

Cut charts

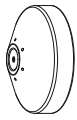
The following cut charts for the MAXPRO200 show the consumable parts, cutting speeds, and the gas and torch settings required for each process, allowing for differences in the lead length. While you can use these parameters for cutting with both mechanized and handheld torches, the consumable part numbers listed with each cut chart are specific to mechanized torches. Refer to *Hand held cutting and gouging consumable selection on page 87* for the consumables to use for handheld torches for each process.

The cut chart values in this document are recommended to provide high quality cuts with minimal dross. Because of differences between installations and material composition, adjustments may be required to obtain desired results.

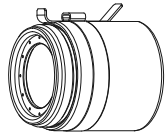
Operation

Mild steel Air Plasma / Air Shield 50 A Cutting

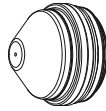
Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
12/25	103/218



220532



220936* / 220935**



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Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
62	63	63	63	39	42	45	47	0.5	112	1.5	9400	3.0	200	0.0
								0.8	111	1.5	8510	3.0	200	0.0
								1.0	111	1.5	8050	3.0	200	0.1
								1.2	110	1.8	7625	3.6	200	0.1
								1.5	110	1.8	7370	3.6	200	0.1
								2.0	110	1.8	6735	3.6	200	0.1
								2.5	111	2.0	5080	4.0	200	0.2
								3.0	111	2.0	3760	4.0	200	0.3
								4.0	113	2.3	2415	4.6	200	0.4
6.0	118	2.5	1600	5.0	200	0.5								

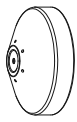
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
62	63	63	63	39	42	45	47	0.018	112	0.06	375	0.12	200	0.0
								0.024	112	0.06	350	0.12	200	0.0
								0.030	111	0.06	340	0.12	200	0.0
								0.036	111	0.06	325	0.12	200	0.1
								0.048	110	0.07	300	0.14	200	0.1
								0.060	110	0.07	290	0.14	200	0.1
								0.075	110	0.07	275	0.14	200	0.1
								0.105	111	0.08	180	0.16	200	0.2
								0.135	111	0.08	110	0.16	200	0.3
								3/16	116	0.09	75	0.18	200	0.4
1/4	118	0.10	60	0.20	200	0.5								

*with IHS tab / **without IHS tab

Mild steel
O₂ Plasma / Air Shield
50 A Cutting

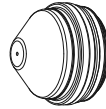
Flow rates – lpm/scfh	
O ₂ (Plasma)	Air (Shield)
12/25	73/155



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Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead length.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
68	68	69	69	25	27	29	31	0.5	98	1.5	7550	3.0	200	0.0
								0.8	96	1.5	7050	3.0	200	0.0
								1.0	90	1.5	6775	3.0	200	0.1
								1.2	94	1.5	6600	3.6	200	0.1
								1.5	99	1.5	6150	3.6	200	0.1
								2.0	99	1.5	5400	3.6	200	0.1
								2.5	99	1.8	4300	4.0	200	0.2
								3.0	99	1.8	3650	4.0	200	0.3
								4.0	101	2.0	2800	4.6	200	0.4
6.0	103	2.5	1750	5.0	200	0.5								

English

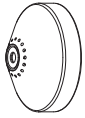
Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
68	68	69	69	25	27	29	31	0.018	98	0.06	300	0.12	200	0.0
								0.024	98	0.06	290	0.12	200	0.0
								0.030	98	0.06	280	0.12	200	0.0
								0.036	89	0.06	270	0.12	200	0.1
								0.048	94	0.06	260	0.12	200	0.1
								0.060	99	0.06	240	0.12	200	0.1
								0.075	99	0.06	220	0.12	200	0.1
								0.105	99	0.07	160	0.14	200	0.2
								0.135	99	0.07	130	0.14	200	0.3
								3/16	103	0.09	85	0.15	150	0.4
								1/4	103	0.10	65	0.15	150	0.5

*with IHS tab / **without IHS tab

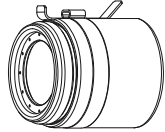
Operation

Mild steel Air Plasma / Air Shield 130 A Cutting

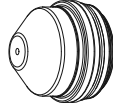
Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
33/70	68/145



