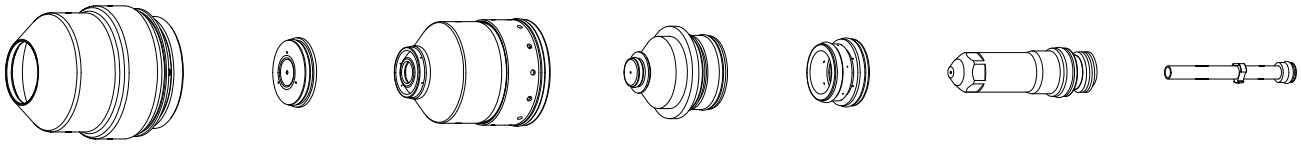
Mild steel

O_2 Plasma / O_2 Shield

30 A Cutting

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	43 / 90
Cutflow	25 / 52	0 / 0

Note: Air must be connected to use this process. It is used as the preflow gas



220747 220194 220754 220193 220180 220192 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
O_2	O_2	78	17	94	17	**0.5**	114	1.3	5355	2.3	180	0.1
						0.8	115		4225			0.2
						1	116		3615			0.3
						1.2	117		2865			
						1.5	119		2210			
			35		7	**2**	120	1.5	1490	2.7		0.4
						2.5	122		1325			
			75			**3***	123		1160			0.5
						4*	125		905			0.7
						6*	128		665			1.0

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
O_2	O_2	78	17	94	17	**.018**	114	0.050	215	0.090	180	0.1
						.024			200			
						.030	115		170			0.2
						.036	116		155			0.3
						.048	117		110			
						.060	119		85			
			35		7	**.075**	120	0.060	60	0.110		0.4
						.105	122		50			
			75			**.135***	123		40			0.5
						3/16*	128		30			0.7
						1/4*			25			1.0

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	105
Ar	Air	90	10	90	10	**9**	2.5	0.10	2540	100	80

*Pierce complete is recommended for these thicknesses

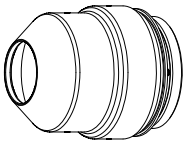
Mild steel

O_2 Plasma / O_2 Shield

50 A Cutting

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	43 / 90
Cutflow	25 / 52	0 / 0

Note: Air must be connected to use this process. It is used as the preflow gas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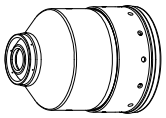
220555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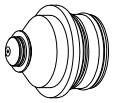
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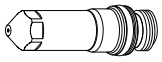
220553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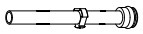

220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
O_2	O_2	70	30	81	14	**0.8**	110	1.0	6500	2.0	200	0.0
						1	111		5000			
						1.2	112		4150			
						1.5	114	1.3	3200	2.6		
						2	115		2700			
						2.5	117		2200			0.1
						3	119	1.5	1800	3.0		0.2
						4	121		1400			0.3
						5	122		1200			0.4
						6	126	2.0	950	4.0		0.5
						7	128		780			
						8	130		630			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
O_2	O_2	70	30	81	14	**.030**	110	0.04	270	0.08	200	0.0
						.036			210			
						.048	112		160			
						.060	114	0.05	125	0.10		
						.075	115		110			
						.105	118		80			0.1
						.135	120	0.06	60	0.12		0.2
						3/16	121		50			0.3
						1/4	125	0.08	35	0.16		0.5
						5/16	130		25			

Marking

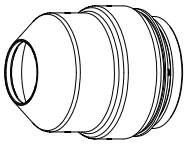
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	118
Ar	Air	90	10	90	10	**9**	2.5	0.10	2540	100	77

Mild steel

O_2 Plasma / Air Shield

80 A Cutting

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	76 / 161
Cutflow	23 / 48	41 / 87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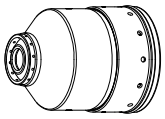
220189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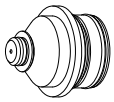
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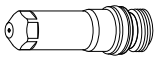
220179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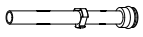

220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
O_2	Air	48	23	78	23	**2**	112	2.5	9810	3.8	150	0.1
						2.5	115		7980			
						3	117		6145			0.2
						4	120	2.0	4300	4.0	200	
						6	123		3045			0.3
						10	127		1810			0.5
					10	**12**	130		1410	5.0	250	0.7
						15	133		1030			0.8
						20	135	2.5	545	6.3		0.9

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
O_2	Air	48	23	78	23	**.075**	112	0.100	400	0.150	150	0.1
						.105	115		290			
						.135	117		180			0.2
						3/16	120	0.080	155	0.160	200	
						1/4	123		110			0.3
						3/8	127		75			0.5
					10	**1/2**	130		50	0.200	250	0.7
						5/8	133		37			0.8
						3/4	135	0.100	25	0.250		0.9

Marking

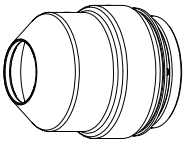
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	130
Ar	Air	50	10	50	10	**15**	3.0	0.12	2540	100	78

Mild steel

O_2 Plasma / Air Shield

130 A Cutting

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	102 / 215
Cutflow	33 / 70	45 / 96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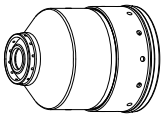
220183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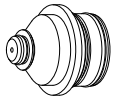
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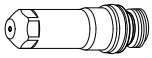
220179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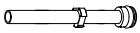

220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
O_2	Air	32	32	84	28	**3**	124	2.5	6505	5.0	200	0.1
						4	126	2.8	5550	5.6		0.2
						6	127		4035			0.3
					22	**10**	130	3.0	2680	6.0		
						12	132	3.3	2200	6.6		0.5
						15	135	3.8	1665	7.6		0.7
			52			**20**	138		1050			1.0
						25	141	4.0	550		190	1.8
						32	160	4.5	375	Edge start		
						38	167		255			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
O_2	Air	32	32	84	28	**.135**	124	0.100	240	0.200	200	0.1
						3/16	126	0.110	190	0.220		0.2
						1/4	127		150			0.3
					22	**3/8**	130	0.120	110	0.240		
						1/2	132	0.130	80	0.260		0.5
						5/8	135	0.150	60	0.300		0.7
			52			**3/4**	138		45			1.0
						1	141	0.160	20		190	1.8
						1-1/4	160	0.180	15	Edge start		
						1-1/2	167		10			

Marking

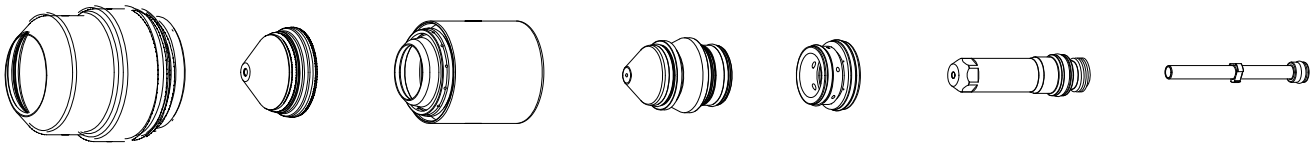
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	130
Ar	Air	50	10	50	10	**15**	3.0	0.12	2540	100	75

Mild steel bevel cutting

O_2 Plasma / Air Shield

130 A

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	64 / 135
Cutflow	33 / 70	45 / 96



220637 220742 220740 220646 220179 220649 220700

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
O_2	Air	15	23	84	21	2.0	**3**	2.5 – 8.6	6505	5.0	200	0.1
							4	2.8 – 8.6	5550	5.6		0.2
							6		4035			0.3
					15		**10**	3.0 – 8.6	2680	6.0		
							12	3.3 – 8.6	2200	6.6		0.5
							15	3.8 – 8.6	1665	7.6		0.7
							20		1050			1.0
							25	4.0 – 8.6	550		190	1.8
							32	4.5 – 8.6	375	Edge start		
							38		255			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	in	ipm	in	Factor %	Seconds
O_2	Air	15	23	84	21	0.080	**0.135**	0.100 – 0.340	240	0.200	200	0.1
							3/16	0.110 – 0.340	190	0.220		0.2
							1/4		150			0.3
					15		**3/8**	0.120 – 0.340	110	0.240		
							1/2	0.130 – 0.340	80	0.260		0.5
							5/8	0.150 – 0.340	60	0.300		0.7
							3/4		45			1.0
							1	0.160 – 0.340	20		190	1.8
							1-1/4	0.180 – 0.340	15	Edge start		
							1-1/2		10			

