

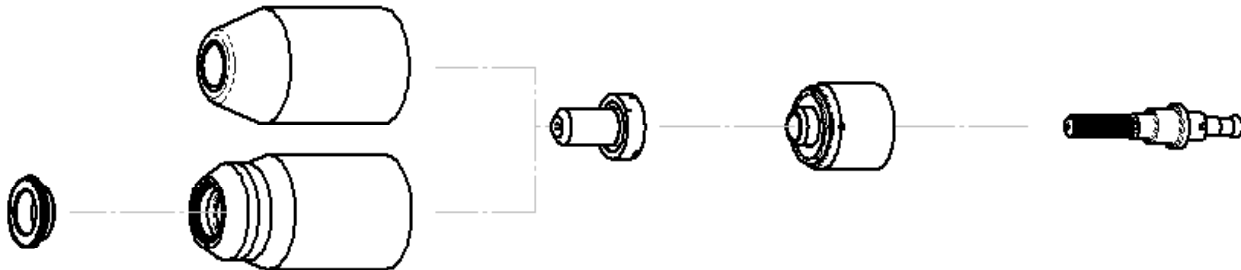
# CUTMASTER A120

## 4T.08 Recommended Cutting Speeds for Machine and Automated Torches With Exposed Tip

Mild Steel

40A

Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8208	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
20		0.036	70 (25') 75 (50')	101	0.14	160	0.18	0.0	0.05
16		0.060		103	0.14	140	0.18	0.0	0.05
14		0.075		105	0.14	120	0.18	0.1	0.06
12		0.105		108	0.14	80	0.18	0.2	0.06
10		0.135		110	0.14	60	0.18	0.3	0.06
	3/16	0.188		111	0.14	55	0.18	0.4	0.06
	1/4	0.250		117	0.14	40	0.18	0.5	0.07
	3/8	0.375		119	0.14	25	0.18	1.2	0.07
	1/2	0.500		120	0.14	15	0.2	2.0	0.07

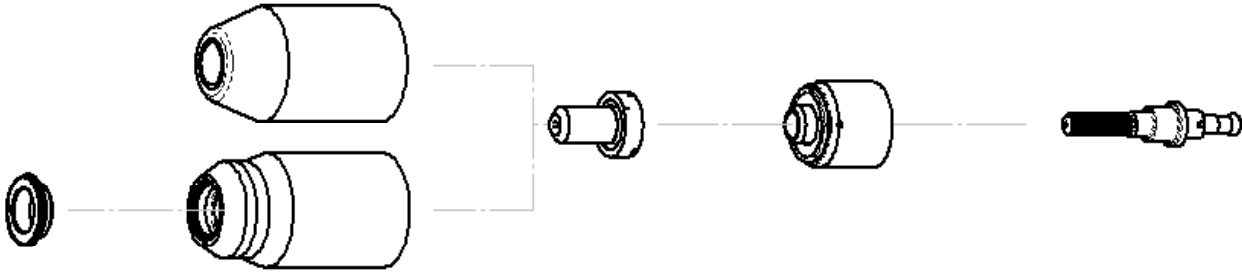
**CUTMASTER A120**

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed	
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)	
1	4.8 (7.6m)	101	3.6	3990	4.6	0.0	1.1	
2		105	3.6	2920	4.6	0.1	1.4	
3		109	3.6	1810	4.6	0.3	1.5	
4		110	3.6	1470	4.6	0.3	1.6	
5		112	3.6	1345	4.6	0.4	1.6	
6		5.2 (15.2m)	116	3.6	1100	4.6	0.5	1.7
8			118	3.6	815	4.6	1.0	1.7
10			119	3.6	595	4.6	1.5	1.8
12			120	3.6	435	5.1	2.0	1.8

**BOLD TYPE** indicates maximum piercing parameters.

# CUTMASTER A120

## Stainless Steel 40A Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8208	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
18		0.050	75 (25') 80 (50')	110	0.19	60	0.20	0.00	0.07
16		0.063		100	0.19	50	0.20	0.00	0.07
14		0.078		105	0.19	45	0.20	0.10	0.07
12		0.109		110	0.19	40	0.20	0.20	0.07
10		0.141		108	0.19	35	0.20	0.30	0.07
	3/16	0.188		110	0.19	30	0.20	0.40	0.07
	1/4	0.250		120	0.19	18	0.20	0.50	0.08
	3/8	0.375		126	0.19	10	0.20	2.00	0.08
	1/2	0.500		118	0.19	8	<i>Edge start</i>		0.09

**CUTMASTER A120**

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.2 (7.6) 5.5 (15.2)	112	4.8	1670	4.8	0.0	1.7
2		105	4.8	1140	5.1	0.1	1.8
3		109	4.8	980	5.1	0.2	1.8
4		109	4.8	845	5.1	0.3	1.8
5		111	4.8	715	5.1	0.4	1.8
6		118	4.8	525	5.1	0.5	2.0
8		123	4.8	350	5.1	1.5	2.0
<b>10</b>		<b>125</b>	<b>4.8</b>	<b>245</b>	<b>5.1</b>	<b>2.0</b>	<b>2.0</b>
<b>12</b>		<b>120</b>	<b>4.8</b>	<b>215</b>	<b>Edge Start</b>		<b>2.2</b>

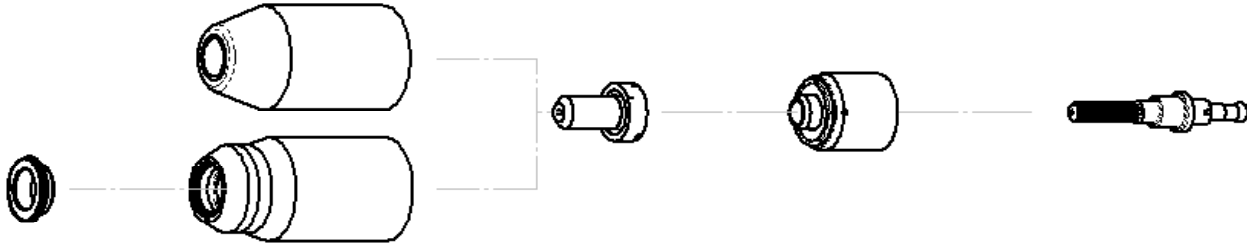
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

## Aluminum

### 40A

### Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8208	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
20		0.040	70 (25') 75 (50')	95	0.16	300	0.16	0.0	0.06
16		0.063		97	0.16	170	0.16	0.0	0.06
12		0.097		113	0.16	100	0.16	0.2	0.07
11		0.125		115	0.16	90	0.18	0.3	0.07
9		0.160		113	0.18	85	0.18	0.4	0.07
	3/16	0.188		116	0.18	75	0.18	0.5	0.07
	1/4	0.250		128	0.18	30	0.18	1.0	0.08
	3/8	0.375		150	0.18	10	<i>Edge Start</i>		0.09

**CUTMASTER A120**

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1.0	4.8 (7.6m) 5.2 (15.2m)	95	4.1	7620	4.1	0.0	1.5
2.0		104	4.1	3500	4.1	0.2	1.6
3.0		115	4.1	2350	4.6	0.3	1.7
4.0		113	4.6	2170	4.6	0.4	1.7
5.0		118	4.6	1740	4.6	0.5	1.8
<b>6.0</b>		<b>125</b>	<b>4.6</b>	<b>1015</b>	<b>4.6</b>	<b>0.8</b>	<b>1.9</b>
<b>8.0</b>		<b>139</b>	<b>4.6</b>	<b>500</b>	<b><i>Edge Start</i></b>		<b>2.0</b>
<b>10.0</b>		<b>153</b>	<b>4.6</b>	<b>180</b>	<b><i>Edge Start</i></b>		<b>2.2</b>

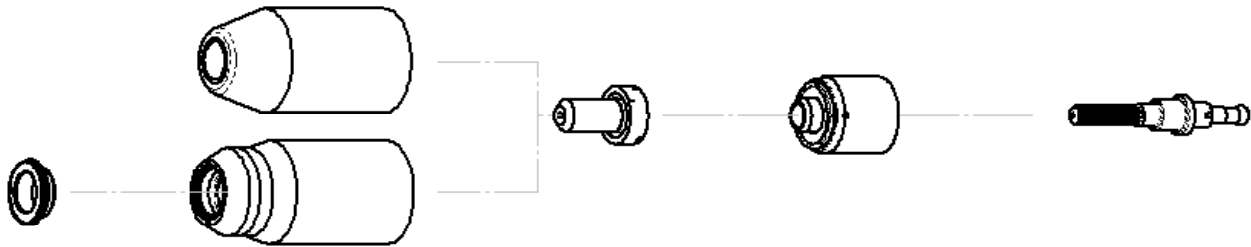
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

Mild Steel

60A

Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8210	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.060	85 (25')	118	0.19	290	0.19	0.00	0.08
14		0.075		120	0.19	285	0.19	0.10	0.08
11		0.120		118	0.19	180	0.19	0.10	0.08
10		0.135		119	0.19	176	0.19	0.10	0.07
	3/16	0.188		121	0.19	100	0.19	0.20	0.08
	1/4	0.250		122	0.19	80	0.19	0.30	0.08
	3/8	0.375		124	0.19	50	0.19	0.50	0.09
	1/2	0.500		132	0.19	26	0.19	0.75	0.10
	5/8	0.625		135	0.19	19	<i>Edge Start</i>		0.10
	3/4	0.750		136	0.19	14	<i>Edge Start</i>		0.08
	1	1.000	150	0.19	6	<i>Edge Start</i>		0.11	

# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	115	4.8	7540	4.8	0	2.1
2		120	4.8	7015	4.0	0.10	1.9
3		118	4.8	4570	4.8	0.10	0.1
4		120	4.8	3650	4.8	0.20	1.9
5		121	4.8	2465	4.8	0.20	2.1
6		122	4.8	2145	4.8	0.30	2.0
8		123	4.8	1635	4.8	0.40	2.2
10		125	4.8	1180	4.8	0.60	2.4
12		<b>130</b>	<b>4.8</b>	<b>795</b>	<b>4.8</b>	<b>0.75</b>	<b>2.4</b>
15		<b>134</b>	<b>4.8</b>	<b>530</b>	<b>Edge Start</b>		<b>2.4</b>
20		<b>138</b>	<b>4.8</b>	<b>325</b>	<b>Edge Start</b>		<b>2.2</b>
25		<b>149</b>	<b>4.8</b>	<b>165</b>	<b>Edge Start</b>		<b>2.7</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

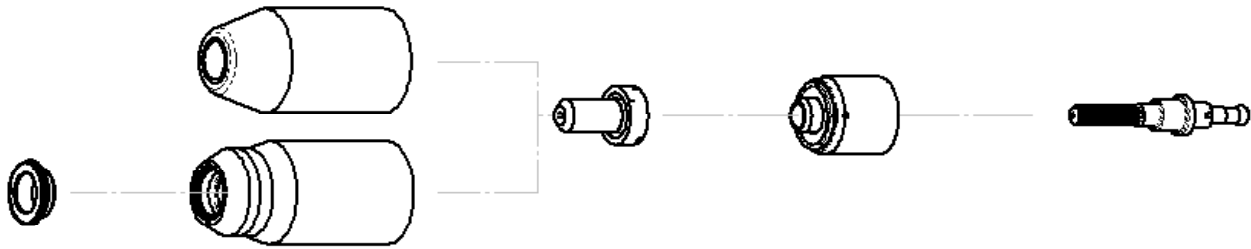


# CUTMASTER A120

## Stainless Steel

### 60A

### Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8210	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.063	85 (25') 90 (50')	119	0.19	350	0.20	0.00	0.05
14		0.078		116	0.19	300	0.20	0.10	0.07
11		0.125		123	0.19	150	0.20	0.10	0.07
10		0.141		118	0.19	125	0.20	0.10	0.08
	3/16	0.188		122	0.19	90	0.20	0.20	0.08
	1/4	0.250		123	0.19	65	0.20	0.30	0.09
	3/8	0.375		130	0.19	30	0.20	0.50	0.09
	1/2	0.500		132	0.19	21	0.20	0.90	0.08
	5/8	0.625		132	0.19	14	<b>Edge Start</b>		0.11
	3/4	0.750		135	0.19	10	<b>Edge Start</b>		0.10

# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	124	4.8	10890	5.1	0.00	0.8
2		116	4.8	7560	5.1	0.10	1.7
3		122	4.8	4365	5.1	0.10	1.7
4		119	4.8	2865	5.1	0.20	2.1
5		122	4.8	2195	5.1	0.20	2.1
6		123	4.8	1790	5.1	0.30	2.2
8		127	4.8	1190	5.1	0.40	2.2
10		130	4.8	725	5.1	0.50	2.2
<b>12</b>		<b>132</b>	<b>4.8</b>	<b>580</b>	<b>5.1</b>	<b>0.90</b>	<b>2.1</b>
<b>15</b>		<b>132</b>	<b>4.8</b>	<b>405</b>	<b><i>Edge Start</i></b>		<b>2.6</b>
<b>20</b>		<b>136</b>	<b>4.8</b>	<b>230</b>	<b><i>Edge Start</i></b>		<b>2.5</b>

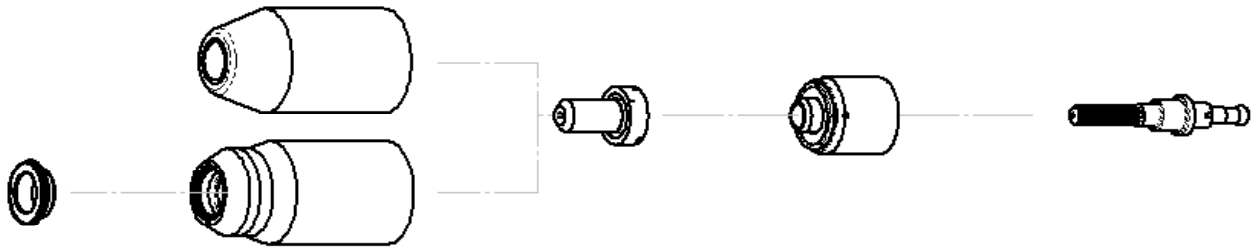
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

## Aluminum

### 60A

### Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8210	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.064	85 (25') 90 (50')	123	0.25	440	0.25	0.00	0.08
14		0.079		126	0.25	300	0.25	0.10	0.09
11		0.120		128	0.25	250	0.25	0.10	0.09
	3/16	0.188		132	0.25	170	0.25	0.20	0.09
	1/4	0.250		132	0.25	85	0.25	0.30	0.09
	3/8	0.375		141	0.25	45	0.25	0.50	0.10
	1/2	0.500		148	0.25	30	0.25	0.80	0.09
	5/8	0.625		145	0.19	18	<i>Edge Start</i>		0.08
	3/4	0.750		147	0.19	12	<i>Edge Start</i>		0.10

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	118	6.4	17010	6.4	0.00	1.8
2		126	6.4	7680	6.4	0.10	2.3
3		128	6.4	6410	6.4	0.10	2.3
4		130	6.4	5230	6.4	0.20	2.3
5		132	6.4	4010	6.4	0.20	2.4
6		132	6.4	2640	6.4	0.30	2.4
8		137	6.4	1630	6.4	0.40	2.4
10		142	6.4	1085	6.4	0.60	2.4
12		<b>146</b>	<b>6.4</b>	<b>845</b>	<b>6.4</b>	<b>0.70</b>	<b>2.3</b>
15		<b>146</b>	<b>4.8</b>	<b>540</b>	<b>Edge Start</b>		<b>2.1</b>
20		<b>148</b>	<b>4.8</b>	<b>260</b>	<b>Edge Start</b>		<b>2.5</b>

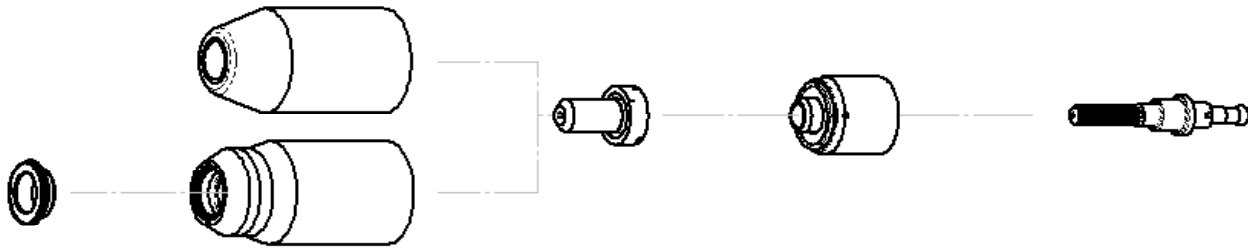
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

Mild Steel

80A

Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8211	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed	
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)	
16		0.060	85 (25')	110	0.19	320	0.20	0.00	0.06	
11		0.120		113	0.19	230	0.20	0.10	0.07	
10		0.135		110	0.19	180	0.20	0.20	0.07	
	3/16	0.188		110	0.19	136	0.20	0.30	0.07	
	1/4	0.250		115	0.19	100	0.20	0.40	0.09	
	3/8	0.375		90 (50')	125	0.19	42	0.20	0.50	0.09
	1/2	0.500			123	0.19	40	0.20	0.60	0.09
	5/8	0.625			133	0.19	18	0.20	0.75	0.10
	3/4	0.750			140	0.25	18	<i>Edge Start</i>		0.11
	7/8	0.875			150	0.25	10	<i>Edge Start</i>		0.11
	1	1.000	152		0.25	8	<i>Edge Start</i>		0.13	

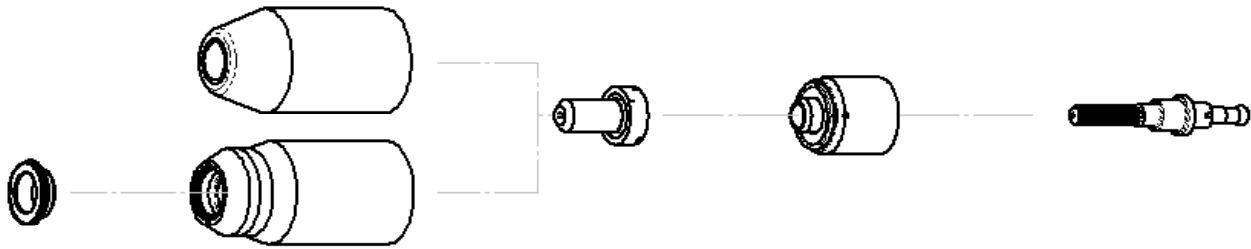
# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	109	4.8	8915	5.1	0.00	1.5
2		111	4.8	7415	5.1	0.10	1.7
3		113	4.8	5915	5.1	0.10	1.8
4		110	4.8	4095	5.1	0.30	1.7
5		111	4.8	3325	5.1	0.30	1.8
6		114	4.8	2745	5.1	0.40	2.2
8		120	4.8	1775	5.1	0.50	2.3
10		125	4.8	1060	5.1	0.50	2.3
12		123	4.8	1025	5.1	0.60	2.3
<b>15</b>		<b>130</b>	<b>4.8</b>	<b>610</b>	<b>5.1</b>	<b>0.75</b>	<b>2.5</b>
<b>20</b>		<b>143</b>	<b>6.4</b>	<b>395</b>	<b>Edge Start</b>		<b>2.7</b>
<b>25</b>		<b>152</b>	<b>6.4</b>	<b>210</b>	<b>Edge Start</b>		<b>3.2</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

