

APPENDIX D - BEVEL CUTTING

Cut charts

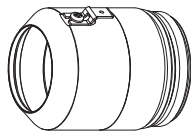
Initial pierce heights and pierce delay times listed in the cut charts are for straight cuts. Edge start indicates that the material thickness is outside the range that can be pierced. These thicknesses can only be cut by using an edge start.

Mild steel bevel cutting

O₂ Plasma / Air Shield

130 A

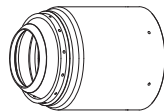
Flow rates - lpm/scfh		
	O ₂	Air
Preflow	0 / 0	64 / 135
Cutflow	33 / 70	45 / 96



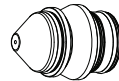
220398



220645



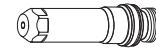
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Notes: Bevel angle range is 0° to 45°. Water tube 220700  must be used with these consumables.

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
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			0.2
							6		4035			0.3
							10	3.0 – 8.6	2680	6.0		0.5
							12	3.3 – 8.6	2200	6.6		0.7
							15	3.8 – 8.6	1665	7.6		1.0
							20					1050
							25					550
							32	4.5 – 8.6	375	Edge start		1.8
							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	Range (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			0.2
							1/4		150			0.3
							3/8	0.120 – 0.340	110	0.240		0.5
							1/2	0.130 – 0.340	80	0.260		0.7
							5/8	0.150 – 0.340	60	0.300		1.0
							3/4					45
							1					20
							1-1/4	0.180 – 0.340	15	Edge start		1.8
							1-1/2		10			