Marking

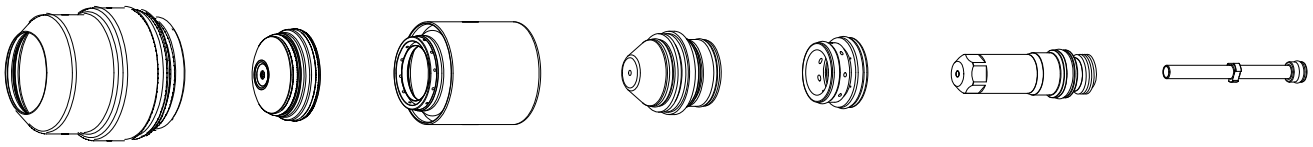
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	130
Ar	Air	50	10	50	10	**15**	3.0	0.12	2540	100	75

Mild steel

O_2 Plasma / Air Shield

200 A Cutting

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	128 / 270
Cutflow	39 / 82	48 / 101



220637 220761 220757 220354 220353 220352 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
O_2	Air	23	42	74	18	**6**	124	3.3	5250	6.6	200	0.2
						10	126		3460			0.3
						12	128		3060			0.5
						15	131	4.1	2275	8.2		0.6
						20	133		1575			0.8
						25	143	5.1	1165	10.2		1.0
						32	145		750			Edge start
						38	152		510			
						50	163		255			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
O_2	Air	23	42	74	18	**3/16**	124	0.130	230	0.260	200	0.2
						1/4			200			
						3/8	126		140			0.3
						1/2	128		115			0.5
						5/8	131	0.160	80	0.320		0.6
						3/4	133		65			0.8
						1	143	0.200	45	0.400		1.0
						1-1/4	145		30			Edge start
						1-1/2	152		20			
						2	163		10			

Marking

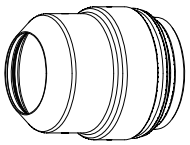
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	130
Ar	Air	30	10	30	10	**20**	3.0	0.12	2540	100	63

Mild steel

O_2 Plasma / Air Shield

260 A Cutting

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	130 / 275
Cutflow	42 / 88	104 / 220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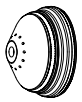
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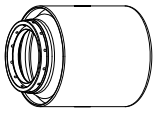
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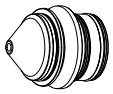
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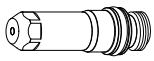
220436


220435


220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
O_2	Air	22	49	76	46	**6**	150	2.8	6500	8.5	300	0.3
						10			4440			
						12			3850			0.4
				80	49	**15**	155	3.6	3130	9.0	250	0.5
						20	159		2170			0.6
						22	166		1930			0.7
				84		**25**	171		1685			0.8
						28	170	4.8	1445	9.5	200	0.9
						32	172		1135			1.0
						38	174		895			1.2
						44	185		580	Edge start		
						50	188		405			
						58	193		290			
						64	202		195			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
O_2	Air	22	49	76	46	**1/4**	150	0.110	250	0.330	300	0.3
						3/8			180			
						1/2			145			0.4
				80	49	**5/8**	155	0.140	115	0.350	250	0.5
						3/4	159		90			0.6
						7/8	166		75			0.7
				84		**1**	171		65			0.8
						1-1/8	170	0.190	55	0.380	200	0.9
						1-1/4	172		45			1.0
						1-1/2	174		35			1.2
						1-3/4	185		22	Edge start		
						2	188		15			
						2-1/4	193		12			
						2-1/2	202		8			

Marking

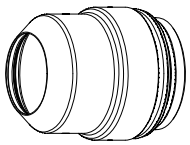
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	135
Ar	Air	30	10	30	10	**24**	3.0	0.12	2540	100	68

Mild steel bevel cutting

O_2 Plasma / Air Shield

260 A

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	130 / 275
Cutflow	42 / 88	104 / 220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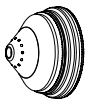
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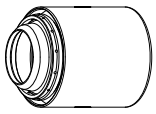
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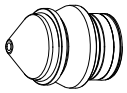
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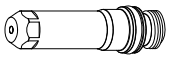
220436


220541


220571

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
O_2	Air	22	49	76	46	2.0	**6**	2.8 – 7.6	6500	8.5	300	0.3
							10		4440			
							12		3850			0.4
				80	49		**15**	3.6 – 7.6	3130	9.0	250	0.5
							20		2170			0.6
							22		1930			0.7
				84			**25**		1685			0.8
							28	4.8 – 7.6	1445	9.5	200	0.9
							32		1135			1.0
							38		895			1.2
							44		580	Edge start		
							50		405			
							58		290			
							64		195			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	in	ipm	in	Factor %	Seconds
O_2	Air	22	49	76	46	0.080	**1/4**	0.110 – 0.300	250	0.330	300	0.3
							3/8		180			
							1/2		145			0.4
				80	49		**5/8**	0.140 – 0.300	115	0.350	250	0.5
							3/4		90			0.6
							7/8		75			0.7
				84			**1**		65			0.8
							1-1/8	0.190 – 0.300	55	0.380	200	0.9
							1-1/4		45			1.0
							1-1/2		35			1.2
							1-3/4		22	Edge start		
							2		15			
							2-1/4		12			
							2-1/2		8			

Marking

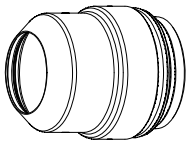
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	135
Ar	Air	30	10	30	10	**24**	3.0	0.12	2540	100	68

Mild steel

O_2 Plasma / Air Shield

400 A

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	190 / 400
Cutflow	66 / 140	137 / 290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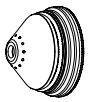
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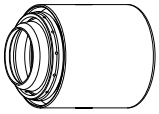
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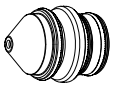
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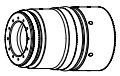
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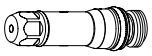

220629


220571

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
O_2	Air	24	50	60	50	**12**	139	3.6	4430	7.2	200	0.4
						15	142		3950			0.5
						20	146		2805			0.7
						25	150	4.0	2210	8.0		0.9
						30	153	4.6	1790	9.2		1.1
						40	158		1160	11.5	250	1.9
						50	167	5.3	795	19.1	360	5.2
						60	173	6.4	580	Edge start		
						70	183		380			
						80	197	7.9	180			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
O_2	Air	24	50	60	50	**1/2**	140	0.14	170	0.28	200	0.4
						5/8	143		150			0.5
						3/4	145		115			0.6
						1	151	0.16	85	0.32		0.9
						1-1/4	153	0.18	65	0.36		1.2
						1-1/2	157		48	0.45	250	1.6
						1-3/4	160		40			2.5
						2	168	0.21	30	0.75	360	5.5
						2-1/4	171	0.25	25	Edge start		
						2-1/2	175		20			
						3	193	0.31	10			

Marking

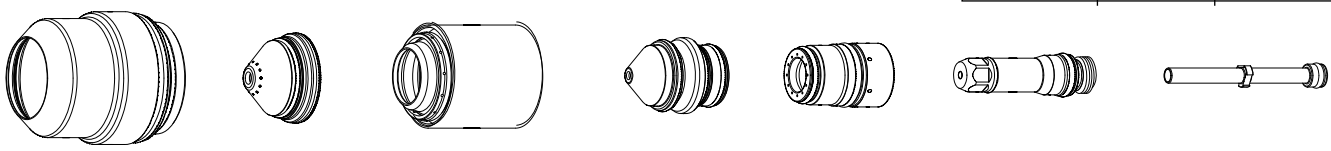
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	123
Ar	Air	20	10	30	10	**25**	3.0	0.12	1270	50	55

Mild steel bevel cutting

O_2 Plasma / Air Shield

400 A

Flow rates – lpm/scfh		
	O_2	Air
Preflow	0 / 0	190 / 400
Cutflow	66 / 140	137 / 290



220637 220636 220635 220632 220631 220629 220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
O_2	Air	24	50	60	50	2.0	**12**	3.6 – 9.4	4430	7.2	200	0.4
							15		3950			0.5
							20		2805			0.7
							25	4.0 – 9.4	2210	8.0		0.9
							30	4.6 – 9.4	1790	9.2		1.1
							40		1160	11.5	250	1.9
							50	5.3 – 9.4	795	19.1	360	5.2
							60	6.4 – 9.4	580	Edge start		
							70		380			
							80	7.9 – 9.4	180			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	in	ipm	in	Factor %	Seconds
O_2	Air	24	50	60	50	0.08	**1/2**	0.14 – 0.37	170	0.28	200	0.4
							5/8		150			0.5
							3/4		115			0.6
							1	0.16 – 0.37	85	0.32		0.9
							1-1/4	0.18 – 0.37	65	0.36		1.2
							1-1/2		48	0.45	250	1.6
							1-3/4		40			2.5
							2	0.21 – 0.37	30	0.75	360	5.5
							2-1/4	0.25 – 0.37	25	Edge start		
							2-1/2		20			
							3	0.31 – 0.37	10			