## Stainless Steel 80A Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8211	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.063	85 (25') 90 (50')	110	0.19	340	0.25	0.00	0.06
11		0.125		115	.0.19	300	0.25	0.10	0.06
10		0.141		115	0.19	280	0.25	0.10	0.06
	3/16	0.188		115	0.19	140	0.25	0.20	0.07
	1/4	0.250		118	0.19	100	0.25	0.30	0.08
	3/8	0.375		119	0.19	45	0.25	0.40	0.08
	1/2	0.500		124	0.19	26	0.25	0.80	0.10
	5/8	0.625		133	0.19	16	<i>Edge Start</i>		0.10
	3/4	0.750		136	0.19	10	<i>Edge Start</i>		0.11

# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	108	4.8	9020	6.4	0.00	1.5
2		111	4.8	8380	6.4	0.00	1.5
3		114	4.8	7730	6.4	0.10	1.5
4		115	4.8	5865	6.4	0.20	1.6
5		115	4.8	3410	6.4	0.20	1.8
6		117	4.8	2765	6.4	0.30	1.9
8		119	4.8	1815	6.4	0.40	2.0
10		120	4.8	1070	6.4	0.60	2.1
12		<b>123</b>	<b>4.8</b>	<b>765</b>	<b>6.4</b>	<b>0.80</b>	<b>2.3</b>
15		<b>131</b>	<b>4.8</b>	<b>475</b>	<b><i>Edge Start</i></b>		<b>2.5</b>
20		<b>137</b>	<b>4.8</b>	<b>205</b>	<b><i>Edge Start</i></b>		<b>3.0</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

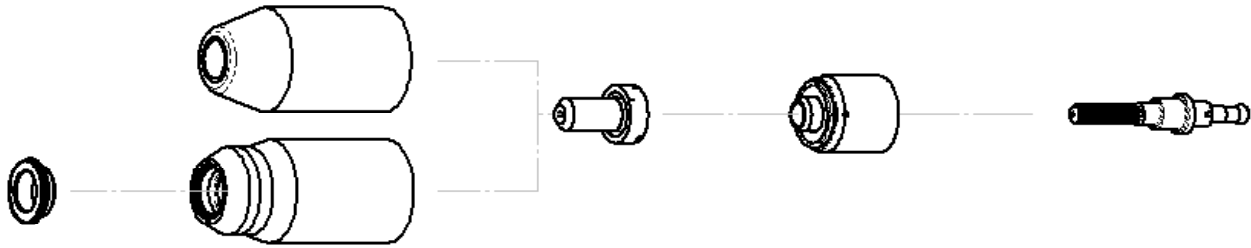


# CUTMASTER A120

## Aluminum

### 80A

### Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8211	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.064	85 (25') 90 (50')	116	0.25	350	0.25	0.00	0.10
11		0.120		120	0.25	280	0.25	0.10	0.10
	3/16	0.188		124	0.25	180	0.25	0.20	0.10
	1/4	0.250		130	0.25	110	0.25	0.30	0.09
	3/8	0.375		136	0.25	55	0.25	0.40	0.11
	1/2	0.500		139	0.25	38	0.25	0.60	0.11
	5/8	0.625		136	0.19	26	0.25	0.75	0.10
	3/4	0.750		150	0.19	14	<i>Edge Start</i>		0.12
	7/8	0.875		153	0.19	10	<i>Edge Start</i>		0.11

# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	114	6.4	8890	6.4	0.00	2.4
2		117	6.4	8420	6.4	0.00	2.5
3		120	6.4	7170	6.4	0.10	2.5
4		122	6.4	5710	6.4	0.20	2.5
5		125	6.4	4315	6.4	0.20	2.5
6		129	6.4	3190	6.4	0.30	2.4
8		133	6.4	2070	6.4	0.40	2.5
10		136	6.4	1330	6.4	0.50	2.7
12		138	6.4	1060	6.4	0.50	2.9
<b>15</b>		<b>137</b>	<b>4.8</b>	<b>745</b>	<b>6.4</b>	<b>0.75</b>	<b>2.5</b>
<b>20</b>		<b>151</b>	<b>4.8</b>	<b>325</b>	<b>Edge Start</b>		<b>3.0</b>

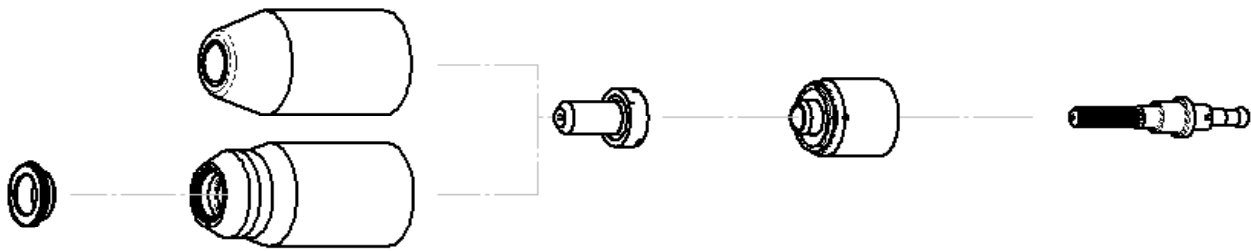
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

Mild Steel

100A

Air Plasma / Air Shield



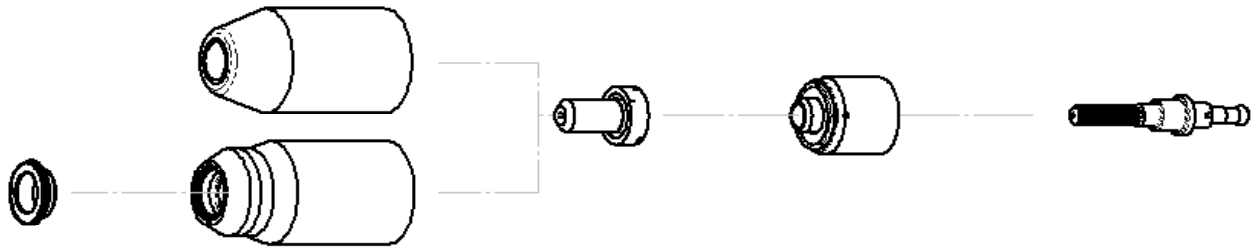
Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8212	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	75 (25') 75 (50')	110	0.18	85	0.20	0.10	0.09
	3/8	0.375		112	0.18	75	0.20	0.20	0.09
	1/2	0.500		115	0.18	45	0.20	0.40	0.10
	5/8	0.625		118	0.18	30	0.20	0.60	0.11
	<b>3/4</b>	<b>0.750</b>		<b>120</b>	<b>0.18</b>	<b>20</b>	<b>0.20</b>	<b>1.20</b>	<b>0.12</b>
	<b>1</b>	<b>1.000</b>		<b>123</b>	<b>0.18</b>	<b>15</b>	<b>Edge Start</b>		<b>0.12</b>
	<b>1-1/4</b>	<b>1.250</b>		<b>128</b>	<b>0.18</b>	<b>8</b>	<b>Edge Start</b>		<b>0.13</b>

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6			5.2 (7.6m) 5.2 (15.2m)	110	4.6	2200	5.1	0.10	2.3
8				111	4.6	2030	5.1	0.10	2.3
10				112	4.6	1790	5.1	0.20	2.3
12				114	4.6	1310	5.1	0.40	2.5
15				117	4.6	870	5.1	0.60	2.7
<b>20</b>				<b>120</b>	<b>4.6</b>	<b>490</b>	<b>5.0</b>	<b>1.20</b>	<b>3.0</b>
<b>25</b>				<b>123</b>	<b>4.6</b>	<b>390</b>	<b>Edge Start</b>		<b>3.0</b>
<b>30</b>				<b>127</b>	<b>4.6</b>	<b>250</b>	<b>Edge Start</b>		<b>3.2</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

**Stainless Steel  
100A  
Air Plasma / Air Shield**



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8212	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	75 (25') 75 (50')	102	0.16	100	0.18	0.00	0.09
	3/8	0.375		106	0.16	65	0.18	0.10	0.10
	1/2	0.500		<b>109</b>	0.16	45	0.18	0.30	0.10
	<b>5/8</b>	<b>0.625</b>		<b>123</b>	<b>0.19</b>	<b>20</b>	<b>0.23</b>	<b>2.00</b>	<b>0.11</b>
	<b>3/4</b>	<b>0.750</b>		<b>128</b>	<b>0.19</b>	<b>15</b>	<b>Edge Start</b>		<b>0.12</b>
	<b>1</b>	<b>1.000</b>			135	<b>0.19</b>	<b>10</b>	<b>Edge Start</b>	
Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6			5.2 (7.6m) 5.2 (15.2m)	102	4.1	2630	4.6	0.00	2.3
8				104	4.1	2080	4.6	0.10	2.4
10				106	4.1	1575	4.6	0.20	2.4
12				108	4.1	1255	4.6	0.30	2.4
<b>15</b>				<b>119</b>	<b>4.6</b>	<b>685</b>	<b>5.7</b>	<b>2.00</b>	<b>2.7</b>
<b>20</b>				<b>129</b>	<b>4.8</b>	<b>360</b>	<b>Edge Start</b>		<b>3.1</b>
<b>25</b>				<b>135</b>	<b>4.8</b>	<b>260</b>	<b>Edge Start</b>		<b>3.2</b>