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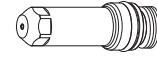
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Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Factor %	
68	69	70	71	22	24	26	28	3.0	149	3.0	5350	6.0	200	0.1
								4.0	147	3.0	4630	6.0	200	0.2
								6.0	142	2.4	3865	7.2	300	0.3
								10.0	152	4.1	2445	8.2	200	0.5
								12.0	154	4.1	2045	8.2	200	0.5
								15.0	155	4.4	1445	8.8	200	0.8
								20.0	158	4.6	815	9.6	210	1.2
								25.0	166	4.6	415	Edge start		
32.0	178	5.1	250	Edge start										

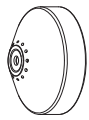
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
68	69	70	71	22	24	26	28	0.135	149	0.12	220	0.24	200	0.1
								3/16	145	0.12	160	0.24	200	0.2
								1/4	141	0.10	150	0.28	300	0.3
								3/8	151	0.16	100	0.32	200	0.5
								1/2	154	0.16	75	0.32	200	0.5
								5/8	155	0.18	50	0.36	200	0.8
								3/4	156	0.18	35	0.38	210	1.2
								1	167	0.18	15	Edge start		
1-1/4	178	0.20	10	Edge start										

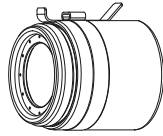
*with IHS tab / **without IHS tab

Mild steel
O₂ Plasma / Air Shield
130 A Cutting

Flow rates – lpm/scfh	
O ₂ (Plasma)	Air (Shield)
20/42	86/183



220491



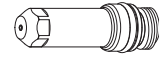
220936* / 220935**



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220487

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
62	62	64	64	30	32	35	37	3.0	130	2.6	5900	5.2	200	0.1
								4.0	131	2.7	5325	5.4	200	0.2
								6.0	134	2.8	3925	5.6	200	0.3
								10.0	136	3.0	2680	6.0	200	0.4
								12.0	138	3.0	2200	6.0	200	0.5
								15.0	140	3.6	1665	7.2	200	0.7
								20.0	145	3.9	1195	7.8	200	1.0
								25.0	151	4.1	685	Edge start		
								32.0	158	4.6	515			
38.0	163	4.6	310											

English

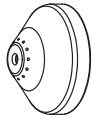
Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
62	62	64	64	30	32	35	37	0.135	130	0.10	240	0.20	200	0.1
								3/16	132	0.11	190	0.22	200	0.2
								1/4	134	0.11	150	0.22	200	0.3
								3/8	136	0.12	110	0.24	200	0.3
								1/2	138	0.12	80	0.24	200	0.5
								5/8	141	0.15	60	0.30	200	0.7
								3/4	144	0.15	50	0.30	200	1.0
								1	151	0.16	25	Edge start		
								1-1/4	158	0.18	20			
1-1/2	163	0.18	12											

*with IHS tab / **without IHS tab

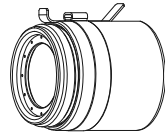
Operation

Mild steel Air Plasma / Air Shield 200 A Cutting

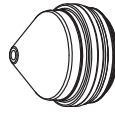
Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
32/68	123/260



420045



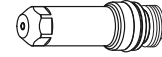
220936* / 220935**



420044



220488



220937

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
52	54	55	56	48	50	54	58	6.0	147	1.0	4885	3.0	300	0.3
								8.0	148	1.3	4515	3.9	300	0.5
								10.0	151	3.0	3556	5.2	200	0.8
								12.0	153	3.0	2794	6.0	200	0.9
								15.0	158	4.3	2265	8.6	200	1.0
								20.0	165	4.8	1415	9.6	200	1.4
								25.0	172	6.4	940	12.8	200	1.7
								32.0	176	6.4	630	12.8	200	2.3
								38.0	179	6.4	510	Edge start		
								44.0	189	6.4	320			
								50.0	199	6.4	215			

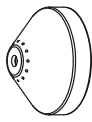
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
52	54	55	56	48	50	54	58	1/4	145	0.04	190	0.12	300	0.3
								5/16	148	0.05	180	0.15	300	0.5
								3/8	151	0.10	140	0.20	200	0.8
								1/2	154	0.13	110	0.25	200	0.9
								5/8	159	0.19	85	0.38	200	1.0
								3/4	164	0.19	60	0.38	200	1.2
								7/8	169	0.19	50	0.38	200	1.4
								1	173	0.25	35	0.45	180	1.7
								1-1/4	176	0.25	25	0.45	180	2.3
								1-1/2	179	0.25	20	Edge start		
1-3/4	190	0.25	12											
								2	200	0.25	8			

