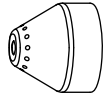
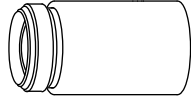


Mild Steel – 45 A – Air – Shielded



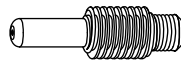
220817



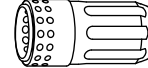
220854
(220953 for
ohmic sensing)



220941



220842



220857

Metric

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width			
					Cut Speed	Voltage	Cut Speed	Voltage				
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm			
2	1.5	3.8	250	0.2	5560	128	7910	125	1.4			
3					3960	128	5590	128				
4				0.4	2800	128	3960	128	1.5			
6					0.6	1430	130	2110		127		
8						1020	133	1385		130		
10				Edge Start			0.8	780	136	920	134	1.8
12							1	540	140	690	138	1.9
16	310	146	400				141	2.1				
20	Edge Start			170	152	240	147	2.3				
25				110	157	145	154	3				

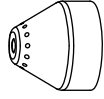
English

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width	
					Cut Speed	Voltage	Cut Speed	Voltage		
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches	
16 GA	0.06	0.15	250	0.1	249	128	320	125	0.053	
14 GA					225	128	320	125	0.054	
10 GA				0.4	129	128	181	128	0.057	
3/16					0.5	85	129	122	127	0.059
1/4						0.6	48	130	72	127
3/8				0.8	33	136	38	133	0.069	
1/2					1	18	141	24	139	0.077
5/8	Edge Start			13	146	16	141	0.082		
3/4				7	151	10	145	0.086		
7/8				6	154	7	151	0.103		
1				4	157	6	154	0.119		

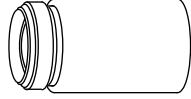
Gas flow rate – slpm / scfh

151 / 320	Hot (cutflow)
184 / 390	Cold (postflow)

Stainless Steel – 45 A – Air – Shielded



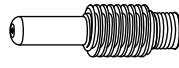
220817



220854
(220953 for
ohmic sensing)



220941



220842



220857

Metric

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width
					Cut Speed	Voltage	Cut Speed	Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
2	1.5	3.8	250	0.1	5620	126	7830	129	0.6
3				0.2	3285	129	4725	128	0.9
4				0.4	1995	130	2960	129	1.1
6				0.6	1145	131	1695	131	1.2
8					830	134	1100	134	1.4
10				0.8	605	137	870	137	1.6
12		4.6	300	1.2	380	141	540	139	1.8
16		Edge Start			240	145	320	142	2.4
20					160	149	205	146	3.1

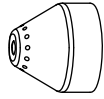
English

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width
					Cut Speed	Voltage	Cut Speed	Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
16 GA	0.06	0.15	250	0.1	237	125	320	128	0.017
14 GA				0.2	230	126	320	129	0.022
10 GA				0.4	90	130	134	128	0.041
3/16				0.5	63	131	93	130	0.044
1/4					40	131	59	131	0.047
3/8				0.8	26	137	29	136	0.061
1/2		0.18	300	1.2	12	142	19	140	0.075
5/8		Edge Start			10	145	13	142	0.096
3/4					7	148	9	145	0.116
7/8					5	151	6	149	0.137

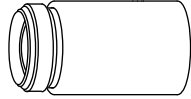
Gas flow rate – slpm / scfh

151 / 320	Hot (cutflow)
184 / 390	Cold (postflow)

Aluminum - 45 A - Air - Shielded



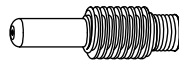
220817



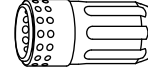
220854
(220953 for
ohmic sensing)



220941



220842



220857

Metric

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width			
					Cut Speed	Voltage	Cut Speed	Voltage				
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm			
2	1.5	3.8	250	0.1	7890	121	9585	134	1.3			
3				0.2	4850	130	7120	129				
4				0.4	3670	133	5650	129				
6							0.5	2060	139	3095	132	1.6
8							0.6	1330	139	1830	136	1.7
10							0.7	860	142	1015	140	1.9
12					Edge Start			620	144	745	142	2
16		Edge Start			360	152	340	148	2.5			

English

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width		
					Cut Speed	Voltage	Cut Speed	Voltage			
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches		
1/10	0.06	0.15	250	0.2	240	126	320	131	0.056		
1/8				0.4	170	131	263	128	0.060		
3/16				0.4	120	134	184	130	0.061		
1/4				0.5	70	137	104	132	0.063		
3/8				0.7	36	141	42	139	0.073		
1/2				Edge Start			21	145	26	143	0.082
5/8				Edge Start			15	152	14	148	0.100
3/4	Edge Start			8	158	9	153	0.117			

