

CIGWELD

AN ESAB BRAND

CIGWELD

AN ESAB BRAND

CIGWELD

AN ESAB BRAND

COMET GAS CONSUMABLES

COMET BLACK NICKEL RANGE

CUTTING STANDARD & HIGH SPEED

GOUGING

HEATING

WELDING

next GENERATION COMET BLACK NICKEL

PATENT PENDING



Precision machined tapered seat (2 seat)

Black nickel plating increases durability and minimises discolouration

Manufactured from copper for increased strength and improved heat dissipation

Concave design featuring key nozzle specifications, including: brand, type, size, pressures and plate thickness

High performance smooth mirror finish gas passages produce a superior oxygen jet stream

SWAGE TECHNOLOGY*

HIGHEST QUALITY CUTTING

Swaging is a method of compressing copper to produce contoured mirror finished gas ports. Firstly, oversized holes are drilled into a nozzle blank. Fine wires are then placed in these holes and the copper is forced down over them. When the wires are withdrawn, they leave long, contoured passageways with a smooth mirror finish. This allows the nozzle to produce a much longer oxygen jet stream, a narrower kerf and a higher quality cut.



CIGWELD Pty Ltd
CIGWELD An ESAB Brand
71 Gower Street, Preston VIC 3072 Australia

Customer Care
Tel: 1300 654 674 | Fax: 03 9474 7391
Email: enquiries@cigweld.com.au

International Enquiries
Tel: +61 3 9474 7508 | Fax: +61 3 9474 7488

CIGWELD.COM.AU

In the interest of continuous improvements, CIGWELD Pty Ltd ABN 56 007 226 815 (An ESAB Brand) reserves the right to change specifications or design on any of its products without prior notice.

DISTRIBUTED BY

* Type 41 Nozzles Only.



CIGWELD.COM.AU

neXt GENERATION COMET

CIGWELD introduces the next generation of Comet gas consumables, featuring a gas equipment world first in black nickel plating. This patented innovation from CIGWELD provides an additional tough wearing layer for superior durability, plus minimises heat discolouration.

With continued superior performance the CIGWELD Comet Black Nickel series offers a full range of consumables to tackle any gas cutting, gouging, welding or heating task. These consumables are designed and manufactured to exacting tolerances to ensure precise compatibility, quality and lasting performance.

CUTTING

STANDARD SPEED

- **Excellent cut quality** – Gas passages produced using swaging technology (Type 41 only) resulting in an extended, smooth, uniform oxygen jet stream.
- **Less slag adhesion** - Manufactured from copper for extra durability and improved heat dissipation.
- **Narrow kerf width** – Provides cleaner cuts and smoother lines with both hand cutting and profile machine cutting.
- **No flame blow off (Type 44)** – Slotted preheat ports cause a turbulence in the gas flow enabling the flame to hang on to the nozzle.

HI-SPEED CUTTING NOZZLES - OFFER THE ADDITIONAL BENEFITS

- **Tapered gas passage tip** - A small taper in the end of the nozzle alters the expansion of the oxygen jet stream. This, combined with higher oxygen pressure produces a narrower kerf width.
- **Fast and Efficient** – Due to a narrower kerf width, less metal is consumed by the cutting flame and 20-40% less oxygen gas is required to produce the cut. An improvement in cutting speed of up to 50% is achieved without a detrimental effect to cut quality.

WELDING

- Manufactured from copper, capable of welding mild steel (Oxy/Acet only), brazing (various materials) and soldering (silver solder & soft solder).
- Each welding tip is individually swaged to ensure proper alignment for uniform flame, sizing and free-flow contour.
- Flame tested to ensure optimum quality and performance.

GOUGING

- Ideal for back "gouging" welds or defects prior to back fill.
- High speed.
- Available in straight and bent nozzle design.
- Bent nozzles allow for easier gouging in horizontal positions.

HEATING

- Concentrated high temperature heat.
- Excellent flame stability.
- Heavy copper construction helps conduct heat away from tip face, keep the tip cool and prevent flashbacks.
- Spanner adjustments milled into ends of Super Heating Tips.
- Gas pressure and identification stamped on every tip.
- A small projection in the middle of the tip face (8x12 HT, SHA1 and SHA2) prevents backfires should the tip touch the work piece.
- Castellations on Super Heating Propane range as an extra resistance to backfire.
- Simple design for ease of cleaning.

PROFESSIONAL
SERIES

STANDARD SPEED CUTTING NOZZLES – OXY / ACETYLENE					TYPE 41
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	
306046	6	1 – 6	2.0	11 (200)	
306047	8	6 – 10	3.5	20 (200)	
306048	12	12 – 20	4.0	38 (200)	
306049	15	25 – 75	7.0	75 (350)	
306050	20	100 – 125	9.0	134 (400)	
306051	24	150 – 200	12.5	232 (500)	
306052	32	225 – 300	20.0	420 (600)	

HIGH SPEED CUTTING NOZZLES – OXY / ACETYLENE						TYPE 41
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	Cutting Speed mm/min	
306069	6HS	6 – 8	6.0	31 (650)	700	
306070	8HS	8 – 20	6.0	50 (650)	700 – 550	
306071	12HS	25 – 75	10.0	107 (650)	500 – 300	
306072	15HS	75 – 150	12.0	158 (650)	300 – 200	
306073	20HS	150 – 250	13.0	250 (650)	200 – 100	
306074	24HS	250 – 300	18.0	320 (650)	90	

