

CUTTING AND WELDING GAS CONTROL EQUIPMENT



GCE GROUP OVERVIEW

The GCE Group has an extensive product range to serve customers within Industrial, Medical, High Purity and special gas applications.

The GCE Group offers local sales and supply companies in the following locations: Austria, Benelux, Czech Republic, France, Germany, Hungary, Italy, Poland, Portugal, Romania, Spain, Sweden, Switzerland, United Kingdom, China and Russia. In addition GCE has recently opened new sales offices in India, Middle East (Dubai), Panama and Mexico and has its main production facilities based in the Czech Republic and China. GCE has a central distribution centre based in Kladno, just north of Prague.

GLOBAL BRAND RECOGNITION

GCE is associated with leading trademarks and brands such as DruVa, Mediline, Mujelli, Propaline, Kayser, Krass, Butbro, Charledave, Propaline, Rhöna, Sabre medical, Murex, AGA, BOC, Linde and ESAB. Our quality management system is certified to ISO 9001 and our products are tested and approved by BAM, BSI, Norske Veritas, US Dot, UL, CEN, DIN and SIS.

All GCE medical production facilities have EN approvals for CE marking and an increasing number of GCE facilities has systems that have been granted approval to the environmental standard ISO 14000.

MARKET LEADERS

The GCE Group is today an europe's leading company in the field of gas control and involved in the development and manufacturing of



all types of equipment for pressure and flow control of high pressure gases. GCE's main business was originally concentrated in the oxy-acetylene cutting and welding market. However, with almost 100 years of experience in the handling of high pressure gases, the product range has grown to include high purity and medical gas equipment.

GCE CORPORATE RESPONSIBILITY

GCE provides high quality premium products. Today's portfolio fits a large variety of applications, from pressure regulators and blowpipes for cutting and welding to sophisticated gas supply systems for medical and electronics industry applications.



HISTORY

The origins of GCE go back to the beginning of the twentieth century when oxy-acetylene cutting and welding methods were first invented. GCE itself was formed in 1987 through the merging of two gas equipment activities from the world's leading industrial gas companies into one entity.

The GCE Group has grown rapidly since its foundation and leads the restructuring of the European gas equipment industry through mergers and acquisitions. Headquarters are based in Malmö, Sweden with the Group having activities in all European markets, and developing businesses in Russia, China, India and South America.

The major Production centres are located in Europe and Asia. Worldwide in excess of 850 people are employed within the GCE group today.

GCE CUTTING AND WELDING TECHNOLOGIES

Welding is one of the leading processes within metal fabrication. Driven by innovations it is widely used as the main technology in areas such as construction, automotive, the transport sector, shipyard industries, offshore and several others.

Metal sheets are fabricated by thermal cutting processes and joined to ensure a rigid and high quality construction. High quality standards and fundamental safety precautions are prerequisite in all works related to cutting and welding technologies.

GCE Cutting and Welding Technologies (GCE CWT) is one of the global market leaders in gas welding, oxy-fuel cutting, brazing and heating processes. GCE CWT provides a full range of gas pressure regulators, arc welding, gas economizers, safety equipment and a comprehensive global range of torches specially designed to meet international standards and local market requirements.

With strong focus on innovations and global market coverage GCE provides solutions which fit to the customer needs. Experienced sales teams supported by application, marketing and technical experts promote the latest GCE solutions within global distribution network on daily basis. Dedicated production team cooperates in two main production facilities and the complete organisation is formed as a Value stream team creating added value to all stakeholders.



SIMPLY SAFE

Safety is always a primary concern in an oxygen/fuel process and GCE is fully committed to the elimination of all risks in this process. It is not only visible on the complete range of safety devices for oxy-fuel applications. Safety is the main objective within all range of GCE CWT products, applications and as well as within internal production processes.

QUALITY TIME

All equipment from GCE is engineered and produced with highest focus on quality. High quality is the base for all activities and by using Lean processes and 6-Sigma tools we constantly refine and develop

existing procedures. All GCE CWT products are designed, tested and manufactured within the quality management system ISO 9001 and in accordance with following regulations and global standards (selected short-list) :

- 2014/68/EC, Pressure Equipment Directive
- 2006/42/EC Machinery Directive
- ISO 2503, Cylinder regulators
- ISO 5172, Cutting, welding, heating torches and nozzles
- EN 730, ISO 5175, Safety devices
- ISO 3821, Rubber hoses
- EN 561, Quick couplers
- ISO 5171, Pressure gauges

ALL SYSTEMS GO

GCE is one of the global drivers of oxy-fuel innovations. Well known solutions are innovative safety systems, pressure regulators and heating equipment. A new program of Intelligent Torches and Systems for oxy-fuel cutting has been launched recently and there is still significant potential to increase the efficiency of oxy-fuel cutting technology. This is the reason for GCE to continuously develop the GCE FIT+® cutting torch solutions. Together with our partner, IHT Automation, GCE believes that a higher level of integrated automation is the future of oxy-fuel cutting. The current result of the development is the range of automated cutting systems which became as simple as a "plug and play" solution.

CUSTOMERS FIRST

Everything we do is conducted in close co-operation with our customers and users. GCE is a service-oriented company which keeps close contact with both its customers and end-users. Thanks to a high level of experience and technical competence within cutting and welding technologies GCE has today a global network of loyal distributors which enables to develop right solutions for the global as well as for local markets.

It's no coincidence that, where the challenge and demands are the greatest, you will find GCE hard at work.

GCE LOCAL OFFICE

Here in the UK GCE has its own sales office, workshop and warehouse based at Haydock, St Helens. Our sales team has acquired many years of experience in all aspects of Gas Control Equipment and is on hand to offer help and advice.

GCE SALES OFFICE & WAREHOUSE

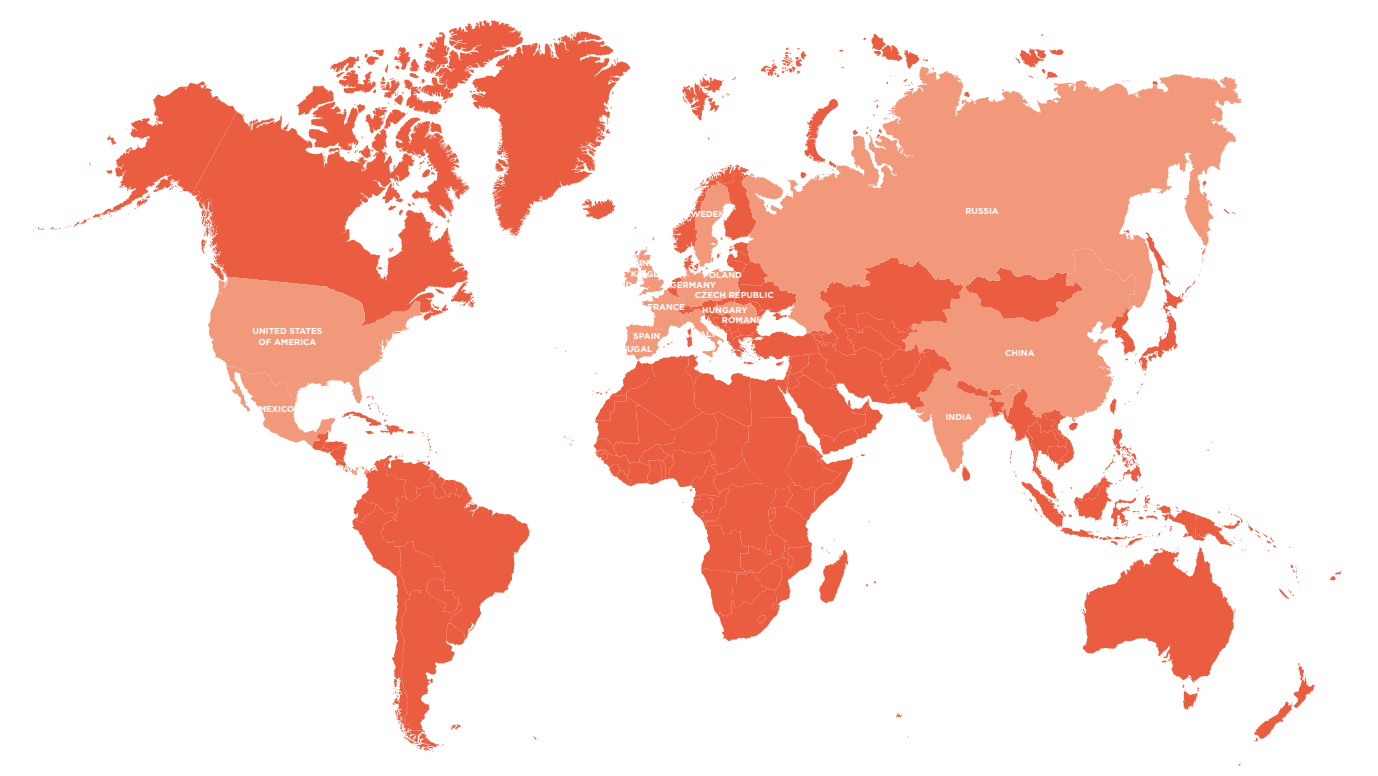
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Please see our website for our current terms and conditions

www.gcegroup.com



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CYLINDER REGULATORS



CYLINDER REGULATOR

ECOSAVER

The GCE ECOSAVER is the high end product in the category of cylinder regulators with integrated gas economizer. It reduces shielding gas consumption during MIG/MAG/TIG welding operations by keeping high quality of the welds. It is an optimal tool for each welding shop decreasing process costs by controlling gas consumption.

Standard pressure regulator for shielding gas provides instable gas flow with flow peaks. These peaks of the waste gas increases cost of the welding operation and also leads to the poor welds. ECOSAVER optimizes gas flow keeping it constantly on the preadjusted level.

This prevents pressure and flow surges from being created in the system. Surges can create gas wastage and give rise to a poor weld. Weld quality and gas consumption are optimised when the ECO Saver is used as part of the control system.

FEATURES / ADVANTAGES / BENEFITS

- Cylinder regulator with gas saver and flow meter.
- Applicable with all type of the shielding gases for MIG/MAG/TIG welding (Ar, Ar-CO₂, Ar-CO₂-O₂, CO₂ etc)
- Provides consistent and stable gas conditions around the weld.
- Available with connections for most markets
- Less «downtime» from changing cylinders which in turn increases productivity.
- Improved weld quality with less porosity.
- Fewer spare cylinders required in stock which reduces rental charges.
- Reduces the number of deliveries required per year.



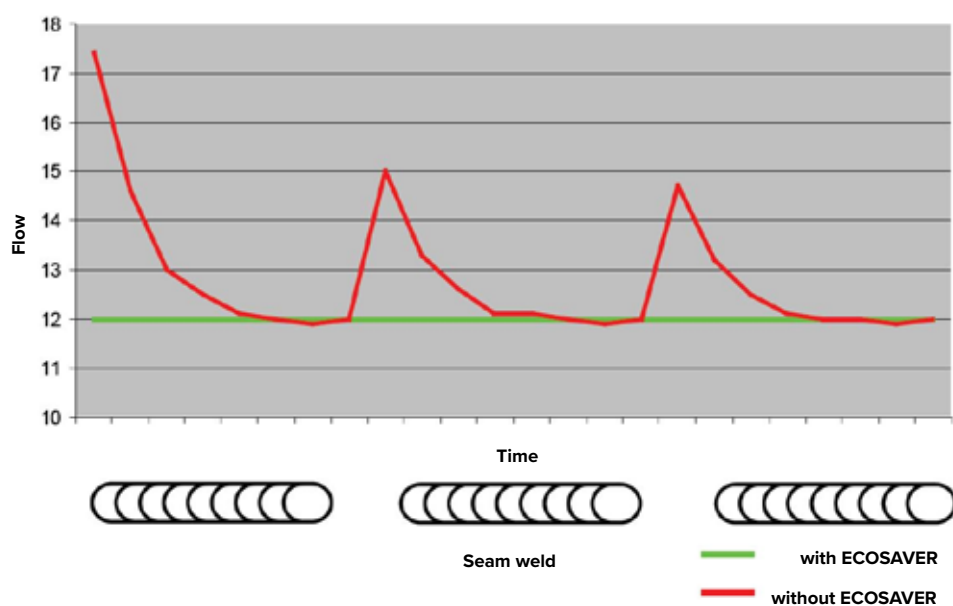
TECHNICAL DATA	
Gas	Ar, Ar/CO ₂ , CO ₂
Body	Brass forged
Bonnet	Zn/Al alloy Die Cast
Stems, nuts and fittings	Brass
Diaphragm	EPDM
Seat sealing	PA
Inlet/Outlet connection	Gas specific connection
Maximal Inlet pressure	230 or 300 bar
Outlet Pressure range	0-24l/min
Temperature range	From -20°C to 60°C
Weight	Approx. according to gas variant: 2,1 kg
ISO 2503 Class	10

GAS SAVINGS

Shielding Gas is a significant consumable cost in the welding process, and savings with ecosaver can also be very significant. The type of welding determines the savings, highest benefits during spot welding, (significant on/off cycling at the gas supply). However valuable reduction in costs can still be achieved even on longer seam runs. Typical expected savings :

TYPE OF WELD	GAS SAVING
Spot welding	40-45%
Mostly spot welding plus some seam welding	30-35%
Equal spot / seam	25-30%
Mostly seam welding	18-22%

COMPARISON OF REGULATOR WITH AND WITHOUT ECOSAVER



Art.Nr.	Type	Inlet connection	Outlet connection	Configuration
9615620	Ar/CO ₂	BS3	G3/8"	SE
9615630	Ar/CO ₂	BS3	G3/8"	BE
0772027	Ar/CO ₂	CGA580 (0.965"14NGO)	9/16" UNF	SE
F21210013	Ar/CO ₂	BS8	G1/4"	SE

CYLINDER REGULATOR

BASECONTROL SE, BE

BASECONTROL is the single stage cylinder regulator for common applications of technical gases up to 230bar service. It has been designed for small and medium gas consumption, in line with ISO 2503.

