

## Powermax30 consumables

Description	Part number
1. Deflector (optional)	220569
2. Retaining cap	220483
3. Nozzle	220480
4. Swirl ring	220479
5. Electrode	220478
Powermax30 consumable kit	850480

## Operating data

<b>Recommended capacity</b>	1/4" (6 mm)
<b>Maximum capacity</b>	3/8" (10 mm)
<b>Severance capacity</b>	1/2" (12 mm)

Material	Thickness		Current (amps)	Approximate Travel speed*	
	(inches)	(mm)		(ipm)	(mm/min)
Mild steel	18 GA	1.3	30	394	10007
	10 GA	3.4	30	87	2210
	3/16	4.8	30	52	1321
	1/4	6.4	30	33	838
	3/8	9.5	30	15	381
Aluminum	18 GA	1.3	30	399	10135
	10 GA	3.4	30	78	1981
	1/4	6.4	30	26	660
	3/8	9.5	30	11	279
Stainless steel	18 GA	1.3	30	221	5613
	10 GA	3.4	30	55	1397
	1/4	6.4	30	24	610
	3/8	9.5	30	11	279

\*Maximum travel speeds are the results of Hypertherm's laboratory testing. For optimum cut quality, speeds should be reduced between 35-50%, depending upon material. Refer to your operator manual for more detail.

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# Power up your Powermax®

with Genuine Hypertherm Consumables

## powermax30®

### Power to go. Performance to last.



### Tapered consumables

Narrow profile for better arc visibility and more clearance.

### Fine-feature cutting

Excellent edge quality on thin metal.

### Durable and reliable

Consumables manufactured for long life and consistent performance.

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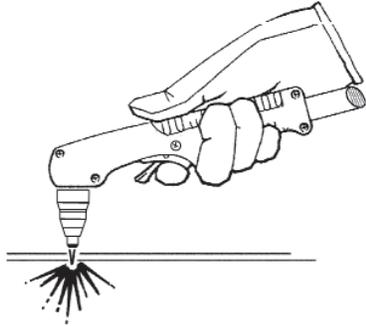


# Hand cutting techniques and recommendations

## Using the proper techniques will help ensure longer consumable life

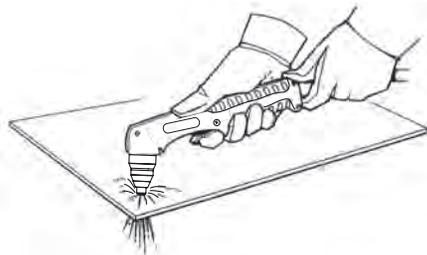
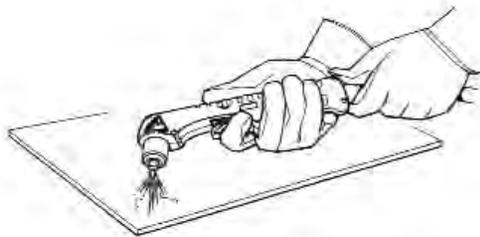
### CUTTING

- Sparks should exit from the bottom of the work piece. Upward sparks indicate a torch moving too fast or a torch with insufficient power
- Torch nozzle should be held vertical to the cutting position and the cut monitored with appropriate face/eye protection
- Pulling rather than pushing a torch through a cut enables better control
- For shielded consumables – Lightly drag the torch across the work piece
- For unshielded consumables – Maintain approximately 1/8" (3 mm) torch-to-work distance
- To cut thinner material, reduce the amps until you get the best quality cut. FineCut consumables are recommended for cutting 24 to 10 ga (.5 to 3.5 mm)
- For straight-line cuts, use a straight edge as a guide
- To cut circles, use a template or a Hypertherm circle cut guide, part number 027668



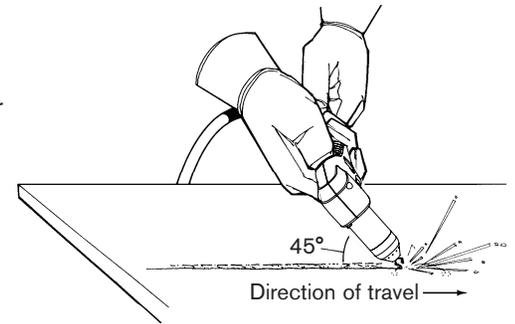
### PIERCING

- Torch to work piece distance before firing torch = approximately 1/8" (3 mm)
- Steps:
  1. Fire the torch at a 40-45 degree angle to the work piece – Slowly rotate it to an upright position
  2. When sparks are exiting from the bottom of the work piece, the arc has pierced through the material
  3. When the pierce is complete, proceed with the cut



### GOUGING

- Torch to work piece distance before firing torch = approximately 1/16" (1.5 mm)
- Steps:
  1. Hold the torch at a 40-45 degree angle to the work piece – Pull the trigger to obtain a pilot arc – Transfer the arc to the work piece
  2. Maintain a 45° angle, approximately, from the work piece
  3. Feed into the gouge – the slower the motion, the deeper the gouge. It is better to move faster and make another pass than mistakenly remove more metal than desired on the first pass.
- Optional deflector may be used to help maintain torch-to-work distance or may be used as a guide when cutting with templates



**OVERTIGHTENING RETAINING CAP WILL DAMAGE TORCH – Finger tighten only!**