



# m<sup>3</sup> 600 Amp Precision Plasmarc™ System with PT-36 Torch

ESAB's fully automated m<sup>3</sup> Plasma™ system offers the latest plasma technology with the precision, versatility, and value demanded by modern lean manufacturers. Each m<sup>3</sup> Plasma system consists of three main components: the m<sup>3</sup> Gas Control, the PT-36 Torch, and the EPP Power Supply.

## m<sup>3</sup> Gas Control

The m<sup>3</sup> 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

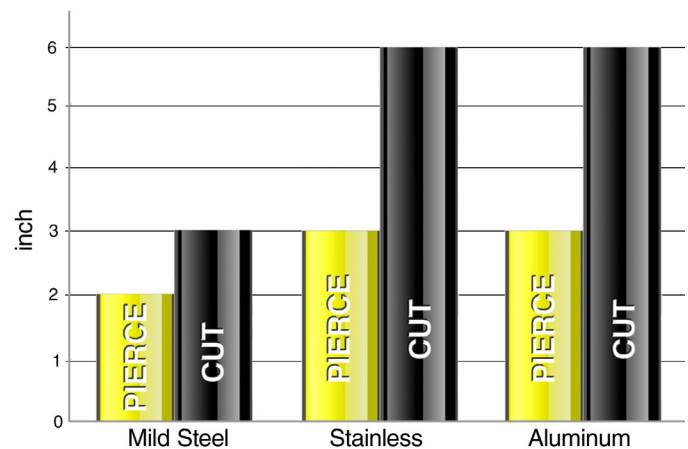
The EPP-601 Precision Plasmarc power supply provides reliable, efficient output power with fast and accurate current control for the most demanding plasma applications. Features include:

- **10 – 600A current range**
- **Wide operating range for best arc performance**
- **High Output Voltage Capacity**
- **Higher standoff capacity improves bevel cutting.**
- **600 Amp output rated for 100% duty cycle**
- **Fast switching between cutting and marking modes**
- **Efficient, high-power factor design**
- **Fan-on-demand technology reduces dust intake and extending maintenance intervals**



## Specifications

Output Range (Cutting)	35 to 600 Amps
Output Range (Marking)	10 to 100 Amps
Open Circuit Voltage	430 VDC
Dimensions	37 in. W x 41 in. H x 45" D



# m<sup>3</sup> 600 Amp Precision Plasmarc™ Performance

Carbon Steel				Stainless Steel				Aluminum			
Thickness (inch)	Current (Amps)	Cutting Speed (in/min)	Cut/ Shield Gases	Thickness (inch)	Current (Amps)	Cutting Speed (in/min)	Cut/ Shield Gases	Thickness (inch)	Current (Amps)	Cutting Speed (in/min)	Cut/ Shield Gases
0.040	30	150	O <sub>2</sub> /N <sub>2</sub> /O <sub>2</sub>	0.040	70	275	N <sub>2</sub> /N <sub>2</sub>	0.040	35	240	N <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub>
0.125	60	150	O <sub>2</sub> /N <sub>2</sub> /O <sub>2</sub>	0.125	60	140	F <sub>5</sub> /N <sub>2</sub>	0.125	50	110	Air/Air
	130	240	O <sub>2</sub> /Air/O <sub>2</sub>		125	225	N <sub>2</sub> /H <sub>2</sub> O		60	210	N <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub>
0.250	90	120	O <sub>2</sub> /Air/O <sub>2</sub>	0.250	90	65	F <sub>5</sub> /N <sub>2</sub>	0.250	90	95	N <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub>
	200	250	O <sub>2</sub> /Air		150	165	Air/Air		150	140	Air/Air
0.375	90	80	O <sub>2</sub> /Air/O <sub>2</sub>	0.375	200	175	N <sub>2</sub> /H <sub>2</sub> O	0.375	200	150	N <sub>2</sub> /H <sub>2</sub> O
	200	155	O <sub>2</sub> /Air		90	45	F <sub>5</sub> /N <sub>2</sub>		90	60	N <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub>
0.500	130	80	O <sub>2</sub> /Air/O <sub>2</sub>	0.500	200	105	Air/Air	0.500	200	110	Air/Air
	200	120	O <sub>2</sub> /Air		130	35	H <sub>35</sub> /N <sub>2</sub>		200	85	N <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub>
0.625	200	100	O <sub>2</sub> /Air	0.625	200	85	Air/Air	0.625	200	85	Air/Air
	300	150	O <sub>2</sub> /Air		200	47	N <sub>2</sub> /N <sub>2</sub>		250	95	N <sub>2</sub> /H <sub>2</sub> O
0.750	200	75	O <sub>2</sub> /Air	0.750	200	70	Air/Air	0.750	260	120	N <sub>2</sub> /N <sub>2</sub>
	360	120	O <sub>2</sub> /Air		260	68	N <sub>2</sub> /N <sub>2</sub>		260	90	N <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub>
1.000	300	120	O <sub>2</sub> /Air	1.000	360	45	H <sub>35</sub> /N <sub>2</sub>	1.000	260	90	N <sub>2</sub> /N <sub>2</sub>
	360	80	O <sub>2</sub> /Air		260	40	N <sub>2</sub> /N <sub>2</sub>		260	45	N <sub>2</sub> /N <sub>2</sub>
1.250	360	55	O <sub>2</sub> /Air	1.250	360	35	H <sub>35</sub> /N <sub>2</sub>	1.250	260	72	N <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub>
	450	70	O <sub>2</sub> /Air		450	38	H <sub>35</sub> /N <sub>2</sub>		450	70	H <sub>35</sub> /N <sub>2</sub>
1.500	300	60	O <sub>2</sub> /Air	1.500	600	60	N <sub>2</sub> /H <sub>2</sub> O	1.500	600	70	N <sub>2</sub> /H <sub>2</sub> O
	450	55	O <sub>2</sub> /Air		600	45	N <sub>2</sub> /H <sub>2</sub> O		450	55	H <sub>35</sub> /N <sub>2</sub>
1.750	300	40	O <sub>2</sub> /Air	2.000	600	32	N <sub>2</sub> /H <sub>2</sub> O	2.000	450	33	H <sub>35</sub> /N <sub>2</sub>
	450	45	O <sub>2</sub> /Air		3.000	600	10		H <sub>35</sub> /N <sub>2</sub>	3.000	600
2.000	400	20	O <sub>2</sub> /N <sub>2</sub> /O <sub>2</sub>	4.000	600	10	H <sub>35</sub> /Air	4.000	600	15	H <sub>35</sub> /Air
	450	33	O <sub>2</sub> /Air		5.000	600	7		H <sub>35</sub> /Air	5.000	600
3.000	450	10	O <sub>2</sub> /Air	6.000	600	4.5	H <sub>35</sub> /Air	6.000	600	8	H <sub>35</sub> /Air

## Notes:

1. This above chart is only a sampling of the numerous cutting conditions available with the m<sup>3</sup> plasma system. For brevity, many available cutting conditions are not shown.
2. All statements and data apply to m<sup>3</sup> 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.

Plasma Marking				
Material	Marking Type	Nozzle (Amps)	Marking Speed (in/min)	Mark / Shield Gases
Carbon Steel	Text	30 - 200	100	Ar/Air
	Line	45 - 200	200 - 400	Ar/Air
Stainless Steel	Text	50 - 200	100	Ar/Air
	Line	70 - 200	300 - 400	Ar/Air

Specifications are subject to change without notice. Please contact ESAB Cutting Systems for the most current specifications, numerical control, and available equipment.



## ESAB Cutting Systems

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