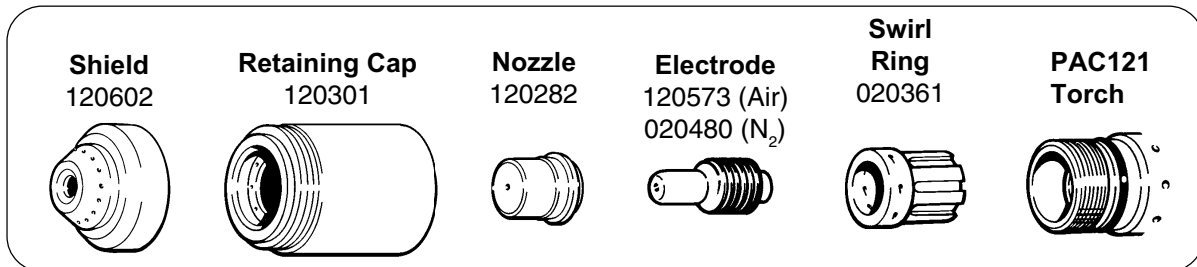


# OPERATION


## CUT CHART - 50A STANDARD CONSUMABLES

The following recommended settings are for mechanized cutting at 50 amps. Torch-to-work distance for the following cut charts 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)
1/16"	Mild/Galvanized	50	103	250	6350	–
3/16"	Mild steel	50	117	97	2470	0.7
1/4"	Mild steel	50	118	58	1480	1.0
3/8"	Mild steel	50	121	31	790	2.0
1/16"	Stainless Steel	50	110	200	5080	–
1/8"	Stainless Steel	50	115	105	2670	0.5
1/4"	Stainless Steel	50	117	36	915	1.0
3/8"	Stainless Steel	50	121	22	560	2.0
1/8"	Aluminum	50	108	170	4320	0.5
1/4"	Aluminum	50	117	50	1270	1.0
3/8"	Aluminum	50	123	27	690	2.0

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



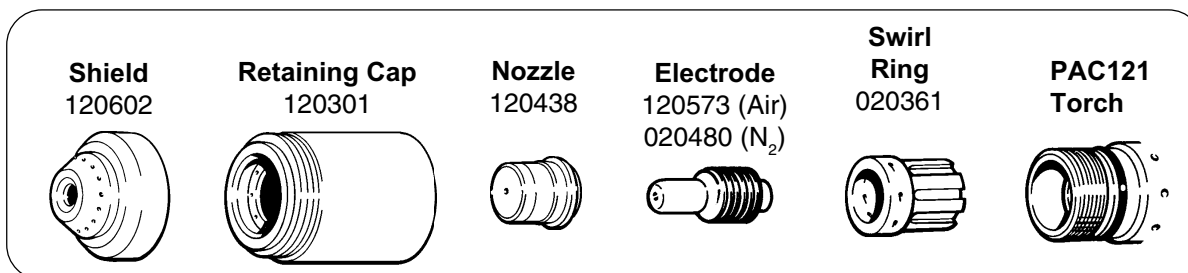
### WARNING



The voltage between the tip of the torch and the workpiece will exceed 113VDC if shielded consumable parts are not installed in the torch. If using the 400V CE power supply, the PAC121TS torch must be operated with shielded parts to maintain the **S** mark and CE low-voltage compliance for hand held applications. See Section 5: *Consumable Parts - For CE Compliance* for a list of CE consumable parts. This requirement does not apply to machine torch applications.

## CUT CHART - 40A CONSUMABLES

Use 40 amp consumables on thin material to obtain a narrow 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/Galvanized	20	121	180	4570	—
24 ga.	0.6	Mild/Galvanized	30	116	280	7110	—
18 ga.	1.2	Mild steel	30	108	200	5080	—
16 ga.	1.5	Mild steel	40	108	180	4570	—
10 ga.	3.4	Mild steel	40	106	110	2790	0.5
1/4"	6.4	Mild steel	40	115	35	890	2.0
3/8"	9.5	Mild steel	40	124	15	380	2.5
27 ga.	0.4	Stainless Steel	40	114	250	6350	—
24 ga.	0.6	Stainless Steel	40	102	200	5080	—
16 ga.	1.5	Stainless Steel	40	110	125	3180	—
10 ga.	3.4	Stainless Steel	40	111	60	1520	0.5
1/4"	6.4	Stainless Steel	40	118	22	560	2.0
3/8"	9.5	Stainless Steel	40	123	12	305	2.5
1/16"	1.5	Aluminum	40	104	200	5080	—
1/8"	3.0	Aluminum	40	123	100	2540	0.6
3/8"	9.5	Aluminum	40	130	13	330	2.5

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

### Cut Chart Notes:

The Cut Charts on these pages are optimized to provide the best cut angle, least dross and best cut surface finish. **Remember that cut charts are intended to provide a good starting point for each different cutting assignment. Every cutting system requires "fine-tuning" for each cutting application to the materials on site in order to obtain optimum cut quality.**