Cutting, Welding/Brazing and Heating Tip Flow and Pressure Data

Table 1. SC12 Series Heavy-Duty Cutting Tips − Acetylene (One Piece)

⚠ High gas withdrawal rates will require cylinder manifolding. Consult your gas supplier.

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Drill Size	
			Cutting Oxygen		Preheat			Oxygen		Fuel Preheat		Cutting Jet	Preheat
	in.	mm	Reg.	Torch	Oxygen	Acet.		Cutting	Preheat				
SC12-00	3/16	5	20	20	10†	10	.050	24	7	6.5	26	68	75
SC12-0	1/4	6	30	30	10†	10	.055	40	7.5	7	22	62	74
SC12-0	3/8	10	35	35	10†	10	.055	50	7.5	7	20	62	74
SC12-1	1/2	13	35	35	10†	10	.080	75	11	9.5	19	56	71
SC12-1	5/8	16	40	40	10†	10	.080	85	11	9.5	17	56	71
SC12-2	3/4	19	36	35	10†	10	.095	105	12	10.5	16	54	70
SC12-2	1	25	41	40	10†	10	.095	115	12	10.5	14	54	70
SC12-2	1-1/4	32	51	50	10†	10	.095	135	12	10.5	13	54	70
SC12-3	1-1/2	38	42	40	10†	10	.100	170	14	12	12	51	68
SC12-3	2	51	47	45	10†	10	.100	180	14	12	10	51	68
SC12-4	2-1/2	64	38	35	10†	10	.125	240	15	13	9	45	62
SC12-4	3	76	44	40	10†	10	.125	265	15	13	8	45	62
SC12-4	4	102	54	50	10†	10	.125	315	16	14	7	45	62
SC12-5	5	127	56	50	10†	10	.150	420	30	26*	7	41	57
SC12-5	6	152	67	60	10†	10	.150	485	30	26*	6	41	57
SC12-5	8	203	78	70	10†	10	.150	550	30	26*	5.5	41	57
SC12-6	10	254	83	70	10†	10	.230	750	32	28*	5	32	57
SC12-6	12	305	125	90	10†	10	.230	975	32	28*	4.5	32	57

† Listed pressure for 3-hose machine cutting torches only. * Minimum of one 350 cubic ft. cylinder

Table 2. SC56 Series Heavy-Duty, Heavy-Preheat Cutting Tips − Acetylene (One Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Drill Size		Recm'd No. Of Cylinders*
			Cutting Oxygen		Preheat			Oxygen		Fuel Preheat		Cutting Jet	Preheat	
	in.	mm	Reg.	Torch	Oxygen	Acet.		Cutting	Preheat					
SC56-1	1/2	13	35	35	10†	10	.080	75	33	30	19	56	65	1
SC56-1	5/8	16	40	40	10†	10	.080	85	33	30	17	56	65	1
SC56-2	3/4	19	36	35	10†	10	.095	105	33	30	16	54	60	1
SC56-2	1	25	41	40	10†	10	.095	115	33	30	14	54	60	1
SC56-2	1-1/4	32	51	50	10†	10	.095	135	33	30	13	54	60	1
SC56-3	1-1/2	38	42	40	10†	10	.100	170	43	39	12	51	57	1
SC56-3	2	51	47	45	10†	10	.100	180	50	45	10	51	57	1
SC56-5	2-5	127	56	50	10†	10	.150	420	57	52	7	41	54	2
SC56-5	6	152	67	60	10†	10	.150	485	66	60	6	41	54	2
SC56-5	8	203	78	70	10†	10	.150	550	72	65	5.5	41	54	2
SC56-7	8–14	356	100	85	10†	10	.250	1250	110	100	4	28	54	2
SC56-9	14–20	508	110	70	14†	12	.350	2150	145	130	3	3	54	3
SC56-9	24	610	130	85	15†	13	.360	2600	175	160	2.5	3	54	4

† Listed pressure for 3-hose machine cutting torches only. Pressures shown are for 25 ft (7.6 m) or less of 3/8 in. (10mm) I.D. hose. Increase pressures if longer hose is used. Use1/2 in. (13mm) I.D. hose when hose length exceeds100 ft (31 m).

