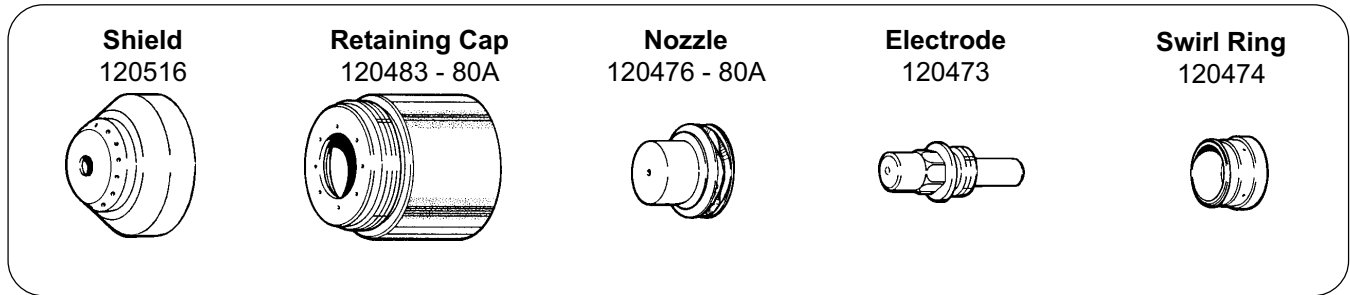


# OPERATION

## CUT CHART - 80A STANDARD CONSUMABLES

The following recommended settings are for mechanized cutting. Torch-to-work distance is 1/16 inch (1.6 mm) for all cuts.

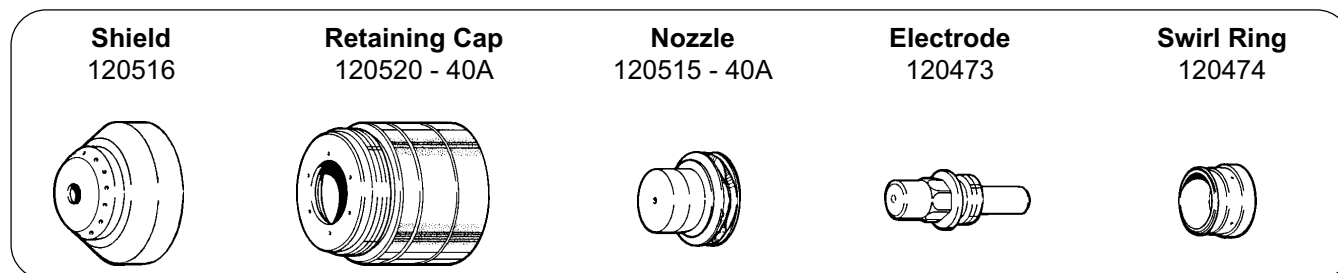


Material Thickness (in.) (mm)		Material	Arc Current (A)	Arc Voltage (V)	Recommended Travel Speed* (ipm) (mm/min)		Pierce Delay (S)
3/16"	4.8	Mild steel	80	115	160	4060	0
1/4"	6.4	Mild steel	80	117	110	2800	0.25
3/8"	9.5	Mild steel	80	116	57	1450	0.50
1/2"	12.7	Mild steel	80	120	38	965	0.75
5/8"	15.9	Mild steel	80	124	25	635	1.75
3/4"	19.0	Mild steel	80	124	20	510	n/a
7/8"	22.2	Mild steel	80	132	14	355	n/a
1"	25.4	Mild steel	80	133	11	280	n/a
3/16"	4.8	Stainless Steel	80	120	160	4060	0.25
1/4"	6.4	Stainless Steel	80	121	100	2540	0.50
3/8"	9.5	Stainless Steel	80	122	53	1345	1.00
1/2"	12.7	Stainless Steel	80	123	32	810	1.25
5/8"	15.9	Stainless Steel	80	123	25	635	1.75
3/4"	19.0	Stainless Steel	80	126	18	460	n/a
1"	25.4	Stainless Steel	80	133	10	255	n/a
1/8"	3.2	Aluminum	80	119	340	8640	0
1/4"	6.4	Aluminum	80	120	140	3560	0.25
3/8"	9.5	Aluminum	80	122	90	2285	0.50
1/2"	12.7	Aluminum	80	129	60	1525	1.00
3/4"	19.0	Aluminum	80	131	31	790	n/a

\* Recommended travel speeds are 10–20% slower than maximum. These slower speeds will produce optimum cut quality.

## CUT CHART - 40A CONSUMABLES

Use 40-amp consumables on thin material to obtain a narrower kerf width and to minimize the heat-affected zone. The following recommended settings are for mechanized cutting. Torch-to-work distance is 1/16 inch (1.6 mm) for all cuts.



Material Thickness (ga. or in.) (mm)		Material	Arc Current (A)	Arc Voltage (V)	Recommended Travel Speed* (ipm) (mm/min)		Pierce Delay (S)
26 ga.	0.5	Mild steel	30	116	510	12950	0
22 ga.	0.8	Mild steel	30	116	360	9140	0
20 ga.	0.9	Mild steel	30	116	240	6100	0
18 ga.	1.2	Mild steel	30	118	210	5330	0
16 ga.	1.5	Mild steel	30	118	120	2050	0
14 ga.	1.9	Mild steel	40	117	200	5080	0.25
10 ga.	3.4	Mild steel	40	121	100	2540	0.50
3/16"	4.8	Mild steel	40	116	70	1780	1.00
1/4"	6.4	Mild steel	40	119	42	1070	1.25
3/8"	9.5	Mild steel	40	126	19	480	n/a
1/2"	12.7	Mild steel	40	131	14	355	n/a
26 ga.	0.5	Stainless steel	30	116	520	13200	0
22 ga.	0.8	Stainless steel	30	116	260	6600	0
20 ga.	0.9	Stainless steel	30	117	170	4320	0
18 ga.	1.2	Stainless steel	40	116	310	7870	0
16 ga.	1.5	Stainless steel	40	117	200	5080	0
14 ga.	1.9	Stainless steel	40	115	170	4320	0.25
10 ga.	3.4	Stainless steel	40	118	70	1780	0.50
3/16"	4.8	Stainless steel	40	119	48	1220	1.00
1/4"	6.4	Stainless steel	40	120	35	890	1.50
3/8"	9.5	Stainless steel	40	125	16	410	n/a
1/2"	12.7	Stainless steel	40	126	11	280	n/a
1/32"	0.8	Aluminum	30	117	600	15240	0
1/16"	1.6	Aluminum	30	117	240	6100	0
3/32"	2.4	Aluminum	40	117	250	6350	0.25
1/8"	3.2	Aluminum	40	117	170	4320	0.50
1/4"	6.4	Aluminum	40	122	53	1350	1.50
3/8"	9.5	Aluminum	40	132	28	710	n/a

\* Recommended travel speeds are 10–20% slower than maximum. These slower speeds will produce optimum cut quality.