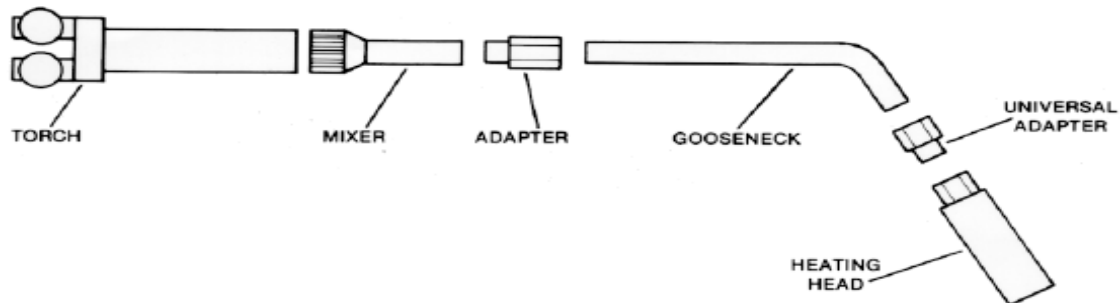


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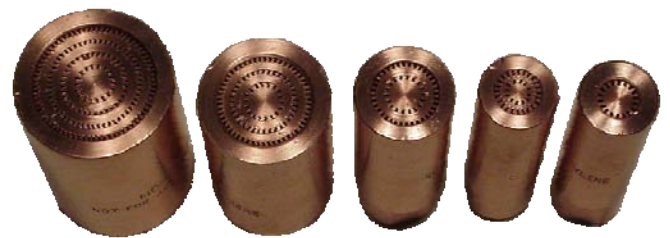
HEATING, WELDING
& BRAZING



IMPROVE (UPGRADE) YOUR EXISTING HEATING EQUIPMENT BY ATTACHING FLAME TECH® COMPONENTS

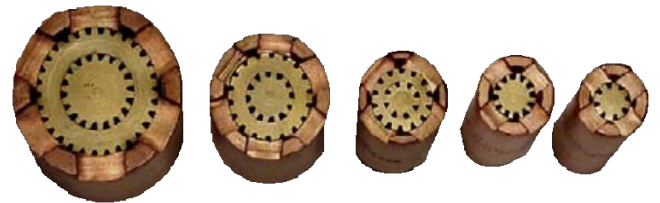
HD HEATING HEADS

Inferno Heavy Duty (HD) Heads are designed to operate with MPS gas, propylene, propane and natural gas. A wide selection of sizes delivers from 20,000 to 1,200,000 BTU's. HD heads are machined from solid bar stock. Internals are press fit and pinned with a large brass pin to prevent separation during backfire.



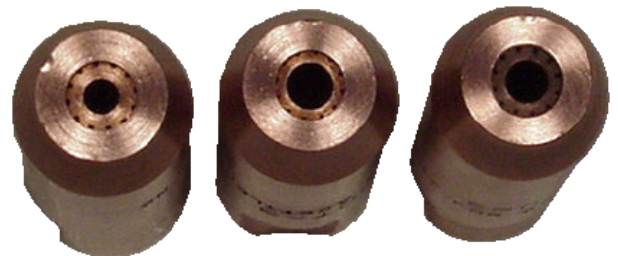
PNG HEATING HEADS

Inferno Propane, Natural Gas (PNG) Heads are designed to operate with propane or natural gas. Shells are machined from solid copper bar stock. Internals are machined from brass which are press fit and pinned to prevent separation during backfire. A wide selection of sizes delivers from 200,000 to 1,200,000 BTU's.



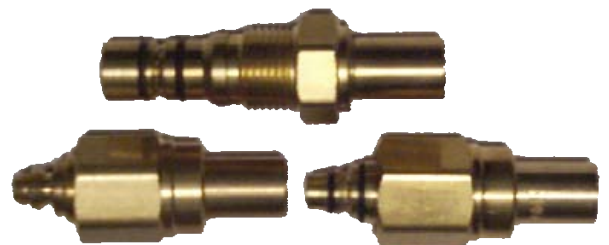
SPOT HEATING HEADS

Inferno Spot Heads are designed to operate with MPS gas, propylene, propane and natural gas. Spot heads are designed to provide a very concentrated flame. This new tool is useful for specialized heating, bending and washing applications. A wide selection of sizes delivers from 70,000 to 513,000 BTU's.