* Cylinders required, based on 350 cubic ft. cylinder.

Table 3. SC50 Series Heavy-Duty, Heavy-Preheat Cutting Tips − Propane (Two Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Cutting Jet	Recm'd No. Of Cylinders*
			Cutting Oxygen		Preheat			Oxygen		Fuel Preheat			
	in.	mm	Reg.	Torch	Oxygen	Propane		Cutting	Preheat				
SC50-00	3/16	5	20	20	10†	10	.050	24	47	13	26	68	1
SC50-0	1/4	6	30	30	10†	10	.055	40	47	13	22	62	1
SC50-0	3/8	10	35	35	10†	10	.055	50	47	13	20	62	1
SC50-1	1/2	13	35	35	10†	10	.080	75	70	15	19	56	1
SC50-1	5/8	16	40	40	10†	10	.080	85	70	15	17	56	1
SC50-2	3/4	19	36	35	10†	10	.095	105	70	15	16	54	1
SC50-2	1	25	41	40	10†	10	.095	115	70	15	14	54	1
SC50-2	1-1/4	32	51	50	10†	10	.095	135	75	16	13	54	1
SC50-3	1-1/2	38	42	40	10†	10	.100	170	75	16	12	51	1
SC50-3	2	51	47	45	10†	10	.100	180	75	16	10	51	1
SC50-4	2-1/2	64	38	35	10†	10	.125	240	75	16	9	45	1
SC50-4	3	76	44	40	10†	10	.125	265	75	16	8	45	1
SC50-4	4	102	54	50	10†	10	.125	315	80	17	7	45	1
SC50-5	5	127	56	50	10†	10	.150	420	80	17	7	41	1
SC50-5	6	152	67	60	10†	10	.150	485	80	17	6	41	1
SC50-5	8	203	78	70	10†	10	.150	550	90	20	5	41	1
SC50-6	10	254	83	70	40†	10	.230	750	230	50	5	32	2
SC50-6	12	304	125	90	40†	12	.230	975	280	60	4.5	32	2
SC50-7	14	354	125	90	60†	20	.250	1250	330	62	4.0	28	2
SC50-8	16	406	125	90	60†	18	.300	1500	375	80	3.5	17	2
SC50-8	18	457	125	90	60†	20	.340	1800	400	85	3.5	17	2
SC50-9	20	508	125	90	60†	23	.350	2150	420	90	3.0	3	2

† Listed pressure for 3-hose machine cutting torches only. Regulator pressures are for 50 ft (13 m) or less of 3/8 in. (10 mm) I.D. hose. Increase regulator pressures if longer hose or smaller I.D. hose is used. If more than 100 ft (31 m) of hose is required, use 1/2 in. (13mm) I.D. hose for additional length.

Table 4. SC50 Series Heavy-Duty, Heavy-Preheat Cutting Tips − Natural Gas (Two Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Cutting Jet
			Cutting Oxygen		Preheat			Oxygen		Fuel Preheat		
	in.	mm	Reg.	Torch	Oxygen	Nat. Gas		Cutting	Preheat			
SC50-00	3/16	5	20	20	6†	5	.050	24	58	36	26	68
SC50-0	1/4	6	30	30	6†	5	.055	40	62	38	22	62
SC50-0	3/8	10	35	35	6†	5	.055	50	62	38	20	62
SC50-1	1/2	13	35	35	8†	6	.080	75	70	40	19	56
SC50-1	5/8	16	40	40	8†	6	.080	85	70	40	17	56
SC50-2	3/4	19	36	35	8†	6	.095	105	70	40	16	54
SC50-2	1	25	41	40	8†	6	.095	115	70	40	14	54
SC50-2	1-1/4	32	51	50	8†	6	.095	135	70	40	13	54
SC50-3	1-1/2	38	42	40	8†	6	.100	170	70	40	12	51
SC50-3	2	51	47	45	8†	6	.100	180	70	40	10	51
SC50-4	2-1/2	64	38	35	8†	6	.125	240	75	45	9	45
SC50-4	3	76	44	40	8†	6	.125	265	75	45	8	45
SC50-4	4	102	54	50	8†	6	.125	315	75	45	7	45
SC50-5	5	127	56	50	8†	6	.150	420	82	50	7	41
SC50-5	6	152	67	60	8†	6	.150	485	82	50	6	41
SC50-5	8	203	78	70	8†	6	.150	550	82	50	5	41
SC50-6	10	254	83	70	10†	8	.230	750	120	75	5	32
SC50-6	12	304	125	90	15†	12	.230	975	165	100	4.5	32
SC50-7	14	354	125	90	20†	16	.250	1250	200	120	4	28
SC50-8	16	406	125	90	20†	18	.300	1500	220	135	3.5	17
SC50-8	18	457	125	90	25†	23	.340	1800	250	150	3.5	17
SC50-9	20	508	125	90	25†	23	.350	2150	250	150	3	3

