

WELD/BRAZE TIP DATA

IMPORTANT: USE PROPER TYPE OF TIP FOR EACH TYPE TORCH.

▽ **WARNING:** USE PROPER TIP SIZE, PRESSURES AND FLAME SIZE TO AVOID BACKFIRE AND FLASHBACK.

Weld/Braze Tips Metal Thickness	V-Style Type Tip	N U M B E R	D E C I M A L	H-Style Type Tip	N U M B E R	D E C I M A L	A-Style Type Tip	N U M B E R	D E C I M A L	Pressure*		
	Type 1, 4, 13,17	Drill		Type 43, 79	Drill		Type 370, 730 330, 98	Drill		Oxy PSIG	Acet PSIG	Acet* SCFH
	Size	Size	Size	Size	Size	Size	Size	Size	Size	Size	Size	Size
Up to 1/32"	000	75	(.021)	0	70	(.028)	00	76	(.020)	3-5	3-5	1-2
1/16" - 3/64"	00	70	(.028)	1	67	(.032)	0	72	(.025)	3-5	3-5	1.5-3
1/32" - 5/64"	0	65	(.035)	2	62	(.038)	1	68	(.031)	3-5	3-5	2-4
3/64" - 3/32"	1	60	(.040)	3	57	(.043)	2	62	(.038)	3-5	3-5	3-6
1/16" - 1/8"	2	56	(.0465)	4	56	(.0465)	3	56	(.0465)	3-5	3-5	5-10
1/8" - 3/16"	3	53	(.0595)	5	55	(.052)	4	54	(.055)	4-7	3-6	8-18
3/16" - 1/4"	4	49	(.073)	6	53	(.0595)	5	51	(.067)	5-10	4-7	10-25
1/4" - 1/2"	5	43	(.089)	7	50	(.070)	6	48	(.076)	6-12	5-8	15-35
1/2" - 3/4"	6	36	(.1065)	8	47	(.0785)	7	45	(.082)	7-14	6-9	25-45
3/4" - 1-1/4"	7	30	(.1285)	9	43	(.089)	8	40	(.098)	8-16	8-10	30-60
1-1/4" - 2"	8	29	(.136)	10	40	(.098)	9	35	(.110)	10-19	9-12	35-75
2-1/2" - 3"	10	27	(.144)				10	30	(.1258)	12-24	12-15	50-100
3-1/2" - 4"	12	25	(.1495)							18-28	12-15	80-160

* **NOTE:** When acetylene welding tips are used with fuel gases, use one size larger tip and maximum pressures to obtain proper heat.

See CHART below for approximate torch oxygen consumption with a neutral flame ratio for various gases:

1.1	Oxygen	to	1	Acetylene
2	Oxygen	to	1	Mapp® / Natural gas
4	Oxygen	to	1	Propane / Propylene

* **NOTE:** Gas consumption data is merely for estimating purposes. It will vary due to the material, skill of the operator and the working conditions. Pressures are approximate for hose length up to 25ft. Increase pressure for longer lengths about 3 PSIG per 25ft.- increase working pressure 2-4 PSIG for check valves. Acetylene delivery pressure should not exceed 15 PSIG under flow conditions.

▽ **WARNING:** The withdrawal rate of an individual acetylene cylinder should not exceed 1/7 (approx. 15%) of the cylinder contents per hour. If additional flow capacity is required, use manifold systems of sufficient size to supply the necessary volume. To avoid dangerous reverse flow of gases due to unbalanced pressures, **do not** allow cylinders (especially oxygen) to become completely empty while in use. Check for adequate gas supplies before starting work (order gas when cylinder contents are at 1/4 capacity), especially with larger heating tips. Purge all hoses and torch passages **before** each torch lighting and use to vent out mixed gases which can cause a flashback if ignited (**VENT GASES SAFELY**). **DO NOT BREATHE FUMES**

INFORMATION: NOTE: Approximate gross BTU Contents Per Cubic Foot (after vaporization or gasification)

Acetylene	- 1470	Methane/ Natural Gas	- 1000
Butane	- 3374	Propylene	- 2371
Propane	- 2498	Mapp®*	- 2406

PSIG - Pounds per Square Inch Gauge

SCFH - Standard Cubic Feet per Hour