MAGNUM MIXERS

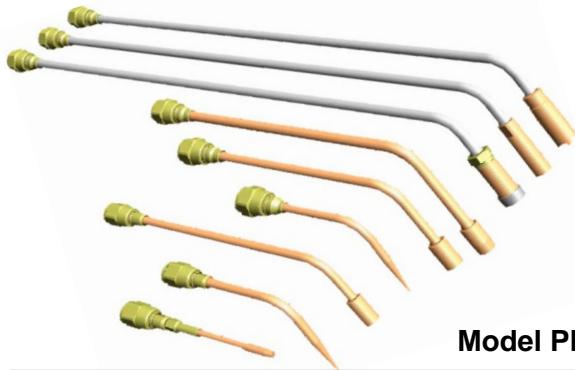
Flame Tech "Magnum" mixers are designed for use with Victor®, Harris®, Airco®, Purox®, and Smith® torches. Using the "Magnum" mixer eliminates the need for mixer to gooseneck adapters and provides greater flows than original manufacturers' mixers.



VICTOR® is a registered trademark for Thermadyne Industries, USA; HARRIS® is a registered trademark for The Lincoln Electric Co., USA; AIRCO® is a registered trademark for Airco Welding Products Div. of BOC Group, USA; SMITH EQUIPMENT® is a registered trademark for Illinois Tool Works, USA; PUROX® is a registered trademark for ESAB Welding & Cutting Products, USA. FLAME TECHNOLOGIES, INC.® is not affiliated with or endorsed by the aforementioned companies.

FLAME TECH®

HEATING, WELDING
& BRAZING



FLAME TECH® stainless steel goosenecks offer durability in a length to meet your needs. These goosenecks fit Flame Tech® "Magnum" mixers and Victor® 1/2 inch mixers without the need for an adapter. All HD, PNG, & SPOT heating heads will screw onto the 1/2-20 end of these goosenecks. **Available in 10", 12", 16", 18", 24", 28" & 36" Lengths**

REFER TO CURRENT PRICE LIST FOR COMPLETE INFERNO HEATING EQUIPMENT OFFERING

Model PNG for use with Natural Gas, Propane

Head Size	Natural Gas/ Propane Pressure P.S.I.G. Minimum-Maximum	Oxygen Pressure P.S.I.G. Minimum-Maximum	Natural Gas/Propane Consumption CFH Minimum-Maximum	Oxygen Consumption CFH Minimum-Maximum	BTU Per Hour
10	2-10	30-45	55-110	180-210	CFH (Gas)
20*	2-12	40-60	90-180	310-330	x
30*	2-15	60-80	170-260	450-600	BTU pri cu. ft.
40*	2-10	80-100	240-290	550-800	
50*	10-25	90-110	280-450	780-980	(see BTChart)

MODEL HD for use with any Commercial Fuel Gas EXCEPT Acetylene

Head Size	Fuel Gas Pressure P.S.I.G. Minimum-Maximum	Oxygen Pressure P.S.I.G. Minimum-Maximum	Fuel Gas Consumption CFH Minimum-Maximum	Oxygen Consumption CFH Minimum-Maximum	BTU Per hour
1	5-10	40-60	70-100	100-180	CFH (Gas)
2*	10-15	50-70	100-150	200-300	
3*	15-25	70-100	150-200	350-460	BTU per cu. f
4	*20-35	90-120	250-350	600-800	
5*	30-50	100-150	400-500	900-1150	(see BTU Chart)

MODEL "SPOT" for use with any Commercial Fuel Gas EXCEPT Acetylene

Head Size	Fuel Gas Pressure P.S.I.G. Minimum-Maximum	Oxygen Pressure P.S.I.G. Minimum-Maximum	Fuel Gas Consumption CFH Minimum-Maximum	Oxygen Consumption CFH Minimum-Maximum	BTU Per Hour
Spot 1	5-15	40-55	70-150	120-300	CFH (Gas)
Spot 2*	7-20	45-65	80-175	150-350	x
Spot 3*	10-25	50-80	100-200	200-400	BTU per cu. (see BTU chart)

Approximate Gross BTU's Per Cubic Foot

Propylene - 2371	Mapp - 2380	Natural Gas - 1012
Butane - 2374	Methane - 2241	Propane - 2563