† Listed pressure for 3-hose machine cutting torches only. Regulator pressures are for 50 ft (13 m) or less of 3/8 in. (10mm) I.D. hose. Increase regulator pressures if longer hose or smaller I.D. hose is used. If more than 100 ft (31 m) of hose is required, use 1/2 in. (13 mm) I.D. hose for additional length.

Table 5. SC46 Series Heavy-Duty Cutting Tips − Propane (One Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Cutting Jet	Drill Size Preheat
			Cutting Oxygen		Preheat			Cutting Oxygen	Preheat Consumption				
	in.	mm	Reg.	Torch	Oxygen	Propane			Oxygen	Propane			
SC46-2	3/4	19	36	35	20†	10	.095	105	70	15	16	54	56
SC46-2	1	25	41	40	20†	10	.095	115	70	15	14	54	56
SC46-2	1-1/4	32	51	50	20†	10	.095	135	70	15	13	54	56
SC46-4	2-1/2	64	38	35	20†	10	.125	240	70	15	9	45	56
SC46-4	3	76	44	40	20†	10	.125	265	70	15	8	45	56
SC46-4	4	102	54	50	20†	10	.150	315	70	15	7	45	56
SC46-5	5	127	56	50	20†	10	.150	420	105	22	7	41	54
SC46-5	6	152	67	60	20†	10	.150	485	105	22	6	41	54
SC46-5	8	203	78	70	20†	10	.150	550	105	22	5	41	54
SC46-6	10	254	83	70	20†	12	.200	750	105	22	5	32	54
SC46-6	12	305	125	90	20†	12	.230	975	105	22	4.5	32	54

† Listed pressure for 3-hose machine cutting torches only.

Table 6. SC46 Series Heavy-Duty Cutting Tips − Natural Gas (One Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Cutting Jet	Drill Size Preheat
			Cutting Oxygen		Preheat			Cutting Oxygen	Preheat Consumption				
	in.	mm	Reg.	Torch	Oxygen	Propane			Oxygen	Nat. Gas			
SC46-2	3/4	19	36	35	20†	10	.095	105	70	41	16	54	56
SC46-2	1	25	41	40	20†	10	.095	115	70	41	14	54	56
SC46-2	1-1/4	32	51	50	20†	10	.095	135	70	41	13	54	56
SC46-4	2-1/2	64	38	35	20†	10	.125	240	70	41	9	45	56
SC46-4	3	76	44	40	20†	10	.125	265	70	41	8	45	56
SC46-4	4	102	54	50	20†	10	.150	315	70	41	7	45	56
SC46-5	5	127	56	50	20†	10	.150	420	90	52	7	41	54
SC46-5	6	152	67	60	20†	10	.150	485	90	52	6	41	54
SC46-5	8	203	78	70	20†	10	.150	550	90	52	5	41	54
SC46-6	10	254	83	70	20†	12	.200	750	90	52	5	32	54
SC46-6	12	305	125	90	20†	12	.230	975	90	52	4.5	32	54

† Listed pressure for 3-hose machine cutting torches only.