Marking

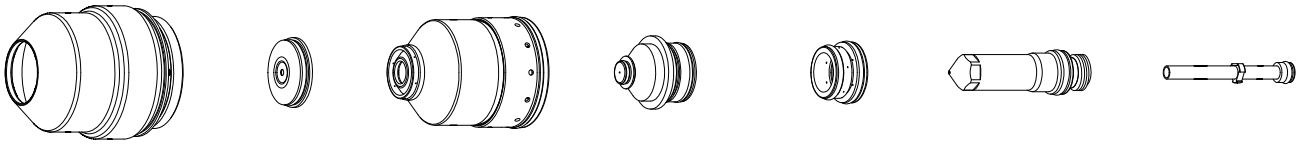
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	123
Ar	Air	20	10	30	10	**25**	3.0	0.12	1270	50	55

Stainless steel

N_2 Plasma / N_2 Shield

45 A Cutting

Flow rates – lpm/scfh	
	N_2
Preflow	24 / 51
Cutflow	75 / 159



220747 220202 220755 220201 220180 220308 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	N_2	35	5	62	49	**0.8**	94	2.5	6380	3.8	150	0.0
						1			5880			0.1
						1.2			5380			0.2
						1.5	95		4630			
						2	97		3935			
						2.5	101		3270			
						3	103		2550			0.3
						4			1580			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	N_2	35	5	62	49	**.036**	94	0.100	240	0.150	150	0.0
						.048			210			0.1
						.060	95		180			0.2
						.075	97		160			
						.105	101		120			
						.135	103		75			0.3

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	85
Ar	N_2	90	10	90	10	**12**	2.5	0.10	2540	100	65

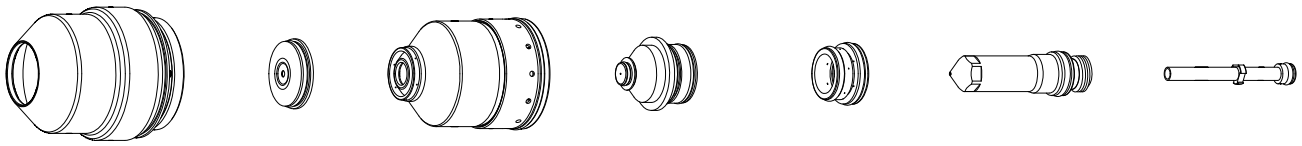
Note: This process produces a darker cut edge than the 45 A, F5/N_2 stainless steel process.

Stainless steel

F5 Plasma / N_2 Shield

45 A Cutting

Flow rates – lpm/scfh		
	F5	N_2
Preflow	0 / 0	43 / 91
Cutflow	8 / 17	65 / 138



220747 220202 220755 220201 220180 220308 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
F5	N_2	35	18	62	49	**0.8**	99	2.5	6570	3.8	150	0.2
						1			5740			
						1.2			4905			
						1.5			3890			
						2	101		3175			
						2.5	102		2510			
						3	103		2010			0.3
						4	104		1435			
					11	**6**	110	2.0	845		190	0.5

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
F5	N_2	35	18	62	49	**.036**	99	0.100	240	0.150	150	0.2
						.048			190			
						.060			150			
						.075	100		130			
						.105	102		90			
						.135	104		65			0.3
					11	**3/16**	108	0.080	45		190	0.4
						1/4	110		30			0.5

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	85
Ar	N_2	90	10	90	10	**12**	2.5	0.10	2540	100	65

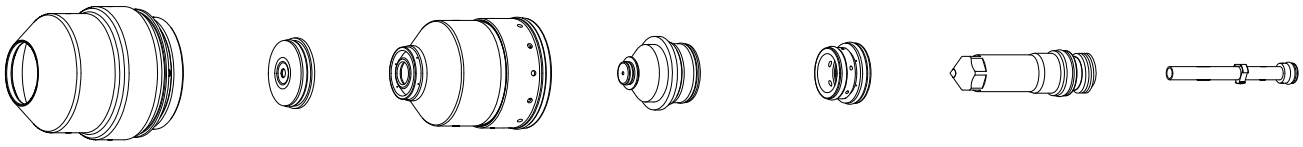
Note: This process produces a shinier cut edge than the 45 A, N_2/N_2 stainless steel process.

Stainless steel

F5 Plasma / N_2 Shield

80 A Cutting

Flow rates – lpm/scfh		
	F5	N_2
Preflow	0 / 0	67 / 142
Cutflow	31 / 65	55 / 116



220747 220338 220755 220337 220179 220339 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
F5	N_2	33	23	65	60	**4**	108	3.0	2180	4.5	150	0.2
						6	112	2.5	1225	3.8		0.3
						10	120	3.0	560	4.5		0.5

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
F5	N_2	33	23	65	60	**.135**	108	0.120	105	0.180	150	0.2
						3/16	110	0.110	60	0.170		0.3
						1/4	112	0.100	45	0.150		
						3/8	120	0.120	25	0.180		0.5

Marking

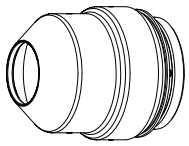
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	95
Ar	N_2	50	10	50	10	**12**	3.0	0.12	2540	100	60

Stainless steel

N_2 Plasma / N_2 Shield

130 A Cutting

Flow rates – lpm/scfh	
	N_2
Preflow	97 / 205
Cutflow	79 / 168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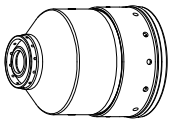
220198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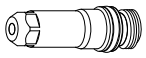
220197


220179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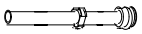

220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	N_2	19	51	75	23	**6**	153	3.0	1960	6.0	200	0.3
						10	156		1300			0.5
						12	162	3.5	900	7.0		0.8
						15	167	3.8	670	Edge start		
						20	176	4.3	305			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	N_2	19	51	75	23	**1/4**	153	0.120	75	0.240	200	0.3
						3/8	156		55			0.5
						1/2	162	0.140	30	0.280		0.8
						5/8	167	0.150	25	Edge start		
						3/4	176	0.170	15			

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

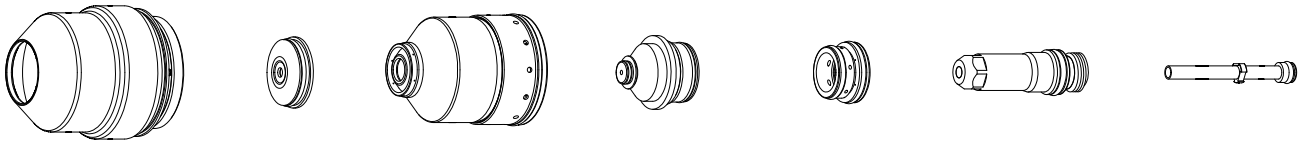
Note: This process produces a rougher, darker cut edge with more dross, and the cut edges are closer to perpendicular than the 130 A, H35/N_2 process.

Stainless steel

H35 Plasma / N_2 Shield

130 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	76 / 160
Cutflow	26 / 54	68 / 144



220747 220198 220755 220197 220179 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	19	32	75	49	**10**	154	4.5	980	7.7	170	0.3
					37	**12**	158		820			0.5
					24	**15**	162		580			0.8
						20	165		360			1.3
					16	**25**	172		260	Edge start		

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	19	32	75	49	**3/8**	154	0.180	40	0.310	170	0.3
					37	**1/2**	158		30			0.5
					24	**5/8**	162		20			0.8
						3/4	165		15			1.3
					16	**1**	172		10	Edge start		

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	130
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

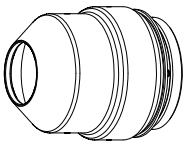
Note: This process produces a smoother, shinier cut edge with less dross, and the cut edges are less perpendicular than the 130 A, N_2/N_2 process.

Stainless steel

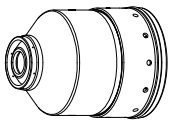
H35 and N_2 Plasma / N_2 Shield

130 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	97 / 205
Cutflow	13 / 28	71 / 150

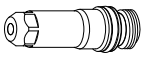

220747


220198


220755


220197


220179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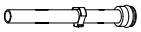

220340

Metric

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	19	51	75	38	32	18	**6**	150	3.0	1835	6.0	200	0.3
								10	153		1195			0.3
					27			**12**	160	3.5	875	7.0		0.5
								15	168	3.8	670	7.6		0.8
								20	176	4.3	305	7.7	180	1.3

English

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	19	51	75	38	32	18	**1/4**	150	0.120	70	0.240	200	0.3
								3/8	153		50			0.3
					27			**1/2**	160	0.140	30	0.280		0.5
								5/8	168	0.150	25	0.300		0.8
								3/4	176	0.170	15	0.310	180	1.3

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	130
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

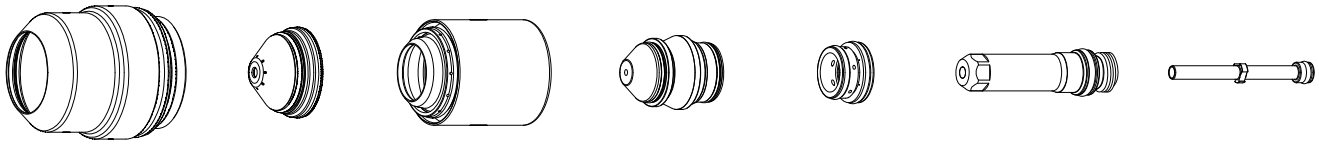
Note: This process produces a smoother, shinier cut edge with less dross, and the cut edges are less perpendicular than the 130 A, N_2/N_2 process. Edge color is more silver than the H35/N_2 process.

