

# UNI-FLAME Oxygen & Acetylene / LPG Professional Industrial Gas Set

## Warning

Before use please refer to instruction manual for safety measures that must be adhered to for safe operation of your Uni-Flame gas cutting and welding equipment. Please read and understand these warnings and instructions. Failure to do so could result in serious injury or death. Uni-Flame gas cutting and welding equipment should only be used by operators who are properly trained and qualified in the safe use of this type of equipment.

### GUIDE FOR TYPE 551 WELDING TIPS OXY / ACETYLENE

TIP SIZE	PRESSURE Kpa OXYGEN	PRESSURE Kpa ACETYLENE	FUEL GAS L/MIN
4	50	50	1.5
6	50	50	1.5
8	50	50	2
10	50	50	3
12	50	50	4
15	50	50	6.5
20	50	50	12

\*ALL FIGURES ARE APPROXIMATE AND CAN VARY

### GUIDE FOR TYPE 554 WELDING TIPS OXY / LPG

TIP SIZE	PRESSURE Kpa OXYGEN	PRESSURE Kpa ACETYLENE	GAS CONSUMPTION Ltr/min	
			OXYGEN	LPG
8	50	50	2	0.5
15	100	100	12	3

\*ALL FIGURES ARE APPROXIMATE AND CAN VARY

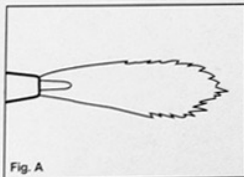


Fig. A

#### Neutral flame

(obtained by having equal quantities oxygen and acetylene).  
Ideal for welding steel, stainless steel, cast iron, copper, aluminium, etc.

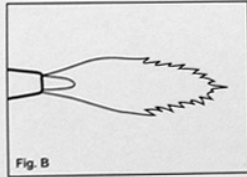


Fig. B

#### Oxidising flame

(obtained by having excess oxygen).  
Ideal for welding brass.

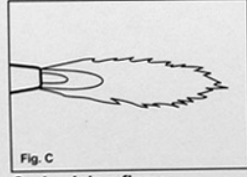


Fig. C

#### Carburising flame

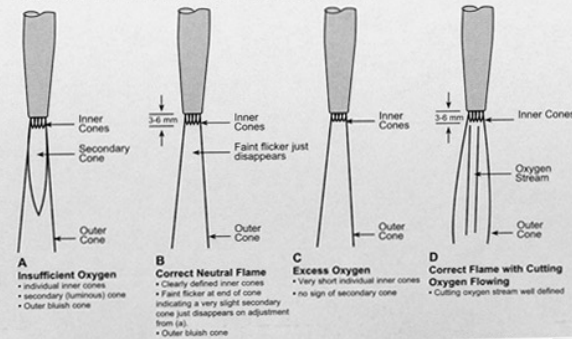
(obtained by having small excess acetylene).  
Ideal for hardening.

### 1. CUTTING GUIDE FOR TYPE 41 ACETYLENE NOZZLES

Plate Thickness mm	Nozzle Size	Pressure Oxygen kPa	Pressure Acetylene kPa	Cutting Speed mm/min	Typical Consumption L/min	
					Oxy	Acet
6	8	200	100	450	19	3
12	12	200	100	380	38	4
20	12	250	100	360	45	5
25	15	220	100	320	56	6
40	15	350	100	270	75	7
50	15	400	100	240	84	7
75	15	450	100	180	95	8
*100	20	400	100	150	134	9
125	20	450	100	150	155	10
150	24	450	100	130	211	11
200	24	500	100	100	234	14
250	32	600	100	90	420	20
300	32	600	100	90	420	20

\* Maximum thickness recommended for cutting attachments.

#### Oxygen-Acetylene flame settings (as viewed through cutting goggles)



### 2. CUTTING GUIDE FOR TYPE 44 LPG NOZZLES

Plate Thickness mm	Nozzle Size	Pressure Oxygen kPa	Pressure LPG kPa	Cutting Speed mm/min	Typical Consumption L/min	
					Oxy	LPG
6	8	200	100	450	30	3.5
12	12	200	100	380	50	4
20	12	250	100	360	68	4.5
25	15	220	100	320	72	5.5
40	15	350	100	270	90	5.5
50	15	400	100	240	99	5.5
75	15	450	100	180	111	6
*100	20	400	100	150	149	6
125	20	450	100	150	171	6.5
150	24	450	100	130	228	7
200	24	500	100	100	256	9
250	32	600	100	90	456	14
300	32	600	100	90	456	14

\* Maximum thickness recommended for cutting attachments.

#### Oxygen-LP Gas flame settings (as viewed through cutting goggles)