Table 7. SC36 Series Heavy-Duty Cutting Tips − Propylene-Propane (One Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Cutting Jet	Drill Size Preheat
			Cutting Oxygen		Preheat			Cutting Oxygen	Preheat Consumption				
	in.	mm	Reg.	Torch	Oxygen	Propy.			Oxygen	Propy.			
SC36-1	1/2	13	35	35	20†	10	.080	75	70	15	19	56	56
SC36-1	5/8	16	40	40	20†	10	.080	85	70	15	17	56	56
SC36-2	3/4	19	36	35	20†	10	.095	105	70	15	16	54	56
SC36-2	1	25	41	40	20†	10	.095	115	70	15	14	54	56
SC36-2	1-1/4	32	51	50	20†	10	.095	135	70	15	13	54	56
SC36-3	1-1/2	38	42	40	20†	10	.100	170	70	15	12	51	56
SC36-3	2	51	47	45	20†	10	.125	180	70	15	10	51	56
SC36-4	2-1/2	64	38	35	20†	10	.125	240	70	15	9	45	56
SC36-4	3	76	44	40	20†	10	.125	265	70	15	8	45	56
SC36-4	4	102	54	50	20†	10	.150	315	70	15	7	45	56
SC36-6	10	254	83	70	20†	12	.200	750	105	22	5	32	54
SC36-6	12	305	125	90	20†	12	.230	975	105	22	4.5	32	54

† Listed pressure for 3-hose machine cutting torches only.

Table 8. SC40 Series Cutting Tips For Machine Or Hand Torches − Oxy-Propane-Natural Gas (Two Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Drill Size Cutting Jet
			Cutting Oxygen		Preheat			Oxygen		Fuel Preheat		
	in.	mm	Reg.	Torch	Oxygen	Propane		Cutting	Preheat			
SC40-0	1/4	6	30	30	10†	10	.055	40	38	8	22	62
SC40-0	3/8	10	35	35	10†	10	.055	50	38	8	20	62
SC40-1	1/2	13	35	35	10†	10	.080	75	38	8	19	56
SC40-1	5/8	16	40	40	10†	10	.080	85	38	8	17	56
SC40-2	3/4	19	36	35	10†	10	.095	105	38	8	16	54
SC40-2	1	25	41	40	10†	10	.095	115	38	8	14	54
SC40-2	1-1/4	32	51	50	10†	10	.095	135	38	8	13	54
SC40-3	1-1/2	38	42	40	10†	10	.100	170	38	8	12	51
SC40-3	2	51	47	45	10†	10	.100	180	38	8	10	51
SC40-4	2-1/2	64	38	35	12†	10	.125	240	65	15	9	45
SC40-4	3	76	44	40	12†	10	.125	265	65	15	8	45
SC40-4	4	102	54	50	12†	10	.125	315	65	15	7	45

† Listed pressure for 3-hose machine cutting torches only.

Table 9. SC60 Series Cutting Tips For Machine Or Hand Torches − Oxy-Propylene (Two Piece)

Tip Number	Metal Thickness		Pressure − psig				Kerf Width	Consumption − scfh			Speed IPM	Drill Size Cutting Jet
			Cutting Oxygen		Preheat			Oxygen		Propylene Preheat		
	in.	mm	Reg.	Torch	Oxygen	Propy.		Cutting	Preheat			
SC60-0	1/4	6	30	30	10†	10	.053	40	38	9	22	62
SC60-0	3/8	10	35	35	10†	10	.055	50	38	9	20	62
SC60-1	1/2	13	35	35	10†	10	.080	75	38	9	19	56
SC60-1	5/8	16	40	40	10†	10	.080	85	38	9	17	56
SC60-2	3/4	19	36	35	10†	10	.095	105	38	9	16	54
SC60-2	1	25	41	40	10†	10	.095	115	38	9	14	54
SC60-2	1-1/4	32	51	50	10†	10	.095	135	38	9	13	54
SC60-3	1-1/2	38	42	40	10†	10	.100	170	38	9	12	51
SC60-3	2	51	47	45	10†	10	.100	180	38	9	10	51
SC60-4	2-1/2	64	38	35	12†	10	.125	240	58	15	9	45
SC60-4	3	76	44	40	12†	10	.125	265	58	15	8	45
SC60-4	4	102	54	50	12†	10	.125	315	58	15	7	45
SC60-5	5	127	56	50	12†	10	.150	420	58	15	7	41
SC60-5	6	153	67	60	12†	10	.150	485	58	15	6	41
SC60-5	8	203	78	70	12†	10	.150	550	58	15	5	41
SC60-6	10	254	83	70	12†	10	.230	750	58	15	5	32
SC60-6	12	305	125	90	12†	10	.230	975	58	15	4.5	32

