

# VICTOR®

## ACETYLENE

### CUTTING TIP CHART

#### Cutting Tip Series 1-101 and 3-101

Metal Thickness	Tip Size	Cutting Oxygen (PSIG)***	Preheat Oxygen (PSIG)*	Acetylene Pressure (PSIG)	Speed I.P.M.	Kerf Width
1/8"	000	20/25	3/5	3/5	20/30	.04
1/4"	00	20/25	3/5	3/5	27/30	.05
3/8"	0	25/30	3/5	3/5	24/28	.06
1/2"	0	30/35	3/6	3/5	20/24	.06
3/4"	1	30/35	4/7	3/5	17/21	.07
1"	2	35/40	4/8	3/6	15/19	.09
2"	3	40/45	5/10	4/8	12/15	.11
3"	4	40/50	5/10	5/11	9/12	.12
4"	5	45/55	6/12	6/13	8/11	.15
6"	6**	45/55	6/15	8/14	6/8	.15
10"	7**	45/55	6/20	10/15	4/5	.34
12"	8**	45/55	7/25	10/15	3/5	.41

\* Applicable for 3-hose machine cutting torches only. With a 2-hose cutting torch, preheat pressure is set by the cutting oxygen.

\*\* For best results use appropriate capacity torches and 3/8" hose when using tip size 6 or larger. Torches with flashback arrestors require up to 25% more pressure as tip size increases (15 PSI maximum acetylene pressure).

\*\*\* All pressures are measured at the regulator using a 25' X 3/8" hose for tip size 6 and larger.

### CAUTION

At no time should the withdrawal rate of an individual acetylene cylinder exceed 1/7 of the cylinder contents per hour. If additional flow capacity is required, use an acetylene manifold system of sufficient size to supply the necessary volume.

## WELDING NOZZLE FLOW DATA

Metal Thickness	Tip Size	Drill Size	Oxygen Pressure (PSIG)		Acetylene Pressure (PSIG)		Acetylene Consumption (SCFH)	
			Min	Max	Min	Max	Min	Max
			Up to 1/32"	000	75 (.022)	3	5	3
1/16" - 3/64"	00	70 (.028)	3	5	3	5	1 1/2	3
1/32" - 5/64"	0	65 (.035)	3	5	3	5	2	4
3/64" - 3/32"	1	60 (.040)	3	5	3	5	3	6
1/16" - 1/8"	2	56 (.046)	3	5	3	5	5	10
1/8" - 3/16"	3	53 (.060)	4	7	3	6	8	18
3/16" - 1/4"	4	49 (.073)	5	10	4	7	10	25
1/4" - 1/2"	5	43 (.089)	6	12	5	8	15	35
1/2" - 3/4"	6	36 (.106)	7	14	6	9	25	45
3/4" - 1 1/4"	7	30 (.128)	8	16	8	10	30	60
1 1/4" - 2"	8	29 (.136)	10	19	9	12	35	75
2 1/2" - 3"	10	27 (.144)	12	24	12	15	50	100
3 1/2" - 4"	12*	25 (.149)	18	28	12	15	80	160

## MFA HEATING NOZZLES

Tip Size	Acetylene Pressure Range PSIG	Oxygen Pressure Range PSIG	Acetylene ft <sup>3</sup> /hr		Oxygen ft <sup>3</sup> /hr		BTU per Hour
			Min	Max	Min	Max	
4	6 - 10	8 - 12	6	20	7	22	SEE BELOW **
6	8 - 12	10 - 15	14	40	15	44	
8	10 - 15	20 - 30	30	80	33	88	
10	12 - 15	30 - 40	40	100	44	110	
12*	12 - 15	50 - 60	60	150	66	165	
15*	12 - 15	50 - 60	90	220	99	244	

\* Use model HD310C torch and 3/8" hose.

\*\* Approximately 1470 gross BTU per cubic foot.

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