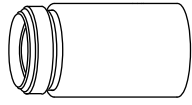
Gas flow rate - slpm / scfh

151 / 320	Hot (cutflow)
184 / 390	Cold (postflow)

Mild Steel – FineCut – Air – Shielded and Unshielded



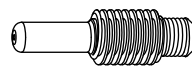
220955 (deflector)
220948 (shield)



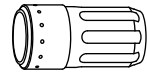
220854
220953 (ohmic)



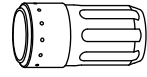
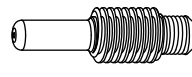
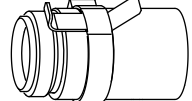
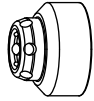
220930



220842



220947



Metric

Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Recommended		Kerf Width	
			mm	%		Cut Speed	Voltage		
mm	A	mm	mm	%	seconds	mm/min	volts	mm	
0.5	40	1.5	3.8	250	0.0	8250	78	0.7	
0.6						8250	78		
0.8						8250	78		
1	45				0.4	1.3	6400	78	1.2
1.5							0.5	4800	78
2								2500	78
3								1900	78
4								1900	78

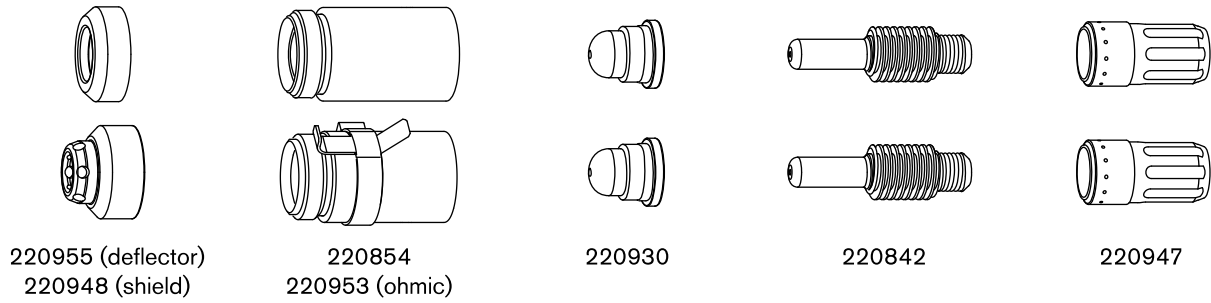
English

Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Kerf Width		
			inches	%		Cut Speed	Voltage			
inches	A	inches	inches	%	seconds	in/min	volts	inches		
26 GA	40	0.06	0.15	250	0.0	325	78	0.025		
24 GA						325	78	0.029		
22 GA						325	78	0.024		
20 GA	45				0.2	0.043	325	78	0.020	
18 GA							0.4	325	78	0.043
16 GA								250	78	0.046
14 GA								200	78	0.049
12 GA							0.5	0.052	120	78
10 GA	95	78	0.051							

Gas flow rate – slpm / scfh

155 / 330	Hot (cutflow)
215 / 460	Cold (postflow)

Stainless Steel – FineCut – Air – Shielded and Unshielded



Metric

Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Recommended		Kerf Width
			mm	%		Cut Speed	Voltage	
mm	A	mm	mm	%	seconds	mm/min	volts	mm
0.5	40	0.5	2.0	400	0.0	8250	68	0.6
0.6						8250	68	
0.8						8250	68	0.5
1	0.2				8250	68		
1.5					0.4	6150	70	1.0
2	4800					71		
3	45				2550	80	1.4	
4					1050	84	1.5	

English

Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Kerf Width
			inches	%		Cut Speed	Voltage	
inches	A	inches	inches	%	seconds	in/min	volts	inches
26 GA	40	0.02	0.08	400	0.0	325	68	0.024
24 GA						325	68	0.021
22 GA						325	68	0.018
20 GA	0.1				325	68	0.017	
18 GA					0.2	325	68	0.036
16 GA	0.4					240	70	0.039
14 GA					200	70	0.040	
12 GA	45				120	80	0.049	
10 GA		75	80	0.055				

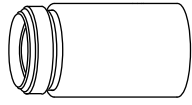
Gas flow rate – slpm / scfh

155 / 330	Hot (cutflow)
215 / 460	Cold (postflow)