Regulator provides very good outlet pressure stability thanks to big diaphragm diameter. Compact, light-weight body fits to use during on-side handling or for maintenance operations in the workshop combined with small size cylinders (5-50 liters). Design is made with side entry (SE) and bottom entry (BE) to fit for all common types of cylinder valves.

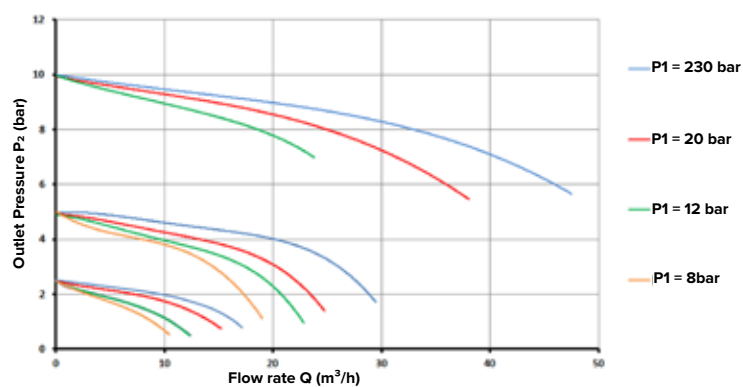
FEATURES / ADVANTAGES / BENEFITS

- Single stage regulator according to ISO 2503 for safe operation up to 230bar service.
- Pressure gauges with three scales in bar, kPa, psi.
- Light-weight design for use with small cylinder
- Safe handling with pressure relief valve
- Inlet connection complying to local standard with both side entry (SE) and bottom entry (BE) orientation.
- Ergonomic handwheel for easy pressure adjustment.

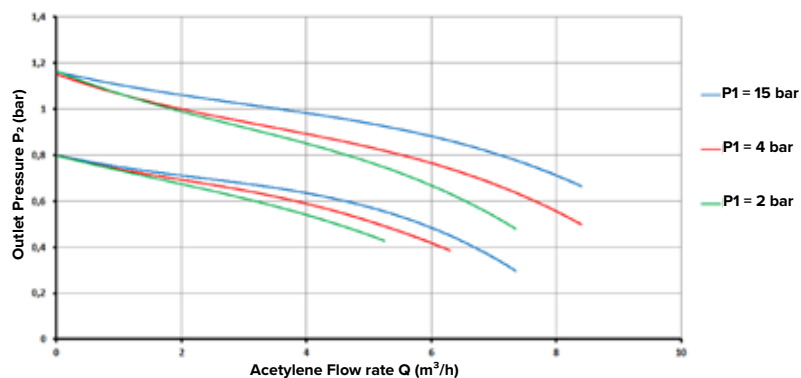


TECHNICAL DATA					
Gas	O ₂ , N ₂ , Ar	Ar, Ar/CO ₂	CO ₂	C ₂ H ₂	C ₃ C ₈
Body	Brass forged				
Bonnet	Zn/Al alloy Die Cast				
Stems, nuts and fittings	Brass				
Diaphragm	EPDM				NBR
Seat sealing	PA			CR	
Inlet/Outlet connection	Gas specific connection				
Maximal inlet pressure	230 bar		200 bar	25 bar	
Outlet pressure range	0-10 bar	0-24l/min		1,5 bar	4 bar
Temperature range	From -20°C to 60°C				
Weight	Approx. according to gas variant: 1,18 kg				
ISO 2503	3	20		1	

Basecontrol Oxygen 230/10bar



Basecontrol SE Acetylene 25/1,5 bar



Art. Nr.	Entry Type	Gas	Inlet pressure (bar)	Inlet connection	Outlet pressure (bar)	Outlet (form)
0870087	SE	Acetylene	25	G5/8" LH (BS3)	1,5	G3/8" LH
0870099	SE	Ac24l	230	G5/8" (BS3)	24 l	G3/8"
0870145	SE	Oxygen	230	G5/8" (BS3)	10	G3/8"
0870146	SE	Propane	25	G5/8" LH (BS3)	4	G3/8" LH
0870229	BE	Acetylene	25	G5/8" LH (BS3)	1,5	G3/8" LH
0870231	BE	Oxygen	230	G5/8" (BS3)	10	G3/8"
0870232	BE	Ac24l	230	G5/8" (BS3)	24 l	G3/8"

CYLINDER REGULATOR

UNICONTROL

Cylinder regulator UNICONTROL is the premium regulator for applications of all technical gases up to 300bar service. It has been designed to suit to small and medium gas consumption, in line with ISO 2503. With its compact design the regulator fits to all common cylinder guards including the latest composite cylinder designs from gas market leaders.

High reliability of the design and long lifetime enables product use in both indoor and outdoor applications. Internal encapsulated valve technology ensures stable gas and flow regulation as well as smooth parameters adjustment. With side entry and bottom entry, it can be used with all common types of cylinder valves. Variant for shielding gas arc welding with flow meter can be extended with second flow meter for two welders operation or for use with weld root shielding gas (forming gas).

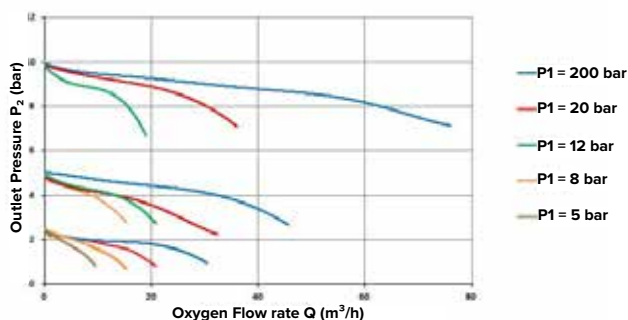
FEATURES / ADVANTAGES / BENEFITS

- UNICONTROL regulators fully conform to all paragraphs of International Standard ISO 2503.
- Uncompromised safety during handling and operation. The UNICONTROL regulators use a filter protected fully encapsulated valve, well proven over several generations of GCE regulators.
- The body is made of solid forged, high quality brass, polished and chemically stabilized.
- The zinc die-cast bonnet is protected by a double layer powder painting to providing a guarantee corrosion resistance even in very aggressive environments.
- For operational safety the integrated Pressure Relief Valve, located on the rear of the body is designed to protect low pressure part of gas supply against overpressurizing.
- Type-tested and certified by BAM Berlin (The German State Testing Institute).

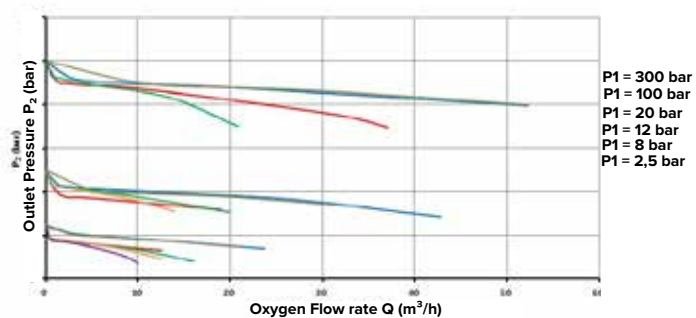


TECHNICAL DATA					
Gas	O ₂ , N ₂ , H ₂ , He	Ar, Ar/CO ₂	CO ₂	C ₂ H ₂	C ₃ C ₈
Body	Brass forged				
Bonnet	Zn/Al alloy Die Cast				
Stems, nuts and fittings	Brass				
Diaphragm	EPDM				NBR
Seat sealing	PA			CR	
Inlet/Outlet connection	Gas specific connection				
Maximal inlet pressure	200 or 300 bar		200 bar	25 bar	
Outlet pressure range	0-10 bar	0-16l/min 0-32l/min		1,5 bar	4 bar
	0-20 bar				
	0-30 bar				
	0-50 bar				
Temperature range	From -20°C to 60°C				
Weight	Approx. according to gas variant: 1,4 kg				
ISO 2503					

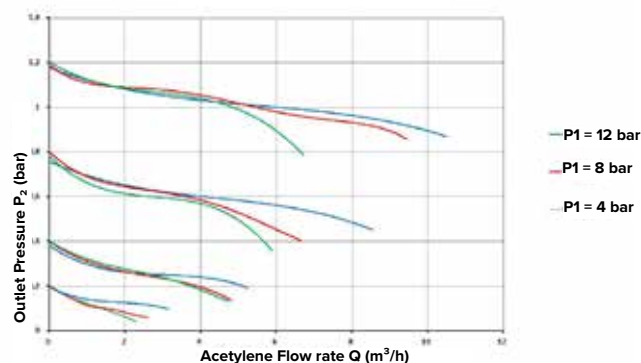
Unicontrol Oxygen 200/10 bar



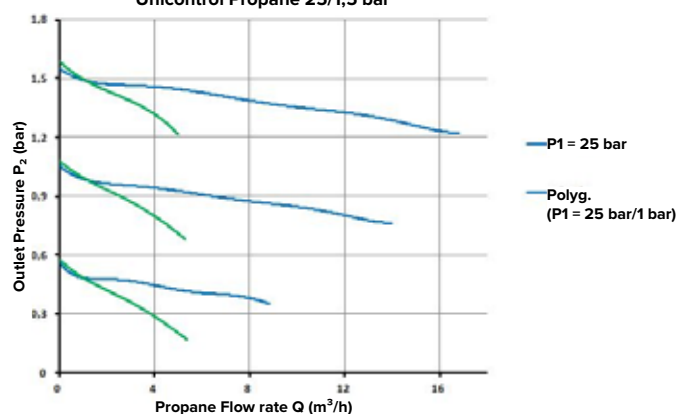
Unicontrol Oxygen 300/10 bar



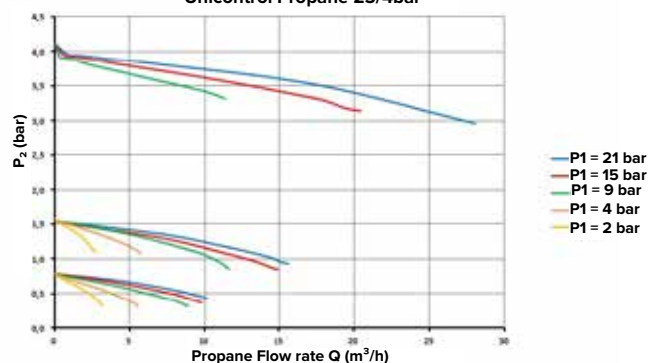
Unicontrol Acetylene 25/1,5 bar



Unicontrol Propane 25/1,5 bar



Unicontrol Propane 25/4bar



UNICONTROL RANGE

REGULATORS - BOTTOM ENTRY



Art. Nr.	Gas	Gauges	Inlet (bar)	Outlet (bar)	Inlet connection	Outlet connection	Nominal flow m ³ /h
0783651	Oxygen	0	300	10	G5/8" (BS3)	G3/8"	30
0783650	Oxygen	2	300	4	G5/8" (BS3)	G3/8"	5
0783652	Oxygen	2	300	10	G5/8" (BS3)	G3/8"	30
0783641	Acetylene	0	25	1,5	G5/8" LH (BS4)	G3/8" LH	5
0783640	Acetylene	2	25	1,5	G5/8" LH (BS4)	G3/8" LH	5
0783656	Propane	0	25	4	G5/8" LH (BS4)	G3/8" LH	5
0783644	Argon	2	300	4	G5/8" (BS3)	G3/8"	5
0783645	Argon	2	300	Maximal Flow 24 LPM	G5/8" (BS3)	G3/8"	15 LPM
0783646	Argon	1	300	2-preset	G5/8" (BS3)	G3/8"	*
0783647	Argon	2	300	Maximal Flow 48 LPM	G5/8" (BS3)	G3/8"	32 LPM
50530	Mapp	0	small cylinders	small cylinders	G1/4" LH	G1/4" LH	

* Regulator without flowmeter (For flowmeters please see page 22)



REGULATORS - SIDE ENTRY

Art. Nr.	Gas	Gauges	Inlet (bar)	Outlet (bar)	Inlet connection	Outlet connection	Nominal flow m ³ /h
0783653	Oxygen	2	300	4	G5/8" (BS3)	G3/8"	5
0783655	Oxygen	2	300	10	G5/8" (BS3)	G3/8"	30
0783643	Acetylene	2	25	1,5	G5/8" LH (BS4)	G3/8" LH	5
0783648	Argon	1	300	4	G5/8" (BS3)	G3/8"	*
0783649	CO ₂ **	2	200	4	0,860×14TPI (BS8)	G3/8"	5
F21100003	Argon	2	300	Maximal Flow 48 LPM	G5/8" (BS3)	G3/8"	32 LPM

* Regulator without flowmeter (For flowmeters please see page 22)

** for CO₂ regulators use heaters above 30 l/m.

** for CO₂ regulators use heaters above 30 l/m.

CYLINDER REGULATOR

MULTISTAGE

GCE MULTISTAGE regulators designed to provide accurate, fluctuation free delivery for precision applications such as shielding gas arc welding, CNC oxy-fuel cutting or laboratory use use of technical gases.