Stainless steel bevel cutting

N_2 Plasma / N_2 Shield

130 A

Flow rates – lpm/scfh	
	N_2
Preflow	97 / 205
Cutflow	125 / 260



220637 220738 220739 220656 220179 220606 220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
N_2	N_2	19	51	75	63	2.0	**6**	3.0 – 10.0	1960	6.0	200	0.3
							10		1300			0.5
							12	3.5 – 10.0	900	7.0		0.8
							15	3.8 – 10.0	670	Edge start		
							20	4.3 – 10.0	305			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	in	ipm	in	Factor %	Seconds
N_2	N_2	19	51	75	63	0.080	**1/4**	0.120 – 0.400	75	0.240	200	0.3
							3/8		55			0.5
							1/2	0.140 – 0.400	30	0.280		0.8
							5/8	0.150 – 0.400	25	Edge start		
							3/4	0.170 – 0.400	15			

Marking

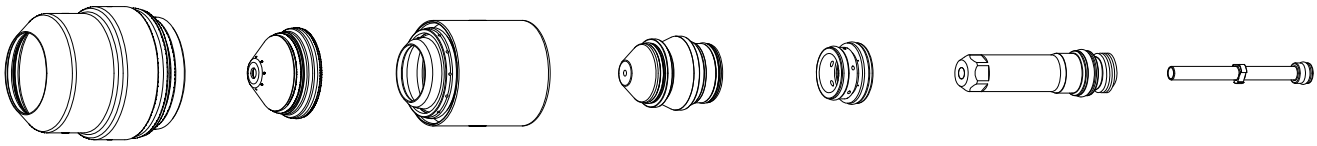
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

Stainless steel bevel cutting

H35 Plasma / N_2 Shield

130 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	90 / 190
Cutflow	26 / 54	114 / 240



220637 220738 220739 220656 220179 220606 220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
H35	N_2	19	32	75	63	2.0	**10**	4.5 – 10.0	980	7.7	170	0.3
							12		820			0.5
							15		580			0.8
							20		360			1.3
							25		260	Edge start		

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	in	ipm	in	Factor %	Seconds
H35	N_2	19	32	75	63	0.080	**3/8**	0.180 – 0.400	40	0.310	170	0.3
							1/2		30			0.5
							5/8		20			0.8
							3/4		15			1.3
							1		10	Edge start		

Marking

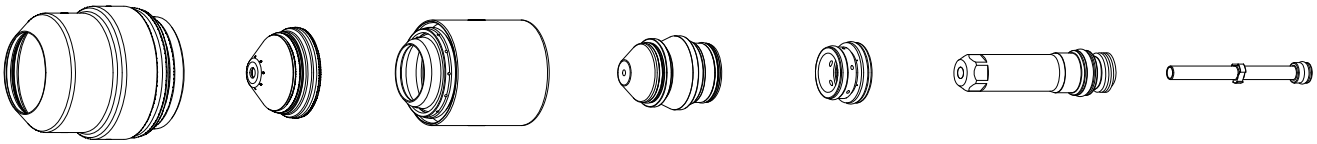
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	130
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

Stainless steel bevel cutting

H35 and N_2 Plasma / N_2 Shield

130 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	97 / 205
Cutflow	13 / 28	120 / 250



220637 220738 220739 220656 220179 220606 220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow				Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
H35	N_2	19	51	75	80	32	18	2.0	**6**	3.0 – 10.0	1835	6.0	200	0.3
									10		1195			
									12	3.5 – 10.0	875	7.0		0.5
									15	3.8 – 10.0	670	7.6		0.8
									20	3.0 – 10.0	305	7.7	180	1.3

English

Select Gases		Set Preflow		Set Cutflow				Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	in	**in**	in	ipm	in	Factor %	Seconds
H35	N_2	19	51	75	80	32	18	0.080	**1/4**	0.120 – 0.400	70	0.240	200	0.3
									3/8		50			
									1/2	0.140 – 0.400	30	0.280		0.5
									5/8	0.150 – 0.400	25	0.300		0.8
									3/4	0.170 – 0.400	15	0.310	180	1.3

Marking

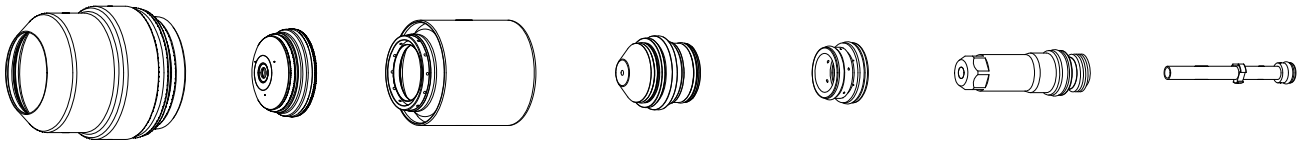
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	130
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

Stainless steel

N_2 Plasma / N_2 Shield

200 A Cutting

Flow rates – lpm/scfh	
	N_2
Preflow	111 / 235
Cutflow	137 / 290



220637 220762 220758 220343 220342 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	N_2	17	42	84	42	**10**	160	3.8	2700	7.6	200	0.5
						12	161		2400			0.6
						15	163		1800			0.8
						20	167		1000			1.0

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	N_2	17	42	84	42	**3/8**	160	0.150	110	0.300	200	0.5
						1/2	161		90			0.6
						5/8	163		65			0.8
						3/4	167		45			1.0

Marking

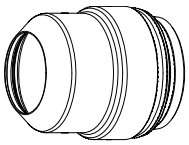
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	66

Stainless steel

H35 Plasma / N_2 Shield

200 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	116 / 245
Cutflow	30 / 63	104 / 220



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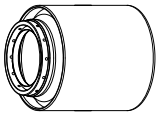

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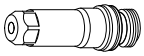

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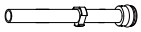


220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	17	43	88	52	**10**	175	9.0	1620	9.0	100	0.5
						12	170	7.5	1450	7.5		0.6
						15	173		1200			0.7
						20	177		820			0.8

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	17	43	88	52	**3/8**	175	0.350	65	0.350	100	0.5
						1/2	170	0.300	55	0.300		0.6
						5/8	173		45			0.7
						3/4	177		35			0.8

Marking

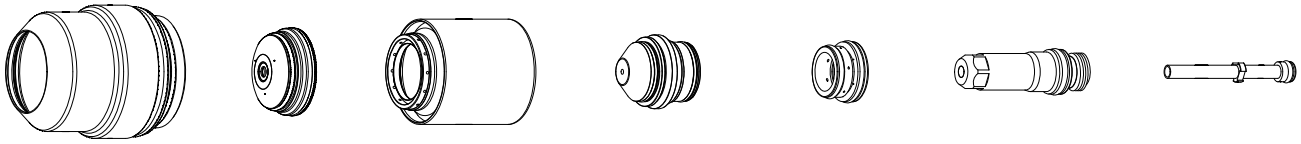
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	66

Stainless steel

H35 and N_2 Plasma / N_2 Shield

200 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	116 / 245
Cutflow	11 / 24	118 / 250



220637 220762 220758 220343 220342 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	17	41	87	41	42	20	**10**	161	4.0	1900	8.0	200	0.5
								12	162		1800			0.6
								15	167	4.6	1600	7.0	150	0.8
								20	171	5.1	1000	7.5		1.0

English

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	17	41	87	41	42	20	**3/8**	161	0.160	75	0.320	200	0.5
								1/2	162		70			0.6
								5/8	167	0.180	60	0.270	150	0.8
								3/4	171	0.200	45	0.300		1.0

Marking

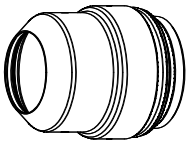
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	66

Stainless steel

N_2 Plasma / Air Shield

260 A Cutting

Flow rates – lpm/scfh		
	N_2	Air
Preflow	127 / 270	0 / 0
Cutflow	54 / 114	116 / 245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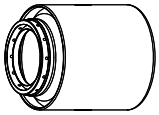
220763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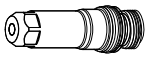
220406


220405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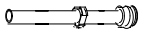