Mild Steel – FineCut Low Speed – Air – Shielded and Unshielded



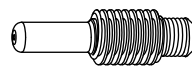
220955 (deflector)
220948 (shield)



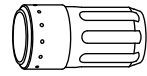
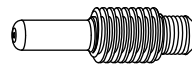
220854
220953 (ohmic)



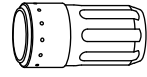
220930



220842



220947



Metric

Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Recommended		Kerf Width
			mm	%		Cut Speed	Voltage	
mm	A	mm	mm	%	seconds	mm/min	volts	mm
0.5	30	1.5	3.8	250	0.0	3800	69	0.6
0.6						3800	68	
0.8						3800	70	
1*	40				0.2	3800	72	0.8
1.5*						3800	75	
2	45				0.4	3700	76	0.7
3						2750	78	1.3
4						1900	78	1.5

English

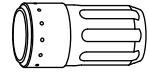
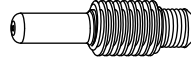
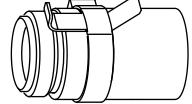
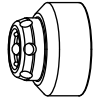
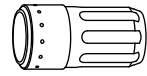
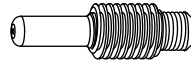
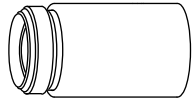
Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Kerf Width
			inches	%		Cut Speed	Voltage	
inches	A	inches	inches	%	seconds	in/min	volts	inches
26 GA	30	0.06	0.15	250	0.0	150	70	0.026
24 GA						150	68	0.024
22 GA					0.1	150	70	0.025
20 GA	150					71		
18 GA	40				0.2	150	73	0.031
16 GA*						0.4	150	75
14 GA*	45				0.5		150	76
12 GA						120	78	0.052
10 GA		95	78	0.051				

Gas flow rate – slpm / scfh

155 / 330	Hot (cutflow)
215 / 460	Cold (postflow)

* Not a dress-free cut.

Stainless Steel – FineCut Low Speed – Air – Shielded and Unshielded



220955 (deflector)
220948 (shield)

220854
220953 (ohmic)

220930

220842

220947

Metric

Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Recommended		Kerf Width	
			mm	%		Cut Speed	Voltage		
mm	A	mm	mm	%	seconds	mm/min	volts	mm	
0.5	30	0.5	2.0	400	0.0	3800	69	0.7	
0.6						3800	69		
0.8						3800	69		
1	40				0.2	2900	69	0.6	
1.5						0.4	2750	69	0.5
2							2550	69	1.3
3						45	0.5	80	1.4
4	0.6				1050		80	1.5	

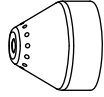
English

Material Thickness	Current	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Kerf Width		
			inches	%		Cut Speed	Voltage			
inches	A	inches	inches	%	seconds	in/min	volts	inches		
26 GA	30	0.02	0.08	400	0.0	150	69	0.028		
24 GA						150	69			
22 GA					0.1	150	69	0.025		
20 GA	150					69				
18 GA	40				0.2	145	69	0.023		
16 GA						0.4	115		69	0.022
14 GA							110		69	0.021
12 GA	45				0.5	80	0.049			
10 GA		0.6	75	80	0.055					

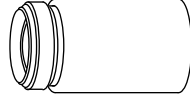
Gas flow rate – slpm / scfh

155 / 330	Hot (cutflow)
215 / 460	Cold (postflow)

Stainless Steel – 45 A – F5 – Shielded



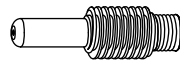
220817



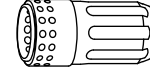
220854
(220953 for
ohmic sensing)



220941



220842



220857

Metric

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width
					Cut Speed	Voltage	Cut Speed	Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
8	1.5	3.8	250	0.8	630	150	860	144	2.1
10					435	153	525	147	2.3
12		Edge Start			340	156	440	150	2.5

English

Material Thickness	Torch-to-Work Distance	Initial Pierce Height		Pierce Delay Time	Best Quality Settings		Production Settings		Kerf Width
					Cut Speed	Voltage	Cut Speed	Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
1/4	0.06	0.15	250	0.6	32	147	47	141	0.075
3/8				0.8	18	152	22	146	0.088
1/2		Edge Start		12	157	16	151	0.101	

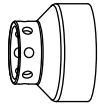
Gas flow rate – slpm / scfh

149 / 315	Hot (cutflow)
184 / 390	Cold (postflow)

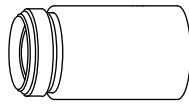


F5 is not recommended for thicknesses less than 7 mm or 1/4 inch or for use with FineCut consumables.