† Listed pressure for 3-hose machine cutting torches only.

Table 10. SC60 Series Heavy-Duty Special Purpose Tips For Hand Torches And Cutting Assemblies − Propane, Propylene

Tip Number	Purpose	Capacity (Width x Depth)		Fuel Gas	Pressure − psig		Consumption − scfh		Oxygen Drill Size	Fuel Gas Configuration
		in.	mm		Oxygen	Fuel Gas	Oxygen	Fuel Gas		
SC2-2	Gouging (General)	5/16 x 1/8	8 x 3	Propane	60	22	389	53	53 31	Slots
SC2-4	Gouging (General)	3/8 x 1/4	10 x 6	Propane	75	22	564	53	44 28	Slots
SC112**	Heating	289,000 BTUs	N/A	Propane	60	25	495	125*	N/A	Slots
SC23-3	Gouging (Heavy)	3/8 x 1/4	10 x 6	Propane	50–60	12–18	174	31	50	Slots
SC23-3M	Gouging	1/4 x 3/8	6 x 10	Propylene	50–60	10–15	174	31	50	Slots

* 2 cylinders required; based on 100 lb cylinders.

** Use with hand (straight) torches only. Do not use in cutting attachments.

Table 11. SC And MC Series Special Purpose Tips For Hand Torches And Cutting Assemblies − Acetylene

Tip Number	Purpose	Capacity (Width x Depth)		Pressure − psig At Regulator		Consumption − scfh		Drill Size	
		in.	mm	Oxygen	Acetylene	Oxygen	Acetylene	Cutting	Preheat
SC13-3	Gouging	3/8 x 1/4	10 x 6	20	10	151	35	50 29	59
SC13-5	Gouging	1/2 x 3/8	13 x 10	25	10	246	50	39 10	55
SC14-3	Riser	1-1/2 Rivets	38 mm Rivets	35–40	10	190	20	51	56
SC15-2	Washing	1/2 x 3/8	13 x 10	30	10	336	40	3	57
SC17-0	Plate Or Thin Sheet Cutting	3/8	10	20	10	55	4	62	62
SC83	Heating	83,000 BTUs	N/A	15	10	58	52*	N/A	56
MC13-3	Gouging	3/8 x 1/4	10 x 6	20	10	115	24**	50	60/29
SC12-4x9	Cutting	4	102	50	10	331	14	45	62

* 2 cylinders required; based on 350 cubic ft. cylinders.

** 1 cylinder required; based on 350 cubic ft. cylinder.

Table 12. MC12 Series Medium Duty Cutting Tips − Acetylene (One Piece)

Tip Number	Metal Thickness		Pressure − psig		Kerf Width	Consumption − scfh			Drill Size	
						Oxygen		Acetylene Preheat		
	in.	mm	Oxygen	Acetylene		Cutting	Preheat		Cutting Jet	Preheat
MC12-00	1/8	3	20*	10	.050	30	7	6	68	75
MC12-00	3/16	5	20*	10	.050	30	7	6	68	75
MC12-0	1/4	6	35*	10	.055	40	7	6	62	75
MC12-0	3/8	10	40*	10	.055	46	7	6	62	75
MC12-1	1/2	13	45*	10	.080	75	9	7	55	74
MC12-1	5/8	16	50*	10	.080	81	9	7	55	74
MC12-2	3/4	19	50*	10	.095	107	11	9	54	71
MC12-2	1	25.4	55*	10	.095	118	11	9	54	71
MC12-3	1-1/2	38	55*	10	.100	170	12	10	51	70
MC12-3	2	51	60*	10	.100	181	12	10	51	70
MC12-4	2-1/2	64	65*	10	.125	249	14	12	45	70
MC12-4	3	76	70*	10	.125	267	14	12	45	70
MC12-4	4	102	65	10	.125	320	15	13	45	70
MC12-5	5	127	80	10	.150	420	15	13	41	70
MC12-5	6	152	90	10	.150	485	15	13	41	70