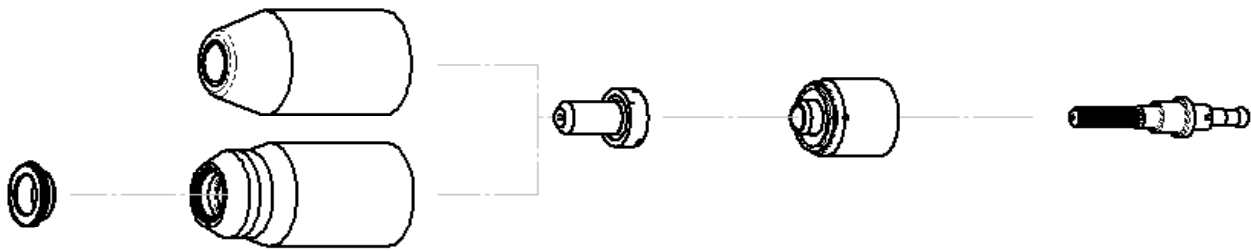
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

## Aluminum

### 100A

### Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8212	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	75 (25')	110	0.19	100	0.20	0.00	0.09
	3/8	0.375		124	0.19	65	0.20	0.20	0.10
	1/2	0.500		128	0.19	45	0.20	0.30	0.11
	5/8	0.625	75 (50')	132	0.19	35	0.20	0.50	0.11
	<b>3/4</b>	<b>0.750</b>		<b>135</b>	<b>0.19</b>	<b>20</b>	<b>0.20</b>	<b>2.00</b>	<b>0.13</b>
	<b>1</b>	<b>1.000</b>		<b>140</b>	<b>0.19</b>	<b>10</b>	<b>Edge Start</b>		<b>0.13</b>

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
	6		5.2 (7.6m) 5.2 (15.2m)	109	4.8	2630	5.1	0.00	2.3
	8			117	4.8	2080	5.1	0.10	2.5
	10			125	4.8	1575	5.1	0.20	2.7
	12			127	4.8	1255	5.1	0.30	2.7
	15			131	4.8	960	5.1	0.50	2.8
	<b>20</b>			<b>136</b>	<b>4.8</b>	<b>470</b>	<b>6.0</b>	<b>2.00</b>	<b>3.3</b>
	<b>25</b>			<b>140</b>	<b>4.8</b>	<b>270</b>	<b>Edge Start</b>		<b>3.4</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

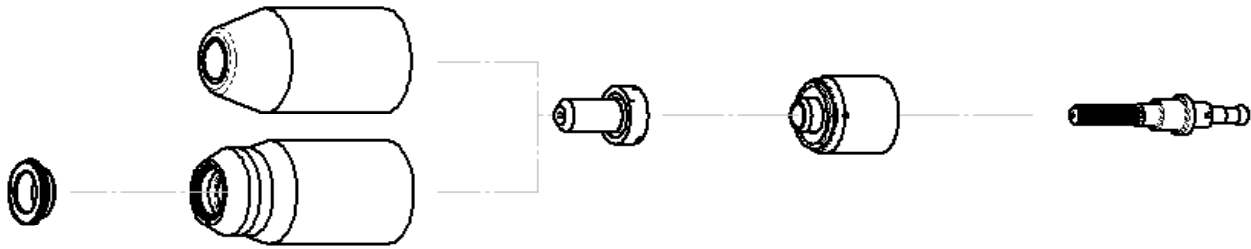
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# CUTMASTER A120

Mild Steel

120A

Air Plasma / Air Shield



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8253	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	80 (25') 80 (50')	134	0.19	150	0.25	0.10	0.11
	3/8	0.375		141	0.19	85	0.25	0.30	0.11
	1/2	0.500		141	0.19	70	0.25	0.80	0.12
	5/8	0.625		146	0.19	45	0.25	1.00	0.12
	<b>3/4</b>	<b>0.750</b>		<b>150</b>	<b>0.19</b>	<b>30</b>	<b>0.25</b>	<b>1.20</b>	<b>0.12</b>
	<b>7/8</b>	<b>0.875</b>		<b>160</b>	<b>0.25</b>	<b>25</b>	<b>Edge Start</b>		<b>0.14</b>
	<b>1</b>	<b>1.000</b>		<b>163</b>	<b>0.25</b>	<b>19</b>	<b>Edge Start</b>		<b>0.14</b>
	<b>1-1/4</b>	<b>1.250</b>		<b>168</b>	<b>0.25</b>	<b>12</b>	<b>Edge Start</b>		<b>0.15</b>
	<b>1-1/2</b>	<b>1.500</b>		<b>172</b>	<b>0.25</b>	<b>8</b>	<b>Edge Start</b>		<b>0.16</b>

# CUTMASTER A120

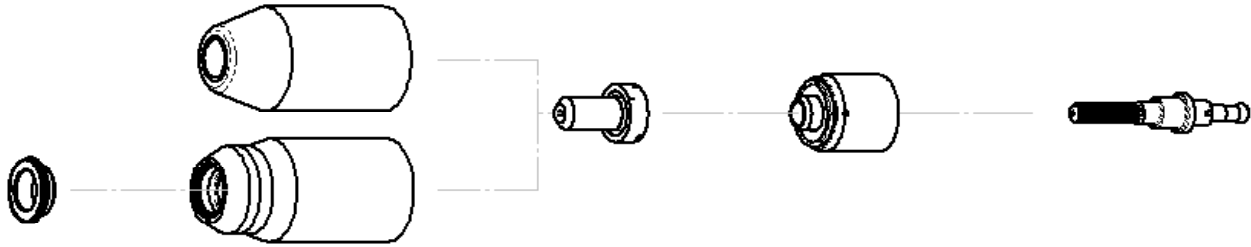
Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6.0	5.5 (7.6m) 5.5 (15.2m)	133	4.8	3990	6.4	0.1	2.5
8.0		138	4.8	2950	6.4	0.2	2.7
10.0		141	4.8	2100	6.4	0.4	2.8
12.0		141	4.8	1860	6.4	0.6	2.9
15.0		145	4.8	1320	6.4	1.0	3.0
<b>20.0</b>		<b>153</b>	<b>4.8</b>	<b>720</b>	<b>6.4</b>	<b>1.2</b>	<b>3.2</b>
<b>25.0</b>		<b>163</b>	<b>6.4</b>	<b>500</b>	<b>Edge Start</b>		<b>3.6</b>
<b>30.0</b>		<b>167</b>	<b>6.4</b>	<b>355</b>	<b>Edge Start</b>		<b>3.8</b>
<b>35.0</b>		<b>170</b>	<b>6.4</b>	<b>255</b>	<b>Edge Start</b>		<b>4.0</b>
<b>40.0</b>		<b>173</b>	<b>6.4</b>	<b>175</b>	<b>Edge Start</b>		<b>4.2</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.



# CUTMASTER A120

## Stainless Steel 120A Air Plasma / Air Shield

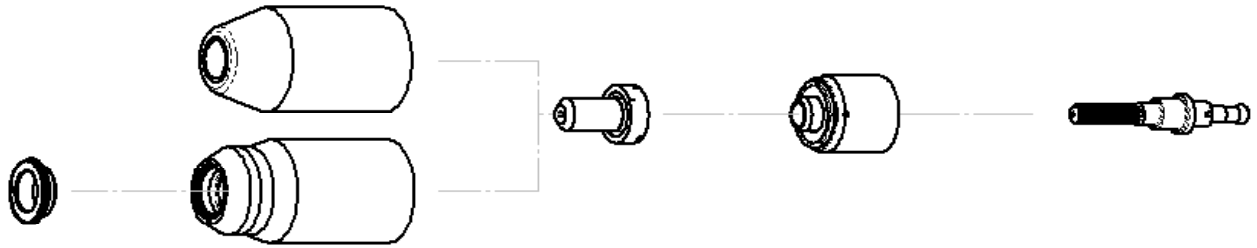


Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8253	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	80 (25') 80 (50')	133	0.19	180	0.25	0.20	0.10
	3/8	0.375		136	0.19	100	0.25	0.40	0.11
	1/2	0.500		140	0.19	60	0.25	0.80	0.11
	<b>5/8</b>	<b>0.625</b>		<b>152</b>	<b>0.25</b>	<b>40</b>	<b>0.30</b>	<b>1.20</b>	<b>0.13</b>
	<b>3/4</b>	<b>0.750</b>		<b>154</b>	<b>0.25</b>	<b>26</b>	<b>Edge Start</b>		<b>0.14</b>
	<b>1</b>	<b>1.000</b>		<b>159</b>	<b>0.25</b>	<b>16</b>	<b>Edge Start</b>		<b>0.14</b>
	<b>1-1/4</b>	<b>1.250</b>		<b>167</b>	<b>0.25</b>	<b>8</b>	<b>Edge Start</b>		<b>0.14</b>
Material Thickness				Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6			5.5 (7.6m) 5.5 (15.2m)	133	4.8	4800	6.4	0.2	2.6
8				135	4.8	3520	6.4	0.2	2.7
10				137	4.8	2390	6.4	0.5	2.8
12				139	4.8	1750	6.4	0.8	2.9
<b>15</b>				<b>149</b>	<b>6.4</b>	<b>1160</b>	<b>7.6</b>	<b>1.2</b>	<b>3.4</b>
<b>20</b>				<b>155</b>	<b>6.4</b>	<b>625</b>	<b>Edge Start</b>		<b>3.6</b>
<b>25</b>				<b>159</b>	<b>6.4</b>	<b>425</b>	<b>Edge Start</b>		<b>3.6</b>
<b>30</b>				<b>165</b>	<b>6.4</b>	<b>260</b>	<b>Edge Start</b>		<b>3.6</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