WARNING

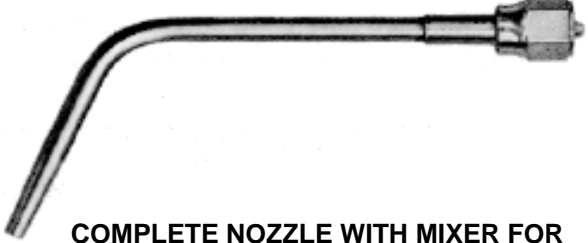
1. Large heating assemblies require high volumes of gas to keep flames burning properly "Starving" the flame will overheat the tip and cause a backfire or flashback (hissing sound inside the head). If additional flow capacity is required use a manifold system of sufficient size to supply the necessary gas volume. Consult your gas supplier for withdrawal rates for other fuel gases. Refer to the chart above for recommended pressure settings and consumption data.
2. Use 3/8" ID hose and heavy duty torch handle with any heating assembly shown with *.
3. IMPORTANT: If a flashback occurs, immediately close the Oxygen Valve first. Then close the Fuel Valve.

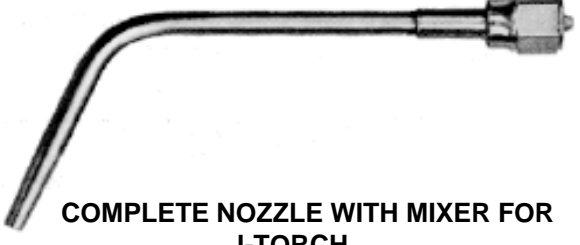
FLAME TECH®

HEATING, WELDING
& BRAZING

OXY-ACETYLENE & OXY-HYDROGEN SELECTION CHART

SIZE	COMPLETE NOZZLE	ELBOW TIP ONLY	MIXER ONLY	STYLE W
000	000-W	000-ET	2-UM	 <p>COMPLETE NOZZLE WITH MIXER FOR 300 TORCH & WH 350 TORCH</p>
00	00-W	00-ET	2-UM	
0	0-W	0-ET	2-UM	
1	1-W	1-ET	2-UM	
2	2-W	2-ET	2-UM	
3	3-W	3-ET	4-UM	
4	4-W	4-ET	4-UM	
5	5-W	5-ET	6-UM	
6	6-W	6-ET	6-UM	

SIZE	COMPLETE NOZZLE	ELBOW TIP ONLY	MIXER ONLY	STYLE W-1
000	000-W-1	000-ET-1	4-UM-1	 <p>COMPLETE NOZZLE WITH MIXER FOR 100 TORCH & WH 250 TORCH</p>
00	00-W-1	00-ET-1	4-UM-1	
0	0-W-1	0-ET-1	4-UM-1	
1	1-W-1	1-ET-1	4-UM-1	
2	2-W-1	2-ET-1	4-UM-1	
3	3-W-1	3-ET-1	4-UM-1	
4	4-W-1	4-ET-1	4-UM-1	
5	5-W-1	5-ET-1	7-UM-1	
6	6-W-1	6-ET-1	7-UM-1	


SIZE	COMPLETE NOZZLE	ELBOW TIP ONLY	MIXER ONLY	STYLE W-J
000	000-W-J	000-ET-J	4-UM-J	 <p>COMPLETE NOZZLE WITH MIXER FOR J-TORCH</p>
00	00-W-J	00-ET-J	4-UM-J	
0	0-W-J	0-ET-J	4-UM-J	
1	1-W-J	1-ET-J	4-UM-J	
2	2-W-J	2-ET-J	4-UM-J	
3	3-W-J	3-ET-J	4-UM-J	
4	4-W-J	4-ET-J	4-UM-J	
5	5-W-J	5-ET-J	7-UM-J	
6	6-W-J	6-ET-J	7-UM-J	


METAL THICKNESS	TIP SIZE	DRILL SIZE	OXYGEN (PSIG)	ACETYLENE (PSIG)	ACETYLENE (SCFH)
Up to 1/32"	000	75 (.022) 3/5	3/5	1/2	
1/16" to 3/64"	00	70 (.028) 3/5	3/5		
1/32" to 5/64	0	65 (.035) 3/5	3/5	2/4	
3/64" to 3/32"	1	60 (.040) 3/5	3/5	3/6	
1/6" to 1/8"	2	56 (.056) 3/5	3/5	5/10	
1/8" to 3/16"	3	53 (.060) 4/7	3/6	8/18	
3/16" to 1/4"	4	49 (.073) 5/10	4/7	10/25	
1/4" to 1/2"	5	43 (.089) 6/12	5/8	15/35	
1/2" to 3/4"	6	36 (.106) 7/14	6/9	25/45	


NOTE: Oxygen consumption (SCFH) is 1.1 times the acetylene under neutral flame conditions.

