Sense™ technology ensures that it is always correctly set.
- Mark, score and make precision gouges with new low amp process.

Maximum productivity

- Finish jobs faster with cut speeds one and a half times greater than oxyfuel on 1/4" mild steel.
- Spend less time on grinding and edge preparation due to superior cut and gouge quality.
- Fast change out of consumables using the new torch disable switch feature.

Rugged and reliable

- Duramax® Lock torches are designed for high-impact and heat resistance.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Hypertherm Certified™ reliability ensures performance in the most demanding environment.

Torches

- To see details on all torches compatible with this system, please refer to the torch applications chart on page 28.



Capacity	Thickness	Cut speed
	Cutting	
Recommended	5/8"	20 ipm
	7/8"	10 ipm
Severance (hand cutting)	1-1/8"	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	7.5 lbs. per hour	.12" D x .26" W

* Actual groove profile varies with torch angle, arc stretch and technique

Specifications

Input voltages (± 10%)	200-240 V, 1-PH, 50-60 Hz 480 V, 3-PH, 50-60 Hz
Input current @ 6.5 kW	200-240 V, 1-PH, 39/32 A 480 V, 3-PH, 9.4 A
Output current	10-45 A
Rated output voltage	145 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	17.4" D; 6.8" W; 14.1" H
Weight with 20' torch	31 lbs.
Gas supply	Cutting: air (clean, dry and oil-free), nitrogen, F5 Gouging: air (clean, dry and oil-free), nitrogen, F5 Marking: air (clean, dry and oil-free), argon
Recommended gas inlet flow rate/pressure	400 scfh @ 90 psi
Input power cable length	10'
Power supply type	Inverter – IGBT
Engine drive requirement	10 kW for full 45 A output
Electrical efficiency	88%
Recyclability	100%
Certifications	CSA-certified for use in the Americas and Asia, except China
Warranty	Power supply: 3-year Torch: 1-year

Hand systems	
088124	Powermax45® XP system, 230 V 1-PH, CSA, plus CPC port, 75° and 15° handheld torch w/consumables, 20' leads
088113	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 75° handheld torch w/consumables, 20' lead
088115	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 75° handheld torch w/consumables, 50' lead
088112	Powermax45 XP system, 230 V 1-PH, CSA, 75° handheld torch w/consumables, 20' lead
088114	Powermax45 XP system, 230 V 1-PH, CSA, 75° handheld torch w/consumables, 50' lead
088125*	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 75° handheld torch w/consumables, 20' lead, English training kit
088127	Powermax45 XP system, 480 V 3-PH, CSA, plus CPC port, 75° handheld torch w/consumables, 20' lead
088129	Powermax45 XP system, 480 V 3-PH, CSA, plus CPC port, 75° handheld torch w/consumables, 50' lead
088126	Powermax45 XP system, 480 V 3-PH, CSA, 75° handheld torch w/consumables, 20' lead
088128	Powermax45 XP system, 480 V 3-PH, CSA, 75° handheld torch w/consumables, 50' lead

*for qualified institutions only – pre-approval required to order

Machine systems	
088123	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 75° and 180° torches w/consumables, 20' and 25' leads, remote
088116	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 180° machine torch w/consumables, 25' lead, remote
088117	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 180° machine torch w/consumables, 35' lead, remote
088118	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 180° machine torch w/consumables, 50' lead, remote
088121	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 180° machine torch w/consumables, 25' lead
088122	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC port, 180° machine torch w/consumables, 50' lead
088119	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC and serial ports, 180° machine torch w/consumables, 25' lead
088120	Powermax45 XP system, 230 V 1-PH, CSA, plus CPC and serial ports, 180° machine torch w/consumables, 50' lead

Powermax45 XP power supplies (power supplies only, no torches)	
088092	Powermax45 XP power supply, 200–240 V 1-PH, CSA
088104	Powermax45 XP power supply, 200–240 V 1-PH, CSA plus CPC port
088105	Powermax45 XP power supply, 200–240 V 1-PH, CSA, plus CPC and Serial ports
088095	Powermax45 XP power supply, 480 V 3-PH, CSA
088110	Powermax45 XP power supply, 480 V 3-PH, CSA, plus CPC port
088111	Powermax45 XP power supply, 480 V 3-PH, CSA, plus CPC and Serial ports
088173	Powermax45 XP power supply, 480 V 3-PH, CSA, no power cord

Duramax Lock torch assemblies	
Below are torches that were designed for use with the Powermax45 XP power supplies, however additional torch models are compatible. Refer to page 28 for more information.	
088164	Duramax® Lock handheld torch, 75°, 20' lead
088165	Duramax Lock handheld torch, 75°, 50' lead
088162	Duramax Lock handheld torch, 15°, 20' lead
088163	Duramax Lock handheld torch, 15°, 50' lead
088167	Duramax Lock machine torch, 180°, 25' lead
088168	Duramax Lock machine torch, 180°, 35' lead
088169	Duramax Lock machine torch, 180°, 50' lead

Powermax45 XP work leads	
223595	45 A work lead with hand clamp, 25'
223596	45 A work lead with hand clamp, 50'
223127	65 A work lead with hand clamp, 75'

Upgrade to the revolutionary Hypertherm cartridge consumable platform for Powermax systems with the installation of a torch adapter. See page 17 to learn more.



