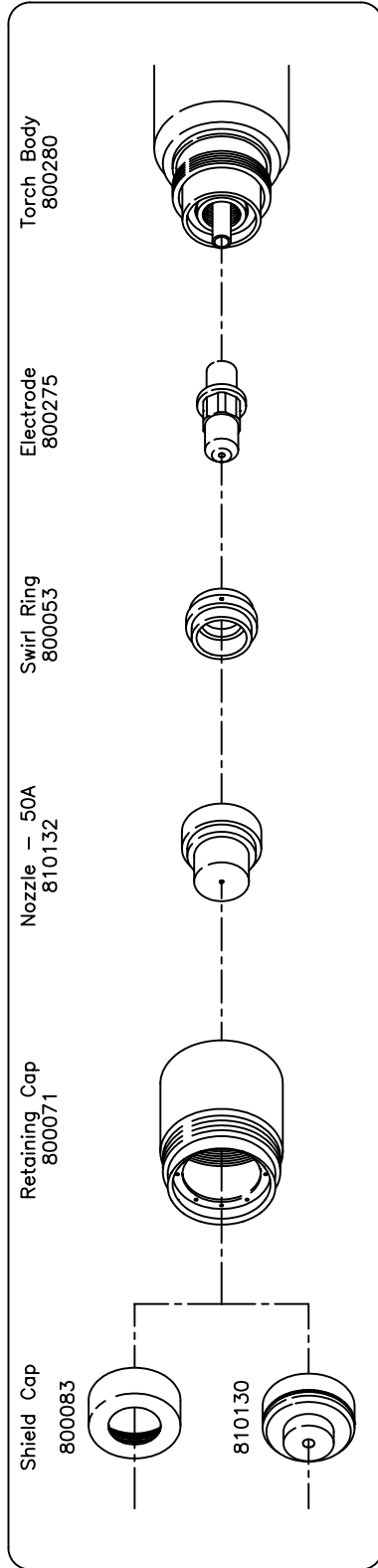


## Cutting Charts

The following conditions are intended to give the operator the best starting point to use when making a cut on a particular material type and thickness and may not reflect optimum conditions. Different metal compositions, consumable parts wear, and air quality will affect the cutting speeds and torch height.