220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	Air	12	47	79	56	**6**	160	3.8	6375	7.5	200	0.3
						10	157		3440			
						12	161		2960			0.4
						15	163		2520			0.5
						20	164		1590			0.6
						25	168		1300			0.8
						32	171		875			1.0
						38	179		515	Edge start		
						44	190		365			
						50	195		180			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	Air	12	47	79	56	**1/4**	160	0.150	240	0.300	200	0.3
						3/8	157		140			
						1/2	161		110			0.4
						5/8	163		95			0.5
						3/4	164		70			0.6
						1	168		50			0.8
						1-1/4	171		35			1.0
						1-1/2	179		20	Edge start		
						1-3/4	190		14			
						2	200		6			

Marking

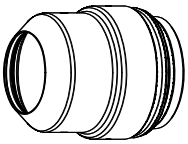
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Stainless steel

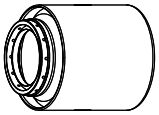
H35 Plasma / N_2 Shield

260 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	127 / 270
Cutflow	40 / 84	122 / 260


220637


220763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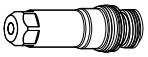
220406


220405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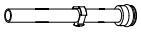

220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	12	49	85	60	**10**	188	11.0	1870	11.0	100	0.3
						12	173	9.0	1710	9.0		0.4
						15	171	7.5	1465		120	0.5
						20	175		1085			0.6
						25	180		785			0.7
						32	185		630			1.0
						38	186		510	Edge start		
						44	189		390			
						50	200		270			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	12	49	85	60	**3/8**	188	0.450	75	0.500	100	0.3
						1/2	173	0.350	65	0.350		0.4
						5/8	171	0.300	55	0.360	120	0.5
						3/4	175		45			0.6
						1	180		30			0.7
						1-1/4	185		25			1.0
						1-1/2	186		20	Edge start		
						1-3/4	189		15			
						2	200		10			

Marking

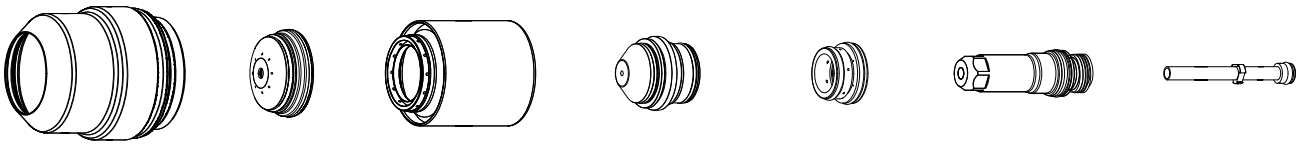
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Stainless steel

H35 and N_2 Plasma / N_2 Shield

260 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	132 / 280
Cutflow	13 / 27	163 / 345



220637 220763 220758 220406 220405 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	12	49	87	60	60	21	**6**	170	4.0	3980	8.0	200	0.3
								10	175		2190			
								12	176		1790			0.5
								15	177		1650			0.7
								20	179		1320			0.8
						40	26	**25**	182		920			1.0
								32	186		755			1.2
								38	189		510	Edge start		
								44	195		390			
								50	202		270			

English

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	12	49	87	60	60	21	**1/4**	170	0.160	150	0.320	200	0.3
								3/8	175		90			
								1/2	176		65			0.5
								5/8	177					0.7
								3/4	179		55			0.8
						40	26	**1**	182		35			1.0
								1-1/4	186		30			1.2
								1-1/2	189		20	Edge start		
								1-3/4	187		15			
								2	202		10			

Marking

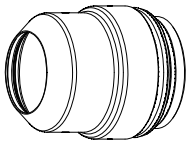
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Stainless steel bevel cutting

H35 Plasma / N_2 Shield

260 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	127 / 270
Cutflow	40 / 84	122 / 260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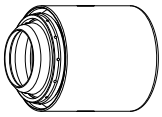
220738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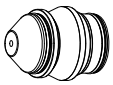
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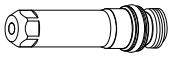
220405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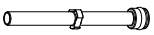

220571

Notes: Bevel angle range is 0° to 45°.

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
H35	N_2	12	49	85	60	2.0	**10**	11.0	1870	12.5	100	0.3
							12	9.0 – 10.0	1710	9.0		0.4
							15	7.5 – 10.0	1465		120	0.5
							20		1085			0.6
							25		785			0.7
							32		630			1.0
							38		510	Edge start		
							44		390			
							50		270			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	in	ipm	in	Factor %	Seconds
H35	N_2	12	49	85	60	0.080	**3/8**	0.450	75	0.500	100	0.3
							1/2	0.350 – 0.400	65	0.350		0.4
							5/8	0.300 – 0.400	55	0.360	120	0.5
							3/4		45			0.6
							1		30			0.7
							1-1/4		25			1.0
							1-1/2		20	Edge start		
							1-3/4		15			
							2		10			

Marking

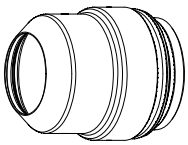
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Stainless steel bevel cutting

N_2 Plasma / Air Shield

260 A

Flow rates – lpm/scfh		
	N_2	Air
Preflow	127 / 270	0 / 0
Cutflow	54 / 114	116 / 245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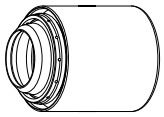
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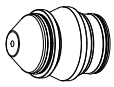
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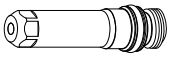
220405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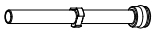

220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
N_2	Air	12	47	79	56	2.0	**6**	3.8 – 10.0	6375	7.5	200	0.3
							10		3440			
							12		2960			0.4
							15		2520			0.5
							20		1590			0.6
							25		1300			0.8
							32		875			1.0
							38		515	Edge start		
							44		365			
							50		180			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	in	ipm	in	Factor %	Seconds
N_2	Air	12	47	79	56	0.080	**1/4**	0.150 – 0.400	240	0.300	200	0.3
							3/8		140			
							1/2		110			0.4
							5/8		95			0.5
							3/4		70			0.6
							1		50			0.8
							1-1/4		35			1.0
							1-1/2		20	Edge start		
							1-3/4		14			
							2		6			

Marking

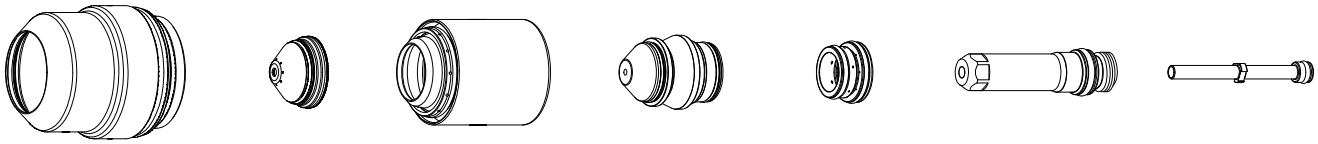
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Stainless steel bevel cutting

H35 and N_2 Plasma / N_2 Shield

260 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	132 / 280
Cutflow	13 / 27	163 / 345



220637 220738 220739 220607 220405 220606 220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow				Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	mm	**mm**	mm	mm/m	mm	Factor %	Seconds
H35	N_2	12	49	87	60	60	21	2.0	**6**	4.0 – 10.0	3980	8.0	200	0.3
									10		2190			
									12		1790			0.5
									15		1650			0.7
									20		1320			0.8
						40	26		**25**		920			1.0
									32		755			1.2
									38		510	Edge start		
									44		390			
									50		270			

English

Select Gases		Set Preflow		Set Cutflow				Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	in	**in**	in	ipm	in	Factor %	Seconds
H35	N_2	12	49	87	60	60	21	0.08	**1/4**	0.16 – 0.40	150	0.320	200	0.3
									3/8		90			
									1/2		65			0.5
									5/8					0.7
									3/4		55			0.8
						40	26		**1**		35			1.0
									1-1/4		30			1.2
									1-1/2		20	Edge start		
									1-3/4		15			
									2		10			

Marking

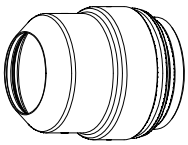
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Stainless steel

N_2 Plasma / Air Shield

400 A

Flow rates – lpm/scfh		
	N_2	Air
Preflow	42 / 90	146 / 310
Cutflow	86 / 182	102 / 217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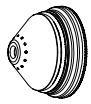
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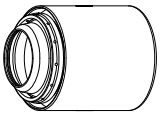
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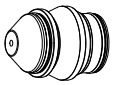
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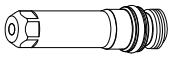
220405