FLAME TECH®

HEATING, WELDING
& BRAZING

STYLE MFA  COMPLETE HEATING NOZZLE WITH MIXER FOR 300 TORCH & WH 350 TORCH	SIZE	COMPLETE NOZZLE	COMPLETE TIP AND GOOSENECK	MIXER ONLY
	4	4-MFA	4-ETMF	MFA-M
6	6-MFA	6-ETMF	MFA-M	
8	8-MFA	8-ETMF	MFA-M-1	
10	10-MFA	10-ETMF	MFA-M-1	
12	12-MFA	12-ETMF	MFA-M-1	
15	15-MFA	15-ETMF	MFA-M-1	

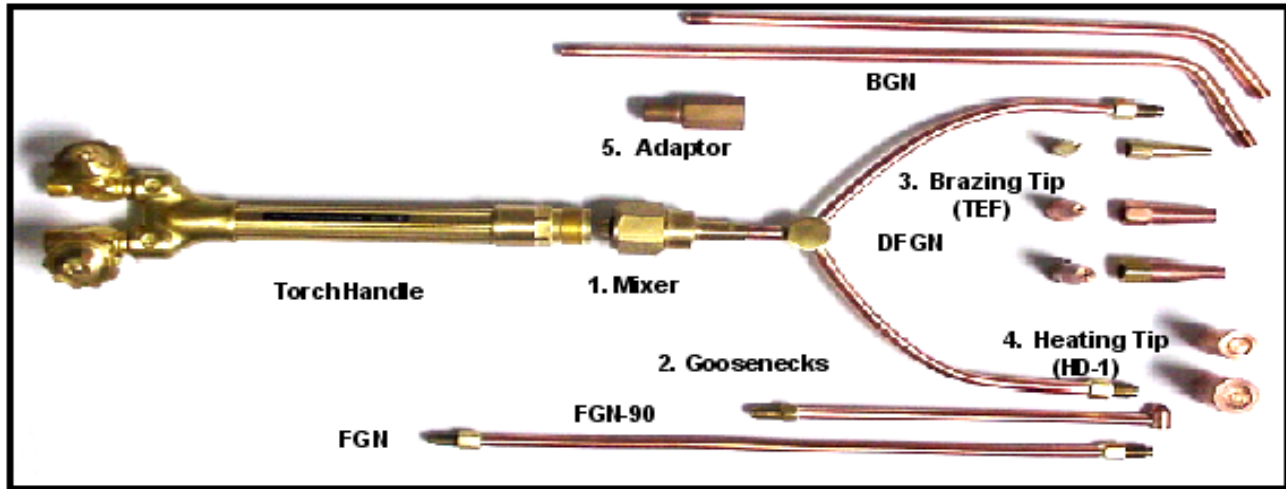
STYLE MFA-1  COMPLETE HEATING NOZZLE WITH MIXER FOR 100 TORCH & WH 250 TORCH	SIZE	COMPLETE NOZZLE	COMPLETE TIP AND GOOSENECK	MIXER ONLY
	2	2-MFA-1	2-ETMF-1	MFA-1-M
4	4-MFA-1	4-ETMF-1	MFA-1-M	
6	6-MFA-1	6-ETMF-1	MFA-1-M	
8	8-MFA-1	8-ETMF-1	MFA-1-M	

STYLE MFA-J  COMPLETE HEATING NOZZLE WITH MIXER FOR J-TORCH	SIZE	COMPLETE NOZZLE	COMPLETE TIP AND GOOSENECK	MIXER ONLY
	2	2-MFA-J	2-ETMF-J	MFA-J-M
4	4-MFA-J	4-ETMF-J	MFA-J-M	
6	6-MFA-J	6-ETMF-J	MFA-J-M	