The first stage reduces the inlet pressure by over 90% and the large second stage diaphragm ensures accurate delivery pressure with keeping of enough flow for medium gas consumption applications..

GCE MULTISTAGE regulators are precision built to latest EN ISO 2503 and EN ISO 7291 standards to provide maximum accuracy and safety. These regulators have the additional feature of being able to pipe away gases from the relief valve port, and comply with the stringent requirements of EN ISO 7291 even for strict manifold application.

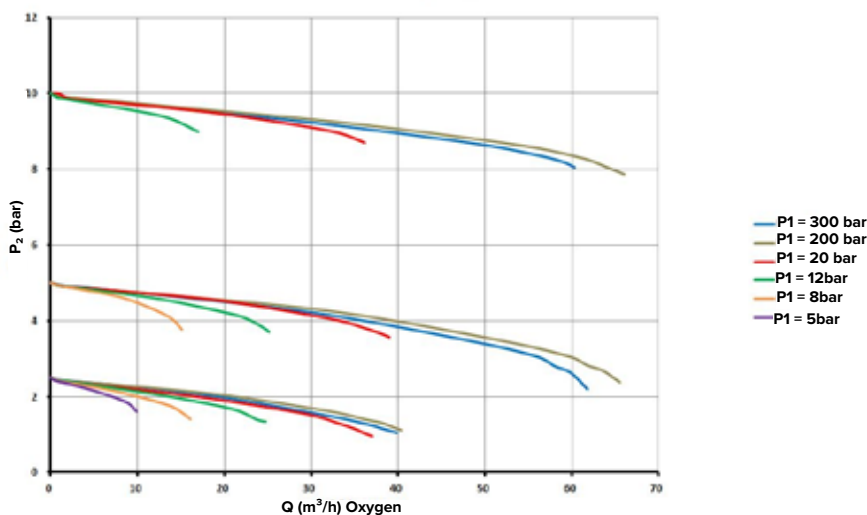
FEATURES / ADVANTAGES / BENEFITS

- Double stage design for high precision of the outlet pressure and flow.
- Top safe bulkhead design, high accuracy pressure gauges.
- Rugged design with big diameter of the second stage diaphragm for increased flow capacity.
- Internal pressure relief valve for the first stage and top mounted relief valve of the second regulation stage
- Inlet connection complying to local standard with both side entry and bottom entry orientation.
- Ergonomic handwheel for easy pressure adjustment.
- Body and first stage bonnet made of high quality Brass alloy.
- Second stage bonnet of Zn-Al alloy powder painted for keeping high corrosion resistance.

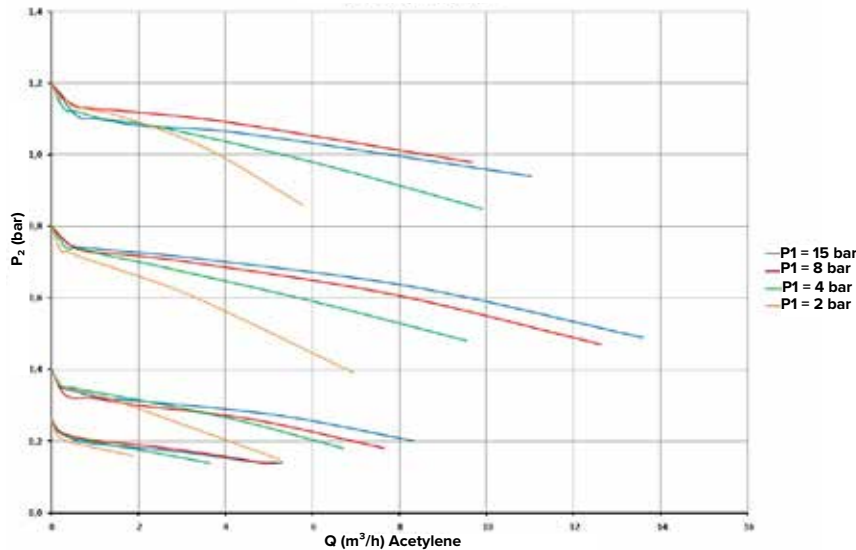


TECHNICAL DATA				
Gas	O ₂ , N ₂ , H ₂ , He	Ar, Ar/CO ₂	CO ₂	C ₂ H ₂
Body	Brass forged			
Bonnet	Zn/Al alloy Die Cast			
Stems, nuts and fittings	Brass			
Diaphragm	EPDM			
Seat sealing	PCTFE/CR			CR
Inlet/Outlet connection	Gas specific connection			
Maximal inlet pressure	200 or 300 bar		200 bar	25 bar
Outlet pressure range	0-1,5 bar	0-16l/min 0-35l/min		1,5 bar
	0-2 bar			
	0-4 bar			
	0-10 bar			
Temperature range	From -20°C to 60°C			
Weight	Approx. according to gas variant: 1,9 kg			
ISO 2503				

MULTISTAGE Oxygen



MULTISTAGE Acetylene



MULTISTAGE RANGE

REGULATORS - BOTTOM ENTRY



0762143



0762144

Art. Nr.	Gas	Gauges	Inlet (bar)	Outlet (bar)	Inlet Connection	Outlet Connection	Nominal m ³ /h
0762144	Oxygen	2	300	4	G5/8"	G3/8"	5
0762145	Oxygen	2	300	10	G5/8"	G3/8"	30
0762143	Acetylene	2	25	1,5	G5/8" LH	G3/8" LH	5
0762181	Inert	2	300	2	G5/8"	G3/8"	1,5
0762146	Inert	2	300	4	G5/8"	G3/8"	5
0762147	Inert	2	300	10	G5/8"	G3/8"	30
0762148	Hydrogen	2	300	4	G5/8" LH	G3/8" LH	5
0762149	Hydrogen	2	300	10	G5/8" LH	G3/8" LH	30
0762152	Nitrous oxide	2	200	10	BS13	G3/8"	30
F21210011	Argon/ CO ₂	2	300	Maximal Flow 35 LPM	G5/8"	G3/8"	35 LPM

REGULATORS - SIDE ENTRY



0762151



0762153

Art. Nr.	Gas	Gauges	Inlet (bar)	Outlet (bar)	Inlet Connection	Outlet Connection	Nominal m ³ /h
0762198	Oxygen	2	300	4	G5/8"	G3/8"	5
0762199	Oxygen	2	300	10	G5/8"	G3/8"	30
0762196	Acetylene	2	25	1,5	G5/8" LH	G3/8" LH	5
0762182	Inert	2	300	2	G5/8"	G3/8"	1,5
0762197	CO ₂ *	2	200	4	0,860×14 TPI	G3/8"	5
0762153	CO ₂ *	2	200	10	0,860×14 TPI	G3/8"	30
0762150	Helium	2	300	4	G5/8"	G3/8"	5
0762151	Helium	2	200	10	G5/8"	G3/8"	30

* for CO₂ regulators use heaters above 40 l/min.

CYLINDER REGULATOR

JETCONTROL 600 (S SERIES)

JETCONTROL 600 (S Series) are single stage, two gauge cylinder regulators extensively used in oil refineries, refrigeration laboratories or industrial processes requiring precise and stable delivery of high pressure industrial gases. It is excellent tool for high pressure testing of vessels and various pipelines for gas and liquid supply.

Regulators are primarily designed, tested and manufactured to operate on max. inlet pressure up to 300 bar and providing pressure outlet up to 206 Bar. Its robust design, top grade materials and strictly controlled manufacturing and testing procedures guarantee high operational safety even if working with small molecular gases (like helium or hydrogen) at very high pressures.

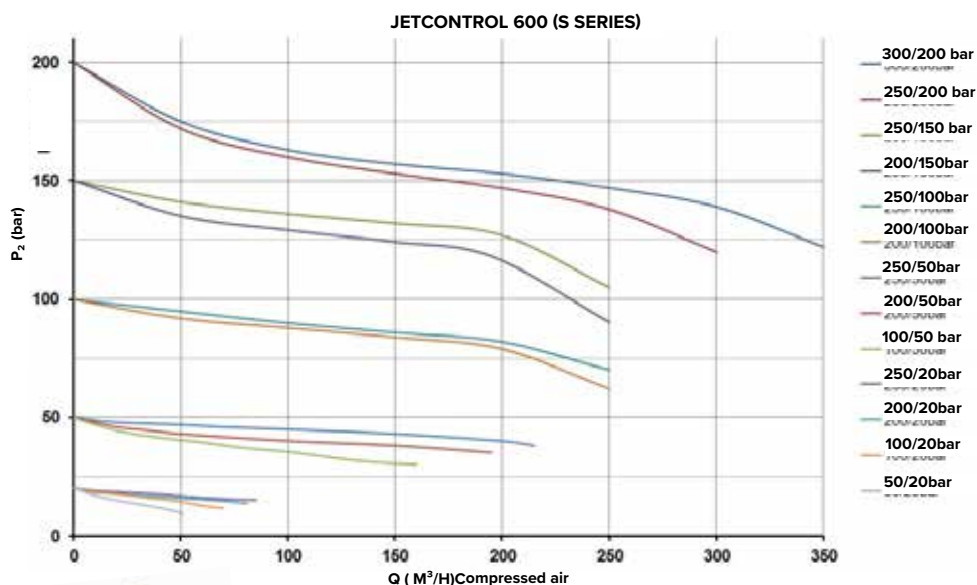
Key components are manufactured from high tensile brass, use of extra safe and accurate bulkhead gauges, double layer high grade stainless steel diaphragms and efficient metal filters help to prolong regulator service life and ensure trouble-free operation of JETCONTROL 600 (S Series) regulators

FEATURES / ADVANTAGES / BENEFITS

- Robust design for high outlet pressure up to 206 bar.
- Smooth outlet pressure adjustment thanks to massive T-bar with long lever to generate bigger torque and with bronze bushing to reduce friction
- Top safe bulkhead design, high accuracy pressure gauges.
- Inlet connection complying to local standards with both side entry and bottom entry orientation.
- Body and bonnet made of a special high tensile Brass alloy.
- Easy connection of the outlet pipe with Parker fittings
- Double layer stainless steel diaphragm
- Higher corrosion resistance with transparent powder painting



TECHNICAL DATA				
Gas	N ₂	Ar	He	H ₂
Body	High tensile brass, chemically stabilized and transparent powder painted			
Bonnet	High tensile brass, chemically stabilized and transparent powder painted			
Stems, nuts and fittings	High tensile brass			
Diaphragm	Stainless steel, two layer			
Seat sealing	PA			
Inlet/Outlet connection	Gas specific connection, outlet with Parker fitting			
Maximal inlet pressure	300 bar			
Outlet pressure range	0-28 bar 0-103 bar 0-206 bar			
Temperature range	From -20°C to 60°C			
Weight	Approx. 2kg			
ISO 2503				



JETCONTROL 600 (S SERIES) BOTTOM ENTRY RANGE

Art. Nr.	Type	Gas	Inlet (bar)	Outlet (bar)	Flow m ³ /h	Inlet (form)	Outlet (form)
0762864	S 400	Inert	300	28	36	G5/8"	
0762865	S 1500	Inert	300	100	120	G5/8"	
0762866	S 2500	Inert	300	170	150	G5/8"	
0762867	S 1500	Oxygen	230	100	115	G5/8"	
0762511	S 2500	Oxygen	230	170	140	G5/8"	

Outlet connections on S series regulators with delivery pressures above 28 bar are compression type, suitable for 1/4" OD tube pipework connection.