Automated control accessories	
128650	Remote on/off switch for machine torch, 25'
128651	Remote on/off switch for machine torch, 50'
128652	Remote on/off switch for machine torch, 75'
428755	Remote on/off switch for machine torch, 150'
428653	Upgrade kit: CPC port with selectable voltage ratio
428654	Upgrade kit: Serial interface port (RS-485)
023206	Machine interface cable without voltage divider signal, spade connectors, 25'
023279	Machine interface cable without voltage divider signal, spade connectors, 50'
228350	Machine interface cable with voltage divider signal, spade connectors, 25'
228351	Machine interface cable with voltage divider signal, spade connectors, 50'
223048	Machine interface cable with voltage divider signal, D-sub connector, 25'
123896	Machine interface cable with voltage divider signal, D-sub connector, 50'
223236	Serial interface RS-485 to unterminated, 25'
223237	Serial interface RS-485 to unterminated, 50'
223239	Serial interface RS-485 to 9-pin D-sub connector, 25'
223240	Serial interface RS-485 to 9-pin D-sub connector, 50'

Consumable kits and packs	
851510	Consumable kit, Powermax45 [®] XP Essential handheld, 45 A, cutting
851511	Consumable kit, Powermax45 XP Essential mechanized, 45 A, cutting
851512	Consumable kit, Powermax45 XP Essential mechanized ohmic, 45 A, cutting
428414	Consumable kit, Duramax [®] and Duramax Lock, 30–65 A, HyAccess™ cutting and gouging
428746	Consumable kit, Duramax and Duramax Lock, 30–45 A, FlushCut™
428445	Starter pack, Duramax, HyAccess, 30–65 A, cutting, qty. 1 each 420413, 420410 and 420408
428446	Starter pack, Duramax, HyAccess, 30–65 A, gouging, qty. 1 each 420413, 420412 and 420408
228767	Bulk pack, electrode, Duramax, 10–105 A, contains 220842, qty. 25
228934	Bulk pack, electrode, CopperPlus, 10–105 A, contains 220777, qty. 25
228761	Bulk pack, nozzle, Duramax FineCut, 30–45 A, contains 220930, qty. 25
228765	Bulk pack, nozzle, Duramax, 45 A, contains 220941, qty. 25
228764	Bulk pack, shield, Duramax drag cutting, 15–85 A, contains 220818, qty. 10
228763	Bulk pack, shield, Duramax mechanized, 15–85 A, contains 220817, qty. 10
428559	Consumable starter kit Powermax45 XP handheld (for à la carte system ordering)
428560	Consumable starter kit Powermax45 XP, mechanized (for à la carte system ordering)
428561	Consumable starter kit Powermax45 XP, mechanized with ohmic retaining cap (for à la carte system ordering)

Optional system accessories	
127219	System storage dust cover, Powermax45/45 XP
017060	Rolling tool bag, 19.5" x 17.5" x 12.5"
128647	Eliminizer air filtration kit, 1-micron filter and auto-drain moisture separator
011092	Replacement filter element for eliminizer air filter
428719	Oil removal air filtration kit, 0.01-micron coalescing oil extracting filter
428718	Wall mounting bracket kit for eliminizer air filter or oil removal air filter
428720	Replacement filter element for oil removal air filter kit
024877	Leather torch lead cover with hook and loop closure, black, 25' section
127217	Shoulder strap 1.5" x 50"

Optional system accessories (continued)	
128658	Gouging heat shield for T45v handheld torches
027668	Plasma circle cutting guide, deluxe kit with magnetic base
127102	Plasma circle cutting guide, basic
017041	Plasma angle cutting guide
017059	Plasma bevel guide
017042	Magnetic straight edge
017059	Bevel guide
017043	Magnetic block 2-pack
017044	Pocket level and measuring tape holder

Torch consumable stack-up



Nozzles and electrodes are available in various quantities. Contact your distributor for more information.

Consumable type	Torch type	Amperage	Shield/ Deflector	Retaining cap	Nozzle	Electrode	Swirl ring
Drag-cutting	Hand	45	220818	220854	220941	220842	220857
Mechanized	Machine	45	220817 or 220955 ¹	220854 or 220953 ²	220941	220842	220857
FineCut®	Hand	45	220931	220854 or 220953 ²	220930	220842	220947
	Machine		220955 or 220948 ²				
Max control gouging	Hand/Machine	26–45	420480	220854	420419	220842	220857
Precision gouging	Hand/Machine	10–25	420414	220854	420415	220842	220857
Marking	Hand/Machine	10–25	420542	220854 or 220953 ²	420415	220842	220857
FlushCut™	Hand/Machine	30–45	420540 ⁴	420536	420633 ³	420635	420634
HyAccess™ cutting	Hand	15–45	N/A	420413	420410	420408	220857
HyAccess™ gouging	Hand	15–45	N/A	420413	420412	420408	220857

¹ Deflector for unshielded cutting

² Ohmic retaining cap

³ Nozzle/shield assembly

⁴ Retaining ring

Powermax65/85/105 SYNC™

Building from the strong value proposition that the Powermax® family currently offers, the new Powermax SYNC™ series elevates and sets the Powermax brand apart from the competition.

This next generation of Powermax65/85/105 A systems, the Powermax SYNC is the result of several years of design and manufacturing innovation with the main objective of solving common customer pain points associated with plasma system operation.

Training

- With an emphasis on ease-of-use features, Powermax SYNC can reduce operator training time, provide data driven insights to improve operator performance and make new operators proficient faster.

Consumable inventory management

- The introduction of a single-piece cartridge consumable reduces the number of parts needed to operate the system, simplifies knowing when and which part to change and optimizes overall performance and cut quality.

Utilization

- Convenient hand torch controls reduces operator reliance to be near the power supply saving valuable time during consumable change-outs and amperage adjustments. Specialty applications such as gouging, FlushCut™ and FineCut® are even easier to access with cartridge and automated set-up, maximizing the versatility of Powermax systems.