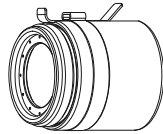
*with IHS tab / **without IHS tab

Mild steel
O₂ Plasma / Air Shield
200 A Cutting

Flow rates – lpm/scfh	
O ₂ (Plasma)	Air (Shield)
32/67	123/260



220832



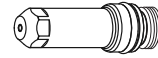
220936* / 220935**



220831



220834



220937

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
68	69	70	71	48	50	54	58	6.0	146	1.5	6210	3.0	200	0.3
								8.0	150	3.4	4850	5.1	150	0.4
								10.0	156	4.6	3735	6.9	150	0.4
								12.0	154	3.8	3415	9.5	250	0.6
								15.0	153	3.1	2845	7.8	250	0.7
								20.0	154	3.0	1920	7.5	250	0.8
								25.0	154	3.2	1430	8.0	250	1.0
								32.0	161	3.1	805	7.8	250	1.3
								38.0	168	4.4	570	Edge start		
								44.0	175	4.4	395			
								50.0	180	4.4	270			

English

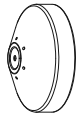
Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
68	69	70	71	48	50	54	58	1/4	143	0.08	235	0.15	200	0.3
								3/8	157	0.19	150	0.28	150	0.3
								1/2	153	0.14	130	0.28	200	0.3
								5/8	153	0.12	105	0.28	250	0.5
								3/4	154	0.12	80	0.28	250	0.6
								7/8	154	0.13	65	0.31	250	0.7
								1	154	0.13	55	0.31	250	0.8
								1-1/4	161	0.13	32	0.35	280	1.5
								1-1/2	168	0.18	22	Edge start		
								1-3/4	175	0.18	15			
								2	181	0.18	10			

*with IHS tab / **without IHS tab

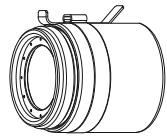
Operation

Stainless steel Air Plasma / Air Shield 50 A Cutting

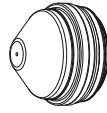
Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
12/25	103/218



220532



220936* / 220935**



220890



220529



220528

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
62	63	63	63	39	42	45	47	0.5	101	1.5	8000	3.0	200	0.0
								0.8	102	1.6	7750	3.2	200	0.0
								1.0	102	1.8	7115	3.6	200	0.1
								1.2	103	1.8	6350	3.6	200	0.1
								1.5	106	1.8	5335	3.6	200	0.1
								2.0	108	2.0	4200	4.0	200	0.1
								2.5	111	2.0	3300	4.0	200	0.2
								3.0	112	2.0	2800	4.0	200	0.3
								4.0	116	2.2	2300	4.4	200	0.4
6.0	123	2.5	1400	5.0	200	0.5								

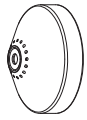
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
62	63	63	63	39	42	45	47	0.018	101	0.06	300	0.12	200	0.0
								0.024	101	0.06	275	0.12	200	0.0
								0.030	102	0.06	265	0.12	200	0.0
								0.036	102	0.06	250	0.12	200	0.1
								0.048	103	0.07	225	0.14	200	0.1
								0.060	106	0.07	190	0.14	200	0.1
								0.075	107	0.07	165	0.14	200	0.1
								0.105	112	0.08	125	0.16	200	0.2
								0.135	113	0.08	85	0.16	200	0.3
								3/16	119	0.09	55	0.18	200	0.4
1/4	124	0.10	45	0.20	200	0.5								

*with IHS tab / **without IHS tab

Stainless steel
Air Plasma / Air Shield
130 A Cutting

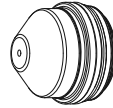
Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
33/70	69/145



220536



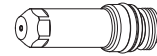
220936* / 220935**



220892



220488



220487

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
68	69	70	71	22	24	26	28	6.0	147	3.5	2625	7.0	200	0.3
								10.0	153	4.1	1700	8.2	200	0.5
								12.0	155	4.1	1380	8.2	200	0.8
								15.0	160	4.4	900	Edge start		
								20.0	170	4.6	430			