* Increase pressure 10–15 psig when using AC309 cutting attachments.

Table 13. MC40 Series Medium-Duty Cutting Tips − Propane/Natural Gas (Two Piece)

Tip Number	Metal Thickness		Pressure − psig		Kerf Width	Consumption − scfh			Drill Size Cutting Jet
						Oxygen		Propane Preheat	
	in.	mm	Oxygen	Propane		Cutting	Preheat		
MC40-00	3/16	5	30*	10	.050	24	35	7	68
MC40-0	1/4	6	35*	10	.055	40	35	7	62
MC40-0	3/8	10	40*	10	.055	46	35	7	62
MC40-1	1/2	13	45*	10	.080	75	35	7	55
MC40-1	5/8	16	50*	10	.080	81	35	7	55
MC40-2	3/4	19	50*	10	.095	107	35	7	54
MC40-2	1	25	55*	10	.095	118	35	7	54
MC40-2	1-1/4	32	60*	10	.095	133	35	7	54
MC40-3	1-1/2	38	55*	10	.100	170	35	7	51
MC40-3	2	51	60*	10	.100	181	35	7	51
MC40-4	2-1/2	64	65*	10	.125	249	35	7	51
MC40-4	3	76	70*	10	.125	267	35	7	51
MC40-4	4	102	75*	10	.125	320	35	7	51

☞ *Data based on 25 ft (7.6 m) of 3/16 in. (5 mm) I.D. hose for cutting up to 1-1/2 in. (38 mm) steel and 25 ft (7.6 m) of 1/4 in. (6 mm) I.D. hose for cutting 2 in. (51 mm) steel and above.*

* Increase pressure 10–15 psig when using AC305 or AC309 cutting attachment.

Table 14. MC60 Series Medium-Duty Cutting Tips − Propylene (Two Piece)

Tip Number	Metal Thickness		Pressure − psig		Kerf Width	Consumption − scfh			Drill Size Cutting Jet
						Oxygen		Propylene Preheat	
	in.	mm	Oxygen	Propane		Cutting	Preheat		
MC60-0	1/4	6	35*	10	.055	40	26	7	62
MC60-0	3/8	10	40*	10	.055	46	26	7	62
MC60-1	1/2	13	45*	10	.080	75	26	7	55
MC60-1	5/8	16	50*	10	.080	81	26	7	55
MC60-2	3/4	19	50*	10	.095	107	26	7	54
MC60-2	1	25	55*	10	.095	118	26	7	54
MC60-2	1-1/4	32	60*	10	.095	133	26	7	54
MC60-3	1-1/2	38	55*	10	.100	170	42	11	51
MC60-3	2	51	60*	10	.100	181	42	11	51
MC60-4	2-1/2	64	65*	10	.125	249	42	11	45
MC60-4	3	76	70*	10	.125	267	42	11	45
MC60-4	4	102	75*	10	.125	320	42	11	45

☞ *Data based on 25 ft (7.6 m) of 3/16 in. (5 mm) I.D. hose for cutting up to 1-1/2 in. (38mm) steel and 25 ft (7.6 m) of 1/4 in. (6 mm) I.D. hose for cutting 2 (51 mm) steel and above.*

* Increase pressure 10–15 psig when using AC305 or AC309 cutting attachment.