Torch adapter and the Hypertherm cartridge platform

For Powermax45 XP/65/85/105 systems

Compatibility

The torch adapter allows for conversion to the cartridge consumable platform if you have the following systems and torch types.

System	Torch type	Part number
Powermax45 [®] XP	Duramax [®] Lock hand, and mechanized	428951
Powermax65 [®]		
Powermax85 [®]	Duramax hand, mechanized and robotic	
Powermax105 [®]		

- Not recommended for use on Duramax retrofit torches for Powermax1000/1250/1650
- Not compatible with Duramax Hyamp™ standard or long style torches
- The cartridge consumable platform is standard for the new Powermax SYNC™ 65/85/105 systems with SmartSYNC™ torches (no adapter required)
- When using the adapter with the Powermax45 XP in a mechanized application, Hypertherm recommends using the 45 A cut charts for the Powermax45 XP

Color codes for ease of use

The easy to identify cartridges are color coded by process to eliminate consumable part mix-ups and are clearly marked for amperage and part number.



Upgrade to the revolutionary Hypertherm cartridge consumable platform with the installation of a torch adapter.



Powermax SYNC™ series

Professional air plasma systems from 65–105 amp



Easy to use

- Easy to identify single-piece cartridge consumables are color coded by process to eliminate parts mix-up and simplify consumable inventory management.
- New SmartSYNC™ torches with the Hypertherm cartridge automatically set the correct amperage and operating mode, eliminating setup errors.
- End of life detection lets the operator know when it's time to change the cartridge.
- Less operator fatigue when using handheld torches with our new flexible lead. The lead has the same robustness of our previous lead jacket material and will also be used on robotic torches.

Minimizes operating costs

- Simplified operation minimizes downtime, troubleshooting, waste and training time.
- Advanced cartridge consumable design provides up to twice the life for hand cutting and improved quality over life in mechanized setups compared to standard consumables.
- Access to cartridge data for performance tracking, analyzing usage patterns.

Maximize performance

- Tackle a wide range of jobs with easily interchangeable torch styles and application-specific Hypertherm cartridge consumables for various types of cutting and gouging.
- Reduce training time with simplified set up and consistent performance.
- Time-saving hand torch controls allow the operator to adjust the amperage on the fly and change consumables and applications without returning to the power supply.

Industry-leading reliability

- SmartSYNC™ torches are engineered for rugged, industrial environments.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Industry-leading reliability reduces production downtime.

Torches

- To see details on all torches compatible with this system, please refer to the torch applications chart on page 28.

	Powermax65 SYNC		Powermax85 SYNC		Powermax105 SYNC	
Capacity	Thickness	Cut speed	Thickness	Cut speed	Thickness	Cut speed
Cutting						
Recommended	3/4"	20 ipm	1"	20 ipm	1-1/4"	20 ipm
	1"	10 ipm	1-1/4"	10 ipm	1-1/2"	10 ipm
Severance	1-1/4"	5 ipm	1-1/2"	5 ipm	2"	5 ipm
Pierce*	5/8"		3/4"		7/8"	
*Pierce rating for handheld use or with automatic height control						
Capacity	Metal removal rate	Groove profile	Metal removal rate	Gouge profile	Metal removal rate	Gouge profile
Maximum removal gouging						
Typical gouge	8.8 lbs. per hour	.11" D x .25" W	18.2 lbs. per hour	.14 D x .26 W	19.1 lbs. per hour	.26 D x .24 W

Specifications

	Powermax65 SYNC™	Powermax85 SYNC™	Powermax105 SYNC™
Input voltages	200-480 V, 1-PH, 50/60 Hz 200-600 V, 3-PH, 50/60 Hz	200-480 V, 1-PH, 50/60 Hz 200-600 V, 3-PH, 50/60 Hz	200-600 V, 3-PH, 50/60 Hz
Kilowatt output	9 kW	12.2 kW	16.8 kW
Input current	200/208/240/480 V, 1-PH 52/50/44/22 A @ 9 kW 200/208/240/480/600 V, 3-PH 32/31/27/13/13 A @ 9 kW	200/208/240/480 V, 1-PH 70/68/58/29 A @ 12.2 kW 200/208/240/480/600 V, 3-PH 42/40/35/18/17 A @ 12.2 kW	200/208/240/480/600 V, 3-PH 58/56/49/25/22 A @ 16.8 kW
Output current	20-65 A	25-85 A	30-105 A
Rated output voltage	139 VDC	143 VDC	160 VDC
Duty cycle @ 104° F	50% @ 65 A, 230-600 V, 1/3-PH 40% @ 65 A, 200-208 V, 1/3-PH 100% @ 46 A, 230-600 V, 1/3-PH	60% @ 85 A, 230-600 V, 3-PH 60% @ 85 A, 480 V, 1-PH 50% @ 85 A 240 V, 1-PH 50% @ 85 A, 200-208 V, 3-PH 40% @ 85 A, 200-208 V, 1-PH 100% @ 66 A, 230-600 V, 1/3-PH	70% @ 105 A, 240 V, 3-PH 80% @ 105 A, 480-600 V, 3-PH 100% @ 94 A, 480-600 V, 3-PH 100% @ 88 A, 240 V, 3-PH
Open circuit voltage (OCV)	295 VDC	305 VDC	300 VDC
Dimensions with handles	m D19" D; 9.2" W; 17" H	19" D; 9.2" W; 17" H	23.3" D; 10.8" W; 20.0" H
Weight w/25' torch	61 lbs.	67 lbs.	95 lbs.
Gas supply	Clean, dry, oil-free air or nitrogen	Clean, dry, oil-free air or nitrogen	Clean, dry, oil-free air or nitrogen
Optimum inlet gas pressure	110-120 psi	110-120 psi	110-120 psi
Minimum inlet gas pressure	75 psi	75 psi	80 psi
Recommended inlet gas flow rate	Cutting: 450 scfh, 7.5 scfm @ 85 psi Gouging: 450 scfh, 7.5 scfm @ 70 psi	Cutting: 450 scfh, 7.5 scfm @ 85 psi Gouging: 450 scfh, 7.5 scfm @ 70 psi	Cutting: 550 scfh, 92 scfm @ 90 psi Gouging: 550 scfh, 92 scfm @ 70 psi
Input power cable length	10'	10'	10'
Power supply type	Inverter - IGBT	Inverter - IGBT	Inverter - IGBT
Engine drive requirement	15 kW for full 65 A output	20 kW for full 85 A output	30 kW for full 105 A output
Certifications	CSA-certified for use in the Americas and Asia, except China	CSA-certified for use in the Americas and Asia, except China	CSA-certified for use in the Americas and Asia, except China
Warranty	Power supplies have a 3-year warranty and torches a 1-year warranty	Power supplies have a 3-year warranty and torches a 1-year warranty	Power supplies have a 3-year warranty and torches a 1-year warranty

