



Cutting Tips Operational & Performance Data

Types: 100, 101, 104, 108, 110, 111, 112, 129 (Oxy- Acetylene)

Metal Thickness	Tip Size	Cutting Oxygen (PSIG)***	Cutting Oxygen (SCFH)	Pre-Heat Oxygen (PSIG)*	Pre-Heat Oxygen (SCFH)	Acetylene (PSIG)	Acetylene (SCFH)****	Speed I.P.M.	Kerf Width
1/8"	000	20/25	20/25	3/5	3/5	3/5	3/5	28/32	.04
1/4"	00	20/25	30/35	3/5	4/6	3/5	4/6	27/30	.05
3/8"	0	25/30	55/60	3/5	5/9	3/5	5/8	24/28	.06
1/2"	0	30/35	60/65	3/6	7/11	3/5	6/10	20/24	.06
3/4"	1	30/35	80/85	4/7	9/14	3/5	8/13	17/21	.07
1"	2	35/40	140/150	4/9	11/18	3/6	10/16	15/19	.09
1-1/2"	2	40/45	150/160	4/12	13/20	3/7	12/18	13/17	.09
2"	3	40/45	210/225	5/14	15/24	4/9	14/22	12/15	.11
2-1/2"	3	45/50	225/240	5/16	18/29	4/10	16/26	10/13	.11
3"	4	40/50	270/320	6/17	20/33	5/10	18/30	9/12	.12
4"	5	45/55	390/425	7/18	24/37	5/12	22/34	8/11	.15
5"	5	50/55	425/450	7/20	29/41	5/13	26/38	7/9	.15
6"	6**	45/55	500/600	10/22	33/48	7/13	30/44	6/8	.18
8"	6**	45/55	500/600	10/25	37/55	7/14	34/50	5/6	.19
10"	7**	45/55	700/850	15/30	44/62	10/15	40/56	4/5	.34
12"	8**	45/55	900/1000	20/35	53/68	10/15	48/62	3/5	.41

Tip Series: MTHM, N, P

Metal Thickness	Tip Size	Cutting Oxygen (PSIG)***	Cutting Oxygen (SCFH)	Pre-Heat Oxygen (PSIG)*	Pre-Heat Oxygen (SCFH)	Fuel Gas (PSIG)	Fuel Gas (SCFH)****	Speed I.P.M.	Kerf Width
1/4"	00	85/95	68/75	See Below ↓	23/140	See Below ↓	12/65	23/30	.05
3/8"	00	85/95	68/75		23/140		12/65	22/29	.05
1/2"	0	85/95	110/120		23/140		12/65	20/28	.06
3/4"	0	85/95	110/120		23/140		12/65	18/26	.06
1"	1	85/95	145/160		23/140		12/65	17/24	.07
1-1/4"	1	85/95	145/160		23/140		12/65	16/20	.07
1-1/2"	1	85/95	145/160		23/148		12/65	12/16	.07
2"	2	85/95	230/250		23/140		12/65	11/15	.09
2-1/2"	2	85/95	230/250		23/140		12/65	10/13	.09
3"	2	85/95	230/250		23/140		12/65	9/11	.09
4"	3	85/95	285/320		23/140		12/65	7/10	.11
5"	3	85/95	285/320		23/140		12/65	6/8	.11
6"	3	85/95	285/320		23/140		12/65	5/7	.11
7"	4	85/95	390/450		23/140		12/65	5/6	.14
8"	4	85/95	390/450		23/140		12/65	4/6	.14
9"	5	85/95	670/720		23/140		12/65	4/5	.18
10"	5	85/95	670/720	23/140	12/65	3/5	.18		

Torch Series	Pre-heat Oxygen (PSIG)	Pre-heat Fuel (PSIG)
MT 200	N/A	8 oz. to 50 PSIG
MT 300	10-50 PSIG	8 oz. to 50 PSIG
MT 400	N/A	5 PSIG UP
MT 600A	20 PSIG UP	2 PSIG UP
MT 600N	25 PSIG UP	8 oz. to 50 PSIG

Note: Data compiled using mild steel as test material.

* Applicable for three hose machine torch only. With a two-hose cutting torch, pre-heat pressure is set by the cutting oxygen.

** For best results use ST2600FC series torches and 3/8" hose when using tip sizes 6 or larger.

*** All pressures are measured at the regulator using 25' x 1/4" hose through tip size 5 and 25' x 3/8" hose for tip size 6 and larger.

**** Oxygen consumption is 1.1 times the acetylene under neutral flame conditions.

WARNING: 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.