Marking and Dimpling – Air – Shielded



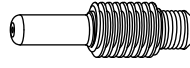
420542



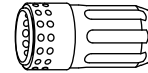
220854
(220953 for
ohmic sensing)



420415



220842



220857

Mild steel

Current A	Torch-to-Work Distance		Initial Marking Height		Delay Time seconds	Marking Speed		Arc Voltage volts	Width		Depth	
	mm	in	mm	in		mm/min	in/min		mm	in	mm	in
Light marking												
10	6.4	0.25	6.4	0.25	0	2540	100	134	2.79	0.11	<0.02	<0.001
Heavy marking												
10	4.6	0.18	4.6	0.18	0	2540	100	111	2.79	0.11	0.09	0.0035
Dimpling												
10	6.4	0.25	—	—	0.05	—	—	—	1.98	0.078	0.25	0.01

Stainless steel

Current A	Torch-to-Work Distance		Initial Marking Height		Delay Time seconds	Marking Speed		Arc Voltage volts	Width		Depth	
	mm	in	mm	in		mm/min	in/min		mm	in	mm	in
Light marking												
10	5.1	0.2	5.1	0.2	0	5080	200	123	2.03	0.08	<0.02	<0.001
Heavy marking												
10	6.4	0.25	6.4	0.25	0	3175	125	133	2.54	0.1	0.08	0.003
Dimpling												
10	6.4	0.25	—	—	0.05	—	—	—	2.03	0.08	0.23	0.009

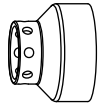
Aluminum

Current A	Torch-to-Work Distance		Initial Marking Height		Delay Time seconds	Marking Speed		Arc Voltage volts	Width		Depth	
	mm	in	mm	in		mm/min	in/min		mm	in	mm	in
Marking												
11	2.5	0.1	5.1	0.2	0	5080	200	98	0.89	0.035	<0.02	<0.001
Dimpling												
10	3.2	0.125	—	—	0.15	—	—	—	0.89	0.035	0.09	0.0035

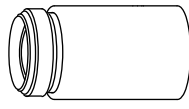
Gas flow rate – slpm / scfh

136 / 290	Hot (cutflow)
141 / 300	Cold (postflow)

Marking and Dimpling – Argon – Shielded



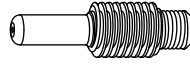
420542



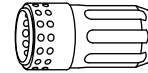
220854
(220953 for
ohmic sensing)



420415



220842



220857

Mild steel

Current A	Torch-to-Work Distance		Initial Marking Height		Delay Time seconds	Marking Speed		Arc Voltage volts	Width		Depth	
	mm	in	mm	in		mm/min	in/min		mm	in	mm	in
Light marking												
10	2.0	0.08	2.0	0.08	0	3175	125	44	1.22	0.048	<0.02	<0.001
Heavy marking												
15	1.5	0.06	1.5	0.06	0	3175	125	42	1.22	0.048	<0.02	<0.001
Dimpling												
20	3.2	0.125	—	—	0.25	—	—	—	0.99	0.039	<0.02	<0.001

Stainless steel

Current A	Torch-to-Work Distance		Initial Marking Height		Delay Time seconds	Marking Speed		Arc Voltage volts	Width		Depth	
	mm	in	mm	in		mm/min	in/min		mm	in	mm	in
Light marking												
12	2.5	0.1	2.5	0.1	0	3175	125	46	1.40	0.055	<0.02	<0.001
Heavy marking												
15	2.5	0.1	2.5	0.1	0	2540	100	46	2.16	0.085	0.02	0.001
Dimpling												
10	3.2	0.125	—	—	0.25	—	—	—	0.94	0.037	0.18	0.007

Aluminum

Current A	Torch-to-Work Distance		Initial Marking Height		Delay Time seconds	Marking Speed		Arc Voltage volts	Width		Depth	
	mm	in	mm	in		mm/min	in/min		mm	in	mm	in
Marking												
16	0.5	0.02	0.5	0.02	0	4445	175	42	0.63	0.025	<0.02	<0.001
Dimpling												
20	0.5	0.02	—	—	0.4	—	—	—	0.66	0.026	0.04	0.0015

Gas flow rate – slpm / scfh

120 / 255	Hot (cutflow)
122 / 260	Cold (postflow)