Art. Nr.	Type	Inlet (bar)	Outlet (bar)	Inlet (form)	Outlet (form)
0762584	RS 400	300	28	G5/8"	W11×1,25
0762583	RS 600	300	41	G5/8"	W11×1,25
0762590	RS 750	300	52	G5/8"	W11×1,25

This range of regulators is specifically designed to meet the needs of the heating, ventilation and air conditioning (HVAC) trades, for purge and leak test applications. The regulators are supplied with JIC fitting outlets.



0762866



SPECIAL PURPOSE REGULATORS

M600 SERIES



0762396

M600 SERIES - improved delivery pressure control is achieved from two stage regulation. Typical applications are those left unattended for periods of time such as cable pressurisation, chemical and laboratory. Range up to 41 bar delivery pressure.

Art. Nr.	Gas	Entry	Inlet (bar)	Outlet (bar)	Inlet (form)	Outlet (form)	Flow m ³ /h
0762372*	CO ₂	side	200	41	G5/8"	G3/8"	80
0762397	Flammable	bottom	300	41	G5/8"	G3/8"L	108
0762396	Inert	bottom	300	41	G5/8"	G3/8"	108
0762377	Inert	side	300	41	G5/8"	G3/8"	108
0762399	Oxygen	bottom	230	41	G5/8"	G3/8"	100

* for CO regulators use heaters



0783594

OR14 SERIES

OR14 SERIES - offering some of the highest flows in the GCE BUTBRO range through the use of a special monel tied valve, these are intended for cylinder and pipeline applications. The G5/8 inlet adaptor can be removed to reveal a 1" BSP flat seat female fitting. Range up to 14 bar delivery pressure.

Art. Nr.	Gas	Entry	Inlet (bar)	Outlet (bar)	Inlet (form)	Outlet (form)	Flow m ³ /h
0783594	Oxygen	rear	230	14	G5/8"	G5/8"	120



0772037

S151 OL2 SERIES

S151 OL2 SERIES - pipeline regulator with excellent outlet pressure stability, with rear entry to suit panel or line mounting. The large outlet configuration is necessary to give high flow from a relatively low inlet pressure source. Max inlet 24 bar and delivery up to 10 bar.

Art. Nr.	Gas	Entry	Inlet (bar)	Outlet (bar)	Inlet (form)	Outlet (form)
0772037	Oxygen	rear	24	10	G1	G3/4"

S151 OL2 pipeline regulator is fitted with 1" BSP RH female inlet and 3/4" BSP RH male outlet.



CO₂ GAS HEATERS

Fitted between the cylinder and the regulator, preventing freezing inside the regulator.

Art. Nr.	Gas	Voltage	Thread	Quantity
50831S	CO ₂	240 V	BS8	1
00012450	CO ₂	230 V	BS8	1

DINCONTROL CYLINDER REGULATOR FOR 300BAR SERVICE WITH NEVOC

Hand tightened connection W30×2, soft sealed with o-ring, in accordance with ISO 5145.



Art. Nr.	Gas Type	Inlet pressure	Outlet pressure	Outlet	Nominal Flow
0780974	Oxygen	300 bar	10 bar	G1/4"	30m ³
0783890	Nitrogen	300 bar	50 bar	G1/4"	70m ³
0780997	Nitrogen	300 bar	10 bar	G1/4"	30m ³
0780998	Arg./CO ₂	300 bar	30 l/min	G1/4"	30 l/min
0782966	Compressed air	300 bar	10 bar	G1/4"	30m ³
0782984	Hydrogen	300 bar	10 bar	G3/8" LH	30m ³
0783883	Forming gas	300 bar	30 l/min	G3/8" LH	
0783833	Oxygen	300 bar	20 bar	G1/4"	50m ³
0783834	Arg./CO ₂	300 bar	20 bar	G1/4"	50m ³
0870173	Compressed air	300 bar	20 bar	G1/4"	50m ³
0870172	Hydrogen	300 bar	20 bar	G3/8" LH	50m ³
548900002011P	O-ring for 300 bar (NEVOC) soft sealed connection. Packing = 10 pcs				

SAFETY PRESSURE GAUGES - BS EN ISO 5171

1/4" BSPP



9415070

Art. Nr.	Gas	Pressure	Diameter	Finish
9425900	Acetylene	2,5 bar 35 psi	50 mm	Black
9415080	Acetylene	2,5 bar 35 psi	63 mm	Gold
9425850	Acetylene	40 bar 550 psi	50 mm	Black
9426050	Acetylene	40 bar 550 psi	63 mm	Gold
388413350512P	General purpose	2,5 bar 35 psi	50 mm	Black
388413350873P	General purpose	16 bar 230 psi	50 mm	Black
9415090	General purpose	16 bar 230 psi	63 mm	Gold
9430710	General purpose	160 bar 2300 psi	50 mm	Black
9415100	General purpose	315 bar 4570 psi	63 mm	Gold
9426840	General purpose	400 bar 5600 psi	50 mm	Black
9426800	Oxygen	16 bar 230 psi	50 mm	Black
2306102	Oxygen	16 bar 230 psi	63 mm	Gold
9415070	Oxygen	315 bar 4570 psi	63 mm	Gold

BALLOON INFLATORS



0762816

Art. Nr.	Type	Inlet	Quantity
0762817	Economy	230 bar/ BS3	1
0762816	Standard	230 bar/ BS3	1
0762818	Combi	230 bar/ BS3	1

Economy - Latex balloons (gaugeless, requires spanner to connect to cylinder)

Standard - Latex balloons, (inc contents gauge and handwheel)

FLOWMETERS

Precision Flowmeter with brass finish, 3/8" BSP connections, available in 2 models, 15 LPM or 30 LPM.

Art. Nr.	Gauges	Quantity
388239391610	0 - 15 LPM	1
9423240	0 - 30 LPM	1

CYLINDER REGULATOR

GAS ECONOMISIER GS40

The GCE Gas economiser is the leading accessory for shielding gas arc welding as MIG, MAG and TIG welding technologies. With its small and compact design, the GS40 can be installed downstream most common cylinder pressure regulators or outlet point regulators with flow control. GS40 stabilizes flow and optimises shielding gas pressure in the hose during welding process. Cost of the shielding gas is important factor influencing total cost balance of the welding operation. The savings with GS40 represents up to 0,5ltr of the shielding gas on each average weld. Optimal gas delivery with proper defined pressure and flow-rate improves quality of welding. Cost saving and quality improvement in this area give the advantage to the user on the competitive market.

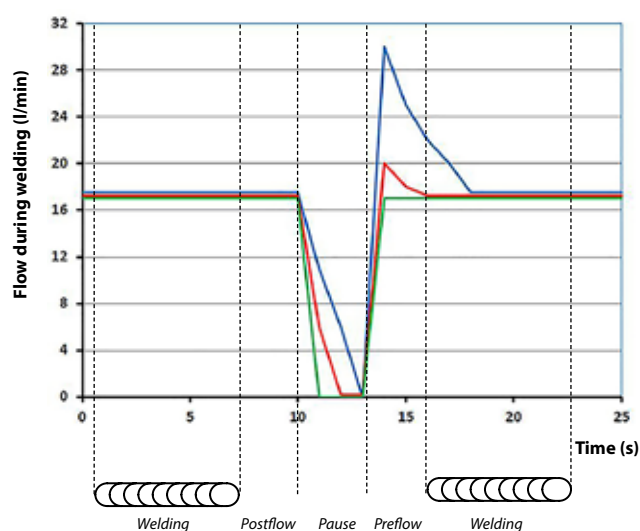
FEATURES / ADVANTAGES / BENEFITS

- Shielding gas saving up to 40%.
- Savings represents up to 0,5 ltr of the shielding gas on each average weld.
- Increases welding quality by delivering of the optimal amount of the shielding gas.
- Minimizes weld porosity.
- Stabilizes outlet pressure of the standard cylinder regulator which eliminates gas flow surges and flow turbulences.
- Can be installed with all common shielding gas regulators including outlet point regulators.
- Adjustable variant to be used with regulators with flow-meters.
- Fixed variant for regulators with litre-scaled pressure gauges.



TECHNICAL DATA	
Gas	Ar, Ar/CO ₂ , CO ₂
Body	Aluminium
Bonnet	Zn/Al alloy Die Cast
Stems, nuts and fittings	Brass
Diaphragm	EPDM
Seat sealing	PA
Inlet/Outlet connection (EN 560)	Country specific connection
Maximal inlet pressure	30 bar
Outlet Pressure range	0-32l/min
Temperature range	From -20°C to 60°C
Weight	Approx. according to gas variant: 0,4 kg

PRINCIPLE OF GAS SAVING



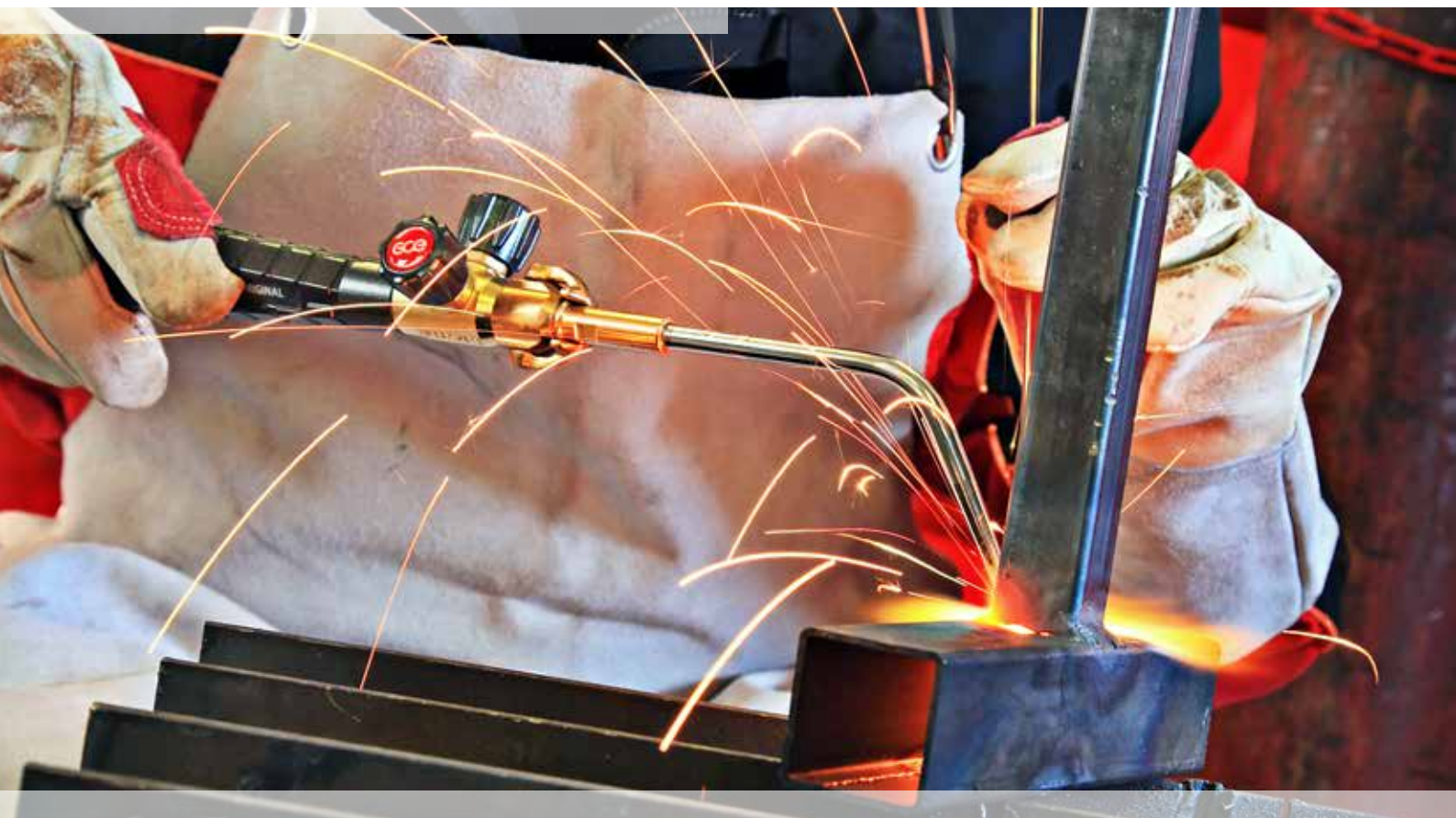
- Regulator without gas economiser
- Regulator with GS40F
- Regulator with GS40A



Art. Nr.	Type	Max. inlet pressure (bar)	Inlet / Outlet connection
F21310010	Adjustable	30	9/16 UNF
F21310005	Adjustable	30	G1/4"
F21310008	Adjustable	30	G3/8"
F21310011	Fixed	30	9/16 UNF
F21310006	Fixed	30	G1/4"
F21310009	Fixed	30	G3/8"

COMBINED TORCH SYSTEMS

WELDING TORCHES



TORCHES - COMBINED OXY-FUEL SYSTEMS

X11® ORIGINAL

The GCE X11® Original is a complete system for cutting, welding, heating and soldering. With its ergonomic design and wide range, developed by GCE, it's probably the most attractive product for light duty applications on the market.