Ordering information

Below are the standard system configurations, which include a power supply, torch and work cable.

CSA	75° hand torch		75° and 15° hand torch	180° full-length machine torch					180° full-length machine torch and 75° hand torch
	25'	50'	25'	25'	35'	50'	35'/25'		
Powermax65 SYNC™ power supplies			Without remote pendant	With remote pendant	Without remote pendant	Without remote pendant	With remote pendant	Without remote pendant	With remote pendant
Standard power supply	083343	083344	083347						
Power supply with CPC port and voltage divider	083345	083346		083348	083349		083361	083350	083351
Power supply with CPC port, voltage divider and serial port				083352		083375			
Powermax85 SYNC™ power supplies			Without remote pendant	With remote pendant	Without remote pendant	Without remote pendant	With remote pendant	Without remote pendant	With remote pendant
Standard power supply	087183	087184	087187						
Power supply with CPC port and voltage divider	087185	087186		087207	087189		087208	087190	087191
Power supply with CPC port, voltage divider and serial port					087192	087218			
Powermax105 SYNC™ power supplies			Without remote pendant	With remote pendant	Without remote pendant	Without remote pendant	With remote pendant	Without remote pendant	With remote pendant
Standard power supply	059625	059626	059634						
Power supply with CPC port and voltage divider	059627	059628		059636	059637		059639	059638	059687
Power supply with CPC port, voltage divider and serial port					059684	059762			

Custom configurations (select power supply, torch, work cable, cartridge, and other components)

Power supply options

	Standard power supply	Power supply with CPC port and voltage divider	Power supply with CPC port, voltage divider and serial port
Powermax65 SYNC 200–600 V	083371	083372	083373
Powermax85 SYNC 200–600 V	087213	087214	087215
Powermax105 SYNC	059704	059705	059706

Torch options

	Hand torches		Machine torches	Robotic/Mini		
	75°	15°	180°	180°	90°	45°
15'				059733		
25'	059726	059723	059719	059734	059731	059729
35'			059720			
50'	059727	059724	059721	059735	059732	059730
75'	059728	059725	059722		059737	059736

Cable options

Control cables						
Cable length	Remote pendant	CNC, spade connector, divided voltage	CNC, spade connector, no divided voltage	CNC, D-sub connector, divided voltage	RS-485 Serial comm, unterminated	RS-485 Serial comm, D-sub
25'	128650	228350	023206	223048	223236	223239
50'	128651	228351	023279	123896	223237	223240
75'	128652					

Cable options

Work cables			
Cable length	Hand clamp	C-style clamp	Ring terminal
25'	223254	223287	223284
50'	223255	223288	223285
75'	223256	223289	223286

Specialty application cartridge options

	FlushCut™	FineCut® handheld	FineCut® mechanized
30-45 A		428928	428926
65 A	428952		
85 A	428953		
105 A	428954		



Process	Amps	Part number	Powermax65 SYNC	Powermax85 SYNC	Powermax105 SYNC
Drag-cutting	45	428927	●	●	●
	65	428931	●	●	●
	85	428935		●	●
	105	428937			●

FineCut drag-cutting	30-45	428928	●	●	●
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Mechanized cutting	45	428925	●	●	●
	65	428930	●	●	●
	85	428934		●	●
	105	428936			●

FineCut mechanized cutting	30-45	428926	●	●	●
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Ohmic ring kit (3) rings per kit		428895	●	●	●
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Max removal gouging	45-85	428932	●	●	
	105	428938			●
Max control gouging	45-85	428933	●	●	
	105	428939			●



FlushCut™	65	428952	●	●	●
	85	428953		●	●
	105	428954			●

Powermax125®

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



Maximum productivity

- Finish jobs faster with cut speeds 5 times greater than oxyfuel on 1/2" mild steel.
- Spend less time on grinding and edge preparation due to superior cut and gouge quality.
- Maximize your cutting time with 100% duty cycle.

Low operating costs

- Reduce costs with consumable life up to four times longer than other systems in this amperage range.
- Electrode end-of-life detection protects the torch and workpiece from damage by automatically stopping power when the electrode is overused.

Easy-to-use for cutting and gouging

- No need to change the air pressure. Smart Sense™ technology ensures that it is always correctly set.
- Tackle different jobs with multiple, easy-to-use torch styles.

Built and tested to withstand the harshest conditions

- Duramax® Hyamp™ torches are designed for high-impact and heat resistance.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Low maintenance maximizes uptime.

