

SPIRIT® II 400

FINELINE™ HIGH DEFINITION PLASMA CUTTING TECHNOLOGY



Spirit II 400 shown with Automatic Gas Console (AGC) configuration



KEY FEATURES

The Spirit® II series plasma cutting power sources with FineLine™ High Definition Plasma Cutting Technology delivers the best cut quality in the industry. Our combination of patented processes, torch and consumable design ensures a precise gas flow that creates a consistent shape in the plasma arc.

- Exceptional pierce, cut and marking capabilities, virtually dross free, with high definition edge quality of 2 degrees or less of a cut edge bevel
- Designed to use up to 78% less plasma gas than the competition for lower operating costs
- Robust design components with rigorous manufacturing and testing standards for exceptional product reliability and productivity.

Processes »

Plasma Cutting and Marking

Output »

400A DC @ 100% Duty Cycle

Product Number »

See literature E15.17

Cutting Capacity

Type	Production Pierce	Max. Thickness Edge Start, No Dross
Mild Steel	2.0 (50 mm)	3.0 in. (75 mm)

OPERATING DATA

Mild Steel			
Amp	Thickness in. (mm)	Speed ipm (m/min.)	Gas
30	0.036 (1.0)	105 (2.615)	O ₂ Plasma O ₂ Shield
	0.075 (2.0)	65 (1.615)	
	0.135 (3.0)	40 (1.285)	
50	0.075 (2.5)	200 (4.885)	O ₂ Plasma Air Shield
	0.125 (3.0)	180 (4.660)	
	1/4 (6.0)	75 (2.075)	
70	0.125 (3.0)	190 (4.995)	
	1/4 (5.0)	120 (3.265)	
	3/8 (6.0)	75 (3.105)	
100	1/4 (6.0)	150 (3.950)	
	1/2 (12.0)	65 (1.850)	
	3/4 (20.0)	35 (0.800)	
150	1/4 (6.0)	165 (4.305)	
	1/2 (12.0)	90 (2.485)	
	1 (25.0)	40 (1.040)	
200	1/4 (6.0)	230 (6.100)	
	1/2 (12.0)	120 (3.160)	
	3/4 (20.0)	75 (1.810)	
	1 (25.0)	50 (1.310)	
275	1/2 (12.0)	125 (3.290)	
	3/4 (20.0)	90 (2.190)	
	1 (25.0)	65 (1.690)	
	1-1/4 (32.0)	45 (1.120)	
400	1/2 (12.0)	160 (4.205)	
	3/4 (20.0)	110 (2.700)	
	1 (25.0)	85 (2.200)	
	1-1/2 (38.0)	50 (1.275)	
	2 (50.0)	33 (0.860)	
	2-1/2 (65.0)*	15 (0.381)	
3 (75.0)*	8 (0.203)		
Aluminum			
50	0.080 (2.0)	90 (2.360)	Air Plasma N ₂ Shield
70	0.080 (2.0)	250 (6.400)	
	3/16 (5.0)	80 (1.920)	
	1/2 (12.0)	30 (0.820)	
100	1/4 (6.0)	105 (2.710)	
	3/8 (10.0)	90 (2.210)	
	1/2 (12.0)	70 (1.890)	
150	1/4 (6.0)	145 (3.770)	
	1/2 (12.0)	90 (2.430)	
	3/4 (20.0)	45 (0.990)	
200	1/4 (6.0)	190 (4.995)	
	1/2 (12.0)	110 (2.995)	
	3/4 (20.0)	65 (1.575)	
275	3/8 (10.0)	160 (3.930)	
	1/2 (12.0)	125 (3.375)	
	3/4 (20.0)	85 (2.055)	
400	1/2 (12.0)	150 (3.950)	
	1 (25.0)	75 (1.945)	
	1-1/2 (38.0)	35 (0.895)	

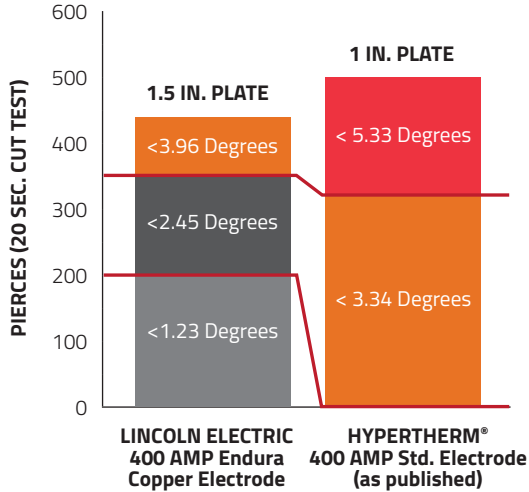
Stainless Steel			
Amp	Thickness in. (mm)	Speed ipm (m/min.)	Gas
50	0.075 (2.5)	105 (2.565)	Air Plasma N ₂ Shield
	0.120 (3.0)	65 (1.685)	
	1/4 (6.0)	40 (1.075)	
70	0.135 (3.0)	120 (3.210)	
	3/8 (6.0)	50 (2.050)	
100	3/8 (10.0)	80 (1.935)	
	1/2 (12.0)	55 (1.540)	
150	1/4 (6.0)	150 (3.910)	
	1/2 (12.0)	85 (2.330)	
	3/4 (20.0)	45 (1.030)	
200	1/4 (6.0)	200 (5.220)	H17 Plasma N ₂ Shield
	5/8 (16.0)	75 (1.890)	
	1 (25.0)	40 (1.050)	
275	1/2 (12.0)	120 (3.220)	
	3/4 (20.0)	80 (1.940)	
	1 (25.0)	55 (1.435)	
400	1/2 (12.0)	105 (3.415)	
	1 (25.0)	50 (1.690)	
	1-1/2 (38.0)	30 (0.895)	
	2 (50.0)*	18 (0.410)	
70	3/16 (5.0)	80 (2.030)	H17 Plasma N ₂ Shield
	1/4 (6.0)	100 (2.625)	
150	1/2 (12.0)	60 (1.610)	
	3/4 (20.0)	40 (0.940)	
200	3/8 (10.0)	80 (2.010)	
	5/8 (16.0)	60 (1.515)	
	1 (25.0)	35 (0.915)	
260	3/8 (10.0)	85 (2.140)	
	3/4 (20.0)	55 (1.315)	
	1 (25.0)	33 (0.875)	
400	1/2 (12.0)	105 (2.750)	
	1 (25.0)	50 (1.310)	
	1-1/2 (38.0)	30 (0.7765)	
	2 (50.0)*	18 (0.470)	

* Requires edge start or moving pierce

CUT QUALITY OVER CONSUMABLE LIFE

- ISO Range 1 ■ ISO Range 2 ■ ISO Range 3
- ISO Range 4 ■ ISO Range 5 ■ > ISO Range 5

Spirit II 400 » 400A, 1.5 in. (38.1 mm) Mild Steel
 Based on testing performed in lab conditions in 2012



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