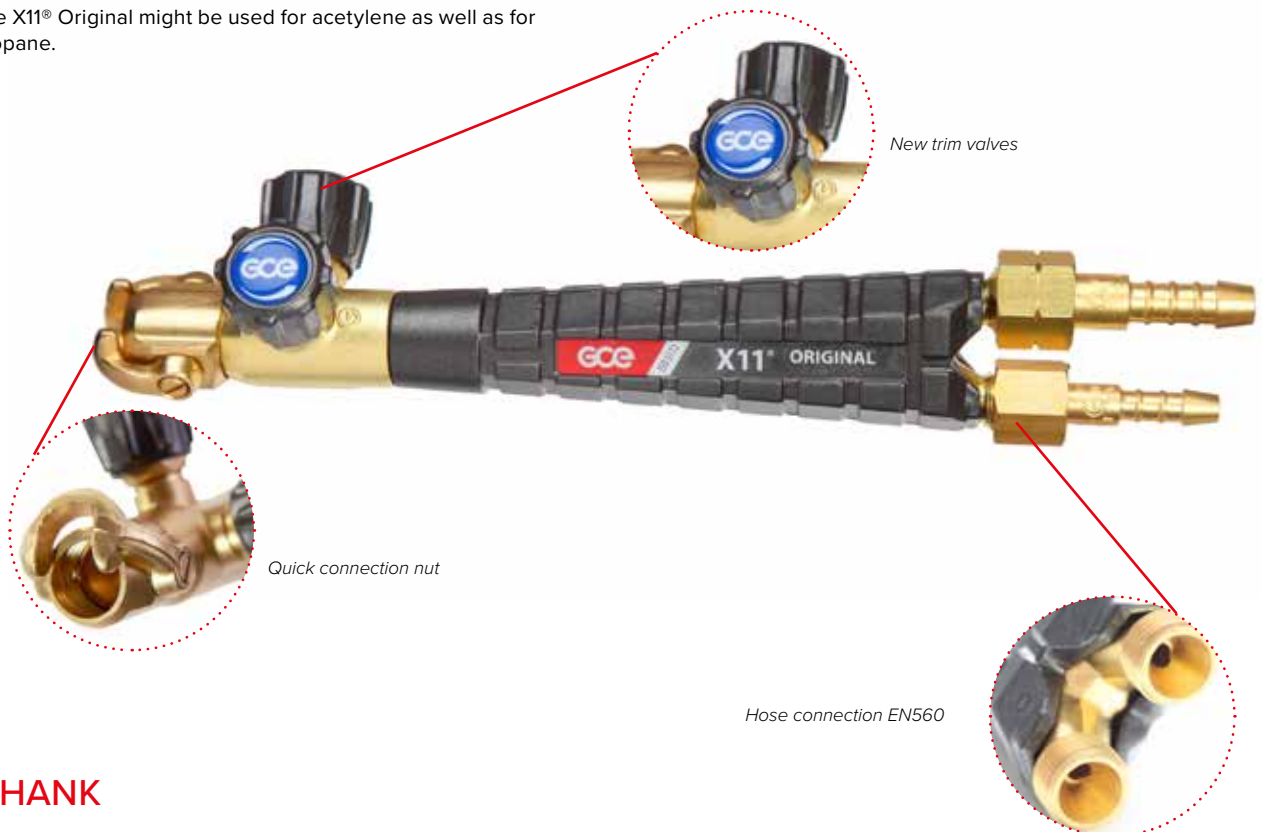
GCE offers a wide range of complete X11 sets for various applications. They are all special designed to make it easy for the user to select what's needed for the work to be done. The equipment is packed in robust boxes for good protection and easy transportation.

The X11® Original is a complete system comprising everything you likely need for general welding, heating, brazing and cutting applications.

The X11® Original fully meets the requirements of EN ISO 5172 and is manufactured according to the Quality Management System ISO 9001.

FEATURES / ADVANTAGES / BENEFITS

- The teflon washers on all attachments, for perfect seal, are easily replaced.
- The quick connection nut enables rapid exchange of the welding head and the cutting attachment.
- The new trim valve design and the cutting oxygen lever are easy to set and adjust.
- A vast number of accessories increases the flexibility of the X11® Original torch system.
- The X11® Original might be used for acetylene as well as for propane.



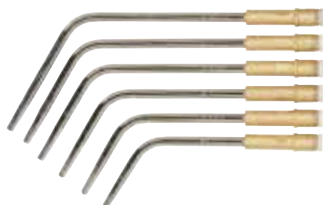
X11 SHANK

Art. Nr.	Oxygen	Fuel gas
0767537	G1/4"	G1/4"LH

WELDING AND HEATING HEADS

The single flame, backfire safe, welding heads come in a flow range from 40 l/h up to 1250 l/h and have spanner grips for easy exchange of tips. The welding tips are made of chrome-plated copper for efficient heat dissipation and are fully swaged to give a perfect flame. Flexible welding tips, heating attachments up to 2500 l/h and soldering heads are also available.

WELDING ATTACHMENTS



Art. Nr.	Size Nr.	Gas flow (l/h)	Thickness (mm)
9430540	0	40	0,2 - 0,5
9431640	1A	80	0,5 - 1,0
9390440P	2A	160	1,0 - 2,0
9389890P	E2A	230	1,5 - 3,0
9390460P	3A	315	2,0 - 4,0
9389900P	E3A	400	3,5 - 5,0
9390480P	4A	500	4,0 - 6,0
9389910P	E4A	650	5,0 - 7,0
9389380P	5A	800	6,0 - 9,0
Acetylene pressure: 0,1-0,8 bar			
Oxygen pressure: 2,5 bar			

FLEXIBLE ATTACHMENTS



Art. Nr.	Size Nr.	Gas flow (l/h)	Thickness (mm)
9390590	1	80	0,5 - 1,0
9389580P	3	315	2,0 - 4,0
9390620	4	500	4,0 - 6,0
9389600	5	800	6,0 - 9,0
Acetylene pressure: 0,1-0,8 bar			
Oxygen pressure: 2,5 bar			

HEATING ATTACHMENT MULTIFLAME - ACETYLENE



Art. Nr.	Gas flow (l/h)
202232204P	500
202232205	800
202232206	1000
Acetylene pressure: 0,5-0,8 bar	
Oxygen pressure: 2,5 bar	



HEATING ATTACHMENT - PROPANE



Art. Nr.	Type
0763658	Multiflame 90 l/h
202232126	Multiflame 1000 l/h



CUTTING ATTACHMENT

Cutting attachment X11 has 90 degrees head angle for simple and basic cutting operations and user friendly lever for easy opening of the cutting oxygen flow. With the GCE X11 Original cutting attachment it is possible to cut up 100 mm thickness.



Art. Nr.	Gas	Mixing type	Notice
0764151	Acetylene	Injector type	
0767545	Acetylene	Injector type	Nozzle HA411 No.1 included
N560172	Acetylene	Injector type	Nozzle HA411 No.2 included
0763614	Fuel gas	Nozzle mix	For cutting nozzles ANME, PNME



Easily replaceable teflon washers

CUTTING NOZZLES



HA 411



HP 433



ANME



PNME

ACCESSORIES



Art. Nr.	Type	Position
163811162890P	Spanner 6-gap	
9430450	Circle cutting device Ø 60-200 mm	3
9414770	Twin wheel cutting guide, injector	1
9414760	Cleaning needles in a case	
9414750	Teflon washers, 5 pcs/package	



COMPLETE X11® ORIGINAL BOX



Art. Nr.	Shank	Cutting attachment	Welding attachment	Nozzles	Other equipment
0764265	X11 G1/4" + G1/4"LH	X11 P 190 ACE 90° L	2A 160I, 3A 315I, 4A 500I	HA411 - No.2, No.3	cleaning needles, BV12 + nuts, QC, plastic case

TORCHES - COMBINED OXY-FUEL SYSTEMS

X21® ORIGINAL

The GCE X21® Original with large capacity for welding, cutting, soldering, heating and straightening. X21® Original is a combined gas welding and gas cutting torch for manual work. It is a pressure torch (II) that is designed on the basis of the stringent demands stipulated by standard EN ISO 5172.

X21 is a versatile and complete torch system, with cutting attachments for injector or pressure principle, and with round or oval shank, for all medium and heavy duty cutting, welding, and heating jobs. With the pressure principle you use 3-cone cutting nozzles, with the injector principle you use fl at seal cutting nozzles. The choice is yours.

All X21 equipment fully meets the requirement of EN ISO 5172 and is manufactured at our factory under the Quality Management System ISO 9001.

X21 satisfies the high expectations that users have of a quality torch. With the X 21 pressure torch, the gases are mixed in the torch head, which increases safety against flashbacks. Pressure torches entail that Oxygen and fuel gas for the heating flame have the same inlet pressure to the nozzle.

X21® Original is available for the fuel gases Acetylene and Propane (LPG). Using Propane as the fuel gas, all the processes apart from gas welding can be used.

FEATURES / ADVANTAGES / BENEFITS

- Choose between round and oval torch handle
- Potential to weld material thicknesses up to 14 mm
- Cut up to 500 mm
- Perfect for flame cleaning and straightening
- Large range of accessories
- Equipment for powder cutting available



AVAILABLE SHANK TYPES

ROUND TYPE

Art. Nr.	Type
0764658	G3/8" + G3/8" LH (hose nipples 6,3 mm)
0767946	G3/8" + G3/8" LH (BV12 - 6,3 mm)



X21 Original Round Shank

FLAT TYPE (OVAL)

Art. Nr.	Type
0763939	G3/8" + G3/8" LH



X21 Original Flat Shank

X21 FOR WELDING



WELDING ATTACHMENT OXYGEN-ACETYLENE

Art. Nr.	Size Nr.	Gas flow (l/h)	Thickness (mm)
9389430P	0	40	0,2 - 0,5 mm
9389440P	1	80	0,5 - 1,0 mm
9389450P	2	160	1,0 - 2,0 mm
9389460P	2E	230	2,0 - 3,0 mm
9389470P	3	315	2,0 - 4,0 mm
9389480P	3E	400	3,5 - 5,0 mm
9389490P	4	500	4,0 - 6,0 mm
9389500P	4E	650	5,0 - 7,0 mm
9389510P	5	800	6,0 - 9,0 mm
9389520P	5E	1000	7,0 - 10,0 mm
9389530P	6	1250	9,0 - 14,0 mm

X21 FOR HEATING

In addition to various welding attachments, there are three single flame heating attachments for Acetylene, ranging from 1800 to 5000 l/h, as well as three multiple flame heating attachments ranging from 1000 to 5000 l/h. In addition there are four multiple flame heating attachments for Propane, ranging from 1000 to 7000 l/h.

HEATING ATTACHMENT, SINGLE FLAME OXYGEN-ACETYLENE



Art. Nr.	Size Nr.	Working pressure Oxygen (bar)	Working pressure Acetylene (bar)
9389540P	1800 l/h	3	0,3
9389550	2500 l/h	6	0,4
219100228	5000 l/h	8	0,6

HEATING ATTACHMENT, MULTIFLAME OXYGEN-ACETYLENE



Art. Nr.	Size Nr.	Working pressure Oxygen (bar)	Working pressure Acetylene (bar)
9389540P	1800 l/h	3	0,3
9389550	2500 l/h	6	0,4
219100228	5000 l/h	8	0,6



HEATING ATTACHMENT, MULTIFLAME OXYGEN-PROPANE



Art. Nr.	Size Nr.	Working pressure Oxygen (bar)	Working pressure Acetylene (bar)
202232217	1 000 l/h	0,9	0,7
202232218	2 000 l/h	2,4	0,8
202232219	4 000 l/h	4,9	1,9
202232220	7 000 l/h	8,0	2,5



CUTTING ATTACHMENT

There are two types of cutting attachment with lever valve or wheel valve suitable for both acetylene and propane. Angles for nozzle head are available in 90°, 75°, 45° and 0°. With X21 it's possible to steel material in thicknesses up to 500 mm. GCE offer a wide range of 3-cone nozzle designs for various applications. The X21 cutting attachment is available both as injector and pressure torch.