TIP SIZE	OXYGEN PRESSURE (PSIG)	ACETYLENE PRESSURE (PSIG)	OXYGEN CONSUMPTION (SCFH)	ACETYLENE CONSUMPTION (SCFH)	BTU PER HOUR	
					NOTE: Approximate Gross BTU Contents per Cubic Foot:	
2	4/8	4/8	3/10	3/9	Acetylene	1470
4	8/12	6/10	7/22	6/20	Butane	3374
6	10/15	8/12	15/44	14/50	Propane	2498
8	20/30	10/15	33/88	30/80	Mapp	2406
10	30/40	12/15	44/110	40/100	Methane	1000
12	50/60	12/15	66/165	60/150	Propylene	2371
15	50/60	12/15	99/244	90/220	Natural Gas	1000

BRAZING & LIGHT DUTY HEATING EQUIPMENT

This fuel gas brazing & heating equipment enhances the use of fuel gas for applications that until now required acetylene. The same philosophy we use for our heavy duty heating equipment is used in the design of this equipment. The special fuel gas mixers designed for use with all the popular OEM torch handles utilize the same accessories. This standardizes purchasing, reduces inventory, makes the components more cost effective and gives the craftsman tremendous flexibility.

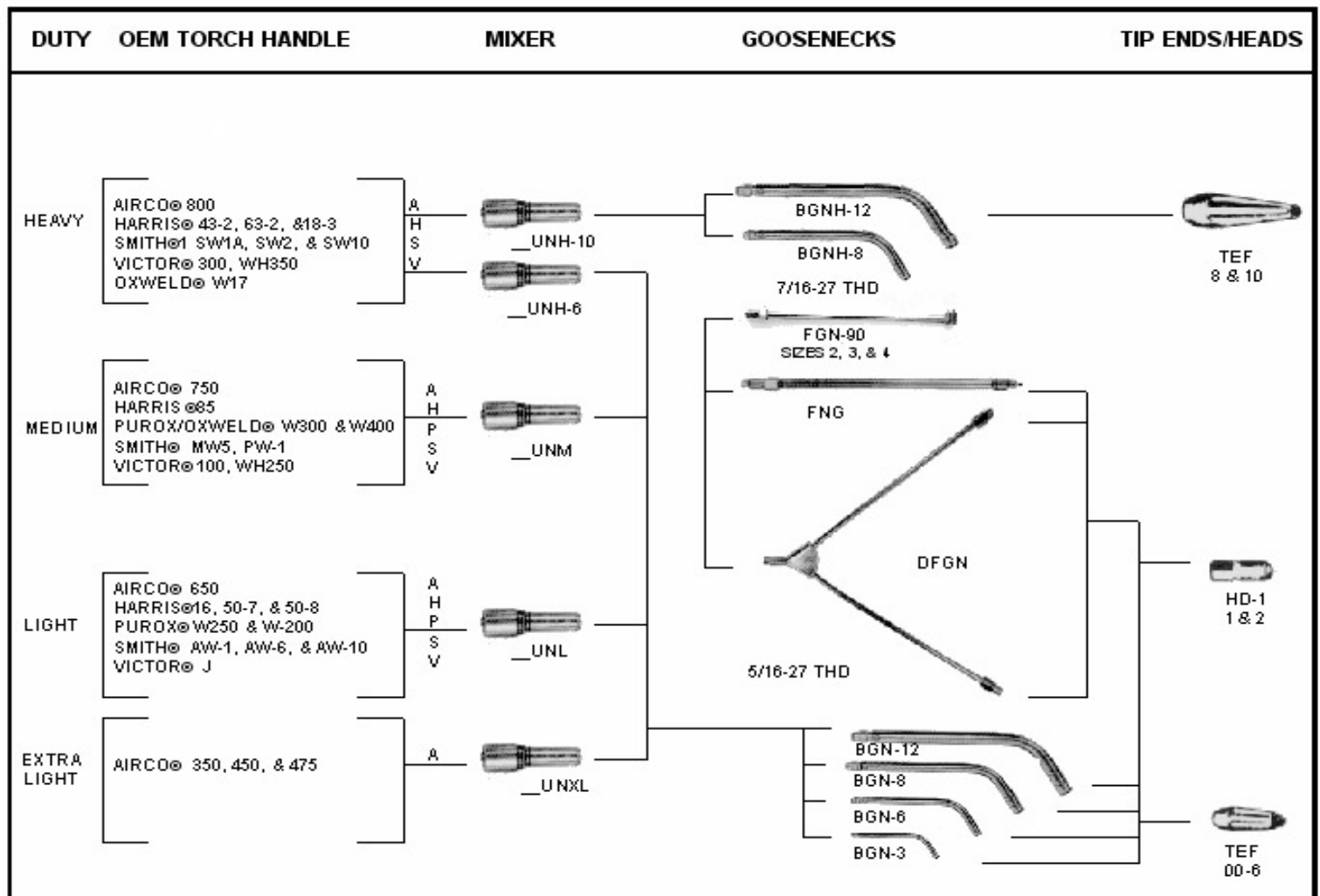


- MIXER** - Designed to enhance the performance of all Fuel Gases - available for all popular torches.
- GOOSENECKS** - The wide variety of gooseneck accessories cover most all applications.
- BRAZING TIPS** - The TEF (Tip End Fuel) gas brazing tips were designed to overcome most of the problems encountered when brazing with fuel gases. These TEF tips will flow from 25 to 50 percent more gas than single orifice welding tips designed for acetylene before becoming unstable and blowing away from the tip.
- HEATING TIPS** - The HD-1 series heating tips allow the use of fuel gases with minimum & light duty torches for heating applications that until now had to use acetylene. The HD-1 head will yield from 120,000 to 375,000 BTU's per hour, which covers the smallest to the largest multi-flame acetylene heating assemblies.