Torches

- To see details on all torches compatible with this system, please refer to the torch applications chart on page 28.

Capacity	Thickness	Cut speed
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	Cutting	
Recommended	1-1/2"	18 ipm
	1-3/4"	10 ipm
Severance (hand cutting)	2-1/4"	5 ipm
Pierce*	1"	

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

Capacity	Metal removal rate	Groove profile*
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	Gouging	
Typical gouge	27.6 lbs. per hour	0.17-0.31" D x 0.24-0.39" W

* Actual groove profile varies with torch angle, arc stretch, and technique

Specifications

Input voltages	480/600 V, 3-PH, 50/60 Hz
Kilowatt output	21.9 kW
Input current @ 21.9 kW	480/600 V, 31/24 A
Output current	30-125 A
Rated output voltage	175 VDC
Duty cycle @ 104° F	100% @ 125 A, 480/600 V, 3-PH
Open circuit voltage (OCV)	320 VDC
Dimensions with handles	23.3" D; 10.8" W; 20.0" H
Weight with 25' torch	480 V 105.7 lbs. 600 V 104.7 lbs.
Gas supply	Clean, dry, oil-free air or nitrogen
Recommended gas inlet flow rate/pressure	Cutting: 550 scfh @ .85 psi Gouging: 450 scfh @ .60 psi
Input power cable length	10'
Power supply type	Inverter - IGBT
Engine drive requirement	40 kW for full 125 A output
Certifications	CSA-certified for use in the Americas and Asia, except China.
Warranty	Power supply: 3-year Torch: 1-year

Hand systems	
059538	Powermax125® system, 480 V 3-PH, CSA, plus CPC port, 85° and 15° handheld torches w/consumables, 25' lead
059569	Powermax125 system, 480 V 3-PH, CSA, plus CPC port, 85° and 15° handheld torches w/consumables, 50' lead
059536	Powermax125 system, 480 V 3-PH, CSA, plus CPC port, 85° handheld torch w/consumables, 25' lead
059537	Powermax125 system, 480 V 3-PH, CSA, plus CPC port, 85° handheld torch w/consumables, 50' lead
059571*	Powermax125 system, 480 V 3-PH, CSA, plus CPC port, 75° handheld torch w/consumables, 25' lead, English training kit
059555	Powermax125 system, 600 V 3-PH, CSA, plus CPC port, 85° and 15° handheld torches w/consumables, 25' lead
059570	Powermax125 system, 600 V 3-PH, CSA, plus CPC port, 85° and 15° handheld torches w/consumables, 50' lead
059546	Powermax125 system, 600 V 3-PH, CSA, plus CPC port, 85° handheld torch w/consumables, 25' lead
059547	Powermax125 system, 600 V 3-PH, CSA, plus CPC port, 85° handheld torch w/consumables, 50' lead

*For qualified institutions only - pre-approval required to order

Machine systems	
059539	Powermax125 system, 480 V 3-PH, CSA, plus CPC port, 180° machine torch w/consumables, 25' lead, remote
059540	Powermax125 system, 480 V 3-PH, CSA, plus CPC port, 180° machine torch w/consumables, 50' lead, remote
059542	Powermax125 system, 480 V 3-PH, CSA, plus CPC and serial ports, 180° machine torch w/consumables, 25' lead
059543	Powermax125 system, 480 V 3-PH, CSA, plus CPC and serial ports, 180° machine torch w/consumables, 50' lead
059541	Powermax125 system, 480 V 3-PH, CSA, plus CPC port, 85° torch w/25' lead, 180° torch w/50' lead w/consumables, remote
059544	Powermax125 system, 480 V 3-PH, CSA, plus CPC and serial ports, 180° torch w/consumables, 25' lead w/ring, cables
059545	Powermax125 system, 480 V 3-PH, CSA, plus CPC and Serial ports, 180° torch w/consumables, 50' lead w/ring, cables
059552	Powermax125 system, 600 V 3-PH, CSA, plus CPC port, 180° machine torch w/consumables, 25' lead, remote
059553	Powermax125 system, 600 V 3-PH, CSA, plus CPC port, 180° machine torch w/consumables, 50' lead, remote
059550	Powermax125 system, 600 V 3-PH, CSA, plus CPC and serial ports, 180° machine torch w/consumables, 25' lead
059551	Powermax125 system, 600 V 3-PH, CSA, plus CPC and serial ports, 180° machine torch w/consumables, 50' lead
059554	Powermax125 system, 600 V 3-PH, CSA, plus CPC port, 85° torch w/25' lead, 180° torch w/50' lead, consumables, remote
059548	Powermax125 system, 600 V 3-PH, CSA, plus CPC and serial ports, 180° torch w/consumables, 25' lead w/ring, cables
059549	Powermax125 system, 600 V 3-PH, CSA, plus CPC and serial ports, 180° torch w/consumables, 50' lead w/ring, cables

Powermax125 Power Supplies (power supplies only, no torches)	
059488	Powermax125 power supply, 480 V 3-PH, CSA, plus CPC port
059509	Powermax125 power supply, 600 V 3-PH, CSA, plus CPC port
059489	Powermax125 power supply, 480 V 3-PH, CSA, plus CPC and serial ports
059669	Powermax125 power supply, 480 V 3-PH, CSA, plus CPC port, no power cord
059510	Powermax125 power supply, 600 V 3-PH, CSA, plus CPC and serial ports