**Aluminum  
120A  
Air Plasma / Air Shield**



Deflector	Standard Shield Cup Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8243	9-8218 9-8237	9-8253	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	80 (25') 80 (50')	139	0.19	180	0.25	0.30	0.11
	3/8	0.375		140	0.19	110	0.25	0.50	0.11
	1/2	0.500		143	0.19	75	0.25	0.80	0.11
	<b>5/8</b>	<b>0.625</b>		<b>156</b>	<b>0.25</b>	<b>50</b>	<b>0.30</b>	<b>1.00</b>	<b>0.12</b>
	<b>3/4</b>	<b>0.750</b>		<b>161</b>	<b>0.25</b>	<b>34</b>	<b>Edge Start</b>		<b>0.13</b>
	<b>1</b>	<b>1.000</b>		<b>167</b>	<b>0.25</b>	<b>23</b>	<b>Edge Start</b>		<b>0.14</b>
Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6			5.5 (7.6m) 5.5 (15.2m)	139	4.8	4770	6.4	0.2	2.8
8				140	4.8	3650	6.4	0.2	2.8
10				140	4.8	2660	6.4	0.5	2.8
12				142	4.8	2100	6.4	0.8	2.8
<b>15</b>				<b>152</b>	<b>6.4</b>	<b>1445</b>	<b>7.6</b>	<b>1.2</b>	<b>3.0</b>
<b>20</b>				<b>162</b>	<b>6.4</b>	<b>820</b>	<b>Edge Start</b>		<b>3.4</b>
<b>25</b>			<b>167</b>	<b>6.4</b>	<b>600</b>	<b>Edge Start</b>		<b>3.4</b>	

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

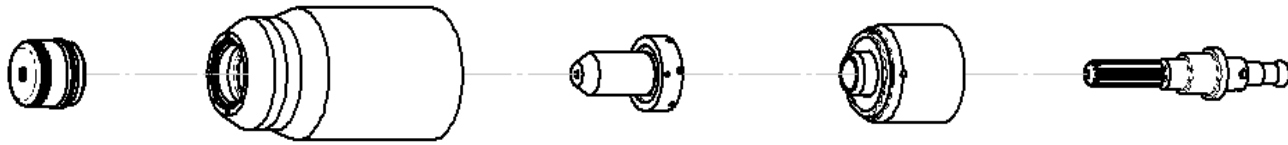
# CUTMASTER A120

## 4T.09 Recommended Cutting Speeds for Machine and Automated Torches With Shielded Tip

Mild Steel

40A

Air Plasma / Air Shield

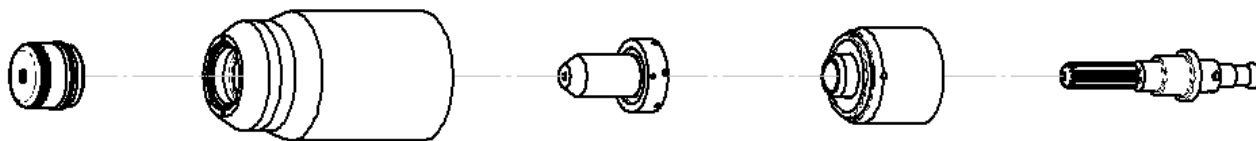


Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8245	9-8237	9-8208	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
20		0.036	75 (25') 80 (50')	107	0.16	130	0.16	0.0	0.06
16		0.060		113	0.16	120	0.16	0.0	0.06
14		0.075		108	0.16	90	0.16	0.1	0.06
12		0.105		111	0.16	75	0.16	0.2	0.06
10		0.135		114	0.16	65	0.16	0.3	0.07
	3/16	0.188		115	0.16	65	0.16	0.4	0.07
	1/4	0.250		118	0.16	45	0.16	0.5	0.07
	3/8	0.375		123	0.16	23	0.16	1.2	0.08
	1/2	0.500		<b>128</b>	<b>0.16</b>	<b>18</b>	<b>0.16</b>	<b>2.0</b>	<b>0.08</b>
Material Thickness				Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1			5.2 (7.6) 5.5 (15.2)	108	4.1	3266	4.1	0.0	1.4
2				108	4.1	2239	4.1	0.0	1.5
3				112	4.1	1794	4.1	0.1	1.7
4				114	4.1	1651	4.1	0.2	1.7
5				115	4.1	1578	4.1	0.3	1.7
6				117	4.1	1256	4.1	0.4	1.7
8				121	4.1	853	4.1	0.5	1.7
10				124	4.1	565	4.1	1.2	1.8
12				<b>127</b>	<b>4.1</b>	<b>485</b>	<b>4.1</b>	<b>2.0</b>	<b>1.9</b>

**BOLD TYPE** indicates maximum piercing parameters.

**Stainless Steel  
40A  
Air Plasma / Air Shield**



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8245	9-8237	9-8208	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
18		0.050	75 (25') 80 (50')	110	0.16	60	4.1	0.0	0.06
16		0.063		108	0.16	50	4.1	0.1	0.07
14		0.078		114	0.16	45	4.1	0.1	0.07
12		0.109		113	0.16	40	4.1	0.2	0.07
10		0.141		116	0.16	35	4.1	0.3	0.07
	3/16	0.188		115	0.16	30	4.1	0.4	0.07
	1/4	0.250		118	0.16	20	4.1	1.2	0.07
	3/8	0.375		125	0.16	15	4.1	1.8	0.08
	<b>1/2</b>	<b>0.500</b>		<b>127</b>	<b>0.16</b>	<b>10</b>	<b>4.1</b>	<b>2.0</b>	<b>0.08</b>
Material Thickness				Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1			5.2 (7.6) 5.5 (15.2)	109	4.1	1670	4.1	0.0	1.7
2				114	4.1	1140	4.1	0.1	1.8
3				114	4.1	980	4.1	0.2	1.8
4				116	4.1	845	4.1	0.3	1.8
5				115	4.1	725	4.1	0.4	1.8
6				117	4.1	565	4.1	0.5	2.0
8				122	4.1	440	4.1	1.5	2.0
10				125	4.1	360	4.1	1.8	2.0
12				<b>127</b>	<b>4.1</b>	<b>280</b>	<b>4.1</b>	<b>2.0</b>	<b>2.2</b>

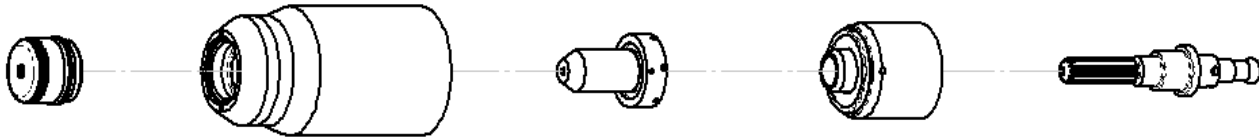
**BOLD TYPE** indicates maximum piercing parameters.

# CUTMASTER A120

## Aluminum

### 40A

### Air Plasma / Air Shield



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8245	9-8237	9-8208	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
20		0.040	75 (25') 80 (50')	110	0.19	300	0.20	0.0	0.06
16		0.063		113	0.19	170	0.20	0.1	0.07
12		0.097		120	0.19	100	0.20	0.2	0.07
11		0.125		125	0.19	90	0.20	0.3	0.07
9		0.160		126	0.19	85	0.20	0.4	0.07
	3/16	0.188		128	0.19	70	0.20	0.5	0.07
	1/4	0.250		137	0.19	30	0.20	1.0	0.08
	<b>3/8</b>	<b>0.375</b>		<b>145</b>	<b>0.19</b>	<b>10</b>	<b>0.20</b>	<b>2.0</b>	<b>0.09</b>
Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1.0			5.2 (7.6) 5.5 (15.2)	110	4.8	7660	5.1	0.0	1.6
2.0				116	4.8	3490	5.1	0.2	1.8
3.0				124	4.8	2350	5.1	0.3	1.8
4.0				126	4.8	2170	5.1	0.4	1.8
5.0				129	4.8	1630	5.1	0.6	1.8
6.0				135	4.8	990	5.1	1.0	1.9
8.0				141	4.8	500	5.1	1.6	2.0
<b>10.0</b>				<b>146</b>	<b>4.8</b>	<b>180</b>	<b>5.1</b>	<b>2.1</b>	<b>2.3</b>

**BOLD TYPE** indicates maximum piercing parameters.

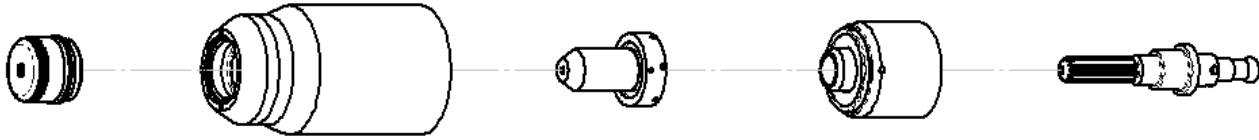
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# CUTMASTER A120