### Cutting Chart Index

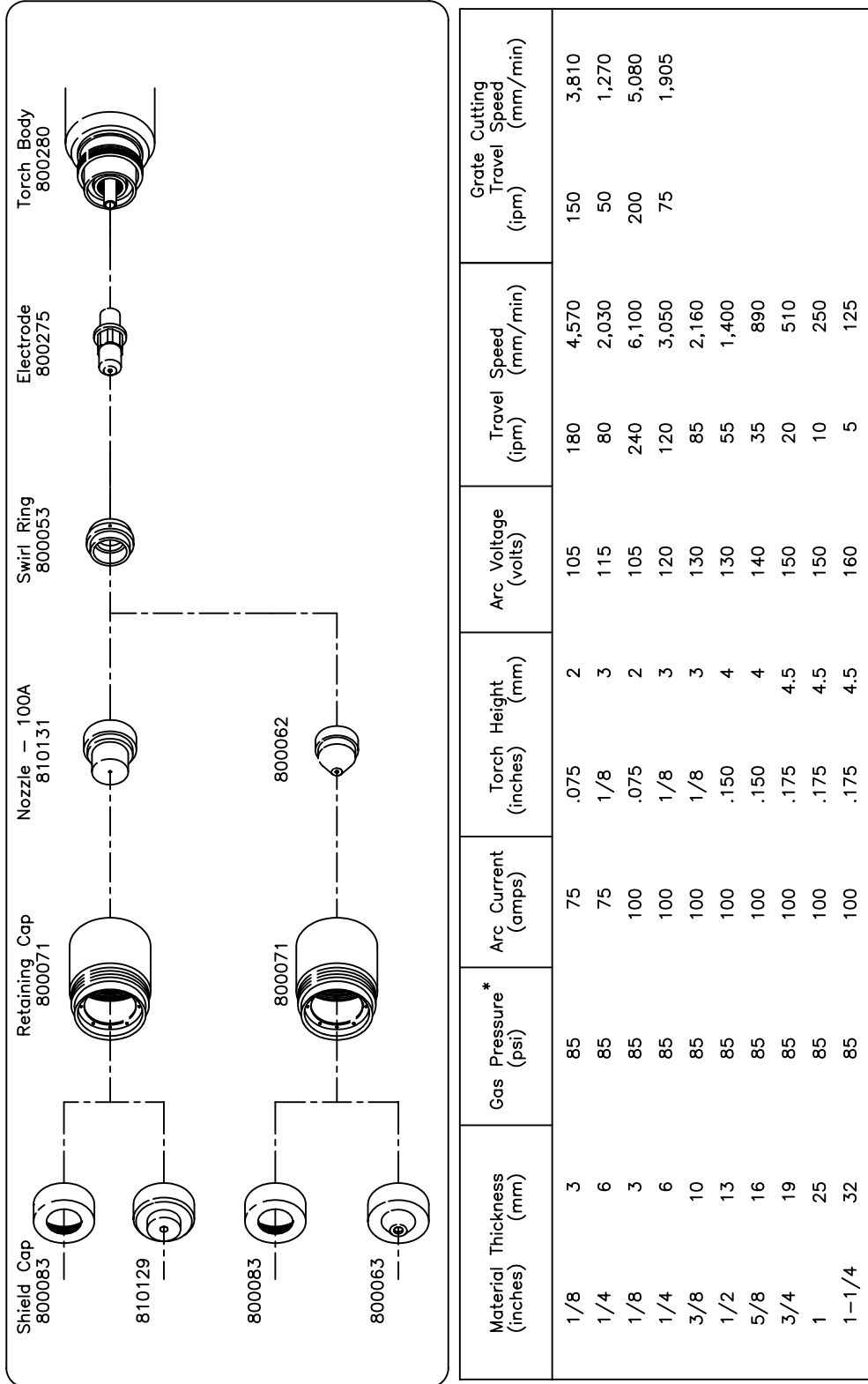
<b>Material</b>	<b>Current</b>	<b>Page</b>
Mild Steel	30-50 Amps	4-9
Mild Steel	75-100 Amps	4-10
Stainless Steel	30-50 Amps	4-11
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Aluminum	30-50 Amps	4-13
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Material Thickness (inches)	Material Thickness (mm)	Gas Pressure* (psi)	Arc Current (amps)	Torch Height (inches)	Torch Height (mm)	Arc Voltage (volts)	Travel Speed (ipm)	Travel Speed (mm/min)	Grate Cutting Travel Speed (ipm)	Grate Cutting Travel Speed (mm/min)
.015	(28 GA)	85	30	1/16	1.5	105	400	10,160	205	5,205
.018	(26 GA)	85	30	1/16	1.5	105	350	8,890	180	4,570
.024	(24 GA)	85	30	1/16	1.5	105	325	8,255	165	4,190
.035	(20 GA)	85	30	1/16	1.5	105	300	7,620	155	3,935
.048	(18 GA)	85	30	1/16	1.5	105	250	6,350	130	3,300
1/16	1.5	85	30	.075	2	105	190	4,825	100	2,540
1/8	3	85	50	.075	2	105	155	3,935	80	2,030
1/4	6	85	50	1/8	3	115	50	1,270	25	635

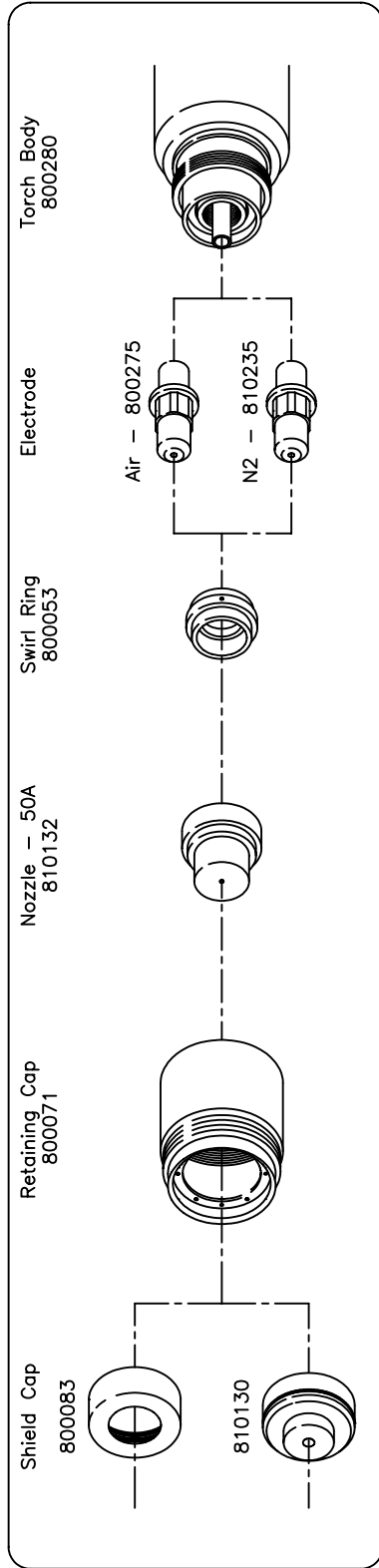
\* Gas pressure with set/run switch in the set position  
 1 inch = 25.4 mm; 1 psi = .0689 bar = 6.895 KPa