- ADAPTORS** - 5/16-27 thread to 1/4" tubing, allowing the customer to make their own gooseneck to fit individual needs.

TORCH HANDLE	MIXERS					ACCESSORIES
	AIRCO®	HARRIS®	PUROX/OXWELD®	SMITH®	VICTOR®	
HEAVY DUTY	A-UNH-10	H-UNH-10	O-17-UNH-10	S-UNH-10	V-UNH-10	BGNH Bent GooseNeck Heavy Duty Length 8" & 12" TEF Tip End Fuel Sizes 8 & 10
	A-UNH-6	H-UNH-6	O-17-UNH-6	S-UNH-6	V-UNH-6	
MEDIUM DUTY	A-UNM	H-UNM	P-UNM	S-UNM	V-UNM-6	BGNH Bent GooseNeck Length 3", 6", 8" & 12" TEF Tip End Fuel HD-1 Heating Heads Sizes 1 & 2 DFGN Dual Flex GooseNeck Length 6" FGN Flexible GooseNeck Length 6" FGN-90 Flexible GooseNeck Length 6" with 90° head
LIGHT DUTY	A-UNL	H-UNL	P-UNL	S-UNL	V-UNL	
EXTRA LIGHT	A-UNXL	NONE	NONE	NONE	NONE	

FLAME TECH®

HEATING, WELDING
& BRAZING



FLAME TECH TEF (TIP END FUEL GAS) BRAZING & HEATING NOZZLE CROSS REFERENCE & FLOW DATA

ACETYLENE	FLAME TECH PART #	DRILL SIZE	TEF SIZE	FUEL GAS PSIG	OXYGEN PSIG	FUEL GAS FLOW CFH *2	BTU PER HOUR
000		75 (.022)	00	3-6	3-6	2-7	CFH (GAS) X BTU PER CU FT. SEE BTU CHART BELOW
00		70 (.028)	0 *1	3-6	3-6	4-9	
0		65 (.035)	1	3-6	4-8	6-12	
1		60 (.040)	2	3-6	5-10	9-18	
2		56 (.046)	3 *1	4-8	8-15	10-20	
3		53 (.060)	4	5-10	10-25	12-24	
4		49 (.073)	5	6-12	15-30	20-40	
5		43 (.084)	6 *1	7-14	20-40	30-75	
6		36 (.106)	8 *1	9-18	30-50	60-120	
7		30 (.128)	8	12-24	40-70	90-180	
8		29 (.136)	10 *1	18-36	50-80	160-320	
10		27 (.144)	10	20-40	50-80	200-400	
12		25 (.149)	20	22-44	50-80	240-48	
MFA-12			HD-1-1	5-10	40-60	70-100	
MFA-15			HD-2-2	10-15	50-70	100-150	

1 Flame Tech offers 10 sizes - however the asterisked () items cover most all applications.

*2 Oxygen consumption (CFH) is about 2.0 times the fuel gas under neutral conditions.