Mild Steel

60A

Air Plasma / Air Shield



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8238	9-8237	9-8210	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.060	85 (25')	128	0.19	250	0.20	0.00	0.09
14		0.075		129	0.19	237	0.20	0.10	0.09
11		0.120		126	0.19	200	0.20	0.10	0.08
10		0.135		128	0.19	142	0.20	0.10	0.09
	3/16	0.188		132	0.19	115	0.20	0.20	0.09
	1/4	0.250		134	0.19	80	0.20	0.30	0.08
	3/8	0.375		132	0.19	34	0.20	0.70	0.10
	1/2	0.500		144	0.19	23	0.20	0.75	0.10
	5/8	0.625		150	0.19	14	<b>Edge Start</b>		0.10
	3/4	0.750		145	0.19	14	<b>Edge Start</b>		0.10
	1	1.000	160	0.19	4	<b>Edge Start</b>		0.12	

# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	127	4.8	6804	5.1	0	2.2
2		129	4.8	5942	5.1	0.10	2.2
3		126	4.8	5080	5.1	0.10	0.1
4		130	4.8	3316	5.1	0.20	2.3
5		132	4.8	2794	5.1	0.20	2.2
6		134	4.8	2230	5.1	0.30	2.1
8		133	4.8	1425	5.1	0.40	2.3
10		134	4.8	822	5.1	0.60	2.5
12		141	4.8	646	5.1	0.75	2.5
15		148	4.8	419	<i>Edge Start</i>		2.6
20		147	4.8	318	<i>Edge Start</i>		2.7
25		159	4.8	118	<i>Edge Start</i>		3.0

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

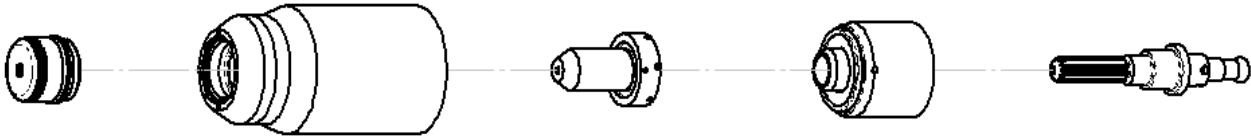


# CUTMASTER A120

## Stainless Steel

### 60A

### Air Plasma / Air Shield



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8238	9-8237	9-8210	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed	
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)	
16		0.063	85 (25')	110	0.13	165	0.20	0.00	0.06	
14		0.078		116	0.13	155	0.20	0.10	0.07	
11		0.125		118	0.13	125	0.20	0.10	0.07	
10		0.141		126	0.13	80	0.20	0.10	0.09	
	3/16	0.188		125	0.13	75	0.20	0.20	0.09	
	1/4	0.250		90 (50')	127	0.13	60	0.20	0.30	0.08
	3/8	0.375			134	0.13	28	0.20	0.50	0.08
	1/2	0.500			136	0.19	17	0.25	0.75	0.09
	5/8	0.625			131	0.13	14	<b>Edge Start</b>		0.08
	3/4	0.750			142	0.19	10	<b>Edge Start</b>		0.11

# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	101	3.3	4590	5.1	0.00	1.2
<b>2</b>		116	3.3	3925	5.1	0.10	1.7
3		118	3.3	3285	5.1	0.10	1.7
<b>4</b>		126	3.3	1985	5.1	0.20	2.2
5		125	3.3	1850	5.1	0.20	2.1
<b>6</b>		127	3.3	1605	5.1	0.30	2.1
8		131	3.3	1100	5.1	0.40	2.1
<b>10</b>		134	3.3	670	5.1	0.50	2.1
<b>12</b>		<b>136</b>	<b>4.8</b>	<b>490</b>	<b>6.4</b>	<b>0.90</b>	<b>2.2</b>
<b>15</b>		<b>132</b>	<b>3.3</b>	<b>375</b>	<b><i>Edge Start</i></b>		<b>2.6</b>
<b>20</b>		<b>144</b>	<b>4.8</b>	<b>230</b>	<b><i>Edge Start</i></b>		<b>2.5</b>

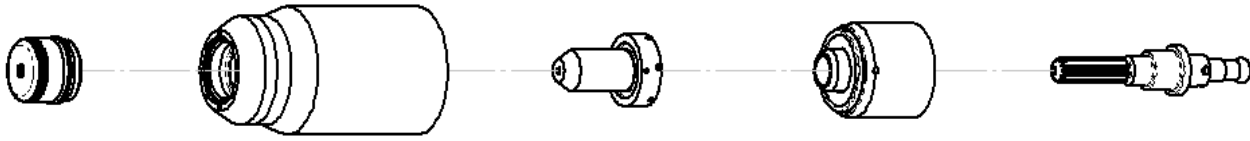
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

Aluminum

60A

Air Plasma / Air Shield



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8238	9-8237	9-8210	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.064	85 (25') 90 (50')	118	0.13	350	0.20	0.00	0.07
14		0.079		118	0.13	350	0.20	0.10	0.08
11		0.120		123	0.13	275	0.20	0.10	0.08
	3/16	0.188		125	0.13	140	0.20	0.20	0.08
	1/4	0.250		132	0.13	80	0.20	0.30	0.08
	3/8	0.375		135	0.13	45	0.20	0.50	0.08
	1/2	0.500		140	0.13	26	0.20	0.80	0.08
	5/8	0.625		148	0.19	18	<i>Edge start</i>		0.10
	3/4	0.750		155	0.19	12	<i>Edge start</i>		0.11

# CUTMASTER A120

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	118	6.4	8890	6.4	0.00	2
2		118	6.4	8890	6.4	0.10	2.0
3		123	6.4	7070	6.4	0.10	2.1
4		124	6.4	5095	6.4	0.20	2.0
5		126	6.4	3335	6.4	0.20	2.0
6		130	6.4	2370	6.4	0.30	2.0
8		134	6.4	1570	6.4	0.40	2.0
10		136	6.4	1070	6.4	0.60	2.0
<b>12</b>		<b>139</b>	<b>6.4</b>	<b>765</b>	<b>6.4</b>	<b>0.70</b>	<b>2.0</b>
<b>15</b>		<b>146</b>	<b>4.8</b>	<b>515</b>	<b><i>Edge start</i></b>		<b>2.4</b>
<b>20</b>		<b>157</b>	<b>4.8</b>	<b>260</b>	<b><i>Edge start</i></b>		<b>2.7</b>

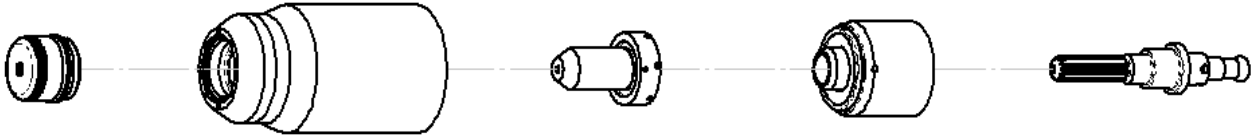
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

Mild Steel

80A

Air Plasma / Air Shield



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8239	9-8237	9-8211	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.060	85 (25') 90 (50')	115	0.13	280	0.20	0.00	0.06
11		0.120		112	0.13	190	0.20	0.10	0.06
10		0.135		110	0.13	176	0.20	0.20	0.06
	3/16	0.188		122	0.19	135	0.20	0.30	0.08
	1/4	0.250		127	0.19	100	0.20	0.40	0.09
	3/8	0.375		134	0.19	40	0.20	0.50	0.10
	1/2	0.500		136	0.19	36	0.20	0.60	0.10
	5/8	0.625		145	0.19	18	<i>Edge Start</i>		0.11
	3/4	0.750		147	0.19	14	<i>Edge Start</i>		0.11
	7/8	0.875		146	0.19	10	<i>Edge Start</i>		0.12
	1.000	1.000		152	0.187	8	<i>Edge Start</i>		0.13

**CUTMASTER A120**

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	116	3.3	7895	5.1	0.00	1.6
2		114	3.3	6395	5.1	0.10	1.6
3		112	3.3	4895	5.1	0.10	1.5
4		115	4.8	4025	5.1	0.30	1.7
5		123	4.8	3300	5.1	0.30	2.0
6		126	4.8	2735	5.1	0.40	2.2
8		131	4.8	1745	5.1	0.50	2.5
10		134	4.8	1000	5.1	0.50	2.6
12		<b>136</b>	<b>4.8</b>	<b>935</b>	<b>5.1</b>	<b>0.60</b>	<b>2.6</b>
15		<b>143</b>	<b>4.8</b>	<b>580</b>	<b>5.1</b>	<b>0.80</b>	<b>2.8</b>
20		<b>147</b>	<b>4.8</b>	<b>325</b>	<b><i>Edge Start</i></b>		<b>2.9</b>
25		<b>151</b>	<b>4.8</b>	<b>210</b>	<b><i>Edge Start</i></b>		<b>3.2</b>

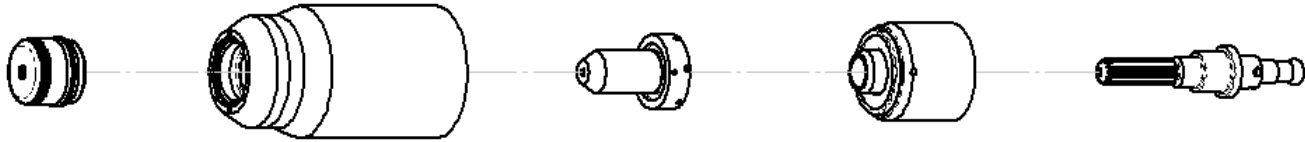
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

