

# SPIRIT® II 275

## FINELINE™ HIGH DEFINITION PLASMA CUTTING TECHNOLOGY



Spirit II 275 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 »

275A DC @ 100% Duty Cycle

#### Product Number »

See literature E15.17

#### Cutting Capacity

Type	Production Pierce	Max. Thickness Edge Start with Dross
Mild Steel	1.50 in. (38 mm)	2.50 in. (60 mm)

# OPERATING DATA

Mild Steel			
Amp	Thickness in. (mm)	Speed ipm (m/min.)	Gas
30	0.036 (1.0)	105 (2.615)	O <sub>2</sub> Plasma O <sub>2</sub> Shield
	0.075 (2.0)	65 (1.615)	
	0.135 (3.0)	40 (1.285)	
50	0.075 (2.5)	200 (4.885)	O <sub>2</sub> 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)	
	1-1/2 (38.0)	25 (0.645)	
	2 (50.0)*	15 (0.395)	
2.5 (65.0)*	9 (0.202)		
Aluminum			
30	0.040 (1.0)	150 (3.885)	Air Plasma N <sub>2</sub> Shield
50	0.080 (2.0)	90 (2.360)	
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)	
	1 (25.0)*	60 (1.565)	
	1-1/4 (32.0)*	45 (1.120)	
	1-1/2 (38.0)*	25 (0.645)	

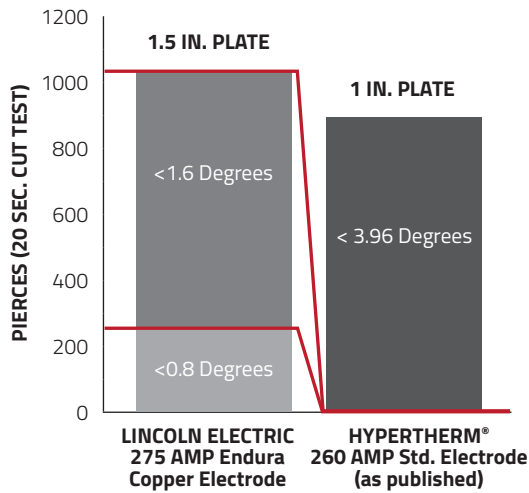
Stainless Steel			
Amp	Thickness in. (mm)	Speed ipm (m/min.)	Gas
30	0.036 (1.0)	200 (4.855)	Air Plasma Air Shield
	0.075 (2.0)	90 (3.260)	
50	0.075 (2.0)	105 (2.565)	Air Plasma N <sub>2</sub> Shield
	0.120 (3.0)	65 (1.685)	
	1/4 (6.0)	40 (1.075)	
70	0.135 (3.0)	120 (3.210)	
	3/8 (6.0)	50 (2.050)	
100	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)	
	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)	
	1-1/4 (32.0)*	35 (0.880)	
	1-1/2 (38.0)*	25 (0.640)	
70	3/16 (5.0)	80 (2.030)	H17 Plasma N <sub>2</sub> Shield
100	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)	
	1-1/4 (32.0)*	26 (0.650)	

\* Requires edge start or moving pierce

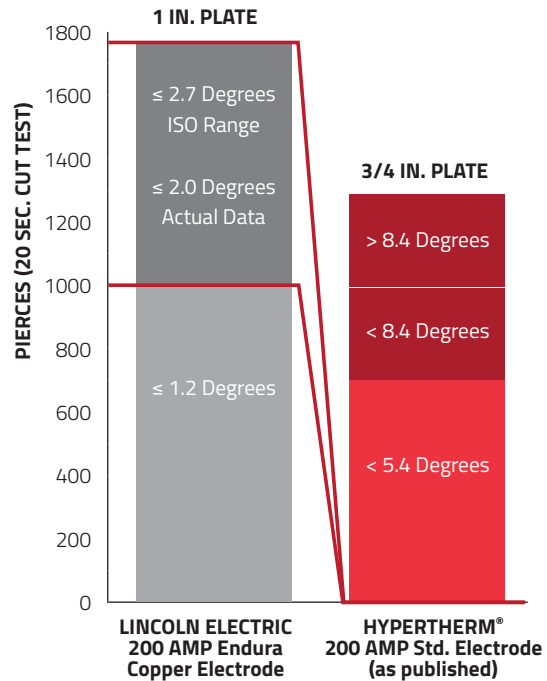
# CUT QUALITY OVER CONSUMABLE LIFE

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

**Spirit II 275 » 275A, 1.5 in. (38.1 mm) Mild Steel**  
Based on testing performed in lab conditions in 2012



**Spirit II 275 » 200A, 1 in. (25.4 mm) Mild Steel**  
Based on testing performed in lab conditions in 2014



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