English

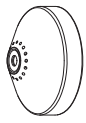
Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
68	69	70	71	22	24	26	28	1/4	148	0.14	100	0.28	200	0.3
								3/8	152	0.16	70	0.32	200	0.5
								1/2	156	0.16	50	0.32	200	0.8
								5/8	162	0.18	30	Edge start		
								3/4	168	0.18	20			

*with IHS tab / **without IHS tab

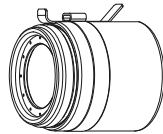
Operation

Stainless steel N₂ Plasma / N₂ Shield 130 A Cutting

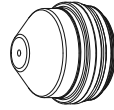
Flow rates – lpm/scfh	
N ₂ (Plasma)	N ₂ (Shield)
32/68	104/218



220536



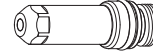
220936* / 220935**



220892



220529



020415

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Factor %	
68	69	70	71	36	39	42	44	5.0	148	3.0	3140	6.1	200	0.3
								6.0	151	3.0	2980	6.1	200	0.3
								10.0	152	3.3	1830	6.6	200	0.5
								12.0	154	3.3	1510	6.6	200	0.8
								15.0	158	3.6	1120	Edge start		
								20.0	166	3.8	470			

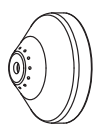
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Factor %	
68	69	70	71	36	39	42	44	3/16	149	0.12	125	0.24	200	0.3
								1/4	151	0.12	115	0.24	200	0.3
								3/8	152	0.13	75	0.26	200	0.5
								1/2	154	0.13	55	0.26	200	0.8
								5/8	159	0.14	40	Edge start		
								3/4	165	0.15	25			

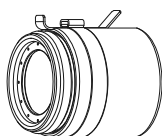
*with IHS tab / **without IHS tab

Stainless steel
Air Plasma / Air Shield
200 A Cutting

Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
32/68	123/260



420045



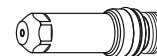
220936* / 220935**



420044



220488



220937

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Factor %	
52	54	55	56	48	50	54	58	4.0	148	2.7	5695	5.4	200	0.4
								6.0	150	3.0	3105	6.0	200	0.4
								10.0	150	3.2	2485	6.4	200	0.5
								12.0	152	3.2	2245	6.4	200	0.8
								15.0	157	3.8	1700	7.6	200	0.8
								20.0	164	4.9	1155	9.8	200	1.0
								25.0	168	5.6	670	11.8	210	1.6
								32.0	174	5.6	515	Edge start		
								38.0	180	5.6	310			
								50.0	188	5.6	203			

English

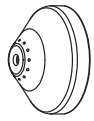
Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
52	54	55	56	48	50	54	58	3/16	149	0.11	240	0.22	200	0.4
								1/4	150	0.12	210	0.24	200	0.4
								3/8	150	0.13	170	0.25	200	0.5
								1/2	153	0.13	120	0.25	200	0.8
								5/8	159	0.16	85	0.32	200	0.8
								3/4	163	0.19	60	0.38	200	1.0
								7/8	166	0.21	50	0.42	200	1.4
								1	168	0.22	40	0.45	210	1.6
								1-1/4	174	0.22	20	Edge start		
								1-1/2	180	0.22	12			
2	188	0.22	8											

*with IHS tab / **without IHS tab

Operation

Stainless steel N₂ Plasma / N₂ Shield 200 A Cutting

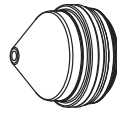
Flow rates – lpm/scfh	
N ₂ (Plasma)	N ₂ (Shield)
37/79	107/225



420045



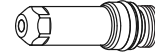
220936* / 220935**



420044



220529



020415

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
69	70	71	72	42	45	48	51	5.0	156	3.2	4460	6.4	200	0.4
								6.0	159	3.2	3980	6.4	200	0.4
								10.0	160	3.2	2900	6.4	200	0.5
								12.0	162	3.2	2260	6.4	200	0.8
								15.0	165	3.4	1760	7.9	230	0.9
								20.0	172	4.2	1190	10.1	240	1.1
								25.0	185	6.4	790	11.4	180	2.0
								32.0	191	6.4	520	Edge start		
								38.0	197	6.4	310			