Table 15. Heavy-Duty Heating Tips − Oxy-Propylene*

Stock Number	No. Of Flames	Uses	Pressure − psig		Consumption − scfh		Average BTU/Hr	Fuel Cylinders Required**	Overall Length		Torch Head Part No.
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			in.	mm	
ST800	Fluted	Propane	30–40	20–25	107–108	22–24	58,000	1	12-1/2	318	16317
		Propylene	30–40	20–25	118–138	31–34	75,000	1			
ST815	Fluted	Propylene	37–77	13–37	390–655	120–235	273,000	1–2	15-1/2	394	4642
ST825	Fluted	Propylene	60–110	20–35	580–1500	225–525	830,000	2–5	31	787	4639

* Use in WH200 and SW1B handles. Use 3/8 in. (10mm) I.D. hose.

** Continuous use with 100 lb propylene or propane cylinders at 70°F (21°C).

Table 16. Medium-Duty Heating Tips − Oxy-Propylene/Oxy-Propane/Natural Gas*

Stock Number	No. Of Flames	Uses	Pressure − psig		Consumption − scfh		Average BTU/Hr	Fuel Cylinders Required**	Overall Length		Torch Head Part No.
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			In.	mm	
MT800	Fluted	Propylene	30–40	20–25	135–146	51–56	123,000	1	12-1/2	318	16317
		Propane	30–40	20–25	119–121	36–38	93,000	1			
MT805	Fluted	Propylene	50–60	20–25	242–270	120–135	280,000	1	15	381	4642
		Propane	50–60	20–25	206–230	80–100	208,000	1			
MT615	Fluted	Propylene	20–60	10–25	235–430	100–160	280,000	2			1495
		Propane	20–60	10–25	225–535	70–160	269,000	1			
		Natural Gas	15–50	10–25	175–450	96–267	182,000	N/A			

* Use in WH100, MW5A, and CW5A torch handles.

** Continuous use with 100 lb propylene or propane cylinders at 70°F (21°C).

Table 17. Heavy-Duty Heating Tips − Oxy-Propane/Natural Gas

Stock Number	No. Of Flames	Uses	Pressure − psig		Consumption − scfh		Average BTU/Hr	Fuel Cylinders Required*	Overall Length		Torch Head
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			In.	mm	
ST615	Fluted	Propane	23–65	10–28	225–535	70–160	244,000	1–2	11-3/4	298	1495
		Natural Gas	18–55	10–28	175–450	96–267	155,145	N/A			
		Propylene	20–60	10–28	235–430	100–160	280,000	1			
ST625	Fluted	Propane	50–110	17–28	480–1000	140–280	455,000	2–3	31-1/2	800	1504
		Natural Gas	43–80	18–28	390–785	200–450	313,950	N/A			
ST635		Propane	70–115	18–40	670–1580	185–480	614,195	2–4	31-1/2	800	1499

* Continuous use with 100 lb propylene or propane cylinders at 70°F (21°C).

Table 18. Heating Tips − Acetylene

⚠ Heating tips must be used with high-flow flashback arrestors. It may be necessary to increase outlet pressures to compensate for flow restrictions caused by flashback arrestors.

Stock Number	No. Of Flames	Drill Size	Pressure − psig		Consumption − scfh		Average BTU/Hr	Fuel Cylinders Required	Overall Length	
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			in.	mm
ST602	6	No. 64	15	15	31	28	40,125	1*	16	406
ST603	6	No. 56	15	15	55	50	71,750	1*	16	406
ST605	12	No. 57	15	15	96	87	124,670	2*	19	483
ST610	12	No. 54	15	15	150	136	194,890	3*	19	483
MT603	6	No. 64	15	15	31	28	40,125	1*	10	254
MT605	6	No. 56	15	15	57	51	73,085	1*	16	406
MT610	12	No. 57	15	15	100	90	128,970	2*	18	457
AT605	6	No. 64	15	15	32	29	40,550	1**	10	254

☞ *Tips may be used with oxygenhydrogen.*

* Requires minimum 350 cubic ft cylinder size at 70°F (21°C). Used in torch handles SW1A, SW1B, WH200, and WH200A.