## Stainless Steel

### 80A

### Air Plasma / Air Shield



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8239	9-8237	9-8211	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.063	85 (25') 90 (50')	114	0.125	340	0.2	0.00	0.06
11		0.125		115	0.125	260	0.2	0.10	0.06
10		0.141		116	0.125	250	0.2	0.10	0.06
	3/16	0.188		115	0.125	170	0.2	0.20	0.07
	1/4	0.250		118	0.125	85	0.2	0.30	0.08
	3/8	0.375		127	0.19	45	0.25	0.40	0.09
	1/2	0.500		136	0.19	16	0.25	0.75	0.11
	5/8	0.625		143	0.19	10	<b>Edge Start</b>		0.12
	3/4	0.750		146	0.19	8	<b>Edge Start</b>		0.11

Material Thickness	Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)	Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
1	5.9 (7.6m) 6.2 (15.2m)	114	3.2	9410	5.1	0.00	1.5
2		114	3.2	8120	5.1	0.00	1.4
3		115	3.2	6830	5.1	0.10	1.4
4		116	3.2	5635	5.1	0.20	1.5
5		115	3.2	4010	5.1	0.20	1.8
6		117	3.2	2640	5.1	0.30	2.0
8		123	4.8	1630	6.4	0.40	2.1
10		128	4.8	1030	6.4	0.60	2.2
<b>12</b>		<b>134</b>	<b>4.8</b>	<b>565</b>	<b>6.4</b>	<b>0.75</b>	<b>2.6</b>
<b>15</b>		<b>141</b>	<b>4.8</b>	<b>295</b>	<b><i>Edge Start</i></b>		<b>3.0</b>
<b>20</b>		<b>147</b>	<b>4.8</b>	<b>185</b>	<b><i>Edge Start</i></b>		<b>2.8</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

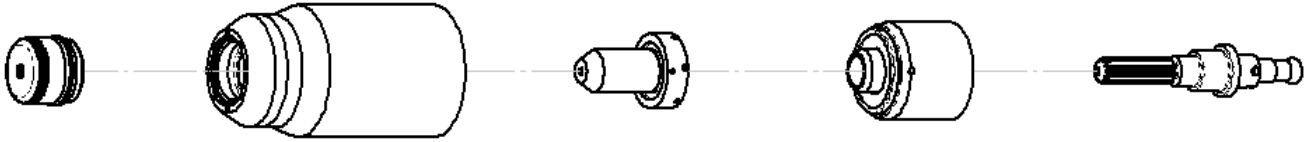


# CUTMASTER A120

## Aluminum

### 80A

### Air Plasma / Air Shield



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8239	9-8237	9-8211	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
16		0.064	85 (25') 90 (50')	115	0.13	320	0.2	0.00	0.09
11		0.120		120	0.13	240	0.2	0.10	0.08
	3/16	0.188		122	0.13	165	0.2	0.20	0.08
	1/4	0.250		124	0.13	100	0.2	0.30	0.10
	3/8	0.375		140	0.19	60	0.2	0.40	0.09
	1/2	0.500		142	0.19	36	0.2	0.60	0.11
	<b>5/8</b>	<b>0.625</b>		<b>148</b>	<b>0.19</b>	<b>26</b>	<b>0.2</b>	<b>0.75</b>	<b>0.11</b>
	<b>3/4</b>	<b>0.750</b>		<b>155</b>	<b>0.19</b>	<b>16</b>	<b>Edge Start</b>		<b>0.12</b>
Material Thickness				Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)

1	5.9 (7.6m) 6.2 (15.2m)	113	3.3	9020	5.1	0.00	2.4
2		116	3.3	7595	5.1	0.00	2.2
3		120	3.3	6165	5.1	0.10	2.0
4		121	3.3	5045	5.1	0.20	2.1
5		122	3.3	3955	5.1	0.20	2.2
6		124	3.3	2905	5.1	0.30	2.3
8		132	4.8	2010	5.1	0.40	2.3
10		140	4.8	1430	5.1	0.50	2.3
12		142	4.8	1045	5.1	0.60	2.6
15		<b>146</b>	<b>4.8</b>	<b>730</b>	<b>5.1</b>	<b>0.75</b>	<b>2.7</b>
<b>20</b>		<b>157</b>	<b>4.8</b>	<b>330</b>	<i>Edge Start</i>		<b>3.2</b>

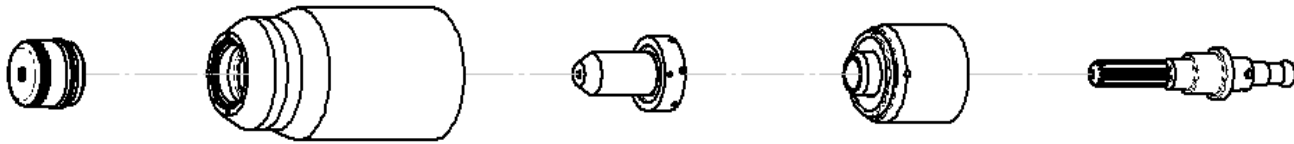
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

Mild Steel

100A

Air Plasma / Air Shield

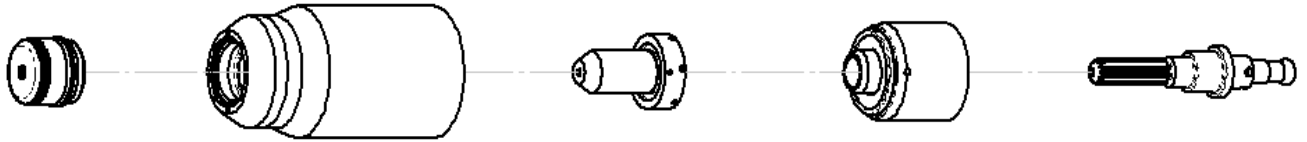


Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8239	9-8237	9-8253	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	75 (25') 75 (50')	114	0.16	85	0.18	0.00	0.08
	3/8	0.375		112	0.16	70	0.18	0.20	0.09
	1/2	0.500		115	0.16	40	0.18	0.30	0.10
	5/8	0.625		123	0.16	30	0.18	0.40	0.10
	<b>3/4</b>	<b>0.750</b>		<b>127</b>	<b>0.16</b>	<b>20</b>	<b>0.18</b>	<b>0.80</b>	<b>0.11</b>
	<b>1</b>	<b>1.000</b>		<b>133</b>	<b>0.16</b>	<b>12</b>	<b>Edge Start</b>		<b>0.12</b>
	<b>1-1/4</b>	<b>1.250</b>		<b>135</b>	<b>0.16</b>	<b>8</b>	<b>Edge Start</b>		<b>0.12</b>
Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)			Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6				114	4.1	2210	4.6	0.00	2.0
8				113	4.1	1960	4.6	0.10	2.2
10				112	4.1	1665	4.6	0.20	2.3
12				114	4.1	1185	4.6	0.30	2.4
15				121	4.1	830	4.6	0.40	2.5
20				128	4.1	475	5.0	0.80	2.8
25				133	4.1	315	<b>Edge Start</b>		<b>2.9</b>
30				134	4.1	230	<b>Edge Start</b>		<b>3.1</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

**Stainless Steel  
100A  
Air Plasma / Air Shield**



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8239	9-8237	9-8212	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	75 (25') 75 (50')	114	0.16	110	0.18	0.00	0.08
	3/8	0.375		116	0.16	70	0.18	0.10	0.09
	1/2	0.500		119	0.16	45	0.18	0.30	0.10
	5/8	0.625		130	0.19	20	0.23	2.00	0.11
	<b>3/4</b>	<b>0.750</b>		<b>135</b>	<b>0.19</b>	<b>15</b>	<b>0.23</b>	<b>2.80</b>	<b>0.11</b>
	<b>1</b>	<b>1.000</b>		<b>140</b>	<b>0.19</b>	<b>10</b>	<b>Edge Start</b>		<b>0.11</b>

Material Thickness		Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)		Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6	5.2 (7.6m) 5.2 (15.2m)	5.2 (7.6m) 5.2 (15.2m)	114	4.1	2900	4.6	0.00	2.0
8			115	4.1	2265	4.6	0.10	2.2
10			116	4.1	1685	4.6	0.20	2.4
12			118	4.1	1285	4.6	0.30	2.4
15			127	4.6	685	5.7	2.00	2.7
20			<b>136</b>	<b>4.8</b>	<b>360</b>	<b>5.7</b>	<b>2.80</b>	<b>2.8</b>
25			<b>140</b>	<b>4.8</b>	<b>260</b>	<b>Edge Start</b>		<b>2.8</b>

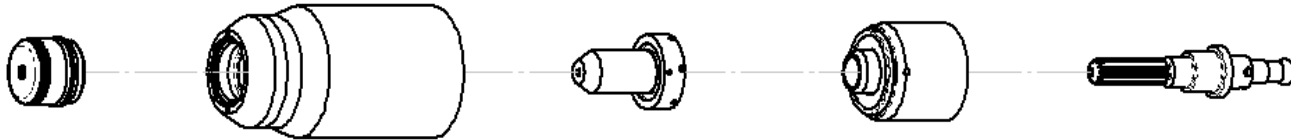
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