Duramax Hyamp series torch assemblies	
059492	Duramax® Hyamp™ handheld torch, 85°, 25' lead
059493	Duramax Hyamp handheld torch, 85°, 50' lead
059494	Duramax Hyamp handheld torch, 85°, 75' lead
059665	Duramax Hyamp handheld torch, 85°, 150' lead
059495	Duramax Hyamp handheld torch, 15°, 25' lead
059496	Duramax Hyamp handheld torch, 15°, 50' lead
059497	Duramax Hyamp handheld torch, 15°, 75' lead
059664	Duramax Hyamp handheld torch, 15°, 150' lead
059562	Duramax Hyamp Long handheld torch 45°, 2' extension, 25' lead
059579	Duramax Hyamp Long handheld torch 45°, 2' extension, 50' lead
059667	Duramax Hyamp Long handheld torch 45°, 4' extension, 150' lead
059563	Duramax Hyamp Long handheld torch 90°, 2' extension, 25' lead
059580	Duramax Hyamp Long handheld torch 90°, 2' extension, 50' lead
059567	Duramax Hyamp Long handheld torch 45°, 4' extension, 25' lead
059581	Duramax Hyamp Long handheld torch 45°, 4' extension, 50' lead
059568	Duramax Hyamp Long handheld torch 90°, 4' extension, 25' lead
059582	Duramax Hyamp Long handheld torch 90°, 4' extension, 50' lead
059668	Duramax Hyamp Long handheld torch 90°, 4' extension, 150' lead
059758	Duramax Hyamp Long handheld torch 45°, 6' extension, 25' lead
059759	Duramax Hyamp Long handheld torch 45°, 6' extension, 50' lead
059623	Duramax Hyamp Long handheld torch 90°, 6' extension, 25' lead
059624	Duramax Hyamp Long handheld torch 90°, 6' extension, 50' lead
059519	Duramax® Hyamp™ machine torch, 180°, 15' lead
059520	Duramax Hyamp machine torch, 180°, 25' lead
059521	Duramax Hyamp machine torch, 180°, 35' lead
059522	Duramax Hyamp machine torch, 180°, 50' lead
059523	Duramax Hyamp machine torch, 180°, 75' lead
059514	Duramax Hyamp mini machine torch, 180°, 15' lead
059515	Duramax Hyamp mini machine torch, 180°, 25' lead
059516	Duramax Hyamp mini machine torch, 180°, 35' lead
059517	Duramax Hyamp mini machine torch, 180°, 50' lead
059666	Duramax Hyamp mini machine torch, 180°, 150' lead
059564	Duramax Hyamp robotic torch, 45°, 25' lead
059670	Duramax Hyamp robotic torch, 45°, 50' lead
059565	Duramax Hyamp robotic torch, 90°, 25' lead
059671	Duramax Hyamp robotic torch, 90°, 50' lead
059566	Duramax Hyamp robotic torch, 180°, 25' lead
059672	Duramax Hyamp robotic torch, 180°, 50' lead

Powermax125 work leads	
223292	Kit: 125 A work lead with hand clamp, 25'
223293	Kit: 125 A work lead with hand clamp, 50'
223294	Kit: 125 A work lead with hand clamp, 75'
223737	Kit: 125 A work lead with hand clamp, 150'
223295	Kit: 125 A work lead with ring terminal, 25'
223296	Kit: 125 A work lead with ring terminal, 50'
223297	Kit: 125 A work lead with ring terminal, 75'
223298	Kit: 125 A work lead with C-style clamp, 25'
223299	Kit: 125 A work lead with C-style clamp, 50'
223300	Kit: 125 A work lead with C-style clamp, 75'

Automated control accessories	
128650	Remote on/off switch for machine torch, 25'
128651	Remote on/off switch for machine torch, 50'
128652	Remote on/off switch for machine torch, 75'
428755	Remote on/off switch for machine torch, 150'
228884	Upgrade kit: Powermax® 105/125 CPC port with selectable voltage ratio
228539	Upgrade kit: Serial interface port (RS-485)
023206	Machine interface cable without voltage divider signal, spade connectors, 25'
023279	Machine interface cable without voltage divider signal, spade connectors, 50'
228350	Machine interface cable with voltage divider signal, spade connectors, 25'

Automated control accessories (continued)	
228351	Machine interface cable with voltage divider signal, spade connectors, 50'
223048	Machine interface cable with voltage divider signal, D-sub connector, 25'
123896	Machine interface cable with voltage divider signal, D-sub connector, 50'
223236	Serial interface RS-485 cable to unterminated, 25'
223237	Serial interface RS-485 cable to unterminated, 50'
223239	Serial interface RS-485 cable to 9-pin D-sub connector 25'
223240	Serial interface RS-485 cable to 9-pin D-sub connector 50'
228806	Clamp assembly for Duramax/Duramax Hyamp robotic torches

Consumable kits	
851474	Consumable kit, Powermax125® Essential handheld, 125 A, cutting
851475	Consumable kit, Powermax125 Essential mechanized, 125 A, cutting
851476	Consumable kit, Powermax125 Essential mechanized ohmic, 125 A, cutting
428713	Consumable kit, Duramax® Hyamp™, 125 A, FlushCut™
428099	Consumable starter kit Powermax125, handheld (for à la carte system ordering)
428100	Consumable starter kit Powermax125, mechanized (for à la carte system ordering)
428101	Consumable starter kit Powermax125, mechanized with ohmic retaining cap (for à la carte system ordering)

Optional system accessories	
229467	Powermax105/125 wheel kit
229570	Powermax105/125 power supply gantry mounting kit for cutting tables
127360	System storage dust cover, Powermax105/125
228890	Eliminizer air filtration kit with steel guard for Powermax105/125
128647	Eliminizer air filtration kit, 1-micron filter and auto-drain moisture separator
011092	Replacement filter element for eliminizer air filter
428719	Oil removal air filtration kit, 0.01-micron coalescing oil extracting filter
428718	Wall mounting bracket kit for eliminizer air filter or oil removal air filter
428720	Replacement filter element for oil removal air filter kit
101215	Steel guard for eliminizer filter for Powermax105/125
229832	Teach tip assembly, Hyamp robotic torch
127363	Torch carry bag, 23" x 11" x 11"