** Requires minimum 200 cubic ft Acetylene cylinder size.

Table 19. Welding/Brazing Tips

Tip Number	Welding Range		Pressure − psig		Consumption − scfh	
	in.	mm	Oxygen	Propane	Oxygen	Propane
MW411	1/2–5/8	13–16	11	11	51.9	13

Tip Number	Welding Range		Drill Size	Pressure − psig	Consumption − scfh
	in.	mm			
SW201	1/32	0.7	71	10	2.3
SW203	5/64	1.9	67	10	3.2
SW205	1/8	3	57	10	6
SW207	3/16	5	54	10	12
SW209	3/8	10	49	10	23
SW210	1/2	13	44	15	36
MW201	1/32	.07	71	10	2.3
MW203	5/64	1.9	67	10	3.2
MW205	1/8	3	57	10	6
MW207	3/16	5	54	10	12
MW209	3/8	10	49	10	23
AW201	Up to1/32	0.7	71	10	2.3
AW203	5/64	1.9	67	10	3.2
AW205	1/8	3	57	10	6
AW207	3/16	5	54	10	12
AW209	3/8	10	49	10	23
AW210	1/2	13	44	10	36

Table 20. Heating Tips − Acetylene

Tip Number	Drill Size	Flame Opening Diameter		Brazing Capacity		Pressure − psig	Consumption − scfh	
		in.	mm	in.	mm		Oxy	Fuel
Brazing Tip Assembly (Acetylene)								
AW201	71	.026	0.7	1/4–3/8	6–10	10	2.3	2.3
AW203	67	.032	0.8	3/8–5/8	10–16		3.2	3.2
AW205	57	.043	1.1	1/2–7/8	12–22		6	6
AW207	54	.055	1.4	5/8–1-3/8	16–35		12	12
AW209	49	.073	1.9	3/4–2-1/8	19–54		23	23
AW210	44	.086	2.2	7/8–2-5/8	22–65		36	36
Screw-On Tips (Acetylene)								
LT103	63	.037	0.9	1/2–3/4	12–19	5–10	4.3	4.3
LT104	56	.047	1.2	5/8–1	16–25		9	9
LT106	52	.064	1.6	3/4–1-1/2	19–38		17	17
Screw-On Tips (LP/Propane)								
NE153	44	.086	2.2	5/8–1	16–25	5–10	31	9
NE154	36	0.106	2.7	7/8–1-5/8	22–41		38	11

Table 21. Quickbraze® Tips

Stock Number	Gas Pressure Settings psig		Consumption Rate		BTU Output/Hr	Brazing Capacity On Copper Pipe	Number Of Flames
	Oxygen	Fuel	Oxygen	Fuel			
S4	8	8	0.8	0.6	1,120	1/4–3/8	1
S6	8	8	3.2	3.4	7,360	1/2–3/4	1
T7	8	8	9.8	7.6	12,200	5/8–1-3/8	2
C2*	7	5	6.4	7.2	12,350	1/2–1-1/8	5
C6*	10	8	9.6	10.8	19,720	7/8–1-5/8	7
14711*	12	10	14.7	9.7	13,760	1/2–1-5/8	4

* For use with Oxy-Acetylene Only.

Table 22. Special Purpose Heating Tips

Tip Number	Pressure − psig				Propane/Natural Gas Consumption − scfh		Heat Output BTU/Hr	
	Natural Gas	Oxygen	Propane	Oxygen	Fuel	Oxygen		
JX16	25	80	25	60	128	502	297,000	130,000

Table 23. Fuel Gas Identification Chart

Generic Name	Trade Name
Acetylene	––
MethylAcetylene-Propadiene (MPS)	MAPP®
Propane, Propane-Based Mixtures	Propane-Butane, Flamex, Acet.ogen, Florida Industrial Gas, Hy-Temp, Fuel Gas, I.G. Gas, Chem-Gas, Chemtane
Propylene	HPG, Apachi, B-Plus, Chem-O-Lene, Gulf HP Gas, HEF, B.T.U., Liquifuel
Natural Gas (Methane)	Natural Gas, City Gas