Art. Nr.	Version	Heating gas	Type	Head angle	Notice
0767941	Lever	Ace/Prop	Nozzle mix	90°	319
0764561	Lever	Ace/Prop	Nozzle MIX	75°	322

CUTTING NOZZLES, 3-CONE (NOZZLE MIX)



ANME: Acetylene



PNME: Propane natural gas



COOLEX HA 311



COOLEX P337



AGN COOLEX



PNME: COOLEX

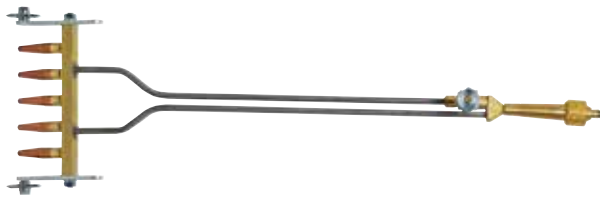
COOLEX A 361 GOUGING
AND RIVET CUTTING
NOZZLE FOR ACETYLENECOOLEX A 341 BENT
RIVET NOZZLE FOR
ACETYLENE

FGA COOLEX: ACETYLENE

ALSO OTHER NOZZLES AVAILABLE PLEASE SEE PAGE 43.

READ MORE ABOUT THE PATENTED **COOLEX SYSTEM**
ON PAGE 39.

X21 FOR FLAME STRAIGHTENING



5 Nozzles For Acetylene



3 Nozzles For Acetylene

Art. Nr.	Type	Working pressure Oxygen (bar)	Working pressure Acetylene (bar)	Lenght (mm)
14070514	3 nozzles	7	0,7	730
202232267	5 nozzles	7	0,7	690

X21 FOR FLAME CLEANING



Acetylene



Acetylene

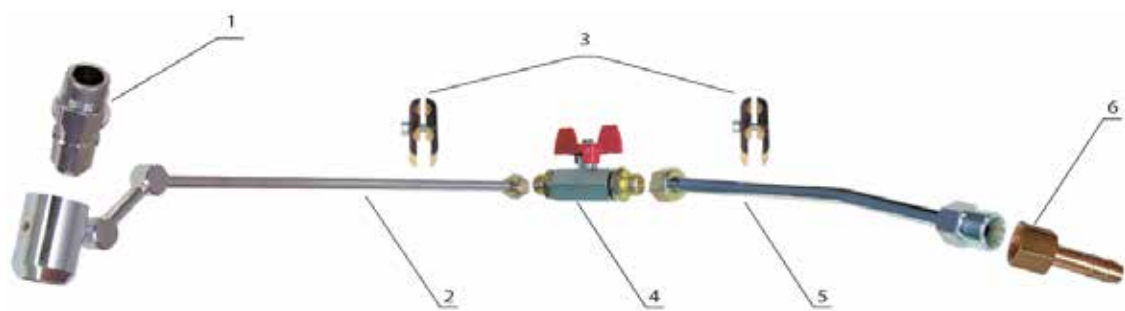
Art. Nr.	Width of head (mm)	Working pressure Oxygen (bar)	Working pressure Acetylene (bar)
202235735	50	3	0,7
202235736	150	5	0,7
202235731	250	5	0,8

X21 FOR POWDER CUTTING



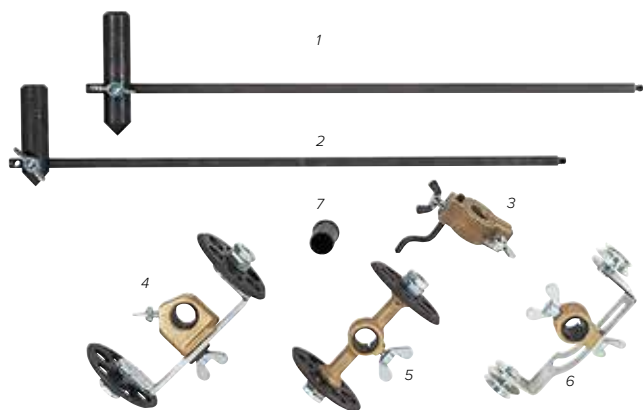
Lenght	Head angle
655 mm	75°

POWDER ATTACHMENT



TECHNICAL DATA	
Weight	0,320 kg
Length	360 mm
Gas	Acetylene, Propane

DESCRIPTION	POSITION
Powder nozzle	1
Powder head with neck	2
Clamp	3
Ball valve	4
Tube with fittings	5
Hose nipple 6,3xG3/8"	6



X21 ACCESSORIES

Art. Nr.	Description	Position
219100280	Radius arm with centre point, big wheel	1
548219100297P	Radius arm with centre point, small wheel	2
202130143	Hole cutting attachment	3
219100296	Twin wheel cutting guide, big wheels for bevel cutting	4
548219100295	Twin wheel cutting guide, big wheels	5
214100454	Twin wheel cutting guide, small wheels	6
548219100509	Bushing	7

COMPLETE KITS

Art. Nr.	Shank	Cutting attachment	Welding attachment	Nozzles	Other equipment
0764265	-	-	6 sizes	HA311 - 3 sizes	spanner, cleaning needles, cutt.guide, BV12 + nuts, set of O-rings, red metal case
0764267	-	-	2 sizes	HA311 - 1 size	cleaning needles, BV12 + nuts, red metal case



LIGHTWEIGHT WELDING

ORBIT

A superbly constructed welding & cutting blowpipe designed with safety in mind and engineered from highest quality materials to complement the operator in production or light gauge maintenance welding & cutting. The shank is common to both welding and cutting heads, the same quick, positive and leak-free means of attachment being used for both. The shank is manufactured from a solid drilled aluminium forging thus avoiding the necessity of internal tubes and giving added safety.

WELDING

The shank can be used with either lightweight swaged nozzles or D.H. solid copper tips + brass neck according to the operators preference, enabling precise flame control and up to 8mm (5/16") welding capacity in steel.

CUTTING

The newly designed lightweight cutting attachment uses the nozzle mix principle and is thus highly resistant to backfire and flashback. Although of a lightweight design, it is engineered from solid brass castings and silver soldered tubes to provide an extremely robust construction. Using Orbit A-FN type nozzles and Acetylene fuel gas the orbit has a cutting capacity of over 20 mm.

GCE BUTBRO torches and nozzles conform to BS EN ISO 5172



TECHNICAL DATA	
Hose connections:	1/4" BSP (other threads available on request)
Welding capacity:	8 mm
Cutting capacity:	20 mm
Welding nozzles:	Lightweight, Swaged Nozzles Size 1-25
	D.H. Solid Copper Tips Sizes 1-25
Cutting nozzles:	ORBIT A-FN Cutting Nozzles
Full details of nozzles on page 37-39	



Art. Nr.	Description	Quantity
0766229 (81222)	ORBIT shank	1
0766230 (81444)	ORBIT cutting attachment	1
0766231 (81025)	ORBIT mixer	1
81666	ORBIT heating nozzle & neck	1

ORBIT COMBINED WELDING & CUTTING OUTFIT



ORBIT COMBINED
WELDING & CUTTING OUTFIT
81000

Consisting of:
ORBIT Shank, Mixer & Cutting Attachment, L/W Nozzles Size 2, 5, 7, 10, 13, 18, 25, 3/64" A-FN Type Cutting Nozzle,
Nozzle Cleaning Outfit, Outfit Spanner, Data Cards, Plastic Carrying Case

Art. Nr.	Description	Quantity
81000	ORBIT combined outfit	1

ORBIT L/W WELDING OUTFIT



ORBIT L/W WELDING OUTFIT
81903

Consisting of:
ORBIT Shank & Mixer, L/W Nozzles Size 1, 2, 3, 5, 7, 10, 13, 25, Hose Check Valves, Outfit Spanner, Data Card, Plastic Carrying Case

Art. Nr.	Description	Quantity
81903	ORBIT combined outfit	1



COMBINED WELDING & CUTTING TORCH FOR MEDIUM DUTY APPLICATIONS

MK3A/4/5

The GCE BUTBRO MK3A /4/5 is a high pressure, sturdily constructed and well balanced welding and cutting torch replacing the GCE BUTBRO MK 2, together with additional improved progressive features. Each component (shank, mixer, cutting attachment) is inter-changeable with other leading makes of type 3/4/5 equipment. It has front mounted colour coded control valves, employing stainless valve spindles fitted with both 'O' ring and nylon seals; providing fine adjustment and leak-free conditions. The shank is common to both welding and cutting heads, the same quick positive positioning and leak-free means of attachment being used for both. GCE BUTBRO torches and nozzles conform to BS EN ISO 5172.

WELDING AND HEATING

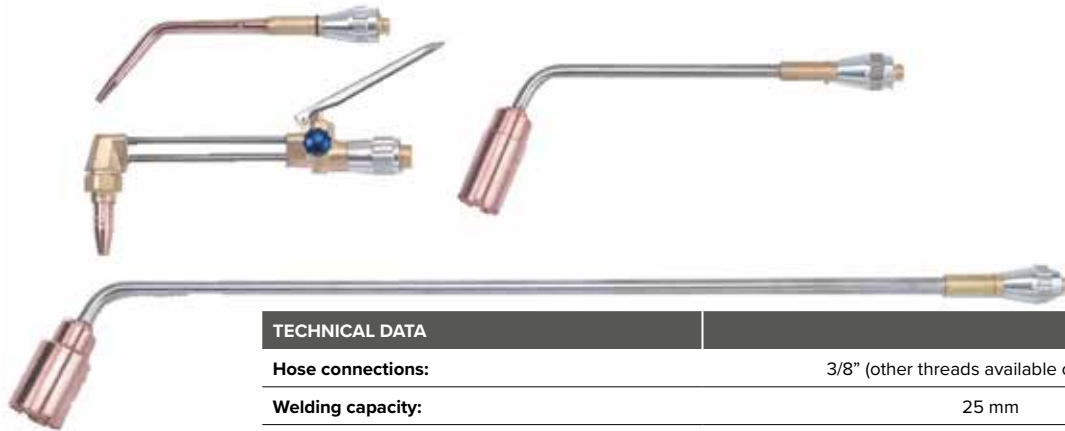
Designed for welding work from 18swg to over 1" thickness using type 3/4/5 swaged nozzles sizes 1 - 90 litres. The mixer seats on serrated toothed faces allowing the operator a selection of positive nozzle positioning through 360°. Also can be used for heating, with either acetylene or propane heating nozzles, together with a heating neck.

CUTTING

The cutting head is nozzle mixing, enabling the operator to use either acetylene or propane fuel gases by fitting the appropriate nozzle. A range of ANM and PNM nozzles are available for clean efficient cutting of material thickness from sheet metal to 50mm (2") using both acetylene, and propane fuel. It's versatility allows gouging, flame cleaning etc., to be supplied to customer's requirements.

PROPANE SUPER HEATING

Using a propane super heating mixer and 10" or 28" stainless steel super heating neck an intense heat output of up to 600,000 Btu/H is obtained. Ideal for heating castings and similar large articles.



