m³ 360 Amp Precision Plasmarc™ System with PT-36 Torch

ESAB's fully automated m³ Plasma™ system offers the latest plasma technology with the precision, versatility, and value demanded by modern lean manufacturers. Each m³ Plasma system consists of three main components: the m³ Gas Control, the PT-36 Torch, and the EPP Power Supply.

m³ Gas Control

The m³ Plasma gas control system is the most advanced gas control system in the industry, featuring precision gas metering and mixing capabilities that support the widest range of plasma cutting capabilities.

PT-36 Torch

The PT-36 Plasmarc Torch features a robust design with high precision torch parts and unique patented features that help operators get the most from every setup.

Power Supply

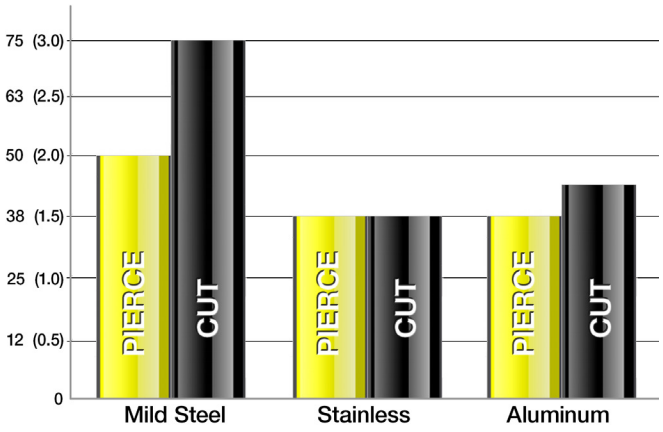
The EPP-362 Precision Plasmarc power supply provides reliable, efficient output power with fast and accurate current control for the most demanding plasma applications. Features include:

- **High-speed data bus controller allows precise control of plasma current and better diagnostics from the machine CNC.**
- **Integrated water cooler reduces installation and floor space requirements**
- **Innovative water cooled power block provides better cooling and longer component life.**
- **High Output Voltage Capacity for better bevel cutting.**
- **Rated for 100% duty cycle at 360 Amp output**
- **Fast switching between cutting and marking modes**
- **Efficient, high-power factor design**

Specifications

	m³ 360 Amp System
Output Range (Cutting)	30 to 360 Amps
Output Range (Marking)	10 to 36 Amps
Open Circuit Voltage	360 VDC
Dimensions	61 x 104 x 120 cm (24 x 41 x 47 in.)

Cutting Range, mm (in.)



m³ 360 Amp Precision Plasmarc™ Performance

Carbon Steel

Thickness (mm)	Speed (mm/min)	Thickness (inch)	Speed (in/min)	Current (amps)	Cut/Shield Gases
1	3800	0.040	150	30	O2-N2/O2
3	3800	0.125	150	60	O2-N2/O2
	6100		240	130	O2-Air/O2
6	2000	0.250	75	60	O2-N2/O2
	5500		210	200	O2-Air/O2
10	1900	0.375	75	100	O2-Air
	3500		140	200	O2-Air/O2
12	2000	0.500	75	130	O2-N2/O2
	3200		120	200	O2-Air/O2
16	1900	0.625	75	200	Air-Air
	2500		100	200	O2-Air
20	1900	0.750	75	200	Air-Air
	3000		120	360	O2-Air
25	1540	1.000	60	280	O2-N2/O2
	2050		80	360	O2-Air
32	1400	1.250	55	360	O2-Air
38	1500	1.500	60	300	O2-Air
45	1000	1.750	40	300	O2-Air
50	150	2.000	6	200	Air-Air

Stainless Steel

Thickness (mm)	Speed (mm/min)	Thickness (inch)	Speed (in/min)	Current (amps)	Cut/Shield Gases
1	7000	0.040	275	70	N2-N2
3	3700	0.125	140	60	F5-N2
	6000		225	125	N2-H20
6	1700	0.250	65	100	F5-N2/CH4
	4400		165	150	Air-Air
	4700		175	200	N2-H20
10	1100	0.375	45	100	F5-N2/CH4
	2600		105	200	Air-Air
12	900	0.500	35	130	H35-N2
	2200		85	200	Air-Air
16	1770	.0625	70	200	Air-Air
20	1100	0.750	45	360	H35-N2
	1700		68	260	N2-N2
25	900	1.000	35	360	H35-N2
	1030		40	260	N2-N2
32	350	1.250	14	200	H35-N2
	760		30	360	H35-N2
38	305	1.500	12	200	H35-N2

Aluminum

Thickness (mm)	Speed (mm/min)	Thickness inch	Speed (in/min)	Current (amps)	Cut/Shield Gases
1	6100	0.040	240	35	N2-N2/CH4
3	4300	0.125	160	50	N2-N2
	5600		210	60	N2-N2/CH4
6	2000	0.250	75	60	N2-N2/CH4
	3700		140	150	Air-Air
	4000		150	200	N2-H20
10	1900	0.375	75	100	N2-N2
	2700		110	200	Air-Air
12	2200	0.500	85	200	N2-N2/CH4
	2200		85	200	Air-Air
16	2400	0.625	95	250	N2-H20
	3000		120	260	N2-N2
20	2200	0.750	90	260	N2-N2/CH4
	2200		90	260	N2-N2
25	1150	1.000	45	200	N2-N2/CH4
	1850		72	260	N2-N2/CH4
32	1140	1.250	45	260	N2-N2/CH4
38	840	1.500	33	360	H35-N2
45	880	1.750	35	360	H35-N2

Plasma Marking

Material	Marking Type	Nozzle (amps)	Marking Speed	
			(mm/min)	(in/min)
Carbon Steel	Text	30 - 200	2500	100
	Line	45 - 200	5000-10000	200-400
Stainless Steel	Text	50 - 200	2500	100
	Line	70 - 200	7600-10000	300-400

Notes:

1. These charts are only a sampling of the numerous cutting conditions available with the m³ plasma system. For brevity, many available cutting conditions are not shown.
2. All statements and data apply to m³ plasma "Generation 2" systems with a PT-36 torch and EPP Power Supply.
3. Cutting speeds are dependent on the material type and grade, gas pressure, gas combination, as well as the consumables selected.
4. Specifications are subject to change without notice. Please contact ESAB Cutting Systems for the most current specifications, numerical control, and available equipment.
5. Mark and shield gases: Ar-Air.

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