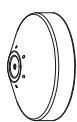
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
69	70	71	72	42	45	48	51	3/16	159	0.13	180	0.25	200	0.4
								1/4	159	0.13	150	0.25	200	0.4
								3/8	160	0.13	120	0.25	200	0.5
								1/2	163	0.13	80	0.25	200	0.8
								5/8	166	0.14	65	0.32	230	0.9
								3/4	170	0.16	50	0.38	240	1.0
								7/8	178	0.19	40	0.38	200	1.5
								1	186	0.25	30	0.45	180	2.0
								1-1/4	191	0.25	21	Edge start		
1-1/2	197	0.25	12											

*with IHS tab / **without IHS tab

Aluminum
Air Plasma / Air Shield
50 A Cutting

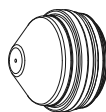
Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
12/25	104/218



220532



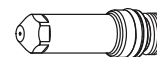
220936* / 220935**



220890



220529



220528

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
62	63	63	63	39	42	45	47	0.5	112	1.5	8000	3.0	200	0.0
								0.8	113	1.6	7750	3.2	200	0.0
								1.0	114	1.8	7115	3.6	200	0.1
								1.2	114	1.8	6350	3.6	200	0.1
								1.5	115	1.8	5335	3.6	200	0.1
								2.0	120	2.0	4200	4.0	200	0.1
								2.5	123	2.0	3300	4.0	200	0.2
								3.0	124	2.0	2800	4.0	200	0.3
								4.0	125	2.2	2300	4.4	200	0.4
								6.0	130	2.5	1400	5.0	200	0.5

English

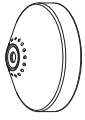
Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
62	63	63	63	39	42	45	47	0.018	112	0.06	325	0.12	200	0.0
								0.020	112	0.06	315	0.12	200	0.0
								0.024	112	0.06	305	0.12	200	0.0
								0.030	113	0.06	295	0.12	200	0.1
								0.036	114	0.07	280	0.14	200	0.1
								0.048	114	0.07	230	0.14	200	0.2
								0.060	115	0.07	195	0.14	200	0.2
								0.075	120	0.08	160	0.16	200	0.2
								0.105	123	0.08	120	0.16	200	0.3
								0.125	124	0.08	100	0.16	200	0.3
								3/16	126	0.09	75	0.18	200	0.4
1/4	131	0.10	50	0.20	200	0.5								

*with IHS tab / **without IHS tab

Operation

Aluminum Air Plasma / Air Shield 130 A Cutting

Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
33/70	69/145



220536



220936* / 220935**



220892



220488



220487

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Factor %	
68	69	70	71	22	24	26	28	6.0	156	2.8	2370	5.6	200	0.2
								10.0	161	3.0	1470	6.0	200	0.3
								12.0	163	3.0	1230	6.0	200	0.5
								15.0	165	3.2	1050	6.4	200	0.8
								20.0	169	3.6	725	7.9	220	1.3
								25.0	175	4.0	525	Edge start		

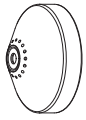
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Factor %	
68	69	70	71	22	24	26	28	1/4	156	0.11	90	0.22	200	0.2
								3/8	160	0.12	60	0.24	200	0.3
								1/2	164	0.12	45	0.24	200	0.5
								5/8	166	0.13	40	0.26	200	0.8
								3/4	168	0.14	30	0.31	220	1.3
								1	176	0.16	20	Edge start		

*with IHS tab / **without IHS tab

Aluminum
N₂ Plasma / N₂ Shield
130 A Cutting

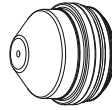
Flow rates – lpm/scfh	
N ₂ (Plasma)	N ₂ (Shield)
32/68	104/218



220536



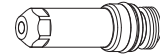
220936* / 220935**



220892



220529



020415

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
68	69	70	71	36	39	42	44	5.0	153	3.0	3140	6.1	200	0.2
								6.0	154	3.0	2980	6.1	200	0.2
								10.0	158	3.3	1830	6.6	200	0.3
								12.0	160	3.3	1510	6.6	200	0.5
								15.0	162	3.6	1120	7.1	200	0.8
								20.0	166	3.9	470	8.7	220	1.4