220709


220571

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	Air	30	50	85	31	**12**	158	3.8	3300	9.9	260	0.3
						15	159		2800			0.4
						20	162	4.6	2340	13.8	300	0.5
						25	164		1940			0.6
						30	176	6.4	1450	19.2		0.8
						40	177	4.6	570	Edge start		
						45	187		430			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	Air	30	50	85	31	**1/2**	158	0.15	125	0.39	260	0.3
						5/8	159		105			0.4
						3/4	162	0.18	95	0.54	300	0.5
						1	164		75			0.6
						1-1/4	176	0.25	50	0.75		0.8
						1-1/2	177	0.18	25	Edge start		
						1-3/4	187		17			

Marking

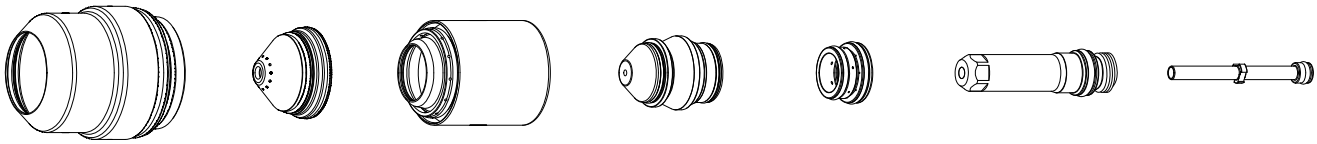
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Stainless steel

H35 Plasma / N_2 Shield

400 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	189 / 400
Cutflow	86 / 182	123 / 260



220637 220707 220712 220708 220405 220709 220571

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	30	45	86	45	**20**	180	9.0	1100	14.5	150	0.7
						25	181		905	19.0	210	1.0
						30	184		800			1.5
						40	186		600			2.0
						50	192		400	Edge start		
						60	198		280			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	30	45	86	45	**3/4**	180	0.35	45	0.53	150	0.7
						1	181		35	0.75	210	1.0
						1-1/4	184		30			1.5
						1-1/2	186		25			2.0
						1-3/4	189		20	Edge start		
						2	192		15			
						2-1/4	198		12			
						2-1/2	202		10			

Marking

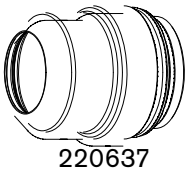
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Stainless steel

H35 and N_2 Plasma / N_2 Shield

400 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	194 / 410
Cutflow	36 / 77	194 / 410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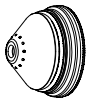
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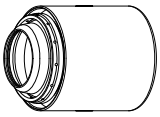
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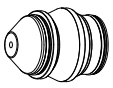
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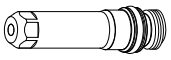
220405


220709


220571

Metric

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	30	45	88	45	60	40	**12**	157	4.6	2750	14	300	0.4
								15	159		2390			0.5
								20	166		1810			0.7
								25	172		1310			1.0
							60	**30**	186	5.3	1080	16		2.0
								40	187	6.4	720	19		3.0
								50	190		520	Edge start		
								60	192		410			
								70	194		310			
								80	210		180			

English

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	30	45	88	45	60	40	**1/2**	157	0.18	105	0.5	300	0.4
								5/8	159		90			0.5
								3/4	166		75			0.7
								1	172		50			1.0
							60	**1-1/4**	182	0.21	40	0.6		1.5
								1-1/2	186	0.25	30	0.8		2.0
								1-3/4	187		25			3.0
								2	190		20	Edge start		
								2-1/4	192		17			
								2-1/2	194		15			
								3	202		10			

Marking

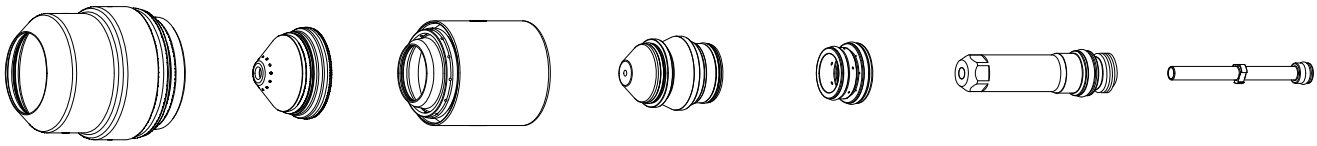
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Stainless steel bevel cutting

N_2 Plasma / Air Shield

400 A

Flow rates – lpm/scfh		
	N_2	Air
Preflow	42 / 90	146 / 310
Cutflow	86 / 182	102 / 217



220637 220707 220712 220708 220405 220709 220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	Range (mm)	mm/m	mm	Factor %	Seconds
N_2	Air	30	50	85	31	2.0	**12**	3.8 – 11.6	3300	9.9	260	0.3
							15		2800			0.4
							20	4.6 – 11.6	2340	13.8	300	0.5
							25		1940			0.6
							30	6.4 – 11.6	1450	19.2		0.8
							40	4.6 – 11.6	570	Edge start		
							45		430			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	Range (in)	ipm	in	Factor %	Seconds
N_2	Air	30	50	85	31	0.08	**1/2**	0.15 – 0.46	125	0.39	260	0.3
							5/8		105			0.4
							3/4	0.18 – 0.46	95	0.54	300	0.5
							1		75			0.6
							1-1/4	0.25 – 0.46	50	0.75		0.8
							1-1/2	0.18 – 0.46	25	Edge start		
							1-3/4		17			

Marking

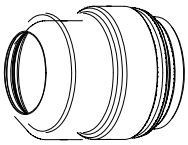
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Stainless steel bevel cutting

H35 Plasma / N_2 Shield

400 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	189 / 400
Cutflow	86 / 182	123 / 260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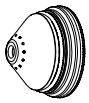
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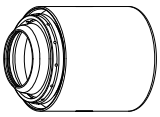
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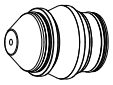
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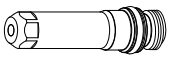
220405


220709


220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	mm	**mm**	Range (mm)	mm/m	mm	Factor %	Seconds
H35	N_2	30	45	86	45	2.0	**20**	9.0 – 11.6	1100	14.5	150	0.7
							25		905	19.0	210	1.0
							30		800			1.5
							40		600			2.0
							50		400	Edge start		
							60		280			

English

Select Gases		Set Preflow		Set Cutflow		Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	in	**in**	Range (in)	ipm	in	Factor %	Seconds
H35	N_2	30	45	86	45	0.08	**3/4**	0.35 – 0.46	45	0.53	150	0.7
							1		35	0.75	210	1.0
							1-1/4		30			1.5
							1-1/2		25			2.0
							1-3/4		20	Edge start		
							2		15			
							2-1/4		12			
							2-1/2		10			

Marking

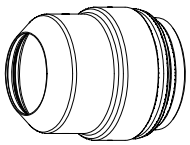
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Stainless steel bevel cutting

H35 and N_2 Plasma / N_2 Shield

400 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	194 / 410
Cutflow	36 / 77	194 / 410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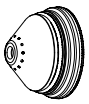
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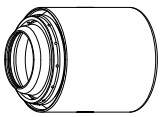
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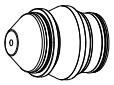
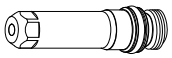

220708


220405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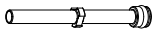

220571

Note: Bevel angle range is 0° to 45°

Metric

Select Gases		Set Preflow		Set Cutflow				Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	mm	**mm**	Range (mm)	mm/m	mm	Factor %	Seconds
H35	N_2	30	45	88	45	60	40	2.0	**12**	4.6 – 11.6	2750	14	300	0.4
									15		2390			0.5
									20		1810			0.7
									25		1310			1.0
							60		**30**	5.3 – 11.6	1080	16		2.0
									40		720	19		3.0
									50	6.4 – 11.6	520	Edge start		
									60		410			
									70		310			
									80		180			

English

Select Gases		Set Preflow		Set Cutflow				Minimum Clearance	**Equivalent Material Thickness**	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	in	**in**	Range (in)	ipm	in	Factor %	Seconds
H35	N_2	30	45	88	45	60	40	0.08	**1/2**	0.18 – 0.46	105	0.5	300	0.4
									5/8		90			0.5
									3/4		75			0.7
									1		50			1.0
							60		**1-1/4**	0.21 – 0.46	40	0.6		1.5
									1-1/2	0.25 – 0.46	30	0.8		2.0
									1-3/4		25			3.0
									2		20	Edge start		
									2-1/4		17			
									2-1/2		15			
									3		10			

Marking

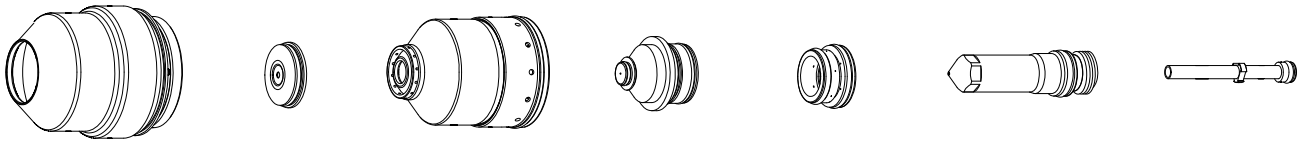
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Aluminum