TECHNICAL DATA	
Hose connections:	3/8" (other threads available on request)
Welding capacity:	25 mm
Cutting capacity:	50 mm
Welding nozzles:	Type 2/3/4/5 Swaged Welding Nozzles Sizes 1-90
Cutting nozzles:	ANM (Acetylene) Cutting Nozzles
	PNM (Propane) Cutting Nozzles
	ASNM Sheet Metal Nozzles
	AGNM Gouging Nozzles
	ARCNM Rivet Cutting Nozzles
Heating nozzles:	AHT (Acetylene) Heating Nozzles
Super heating nozzles:	Super Heating Nozzles (Propane) Sizes 1H-5H



MK3A/4/5 Shank



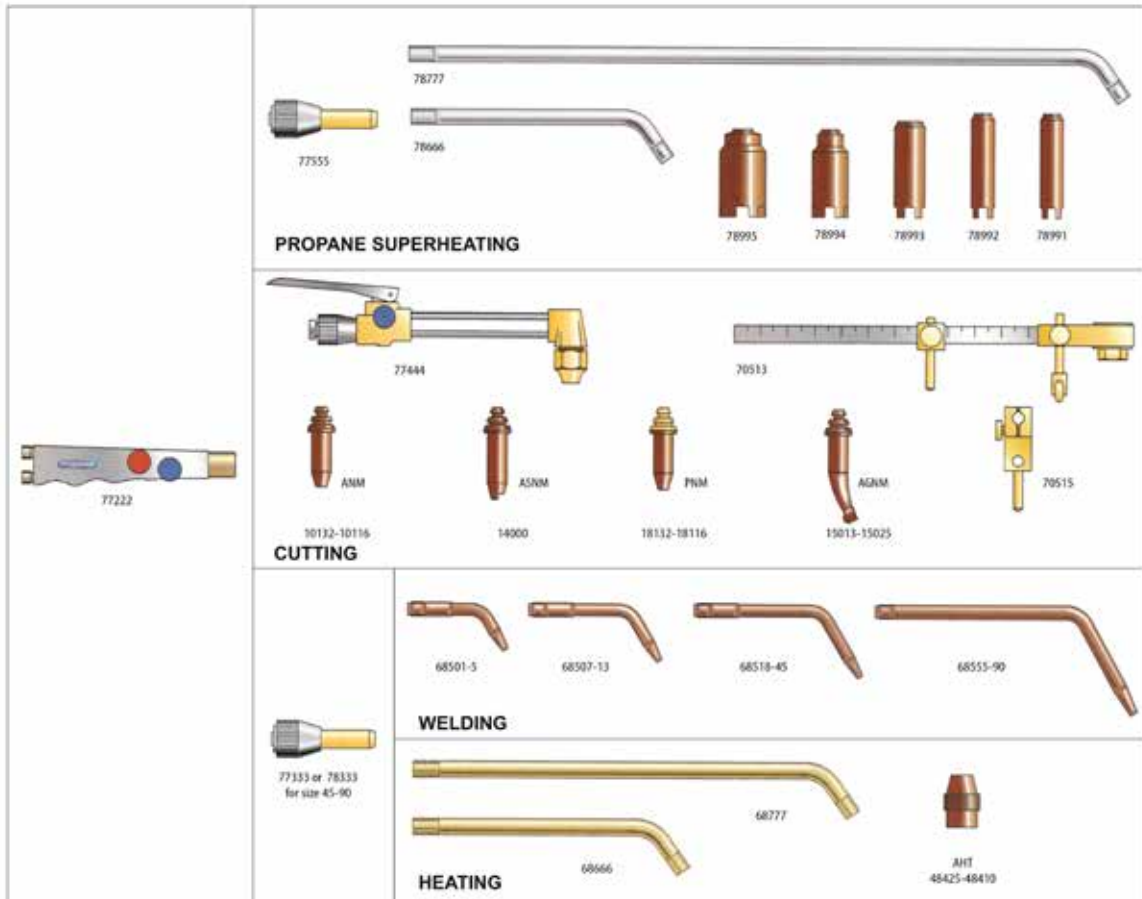
Art. Nr.	Description	Quantity
0766241 (77222)	MK 3A/4/5 Shank	1
0766243 (77333)	MK 3A/4/5 welding mixer	1
0766253 (77555)	MK 3A/4/5 propane superheating mixer	1
0766242 (77444)	MK 3A/4/5 cutting attachment	1
68666	MK 3 brass heating neck (for AHT heating nozzles)	11
68777	MK 3 long brass heating neck (for AHT heating nozzles)	1

OXY-PROPANE SUPERHEATING NECKS

Two superheating necks are available to accommodate the range of five super heating nozzle sizes 1H to 5H which guarantee an immediate and highly intense heat output from 70,000 to 600,000 Btu/h on castings and large articles.

Art. Nr.	Description	Quantity
0766255 (78777)	Superheating 28" neck	1

TYPICAL ASSEMBLIES - MK3A/4/5 SYSTEM



MK3A/4/5 COMBINED WELDING & CUTTING OUTFIT

CONSISTING OF:

GCE BUTBRO MK3A /4/5 Shank, Mixer & Cutting Attachment, Type 3 Swaged Welding Nozzles Size 2, 5, 7, 10, 13, 18, 25, 1/16" ANM Cutting Nozzle, 3/64" ANM Cutting Nozzle, Nozzle Cleaner Outfit, Headnut Spanner, Data Card, Plastic Carrying Case

Art. Nr.	Description	Quantity
77000	MK3A/4/5 combined welding & cutting outfit	1



MK3A/4/5 COMPLETE WELDING & CUTTING OUTFIT

CONSISTING OF:

GCE BUTBRO MK3A /4/5 Shank, Mixer & Cutting Attachment, Single Stage, 2 Gauge Oxygen Regulator, Single Stage, 2 Gauge Acetylene Regulator, Slimguard Oxygen Flashback Arrestor, Slimguard Acetylene Flashback Arrestor, 5 Metres 1/4" Bore Twin Line Fitted Hose, Type 3 Swaged Welding Nozzles Size 2, 5, 7, 13, 1/16" ANM Cutting Nozzle, Sunfire Spark lighter, Nozzle Cleaner Outfit, Combination Spanner, Spindle Key, Headnut Spanner, Goggles, Data Card, Plastic Carrying Case

Art. Nr.	Description	Quantity
77778FB	MK3A/4/5 complete welding & cutting outfit with flashback arrestor	1

MANUAL TORCHES - CUTTING TORCHES AND NOZZLES

X511® ORIGINAL

GCE X511® Original, the solution for all Industrial Cutting applications.

The GCE X511® Original cutting torch ranges is made for perfect cutting, developed to meet industry's highest demand. The design and profile is chosen to give perfect balance and optimum control in continuous operation.

SAFE AND SECURE

The main body components are brass, designed to withstand rough treatment. The strong metal handle in combination with stainless steel tubes makes the torch robust and safe to use.

EASY TO HANDLE

The well designed control knobs make it simple and fast to control the flame and the valves are designed to give smoothest possible control. The position of the lever gives ease and comfort of operation.

HIGH CAPACITY

The X511 Diamond cutting torch is made for nozzle mix nozzles and has capacity for cutting 500 mm (=20 inch). All standard three cone nozzles fit.



Forward mounted valves

FEATURES / ADVANTAGES / BENEFITS

- High quality brass cutter with stainless steel tubes
- Oval handle for positive grip
- The new trim valve design for regulation of preheating oxygen and fuel gas are forward mounted for easiest control of the flame
- The cutting oxygen lever is specially designed to give maximum control of all operations, ideal for piercing, gouging and rivet cutting
- Length, balance and profile are chosen for best control of operation
- Low weight
- The knob valves have a self centering stainless steel valve stem for positive seating and long life
- Large capacity, cuts sheet 500 mm thick



TECHNICAL DATA

Length	Weight
470 mm	1,18 kg
855 mm	1,50 kg
1155 mm	1,85 kg

Art. Nr.	Description	Head Angles	Inlet	Quantity
0767699 (87090)	18" (460 mm)	90°	G3/8"- G3/8" LH	1
0767692 (87097)	36" (900 mm)	75°	G3/8"- G3/8" LH	1
0767690	18" (470 mm)	75°	G3/8"- G3/8" LH	1
0767696	42" (1080 mm)	75°	G3/8"- G3/8" LH	1

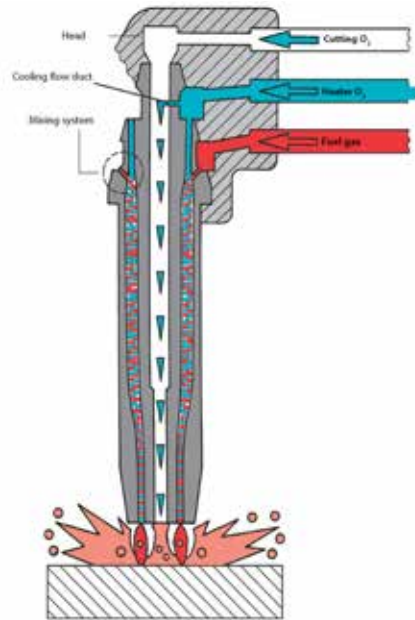
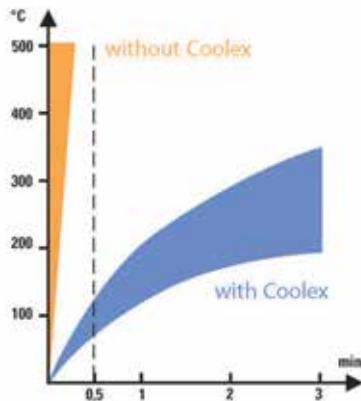
PREMIUM NOZZLES FOR GCE X511 ORIGINAL CUTTING TORCH COOLEX® – 3 CONE SEALED CUTTING NOZZLES

COOLEX® is the generic name for GCE,s 3-cone sealed cutting nozzles which are an innovative development based on conventional cutting nozzles. The COOLEX® nozzles have a cooling flow duct patented by GCE.

In a conventional cutting nozzle, hot gas penetrates from the heating flame into the cutting duct, causing inappropriate heating of the cutting nozzle, often up to 500°. The COOLEX® nozzles with a cooling flow duct reduce the temperature of the nozzles and increase the operational function and the life time of the nozzle.

THE RESULTS :

- Lower temperature
- Fewer operational interruptions



COOLEX CUTTING NOZZLES



HA311 COOLEX®



HA317 COOLEX®



PNME COOLEX®

COOLEX A 341 BENT RIVET NOZZLE
FOR ACETYLENE

HP337 COOLEX®



G1 COOLEX® ACETILENO

COOLEX A 361 GOUGING AND RIVET
CUTTING NOZZLE FOR ACETYLENE

FGA COOLEX: ACETYLENE



HP331 COOLEX®



AGN COOLEX

MANUAL TORCHES - CUTTING TORCHES AND NOZZLES

X501® ORIGINAL

X501 is a reliable and safe torch even under the toughest conditions! The hand cutting torch X 501 is an injector burner (mixer with suction - i), which is used for manual cutting and heating using a mix of oxygen and acetylene or propane. Cutting can be done in steel material up 300 mm thickness.

The hand cutting torch meets all technical requirements and has been developed on the basis of current engineering practice in accordance to EN ISO 5172 standard.

FEATURES / ADVANTAGES / BENEFITS

- High operating safety for both acetylene and propane applications
- The new trim valve design for regulation of preheating oxygen and fuel gas are forward mounted for easiest control of the flame
- The cutting oxygen lever is specially designed to give maximum control of all operations, ideal for piercing, gouging and rivet cutting
- Length, balance and profile are chosen for best control of operation
- High flow rate



Type	Fuel Gas	Length (mm)	Head angle	Inlet connection
X501	Acetylene	575	85 dg	G1/4" - G3/8" LH
X501	Propane	575	75 dg , 90 dg	G1/4" - G3/8" LH

Art. Nr.	Fuel Gas	Head angle	Nozzle type
G0767734	Propane	75 dg	NFF, NX
G0767680	Acetylene	85 dg	AC, FHA, R
G0767796	Propane	90 dg	NFF, NX

AC STANDARD CUTTING NOZZLES FOR ACETYLENE



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rate (Nm ³ /h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001010	3 - 10	730 - 600	2,0 - 3,0	2	0,5	1,3 - 1,7	0,4	0,3
14001011	10 - 25	620 - 410	4,5 - 5,0	2,5	0,5	2,3 - 2,8	0,5	0,35
14001012	25 - 40	410 - 340	4,0 - 5,0	2,5	0,5	2,3 - 2,8	0,5	0,35
14001013	40 - 60	340 - 310	4,0 - 5,0	2,5	0,5	4,1 - 5,1	0,5	0,35
14001014	60 - 100	320 - 250	5,0 - 6,0	3	0,5	8,1 - 9,5	0,5	0,4
14001015	100 - 200	270 - 210	6,5 - 7,5	3,5	0,5	12,0 - 13,0	0,6	0,5
14001016	200 - 300	150 - 110	6,5 - 7,5	6,5 - 7,5	0,5	28,5 - 32,5	1,1	0,8
14001020	3 - 100		Heating nozzle					
14001021	100 - 300		Heating nozzle					

AB - ACETYLENE CUTTING NOZZLES



Art Nr.	Type	Thickness (mm)
14001650	Cutting nozzle	3 - 10
14001651	Cutting nozzle	10 - 25
14001652	Cutting nozzle	25 - 40
14001653	Cutting nozzle	40 - 60
14001654	Cutting nozzle	60 - 100
14001655	Cutting nozzle	100 - 200
14001656	Cutting nozzle	200 - 300

PUZ STANDARD CUTTING NOZZLES FOR LPG, PROPANE, NATURAL GAS (PMYF)



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rate (Nm ³ /h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001350	3 - 10	600 - 550	2,0-3,0	2	0,2	1,3 - 1,7	1,3	0,33
14001351	10 - 25	560 - 400	4,5 - 5,0	2,5	0,2	2,8 - 3,4	1,5	0,38
14001352	25 - 40	400 - 340	4,0 - 5,0	2,5	0,2	2,8 - 3,4	1,5	0,3
14001353	40 - 60	340 - 310	4,5 - 5,5	2,5	0,2	4,6 - 5,6	1,5	0,38
14001354	60 - 100	310 - 260	5,0 - 6,0	2,5	0,2	8,1 - 9,5	1,5	0,38
14001355	100 - 200	260 - 180	5,5 - 6,5	3,0 - 5,0	0,3	12,6 - 14,4	1,7 - 2,5	0,50 - 0,70
14001356	200 - 300	180 - 110	6,5 - 8,5	5,0 - 7,0	0,3	12,6 - 14,4	2,5 - 3,3	0,70 - 0,90
14001147	3 - 100		Heating nozzle, Propane/natural gas					
14001148	100 - 300		Heating nozzle, Propane/natural gas					
14001587	3 - 100		Heating nozzle, mixed fuel gas					



CUTTING TORCHES AND ACCESSORIES

UNIVERSAL

GCE BUTBRO cutters are engineered from solid brass stampings with silver soldered joints and provide a lightweight, well balanced, durable cutter giving reliability. With rear mounted valves and cutting lever and round handle. Cutter employs the nozzle mix principle, in which the combustible gas mixing is confined to the cutting nozzle. This results in a cutter which is highly resistant to backfire and flashback. A wide range of accessories are available for this cutter, such as attachments for heating, gouging, sheet metal nozzles, circle attachments, spade guide, power attachments, etc., to give maximum possible versatility. GCE BUTBRO torches and nozzles conform to BS EN ISO 5172.