GOUGING NOZZLES – OXY / ACETYLENE					TYPE 41
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	
306035	32GB	–	15.0	61 (500)	
306036	48GB	–	18.0	85 (600)	
306037	64GB	–	20.0	112 (650)	
306038	32GS	–	15.0	61 (500)	

SHEET METAL NOZZLE – OXY / ACETYLENE					TYPE 41
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	
306067	6SM	–	1.5	9 (200)	

RIVET CUTTING NOZZLE – OXY / ACETYLENE					TYPE 41
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	
306076	15RC	–	10.0	80 (400)	

STANDARD SPEED CUTTING NOZZLES – OXY / LPG OR NATURAL GAS					TYPE 44
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	
306025	6	3 – 6	2.0	11 (200)	
306026	8	6 – 12	3.5	30 (200)	
306028	12	12 – 20	4.5	58 (250)	
306029	15	25 – 75	5.5	99 (400)	
306030	20	100 – 125	6.5	171 (400)	
306031	24	150 – 200	9.0	256 (500)	
306032	32	225 – 300	14.0	456 (600)	

HIGH SPEED CUTTING NOZZLES – OXY / LPG OR NATURAL GAS						TYPE 44
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	Cutting Speed mm/min	
306018	6HS	6 – 8	5.0	45 (650)	550	
306019	8HS	8 – 20	5.0	64 (650)	550 – 500	
306021	12HS	25 – 75	6.5	122 (650)	500 – 300	
306022	15HS	75 – 150	7.0	173 (650)	300 – 200	
306023	20HS	150 – 250	8.0	267 (650)	200 – 100	
306024	24HS	250 – 300	12.0	350 (650)	90	

GOUGING NOZZLES – OXY / LPG OR NATURAL GAS					TYPE 44
Part Number	Size	Plate Thickness	Fuel Gas Flow l/min @ 100kPa	Total Oxygen Flow & Pressure l/min @ kPa	
306033	32GS	–	12.0	94 (500)	
306054	32GB	–	12.0	94 (500)	
306055	48GB	–	13.0	120 (600)	
306056	64GB	–	13.0	150 (650)	

ORDERING INFORMATION

WELDING TIPS – OXY / ACETYLENE GAS						TYPE 551
Part Number	Tip Size	Steel Thickness	Pressure kPa Oxygen	Pressure kPa Acetylene	Consumption each gas litres/mins	
307056	4	0.9	50	50	1.5	
307057	6	1.2	50	50	1.5	
307000	8	2	50	50	2.0	
307001	10	2.6	50	50	3.0	
307002	12	3.2 – 4.0	50	50	4.0	
307003	15	5.0 – 6.5	50	50	6.5	
307004	20	8.2 – 10.0	50	50	12.0	
307005	26	13 – 19	50	50	22	
307006	32	25	50	100	38.0	
307026	8, 10, 12, 15, 20, 26, 32	2 – 25	–	–	–	

WELDING TIPS – LPG AND NATURAL GAS						TYPE 554
Part Number	Tip Size	Steel Thickness	Pressure kPa Oxygen	Pressure kPa Acetylene	Consumption each gas litres/mins	
306033	4	0.9	50	50	1.5	
306054	6	1.2	50	50	1.5	

HEATING TIPS – OXY / ACETYLENE GAS										
Part Number	Model Number	Tip Size	Operating Pressure Oxy	Fuel	Gas Consumption Oxy	Fuel	Heat Output MJ/hr	Blowpipe	Mixer	Extension Barrel
306068	10 x 12 HT	10 x 12	350	100	23	22	75	Comet 3	–	–
307007	8 x 12 HT	8 x 12	150	100	45-58	41 – 55	180	Comet 3	304002	–
307121	SHA1	8 x 12	150	100	45-58	41 – 55	180	Comet 3	304003	307123, 307124, 307125
307122	SHA2	12 x 12	200	100	74	65	215	Comet 3	304003	307123, 307124, 307125

HEATING TIPS – LPG OR NATURAL GAS										
Part Number	Model Number	Tip Size	Operating Pressure Oxy	Fuel	Gas Consumption Oxy	Fuel	Heat Output MJ/hr	Blowpipe	Mixer	Extension Barrel
306034	20 x 9 HT	20 x 9	500	100	48	12	40	Comet 3	–	–
307120	SHP1	18 x 12	500	100	200	50	280	Comet 3	304003	307123, 307124, 307125
307119	SHP2	36 x 12	600	100	300	75	420	Comet 3	304003	307123, 307124, 307125
307118	SHP3	48 x 12	600	100	400	100	560	Comet 3	304166	307123, 307124, 307125
307117	SHP4	48 x 15	1000	300	600	150	840	Comet 3	304166	307123, 307124, 307125

SUPERHEATING BARRELS* (EXTENSION BARRELS)		
Part Number	Description	Length
307123	Straight stainless steel barrel	735 mm long
307125	Gooseneck stainless steel barrel	700 mm long
307124	Gooseneck stainless steel barrel	450 mm long

* Stainless Steel only.