Air Plasma / Air Shield

45 A Cutting

Flow rates – lpm/scfh	
	Air
Preflow	45 / 95
Cutflow	78 / 165



220747 220202 220756 220201 220180 220308 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
Air	Air	35	19	62	49	**1.2**	130	2.5	4750	3.8	150	0.2
						1.5	115		4160			
						2	113		3865			
						2.5	110		3675			
						3	107		2850			
					33	**4**	102	1.8	2660	2.7		0.3
						6	117	3.0	1695	4.5		0.6

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
Air	Air	35	19	62	49	**.040**	130	0.100	220	0.150	150	0.2
						.051	115		170			
						.064	113		160			
						.102	110		140			
					33	**.125**	102	0.070	110	0.110		0.3
						3/16	114	0.120	90	0.180		0.4
						1/4	117		60			0.6

Marking

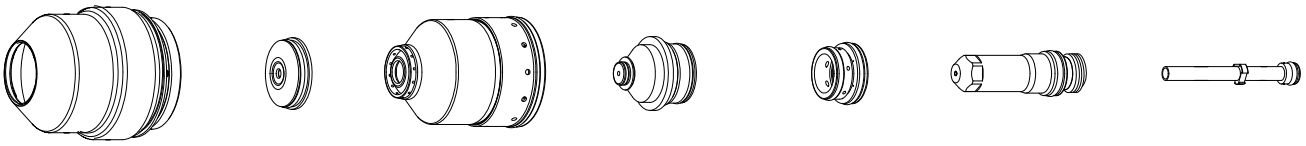
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**15**	2.5	0.10	6350	250	85
Ar	Air	90	10	90	10	**12**	2.5	0.10	2540	100	75

Aluminum

Air Plasma / Air Shield

130 A Cutting

Flow rates – lpm/scfh	
	Air
Preflow	73 / 154
Cutflow	78 / 165



220747 220198 220756 220197 220179 220181 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
Air	Air	19	31	75	23	**6**	153	2.8	2370	5.6	200	0.2
						10	154	3.0	1465	6.0		0.3
						12	156		1225			0.5
						15	158	3.3	1050	6.6		0.8
						20	162	3.5	725	7.0		1.3
						25	172	4.0	525	Edge start		

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
Air	Air	19	31	75	23	**1/4**	153	0.110	90	0.220	200	0.2
						3/8	154	0.120	60	0.240		0.3
						1/2	156		45			0.5
						5/8	158	0.130	40	0.260		0.8
						3/4	162	0.140	30	0.280		1.3
						1	172	0.160	20	Edge start		

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	Air	50	10	50	10	**15**	3.0	0.12	2540	100	82

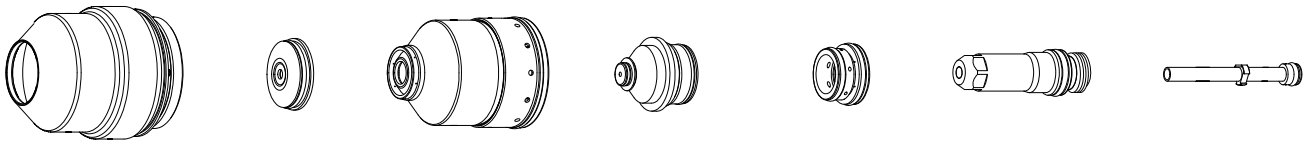
Note: This process produces a rougher cut edge that is less perpendicular than the 130 A, H35/N_2 process.

Aluminum

H35 Plasma / N_2 Shield

130 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	76 / 160
Cutflow	26 / 54	68 / 144



220747 220198 220755 220197 220179 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	19	32	75	49	**10**	158	5.0	1615	6.5	130	0.3
					37	**12**	156	4.5	1455	7.7	170	0.5
					24	**15**			1305			0.8
						20	157		940			1.3
					16	**25**	176		540	Edge start		

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	19	32	75	49	**3/8**	158	0.200	65	0.260	130	0.3
					37	**1/2**	156	0.180	55	0.310	170	0.5
					24	**5/8**			50			0.8
						3/4	157		40			1.3
					16	**1**	176		20	Edge start		

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	130
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

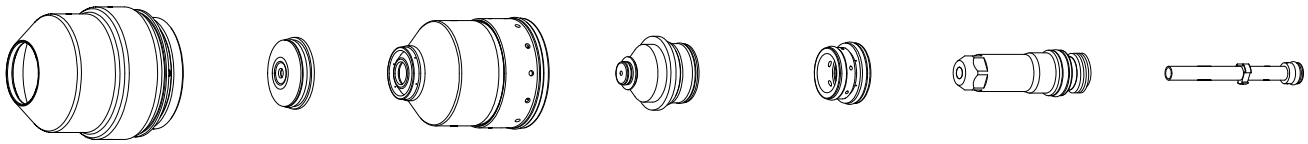
Note: This process produces a smoother cut edge that is more perpendicular than the 130 A, Air/Air process.

Aluminum

H35 and N_2 Plasma / N_2 Shield

130 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	97 / 205
Cutflow	13 / 28	71 / 150



220747 220198 220755 220197 220179 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	19	51	75	27	32	18	**6**	156	3.5	2215	7.0	200	0.3
								10	158		1615			
								12	159	3.0	1455	6.0		0.5
								15	160		1215			0.8
								20	163		815			1.3

English

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	19	51	75	27	32	18	**1/4**	156	0.140	85	0.280	200	0.3
								3/8	158		65			
								1/2	159	0.120	55	0.240		0.5
								5/8	160		45			0.8
								3/4	163		35			1.3

Marking

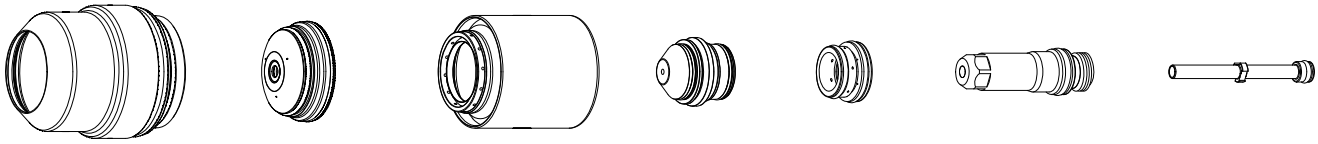
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	130
Ar	N_2	50	10	50	10	**15**	3.0	0.12	2540	100	75

Aluminum

N_2 Plasma / N_2 Shield

200 A Cutting

Flow rates – lpm/scfh	
	N_2
Preflow	113 / 240
Cutflow	135 / 287



220637 220762 220759 220346 220342 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	N_2	17	43	73	43	**10**	158	6.4	4750	9.0	140	0.4
						12			3500			0.5
						15	166		2350			0.6
						20	165		1000			0.8

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	N_2	17	43	73	43	**3/8**	158	0.250	200	0.350	140	0.4
						1/2			120			0.5
						5/8	166		80			0.6
						3/4	165		50			0.8

Marking

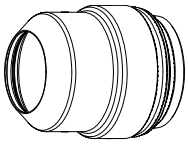
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	66

Aluminum

H35 Plasma / N_2 Shield

200 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	113 / 240
Cutflow	34 / 72	90 / 190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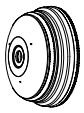
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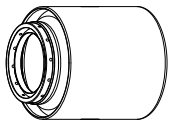
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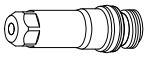
220346


220342


220307


220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	17	43	73	43	**10**	152	6.4	4400	9.0	140	0.3
						12	150		3800			0.4
						15			3000			0.5
						20	159		1450			0.6

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	17	43	73	43	**3/8**	152	0.250	180	0.350	140	0.3
						1/2	150		140			0.4
						5/8			110			0.5
						3/4	159		70			0.6

Marking

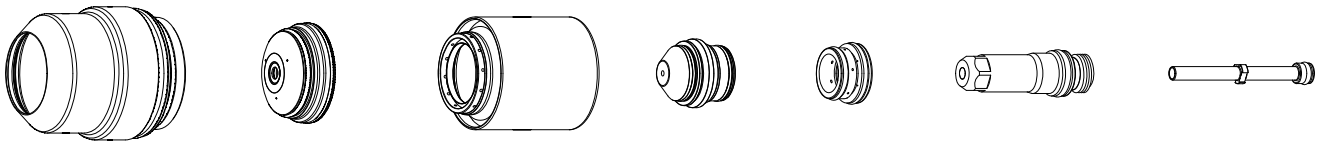
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	66