Figure 4-4 Mild Steel Cutting Chart (30-50 amps)



\* Gas pressure with set/run switch in the set position  
 1 inch = 25.4 mm; 1 psi = .0689 bar = 6.895 KPa

Figure 4-5 Mild Steel Cutting Chart (75-100 amps)

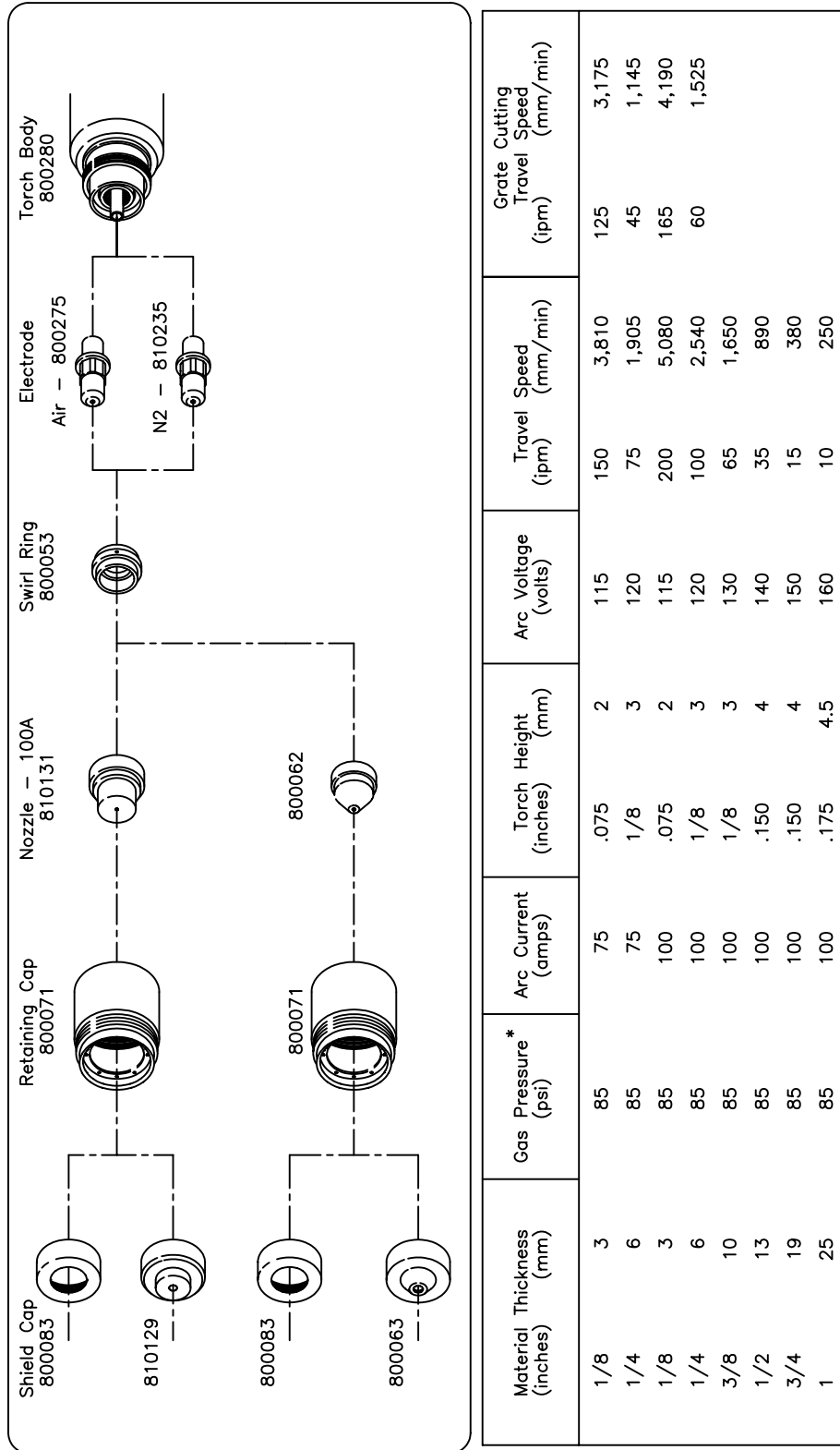


Material Thickness (inches)	Material Thickness (mm)	Gas Pressure* (psi)	Arc Current (amps)	Torch Height (inches)	Torch Height (mm)	Arc Voltage (volts)	Travel Speed (ipm)	Travel Speed (mm/min)	Grate Cutting Travel Speed (ipm)	Grate Cutting Travel Speed (mm/min)
.015	(.28 GA)	85	30	1/16	1.5	110	320	8,125	165	4,190
.018	(.26 GA)	85	30	1/16	1.5	110	280	7,110	145	3,680
.024	(.24 GA)	85	30	1/16	1.5	110	260	6,600	135	3,430
.035	(.20 GA)	85	30	1/16	1.5	110	240	6,100	125	3,175
.048	(.18 GA)	85	30	1/16	1.5	110	180	4,570	95	2,415