## Aluminum

### 100A

### Air Plasma / Air Shield



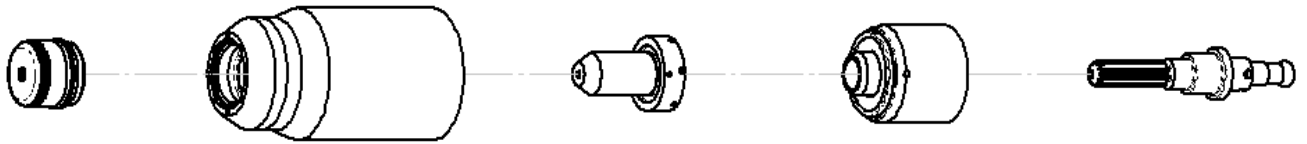
Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8239	9-8237	9-8212	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	75 (25') 75 (50')	121	0.18	110	0.19	0.00	0.10
	3/8	0.375		129	0.18	60	0.19	0.20	0.10
	1/2	0.500		135	0.18	45	0.19	0.30	0.11
	5/8	0.625		133	0.18	32	0.19	0.60	0.11
	<b>3/4</b>	<b>0.750</b>		<b>138</b>	<b>0.18</b>	<b>25</b>	<b>0.19</b>	<b>2.00</b>	<b>0.11</b>
	<b>1</b>	<b>1.000</b>		<b>143</b>	<b>0.18</b>	<b>15</b>	<b>Edge Start</b>		<b>0.14</b>

Material Thickness		Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)		Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6	5.2 (7.6m) 5.2 (15.2m)	5.2 (7.6m) 5.2 (15.2m)	120	4.6	2920	4.8	0.00	2.5
8			125	4.6	2135	4.8	0.10	2.5
10			130	4.6	1470	4.8	0.20	2.6
12			134	4.6	1230	4.8	0.30	2.7
15			134	4.6	905	4.8	0.60	2.9
20			<b>139</b>	<b>4.6</b>	<b>595</b>	<b>6.0</b>	<b>2.00</b>	<b>3.0</b>
25			<b>143</b>	<b>4.6</b>	<b>395</b>	<b>Edge Start</b>		<b>3.6</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

**Mild Steel  
120A  
Air Plasma / Air Shield**



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8256	9-8237	9-8253	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	80 (25') 80 (50')	139	0.125	160	0.20	0.20	0.11
	3/8	0.375		140	0.125	85	0.20	0.20	0.11
	1/2	0.500		142	0.125	75	0.20	0.50	0.10
	5/8	0.625		144	0.125	45	0.20	0.70	0.11
	<b>3/4</b>	<b>0.750</b>		<b>150</b>	<b>0.125</b>	<b>30</b>	<b>0.25</b>	<b>1.50</b>	<b>0.12</b>
	<b>7/8</b>	<b>0.875</b>		<b>158</b>	<b>0.175</b>	<b>25</b>	<b>Edge Start</b>		<b>0.13</b>
	<b>1</b>	<b>1.000</b>		<b>160</b>	<b>0.175</b>	<b>22</b>	<b>Edge Start</b>		<b>0.14</b>
	<b>1-1/4</b>	<b>1.250</b>		<b>165</b>	<b>0.175</b>	<b>15</b>	<b>Edge Start</b>		<b>0.17</b>
	<b>1-1/2</b>	<b>1.500</b>		<b>171</b>	<b>0.175</b>	<b>8</b>	<b>Edge Start</b>		<b>0.15</b>

Material Thickness		Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)		Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6	5.5 (7.6m) 5.5 (15.2m)	5.5 (7.6m) 5.5 (15.2m)	139	4.8	4270	5.08	0.20	2.8
8			140	4.8	3070	5.1	0.2	2.8
10			140	6.4	2120	5.08	0.30	2.8
12			142	6.4	1960	5.08	0.50	2.8
15			143	4.8	1355	5.08	0.70	2.8
<b>20</b>			<b>152</b>	<b>4.8</b>	<b>725</b>	<b>6.4</b>	<b>1.6</b>	<b>3.1</b>
<b>25</b>			<b>160</b>	<b>4.8</b>	<b>570</b>	<b>Edge Start</b>		<b>3.6</b>
<b>30</b>			<b>164</b>	<b>4.8</b>	<b>430</b>	<b>Edge Start</b>		<b>4.0</b>
<b>35</b>			<b>168</b>	<b>4.8</b>	<b>290</b>	<b>Edge Start</b>		<b>4.3</b>
<b>40</b>			<b>173</b>	<b>4.45</b>	<b>150</b>	<b>Edge Start</b>		<b>4.4</b>

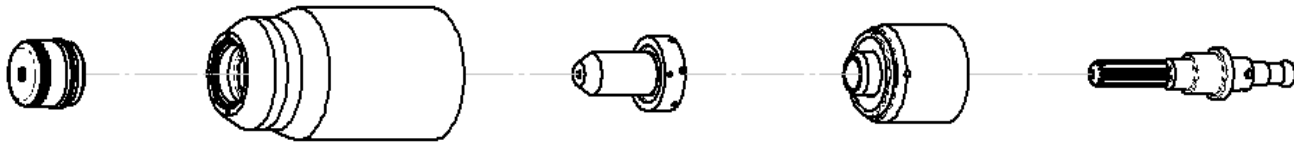
**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

# CUTMASTER A120

## Stainless Steel

### 120A

### Air Plasma / Air Shield



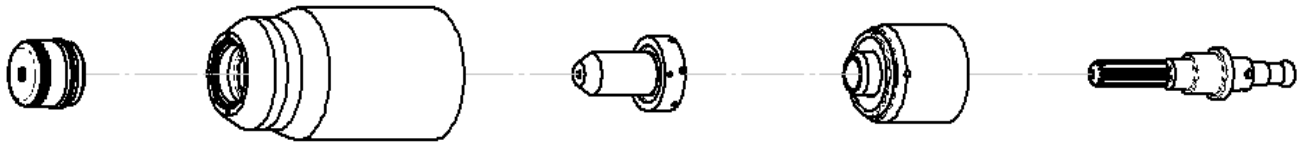
Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8256	9-8237	9-8253		9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed	
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)	
	1/4	0.250	80 (25')	140	0.13	180	0.20	0.30	0.11	
	3/8	0.375		140	0.13	100	0.20	0.40	0.12	
	1/2	0.500		142	0.15	65	0.25	0.80	0.12	
	<b>5/8</b>	<b>0.625</b>		<b>152</b>	<b>0.15</b>	<b>40</b>	<b>0.25</b>	<b>1.00</b>	<b>0.12</b>	
	<b>3/4</b>	<b>0.750</b>		80 (50')	<b>150</b>	<b>0.15</b>	<b>26</b>	<b>Edge Start</b>		<b>0.13</b>
	<b>1</b>	<b>1.000</b>			<b>155</b>	<b>0.15</b>	<b>16</b>	<b>Edge Start</b>		<b>0.13</b>
	<b>1-1/4</b>	<b>1.250</b>			<b>165</b>	<b>0.15</b>	<b>8</b>	<b>Edge Start</b>		<b>0.13</b>

Material Thickness		Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)		Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6	5.5 (7.6m)	5.5 (15.2m)	140	4.8	4800	5.1	0.3	2.8
8			140	4.8	3520	5.1	0.4	2.7
10			140	4.8	2410	5.1	0.6	3.0
12			142	4.8	1850	6.4	0.8	3.1
<b>15</b>			<b>149</b>	<b>6.4</b>	<b>1190</b>	<b>6.4</b>	<b>1.0</b>	<b>3.1</b>
<b>20</b>			<b>151</b>	<b>6.4</b>	<b>620</b>	<b>Edge Start</b>		<b>3.3</b>
<b>25</b>			<b>155</b>	<b>6.4</b>	<b>420</b>	<b>Edge Start</b>		<b>3.3</b>
<b>30</b>			<b>162</b>	<b>6.4</b>	<b>260</b>	<b>Edge Start</b>		<b>3.3</b>

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.

**Aluminum  
120A  
Air Plasma / Air Shield**



Shield Cap	Maximum Life Shield Cup	Tip	Starter Cartridge	Electrode
9-8256	9-8237	9-8253	9-8213	9-8215

Material Thickness			Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(GA)	(in)	inch	PSI (torch lead length)	Volts	(in)	(ipm)	(in)	(sec)	(in)
	1/4	0.250	80 (25') 80 (50')	140	0.13	180	0.20	0.20	0.10
	3/8	0.375		142	0.13	110	0.20	0.30	0.11
	1/2	0.500		148	0.13	75	0.20	0.50	0.11
	<b>5/8</b>	<b>0.625</b>		<b>156</b>	<b>0.15</b>	<b>45</b>	<b>0.25</b>	<b>0.80</b>	<b>0.11</b>
	<b>3/4</b>	<b>0.750</b>		<b>158</b>	<b>0.15</b>	<b>35</b>	<b>Edge Start</b>		<b>0.11</b>
	<b>1</b>	<b>1.000</b>		<b>164</b>	<b>0.15</b>	<b>23</b>	<b>Edge Start</b>		<b>0.12</b>

Material Thickness		Gas Pressure (Air)	Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
(mm)		Bar (torch lead length)	Volts	(mm)	(mm/min)	(mm)	(sec)	(mm)
6	5.5 (7.6m) 5.5 (15.2m)	5.5 (7.6m) 5.5 (15.2m)	140	4.8	4770	5.1	0.2	2.6
8			141	4.8	3650	5.1	0.3	2.6
10			143	4.8	2660	5.1	0.4	2.7
12			147	4.8	2100	5.1	0.5	2.8
<b>15</b>			<b>154</b>	<b>4.8</b>	<b>1355</b>	<b>6.4</b>	<b>0.8</b>	<b>2.8</b>
<b>20</b>			<b>159</b>	<b>4.8</b>	<b>845</b>	<b>Edge Start</b>		<b>2.9</b>
<b>25</b>	<b>164</b>	<b>4.8</b>	<b>605</b>	<b>Edge Start</b>		<b>3.0</b>		

**BOLD TYPE** indicates maximum piercing parameters. **BOLD ITALIC** indicates edge starts only.