English

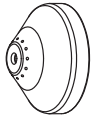
Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
68	69	70	71	36	39	42	44	3/16	153	0.12	125	0.24	200	0.2
								1/4	154	0.12	115	0.24	200	0.2
								3/8	158	0.13	75	0.26	200	0.3
								1/2	160	0.13	55	0.26	200	0.5
								5/8	163	0.14	40	0.28	200	0.8
								3/4	165	0.15	25	0.33	220	1.3

*with IHS tab / **without IHS tab

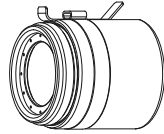
Operation

Aluminum Air Plasma / Air Shield 200 A Cutting

Flow rates – lpm/scfh	
Air (Plasma)	Air (Shield)
32/68	123/260



420045



220936* / 220935**



420044



220488



220937

Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Factor %	
52	54	55	56	48	50	54	58	4.0	150	2.2	6215	4.4	200	0.5
								6.0	156	3.0	5195	6.0	200	0.5
								10.0	156	3.3	3930	6.6	200	0.5
								12.0	159	3.7	3370	7.4	200	0.5
								15.0	163	4.0	2625	8.0	200	0.8
								20.0	169	4.9	1625	9.8	200	1.0
								25.0	177	5.6	1050	11.4	210	1.4
								32.0	187	5.6	515	11.4	210	1.7
								38.0	195	5.6	310	Edge start		

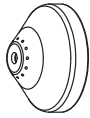
English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Factor %	
52	54	55	56	48	50	54	58	3/16	150	0.10	230	0.20	200	0.5
								1/4	158	0.13	200	0.25	200	0.5
								3/8	155	0.13	160	0.25	200	0.5
								1/2	160	0.15	125	0.30	200	0.5
								5/8	164	0.16	95	0.32	200	0.8
								3/4	168	0.19	70	0.38	200	1.0
								7/8	173	0.21	50	0.42	200	1.2
								1	178	0.22	40	0.45	210	1.4
								1-1/4	187	0.22	20	0.45	210	1.7
1-1/2	195	0.22	12	Edge start										

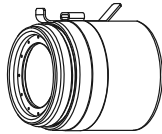
*with IHS tab / **without IHS tab

Aluminum
N₂ Plasma / N₂ Shield
200 A Cutting

Flow rates – lpm/scfh	
N ₂ (Plasma)	N ₂ (Shield)
37/79	107/225



420045



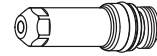
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Note: Gas pressure values are set automatically by the system when the process is chosen. The arc voltage settings in these cut charts were measured with a lead length of 30.5 meters (100 feet). Adjustments to arc voltage settings may be needed for shorter lead lengths.

Metric

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead	7.6 m Lead	15.3 m Lead	22.9 m Lead	30.5 m Lead					mm	Volts	
69	70	71	72	42	45	48	51	5.0	164	3.2	4770	6.4	200	0.5
								6.0	165	3.2	4530	6.4	200	0.5
								10.0	165	3.2	3930	6.4	200	0.5
								12.0	164	3.2	3370	6.4	200	0.5
								15.0	169	4.1	2620	8.1	200	0.8
								20.0	179	5.1	1630	10.2	200	1.2
								25.0	189	6.4	1050	Edge start		
								32.0	198	6.4	500			
38.0	206	6.4	310											

English

Plasma Cutflow				Shield Cutflow				Material Thickness	Arc Voltage	Cut Height	Cutting Speed	Pierce Height		Pierce Delay
25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead	25 ft Lead	50 ft Lead	75 ft Lead	100 ft Lead					in	Volts	
69	70	71	72	42	45	48	51	3/16	165	0.13	190	0.25	200	0.5
								1/4	165	0.13	175	0.25	200	0.5
								3/8	165	0.13	160	0.25	200	0.5
								1/2	164	0.13	125	0.25	200	0.5
								5/8	171	0.16	95	0.32	200	0.8
								3/4	177	0.19	70	0.38	200	1.0
								7/8	183	0.25	50	0.45	180	1.5
								1	190	0.25	40	Edge start		
								1-1/4	198	0.25	20			
1-1/2	206	0.25	12											

*with IHS tab / **without IHS tab