

Hypertherm®

Plasma Cutting Systems



System specifications comparison		Powermax45® XP	Powermax65®	Powermax85®	Powermax105®	Powermax125®
Handheld cut capacity	Recommended	5/8" 7/8"	3/4" 1"	1" 1-1/4"	1-1/4" 1-1/2"	1-1/2" 1-3/4"
	Severance	1-1/8"	1-1/4"	1-1/2"	2"	2-1/4"
Mechanized pierce capacity	with automatic torch height control	1/2" ¹	5/8" ¹	3/4" ¹	7/8" ¹	1" ¹
	without automatic torch height control	1/2"	1/2"	5/8"	3/4"	7/8"
Typical gouge	Metal removed per hour	7.5 lbs	10.7 lbs	19.5 lbs	21.7 lbs	27.6 lbs
	depth x width ²	.12 x .26"	.14 x .26"	.23 x .28"	.32 x .26"	0.17-0.31 x 0.24-0.39"
Output current		10-45 A	20-65 A	25-85 A	30-105 A	30-125 A
Input voltages		200-240 V, 1-PH, 50-60 Hz 480 V, 3-PH, 50-60 Hz	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	480 V, 3-PH, 50-60 Hz 600 V, 3-PH, 50-60 Hz
Rated output voltage		145 VDC	139 VDC	143 VDC	160 VDC	175 VDC
Input current		200-240 V, 1-PH, 39/32 A 480 V, 3-PH, 9.4 A	200/208/240/480 V, 1-PH, 52/50/44/22 A 200/208/240/480/600 V, 3-PH, 32/31/27/13/13 A	200/208/240/480 V, 1-PH, 70/68/58/29 A 200/208/240/480/600 V, 3-PH, 42/40/35/18/17 A	200/208/240/480/600 V, 3-PH, 50/60 Hz, 58/56/49/25/22 A	480/600 V, 3-PH, 50/60 Hz, 31/24 A
Duty cycle ³		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	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	50% @ 105 A, 200 V, 3-PH 54% @ 105 A, 208 V, 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 100% @ 77 A, 208 V, 3-PH 100% @ 74 A, 200 V, 3-PH	100% @ 125 A, 480/600 V, 3-PH
Dimensions with handle	depth x width x height	17.4 x 6.8 x 14.1"	19.7 x 9.2 x 17.9"	19.7 x 9.2 x 17.9"	23.3 x 10.8 x 20.0"	23.3 x 10.8 x 20.0"
Weight with torch		31 lbs	64 lbs	71 lbs	100 lbs	480 V 105.7 lbs 600 V 104.7 lbs
Gas supply	Cutting Gouging Marking	Air, N ₂ , F5 Air, N ₂ , F5 Air or Argon	Air, N ₂ , F5 Air, N ₂ , F5	Air, N ₂ , F5 Air, N ₂ , F5	Air, N ₂ , F5 Air, N ₂ , F5	Air, N ₂ , F5 Air, N ₂ , F5
Recommended flow rate and pressure		Cutting: 400 scfh, 6.6 scfm @ 85 psi Gouging: 350 scfh, 5.8 scfm @ 60 psi	Cutting: 400 scfh, 6.7 scfm @ 85 psi Gouging: 450 scfh, 7.5 scfm @ 70 psi	Cutting: 400 scfh, 6.7 scfm @ 85 psi Gouging: 450 scfh, 7.5 scfm @ 70 psi	Cutting: 460 scfh, 7.7 scfm @ 85 psi Gouging: 480 scfh, 8.0 scfm @ 70 psi	Cutting: 550 scfh, 9.2 scfm @ 85 psi Gouging: 450 scfh, 7.5 scfm @ 60 psi
Torch lead lengths	Handheld	20, 50, 75'	25, 50, 75'	25, 50, 75'	25, 50, 75'	25, 50, 75, 150 ⁴
	Mechanized	15, 25, 35, 50, 75'	15, 25, 35, 50, 75'	15, 25, 35, 50, 75'	15, 25, 35, 50, 75'	15, 25, 35, 50, 75, 150 ⁴
Motor generator requirements for full arc stretch at full output		12.5 kVA or 10 kW	20.1 kVA or 15 kW	26.8 kVA or 20 kW	40.2 kVA or 30 kW	53.6 kVA or 40 kW

¹ Pierce rating for handheld use or with automatic torch height control.

² Dependent on speed, torch angle and standoff.

³ Hypertherm's duty cycle ratings are established at 104° F, according to international standards, and are determined at actual cutting arc voltage levels.

⁴ Selected torch styles.