Aluminum

H35 and N_2 Plasma / N_2 Shield

200 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	121 / 256
Cutflow	13 / 27	126 / 267



220637 220762 220759 220346 220342 220307 220340

Metric

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	17	44	73	44	42	20	**10**	158	6.4	4000	9.0	140	0.3
								12			3650			0.4
								15	162		2450			0.5
								20	170		1050			0.6

English

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	17	44	73	44	42	20	**3/8**	158	0.250	160	0.350	140	0.3
								1/2			140			0.4
								5/8	162		80			0.5
								3/4	170		50			0.6

Marking

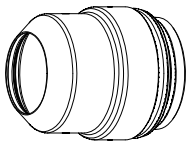
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	140
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	66

Aluminum

N_2 Plasma / Air Shield

260 A Cutting

Flow rates – lpm/scfh		
	N_2	Air
Preflow	125 / 265	0 / 0
Cutflow	50 / 105	113 / 240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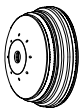
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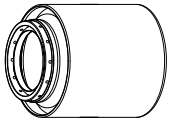
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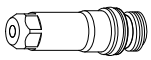

220307


220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	Air	12	49	74	56	**6**	172	6.4	7900	9.0	140	0.2
						10	171		4930			0.4
						12	164	4.0	4290	8.0	200	0.5
						15	165		3330			0.6
						20	171		1940			
						25	177		1440	11.0	260	0.8
						32	191		940	Edge start		
						38	195		520			
						44	202		320			
						50	205		215			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	Air	12	49	74	56	**1/4**	172	0.250	300	0.350	140	0.2
						3/8	171		200			0.4
						1/2	164	0.160	160	0.320	200	0.5
						5/8	165		120			0.6
						3/4	171		80			
						1	177		55	0.420	260	0.8
						1-1/4	190		40	Edge start		
						1-1/2	195		20			
						1-3/4	202		12			
						2	205		8			

Marking

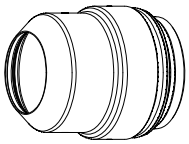
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Aluminum

H35 Plasma / N_2 Shield

260 A Cutting

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	127 / 270
Cutflow	33 / 70	118 / 250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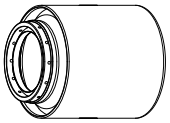
220763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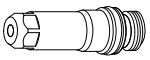

220307


220340

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	12	49	76	58	**6**	170	11.0	7200	11.0	100	0.2
						10		10.0	6120	10.0		0.4
						12	162	7.6	5160	8.5	110	0.5
						15	163		3720			0.6
						20	166		2230			
						25	174		1930	11.0	150	0.8
						32	175		1510	Edge start		
						38	176		1150			
						44	183		670			
						50	190		390			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	12	49	76	58	**1/4**	170	0.450	280	0.450	100	0.2
						3/8		0.400	250	0.400		0.4
						1/2	162	0.300	190	0.330	110	0.5
						5/8	163		130			0.6
						3/4	166		90			
						1	174		75	0.450	150	0.8
						1-1/4	175		60	Edge start		
						1-1/2	176		45			
						1-3/4	183		25			
						2	190		14			

Marking

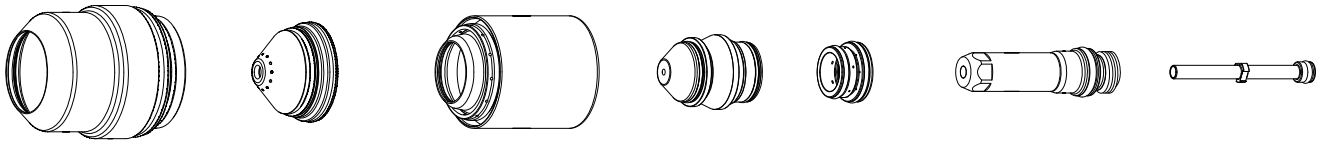
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**18**	2.5	0.10	6350	250	120
Ar	N_2	30	10	30	10	**20**	3.0	0.12	2540	100	63

Aluminum

N_2 Plasma / Air Shield

400 A

Flow rates – lpm/scfh		
	N_2	Air
Preflow	42 / 90	146 / 310
Cutflow	68 / 144	103 / 219



220637 220707 220712 220708 220405 220709 220571

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
N_2	Air	30	50	70	31	**12**	155	3.8	4480	12.5	330	0.4
						15	159		3770			0.5
						20	163	4.1	2740	18.0	440	0.6
						25	169		1850			0.7
						30	175		1410	Edge start		
						40	188		810			
						50	206		410			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
N_2	Air	30	50	70	31	**1/2**	155	0.15	170	0.5	330	0.4
						5/8	159		140			0.5
						3/4	163	0.16	115	0.7	440	0.6
						1	169		70			0.7
						1-1/4	177		50	Edge start		
						1-1/2	178		35			
						1-3/4	198		25			
						2	206		16			

Marking

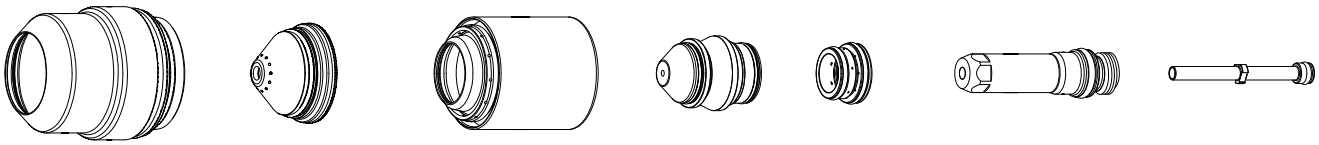
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Aluminum

H35 Plasma / N_2 Shield

400 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	189 / 400
Cutflow	86 / 182	123 / 260



220637 220707 220712 220708 220405 220709 220571

Metric

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	30	45	86	45	**20**	170	9.0	2420	13.5	150	0.7
						25	175		1820	18.9	210	1.0
						30	177		1590			1.5
						40	180		1190			2.0
						50	188		790	Edge start		
						60	200		450			
						70	208		310			
						80	210		210			

English

Select Gases		Set Preflow		Set Cutflow		**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	30	45	86	45	**3/4**	170	0.35	100	0.53	150	0.7
						1	175		70	0.74	210	1.0
						1-1/4	177		60			1.5
						1-1/2	180		50			2.0
						1-3/4	184		40	Edge start		
						2	188		30			
						2-1/4	200		20			
						2-1/2	208		15			
						3	210		10			

Marking

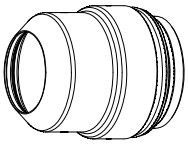
Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50

Aluminum

H35 and N_2 Plasma / N_2 Shield

400 A

Flow rates – lpm/scfh		
	H35	N_2
Preflow	0 / 0	194 / 410
Cutflow	36 / 77	194 / 410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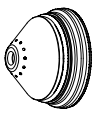
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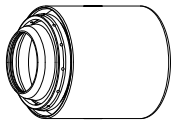
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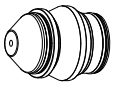
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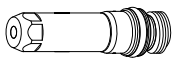
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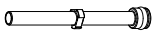
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Metric

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**mm**	Volts	mm	mm/m	mm	Factor %	Seconds
H35	N_2	30	45	88	45	60	40	**12**	155	4.6	5190	14	300	0.4
								15	157		4710			0.5
								20	159		3620			0.7
								25	166		2620			1.0
							60	**30**	171	5.3	2170	16		1.5
								40	175		1440	19		2.0
								50	185	6.4	1000	Edge start		
								60	195		450			
								70	200		310			
								80	208		210			

English

Select Gases		Set Preflow		Set Cutflow				**Material Thickness**	Arc Voltage	Torch-to-Work Distance	Cutting Speed	Initial Pierce Height		Pierce Delay Time
Plasma	Shield	Plasma	Shield	Plasma	Shield	Mix Gas 1	Mix Gas 2	**in**	Volts	in	ipm	in	Factor %	Seconds
H35	N_2	30	45	88	45	60	40	**1/2**	155	0.18	200	0.5	300	0.4
								5/8	157		180			0.5
								3/4	159		150			0.7
								1	166		100			1.0
							60	**1-1/4**	171	0.21	80	0.6		1.5
								1-1/2	175	0.25	60	0.8		2.0
								1-3/4	180		50	Edge start		
								2	185		40			
								2-1/4	195		20			
								2-1/2	200		15			
								3	208		10			

Marking

Select Gases		Set Preflow		Set Cutflow		**Amperage**	Torch-to-Work Distance		Marking Speed		Arc Voltage
						Amps	mm	in	mm/min	ipm	Volts
N_2	N_2	10	10	10	10	**22**	2.5	0.10	1270	50	94
Ar	N_2	30	10	30	10	**24**	3.0	0.12	2540	100	50