1/16	1.5	85	30	.075	2	110	120	3,050	60	1,525
1/8	3	85	50	.075	2	115	100	2,540	50	1,270
1/4	6	85	50	1/8	3	120	35	890		

\* Gas pressure with set/run switch in the set position  
 1 inch = 25.4 mm; 1 psi = .0689 bar = 6.895 KPa

Note: When using nitrogen as the cutting gas, the speeds and arc voltages will be slightly different than shown in the chart.

Figure 4-6 Stainless Steel Cutting Chart (30-50 amps)

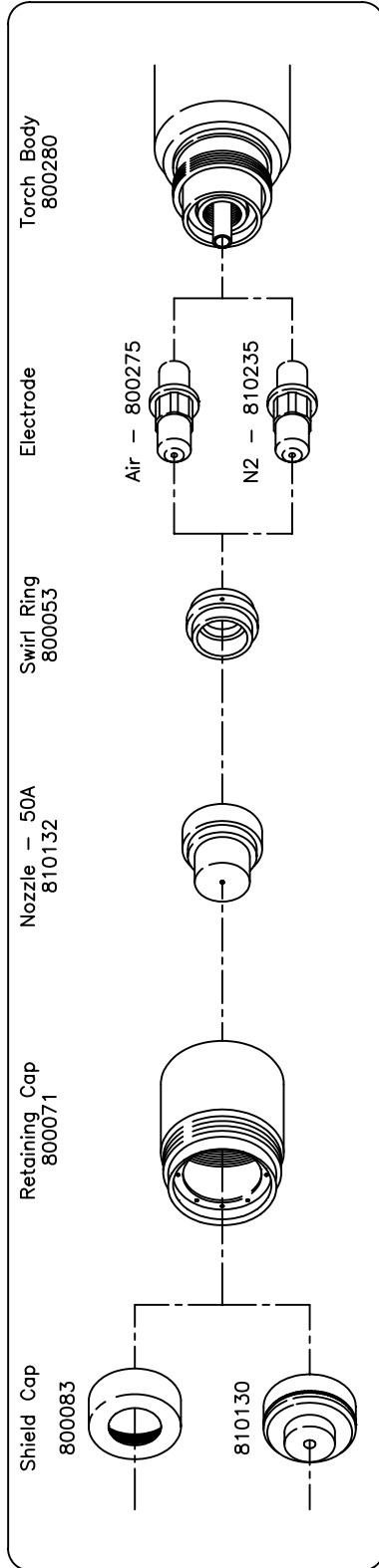


\* Gas pressure with set/run switch in the set position

1 inch = 25.4 mm; 1 psi = .0689 bar = 6.895 KPa

Note: When using nitrogen as the cutting gas, the speeds and arc voltages will be slightly different than shown in the chart.

Figure 4-7 Stainless Steel Cutting Chart (75-100 amps)