Optional system accessories (continued)	
017049	Long torch carry bag for 2' torch
024877	Leather torch lead cover with hook and loop closure, black, 25' section
017053	Plasma circle cutting guide for Duramax Hyamp torch, deluxe kit with magnetic base
017041	Plasma angle cutting guide
017042	Magnetic straight edge
017058	Bevel guide for Duramax Hyamp
017043	Magnetic block 2-pack
017044	Pocket level and measuring tape holder
428348	Gouging heat shield for Duramax Hyamp 80° hand torches
428809	Skeleton cutting sled for Duramax Hyamp Long torches
428495	Hyamp torch adapter for Powermax125/MAXPRO200® machine torches



Torch consumable stack-up

Consumable type	Torch type	Amperage	Shield/ Deflector	Retaining cap	Nozzle	Electrode	Swirl ring
Drag-cutting	Hand	45	420172	220977	420158	220971	220997
		65	420172		420169		
		125	420000		220975		
Mechanized	Machine	45	420168	220977 or 420156 ¹	420158	220971	220997
		65	420168		420169		
		125/105	220976		220975		
FineCut®	Hand	45	420152	220977 or 420156 ¹	420151	220971	420159
	Machine						220997
Hyamp FlushCut	Hand/machine	85-125	420485 ²	420490	420489	420553	420484
Max removal gouging	Hand/machine	30-125	420112	220977	420001	220971	220997
Max control gouging	Hand/machine	30-125	420519	220977	420001	220971	220997

¹ Ohmic retaining cap

² Retaining ring

Personal protective equipment



Dual face shield for slotted hard hat

ANSI Z87.1, CSA Z94.3, CE
 017047 Shade 6
 017048 Shade 8
 017046 Hard hat



Dual face shield

127239 Shade 6
 127103 Shade 8



Leather cutting gloves

127169



Hyamp™ cutting and gouging gloves

017025 Medium
 017026 Large
 017027 X-Large
 017028 2X-Large



Neck guard

017030



Gouging heat shield

128658 T45v; T60/80/100
 428347 Duramax® and SmartSYNC™
 428348 Duramax Hyamp™



Cutting goggles

ANSI Z87.1, CSA Z94.3, CE
 017035 Shade 5



Adjustable eye shades

127416 Shade 5



Clear safety shields

017034



Flip-up eye shades

ANSI Z87.1, CSA Z94.3, CE
 017033 Shade 5



Torch accessories



Cartridge torch adapter for Duramax® and Duramax Lock torches

The adapter is designed to support multiple cartridge change-outs. Periodically inspect and remove the adapter from the torch to check for cracking and thread wear to determine when to replace.

428951



Hyamp™ torch adapter

428495



Torch teach tools

The torch teach tools enable system operators to program the robot's cutting path, while visually verifying the torch will not touch the workpiece while cutting.

429054 for SmartSYNC™ robotic torches

229456 for Duramax® robotic torches

229832 for Duramax Hyamp™ robotic torches

System accessories



Air filtration kits

- 128647 Filter kit only
- 228570 Powermax® 65/85, kit and cover
- 228890 Powermax105/125, kit and cover
- 011092 Replacement filter element
- 428719 Oil removal air filter kit



Leather torch sheathing

- 024877 Black leather 25'



Wheel/gantry kits

- 229370 Powermax® 65/85, wheel kit
- 229569 Powermax65/85, gantry kit
- 229467 Powermax105/125, wheel kit
- 229570 Powermax105/125, gantry kit



System dust covers

- 127144 Powermax® 30/30 XP
- 127469 Powermax30 AIR
- 127219 Powermax45/45 XP
- 127301 Powermax65/85
- 127360 Powermax105/125



Rolling tool bag

- 017060 19.5" x 17.5" x 12.5"



Remote trigger pendant

- 128650 25'
- 128651 50'
- 128652 75'
- 428755 150'



Torch carry bag

- 127363 23" x 11" x 11"
- 017049 Duramax® Hyamp™ 2'



Cartridge reader

The cartridge reader works with the Powermax SYNC™ cartridge reader app to provide a simple process for reviewing data stored in Hypertherm cartridges.

- 528083

Cutting guides



Circle cutting guide

- 127102 Basic Duramax®, Duramax LT, AIR, T30
- 027668 Deluxe Duramax, Duramax LT, AIR, T30
- 017053 Duramax Hyamp™
- 027669 Deluxe SmartSYNC™
- 017065 Basic SmartSYNC



Bevel cutting guide

- 017059 Standard
- 017058 Duramax® Hyamp™
- 017066 SmartSYNC™



Magnetic block 2-pack

- 017043



Angle cutting guide

- 017041



Torch alignment guide

Designed for setting up a machine torch to produce high quality bevel cuts at accurate angles using a tractor.

- 528077



Pocket level and tape magnet

- 017044










Magnetic straight edge

- 017042

Torch applications for Powermax®

Powermax torch product line overview

Hypertherm® offers an extensive array of torch options for the Powermax line of plasma systems.