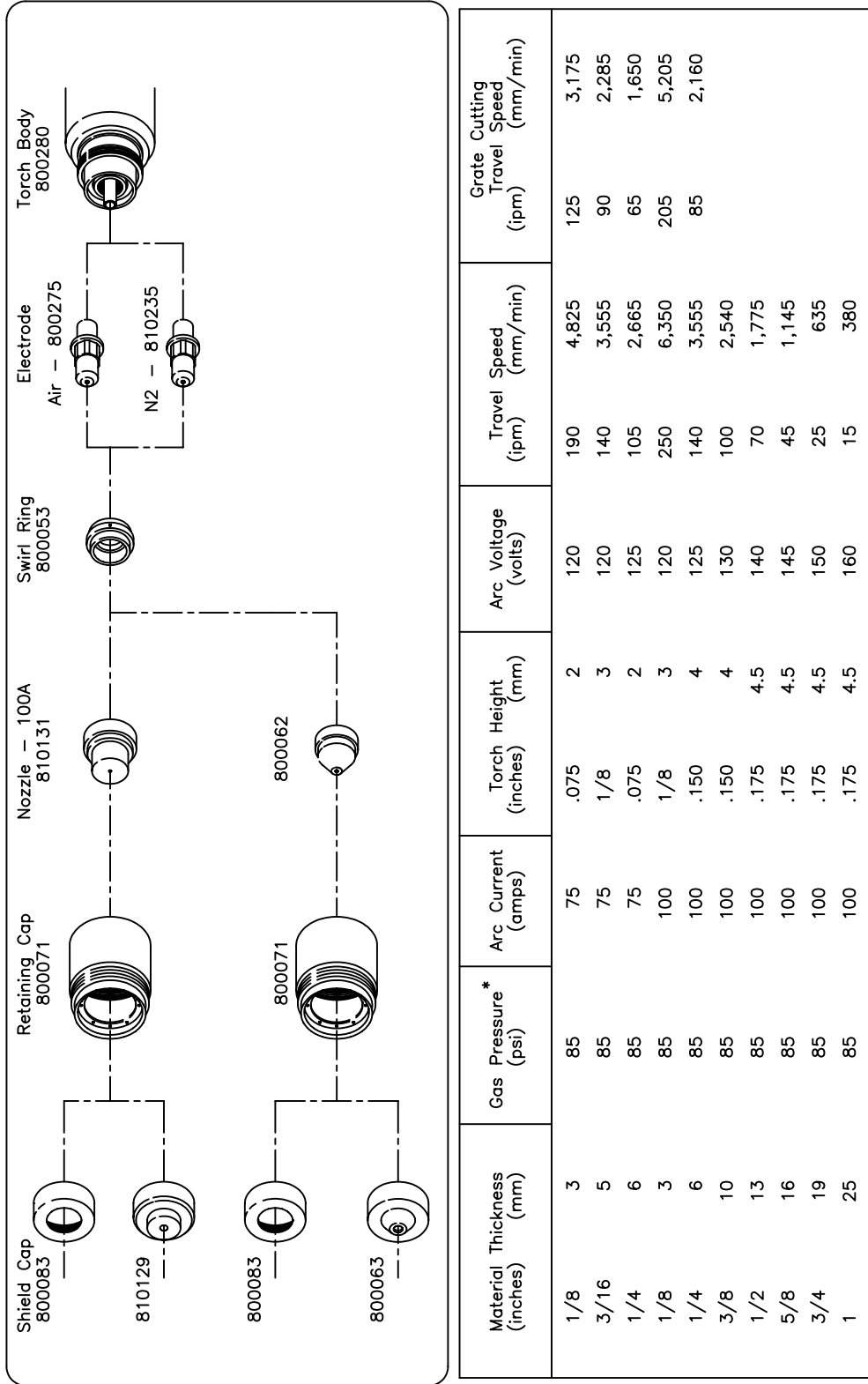


Material Thickness (inches)	Material Thickness (mm)	Gas Pressure (psi)	Arc Current (amps)	Torch Height (inches)	Torch Height (mm)	Arc Voltage (volts)	Travel Speed (ipm)	Travel Speed (mm/min)	Grate Cutting Travel Speed (ipm)	Grate Cutting Travel Speed (mm/min)
1/32	.8	85	30	1/16	1.5	110	300	7,620	150	3,810
1/16	1.5	85	30	1/16	1.5	110	250	6,350	130	3,300
1/8	3	85	50	.075	2	120	165	4,190	85	2,160
1/4	6	85	50	1/8	3	125	70	1,775	35	890
3/8	10	85	50	.150	4	130	45	1,140		

\* Gas pressure with set/run switch in the set position  
 1 inch = 25.4 mm; 1 psi = .0689 bar = 6.895 KPa

Note: When using nitrogen as the cutting gas, the speeds and arc voltages will be slightly different than shown in the chart.

Figure 4-8 Aluminum Cutting Chart (30-50 amps)



\* Gas pressure with set/run switch in the set position

1 inch = 25.4 mm; 1 psi = .0689 bar = 6.895 KPa

Note: When using nitrogen as the cutting gas, the speeds and arc voltages will be slightly different than shown in the chart.

Figure 4-9 Aluminum Cutting Chart (75-100 amps)