Current systems	System	Amps	Torch series	Torch style(s)					
				Current	Hand torch	Straight hand torches	Straight machine torches	Short machine torches	Robotic torches
	Powermax30® XP	30	Duramax® LT	15 ft. lead					
	Powermax30® AIR	30	AIR T30	15 ft. lead					
	Powermax45® XP	45	Duramax® Lock	20 ft. lead 50 ft. lead	20 ft. lead 50 ft. lead	25 ft. lead 35 ft. lead 50 ft. lead			
			Duramax® Hvamp®*	25 ft. lead 50 ft. lead 75 ft. lead	25 ft. lead 50 ft. lead 75 ft. lead	15 ft. lead 25 ft. lead 35 ft. lead 50 ft. lead 75 ft. lead	15 ft. lead 25 ft. lead 35 ft. lead 50 ft. lead	25 ft. lead 50 ft. lead	2 ft. option 4 ft. option 6 ft. option 25 ft. lead 50 ft. lead
	Powermax65 SYNC™	65	SmartSYNC™	25 ft. lead 50 ft. lead 75 ft. lead	25 ft. lead 50 ft. lead 75 ft. lead	25 ft. lead 35 ft. lead 50 ft. lead 75 ft. lead		15 ft. lead 25 ft. lead 50 ft. lead 75 ft. lead	
	Powermax85 SYNC™	85							
	Powermax105 SYNC™	105							
	Powermax125®	125	Duramax® Hvamp®*	25 ft. lead 50 ft. lead 75 ft. lead 150 ft. lead	25 ft. lead 50 ft. lead 75 ft. lead 150 ft. lead	15 ft. lead 25 ft. lead 35 ft. lead 50 ft. lead 75 ft. lead	15 ft. lead 25 ft. lead 35 ft. lead 50 ft. lead 150 ft. lead	25 ft. lead	2 ft. option 4 ft. option 6 ft. option 25 ft. lead 50 ft. lead 150 ft. lead

*Optional

Protect your investment. Choose genuine Hypertherm torches, consumables, and cartridges to keep your Powermax® system running at peak performance. Incorporating the latest technologies and manufactured to the highest standards, Hypertherm consumables and cartridges enhance cut quality, extend consumable life, and boost productivity.

Drag cutting	Consumables for placing the torch directly on the work piece without a standoff.
Mechanized cutting	Consumables for portable automation, CNC table and robotic cutting.
Max control gouging	Consumables for precise metal removal, shallower gouge profiles and light metal washing.
Max removal gouging	Consumables for aggressive metal removal, deep gouge profiles and extreme metal washing.
Precision gouging	Consumables for spot and tack weld removal at very low output current (<25 A).
Marking	Consumables for scoring, indicating part identification, hole or weld locations.
Extended reach cutting	HyAccess™, extended reach consumables for improved visibility and accessibility when cutting or gouging in confined spaces.
Fine feature cutting	FineCut® consumables for narrow kerf width with minimal dross and heat affected zone.
Flush cutting	FlushCut™ consumables for cutting closer to base materials as possible without piercing or damaging the workpiece.



85° hand torch



180° mini machine torch



180° Duramax robotic torch



15° hand torch



180° full-length machine torch



90° Duramax® robotic torch



45° Duramax® robotic torch



45° Duramax® Hyamp™ 2' Long torch



45° Duramax® Hyamp™ 4' Long torch



75° SmartSYNC™ hand torch



Machine SmartSYNC™ torch



180° SmartSYNC™ robotic torch



90° SmartSYNC™ robotic torch



15° SmartSYNC™ hand torch



45° SmartSYNC™ robotic torch

Consumable kits

- Powermax® Essential consumable kits – designed to provide the optimal mix of cutting consumables for your Powermax system
- HyAccess™ and FlushCut™ kits
- Dual pack electrode/nozzle kits for Powermax30 AIR and Powermax30 XP
- Bulk kits – economical for high volume use of select consumables



Powermax Essential consumable kits

Powermax system	Handheld	Mechanized	Mechanized Ohmic
Powermax30 AIR	851462		
Powermax30 XP	851479		
Powermax45 XP	851510	851511	851512
Powermax65	851465	851466	851467
Powermax85	851468	851469	851470
Powermax105	851471	851472	851473
Powermax125	851474	851475	851476

Duramax® consumable bulk kits

Contents	Order quantity	Part number
Electrode (220777)	25	228934
Electrode (220842)	25	228767
Nozzle (220816)	25	228760
Nozzle (220819)	25	228759
Nozzle (220930)	25	228761
Nozzle (220797)	25	228762
Nozzle (220941)	25	228765
Nozzle (220990)	25	228797
Nozzle (220991)	25	228796
Shield (220992)	10	228798
Shield (220993)	10	228799
Shield (220817)	10	228763
Shield (220818)	10	228764



Dual electrode/nozzle packs

Powermax system	Part number	Process
Powermax30 AIR	428350	Standard cutting
Powermax30 XP	428243	Standard cutting
	428244	FineCut®



FlushCut kits

FlushCut consumables for cutting closer to base materials as possible without piercing or damaging the workpiece.

Powermax system	Kit part number	Operating amperage
Powermax45 XP		
Powermax65	428746	15-45 A
Powermax85		
Powermax105	428647	85-105 A
Powermax125	428713	85-125 A

HyAccess kits

Extended reach consumables for improved visibility and accessibility when cutting or gouging in confined spaces.

Powermax system	Kit type	Kit part number	Operating amperage
Powermax30 XP	Combination Cut/Gouging	428337	15-30 A
	Starter kit - Cutting	428443	
	Starter kit - Gouging	428444	
Powermax45 XP	Combination Cut/Gouging	428414	15-65 A
	Starter kit - Cutting	428445	
	Starter kit - Gouging	428446	
	Starter kit - Gouging	428446	

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For more information, visit:
www.hypertherm.com

Engineered and assembled in the USA
ISO 9001:2015

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