88090C



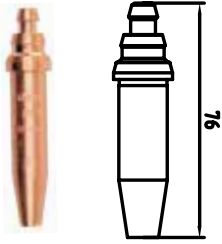
88094C

TECHNICAL DATA	
Hose connections:	3/8" BSP (other threads available on request)
Cutting capacity:	300 mm (12")
Cutting nozzles:	ANM (Acetylene) Cutting Nozzles
	PNM (Propane) Cutting Nozzles
	ASNM Sheet Metal Nozzles
	AGNM Gouging Nozzles
	ARCNM Rivet Cutting Nozzles
Gas:	Acetylene or Propane

Art. Nr.	Description	Head Angles	Quantity
88090C	18" (460 mm)	90°	1
88092C	18" (460 mm)	180°	1
0767949	35" (920 mm)	75°	1
0764510	33" (850 mm)	90°	1
0764511	45" (1150 mm)	90°	1

CUTTING NOZZLES

ANM SHORT PATTERN



Standard cutting nozzle for simple usage in the narrow areas.

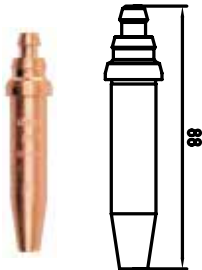
6 heating holes, 76 mm long.

USE:

Acetylene fuel gas.

Art Nr.	Material Tk'ness		Nozzle size	Operating pressure				Gas consumption						Approx. Cutting Speed	
	mm	in		Oxygen bar	PSI	Acetylene bar	PSI	Cutting Ox l/h	ft ³ /h	Heating Ox l/h	ft ³ /h	Acetylene l/h	ft ³ /h	mm/m	in/m
	Sheet		ASNM	1,5	20	0,14	2	800	28	85	3	85	3	-	-
0768554 (10132)	6	1/4	1/32	1,8	25	0,14	2	800	28	480	15	400	14	510	20
0768555 (10364)	13	1/2	3/64	2,1	30	0,21	3	1900	67	570	20	510	18	480	19
0768556 (10116)	25	1	1/16	2,8	40	0,14	2	4000	140	540	19	470	17	400	16
0768556 (10116)	50	2	1/16	3,2/3,5	45/50	0,14	2	4500	160	620	22	560	19	300	12
0768556 (10116)	75	3	1/16	3,5/4,2	50/60	0,14	2	4800	170	680	24	620	22	205	8
0768557 (10564)	100	4	5/64	3,2/4,8	45/70	0,14	2	6800	240	850	30	790	27	150	6
0768558 (10332)	150	6	3/32	3,2/5,5	45/80	0,21	3	9400	330	960	34	850	30	125	5
0768559 (10018)	200	8	1/8	4,2	60	0,28	4	14800	510	1380	48	1250	44	100	4
0768559 (10018)	250	10	1/8	5,3	75	0,28	4	31500	760	1560	55	1420	50	75	3
0768559 (10018)	300	12	1/8	6,3	90	0,28	4	25000	880	1560	55	1420	50	50	2

ANME LONG PATTERN



Longer cutting nozzle allowed precise homogenous mixture of the acetylene and oxygen for faster preheating of the material.

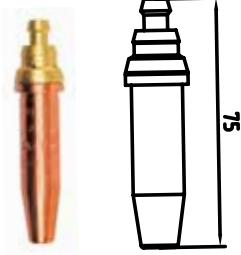
6 heating holes, 88 mm long.

USE:

Acetylene fuel gas.

Art Nr.	Material Tk'ness		Nozzle size	Operating pressure				Gas consumption						Approx. Cutting Speed	
	mm	in		Oxygen bar	PSI	Acetylene bar	PSI	Cutting Ox l/h	ft ³ /h	Heating Ox l/h	ft ³ /h	Acetylene l/h	ft ³ /h	mm/m	in/m
	Sheet		ASNM	1,5	20	0,14	2	800	28	85	3	85	3	-	-
0768670 (45132)	6	1/4	1/32	1,8	25	0,14	2	800	28	480	15	400	14	510	20
0768635 (45364)	13	1/2	3/64	2,1	30	0,21	3	1900	67	570	20	510	18	480	19
0768599 (45116)	25	1	1/16	2,8	40	0,14	2	4000	140	540	19	470	17	400	16
0768599 (45116)	50	2	1/16	3,2/3,5	45/50	0,14	2	4500	160	620	22	560	19	300	12
0768599 (45116)	75	3	1/16	3,5/4,2	50/60	0,14	2	4800	170	680	24	620	22	205	8
0768636 (45564)	100	4	5/64	3,2/4,8	45/70	0,14	2	6800	240	850	30	790	27	150	6
0768662 (45332)	150	6	3/32	3,2/5,5	45/80	0,21	3	9400	330	960	34	850	30	125	5
0768598 (45764)	200	8	7/64	4,2	60	0,28	4	14800	510	1380	48	1250	44	100	4
0768598 (45764)	250	10	7/64	5,3	75	0,28	4	31500	760	1560	55	1420	50	75	3
0768598 (45764)	300	12	7/64	6,3	90	0,28	4	25000	880	1560	55	1420	50	50	2
0768598 (45764)	300	12	7/64	6,3	90	0,28	4	25000	880	1560	55	1420	50	50	2
0769041 (45018)	190-300		1/8												

PNM SHORT PATTERN



Standard cutting nozzle for simple usage in the narrow areas.

9 spline inner, 76 mm long.

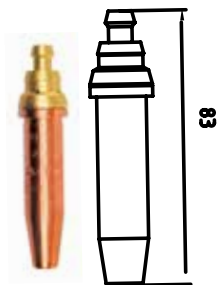
USE:

Propane fuel gas.

Art. Nr.	Range	Size
0768880 (18132)	3 - 6 mm	1/32"
0768865 (18364)	5 - 12 mm	3/64"
0768879 (18116)	10 - 75 mm	1/16"
0768878 (18564)	70 - 100 mm	5/64"
0769481 (18332)	90 - 150 mm	3/32"
0769482 (18018)	190 - 300 mm	1/8"

Material Tk'nness mm in		Nozzle size	Operating pressure				Gas consumption						Approx. Cutting Speeds mm/m in/m	
			Oxygen		Acetylene		Cutting Ox		Heating Ox		Acetylene			
mm	in	size	bar	PSI	bar	PSI	l/h	ft³/h	l/h	ft³/h	l/h	ft³/h	mm/m	in/m
6	1/4	1/32	2,1	30	0,2	3	1000	36	1300	48	300	12	430	17
13	1/2	3/64	2,1	30	0,2	3	1800	65	1600	57	300	14	360	14
25	1	1/16	2,8	40	0,2	3	3000	140	1700	62	400	15	280	11
50	2	1/16	3,2	45	0,3	4	4500	160	1800	66	400	16	205	8
75	3	1/16	3,5	50	0,3	4	4800	170	2000	73	500	18	205	8
100	4	5/64	3,5	50	0,3	4	7300	260	2600	93	600	23	152	6
150	6	3/32	4,2	60	0,4	6	12300	435	3300	120	800	30	125	5
250	10	1/8	5,6	80	0,6	8	22300	790	4600	165	1100	42	50	2
300	12	1/8	6,7	95	0,8	8	26300	930	5900	210	1400	50	50	2

PNME LONG PATTERN



Longer cutting nozzle allowed precise homogenous mixture of the acetylene and oxygen for faster preheating of the material.

9 spline inner, 88 mm long.

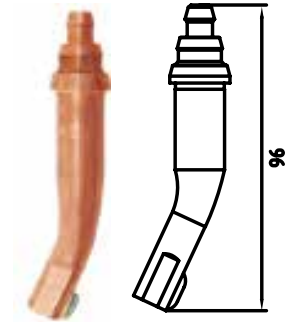
USE:

Propane fuel gas.

Art. Nr.	Range	Size
0769494 (46132)	3 - 6 mm	1/32"
0769495 (46364)	5 - 12 mm	3/64"
0769496 (46116)	10 - 75 mm	1/16"
0769497 (46564)	70 - 100 mm	5/64"
0769498 (46332)	90 - 150 mm	3/32"
0769499 (46764)	140 - 200 mm	7/64"
0769501 (46018)	190 - 300 mm	1/8"

Material Tk'ness mm in		Nozzle size	Operating pressure				Gas consumption						Approx. Cutting Speeds	
			Oxygen		Acetylene		Cutting Ox		Heating Ox		Acetylene		mm/m	in/m
bar	PSI	bar	PSI	l/h	ft³/h	l/h	ft³/h	l/h	ft³/h	l/h	ft³/h			
6	1/4	1/32	2,1	30	0,2	3	1000	36	1300	48	300	12	430	17
13	1/2	3/64	2,1	30	0,2	3	1800	65	1600	57	300	14	360	14
25	1	1/16	2,8	40	0,2	3	3000	140	1700	62	400	15	280	11
50	2	1/16	3,2	45	0,3	4	4500	160	1800	66	400	16	205	8
75	3	1/16	3,5	50	0,3	4	4800	170	2000	73	500	18	205	8
100	4	5/64	3,5	50	0,3	4	7300	260	2600	93	600	23	152	6
150	6	3/32	4,2	60	0,4	6	12300	435	3300	120	800	30	125	5
250	10	1/8	5,6	80	0,6	8	22300	790	4600	165	1100	42	50	2
300	12	1/8	6,7	95	0,8	8	26300	930	5900	210	1400	50	50	2

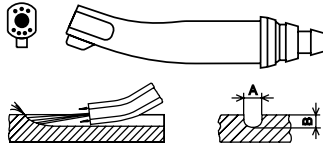
AGNM GOUGING NOZZLES



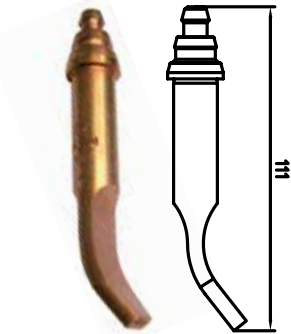
Special cutting nozzle for removing low quality weld.
94 mm long.

USE:
Acetylene fuel gas.

Art. Nr.	Range	Size	Quantity
0768698 (15013)	6 - 8 mm Width × 3 - 9 mm Depth	13 - 1/32"	1
0768661 (15019)	8 - 11 mm Width × 6 - 11 mm Depth	19 - 3/64"	1
0768699 (15025)	9 - 12 mm Width × 9 - 12 mm Depth	25 - 1/16"	1



ARCNM RIVET CUTTING NOZZLE



Special cutting nozzle for cutting of the head of the screws or rivet.

USE:
Acetylene fuel gas.

Art. Nr.	Range	Size	Quantity
0769230 (16000)	ø 50 mm	1/16	1

Material		Nozzle size	Operating pressure				Gas consumption						Approx. Cutting Speeds	
Tk'ness			Oxygen	Acetylene			Cutting Ox	Heating Ox	Acetylene					
mm	in		bar	PSI	bar	PSI	l/h	ft³/h	l/h	ft³/h	l/h	ft³/h	mm/m	in/m
8	5/16	13	4,0	60	0,5	7	3680	130	990	35	905	32	610	24
11	7/16	19	5,0	75	0,5	7	9340	330	1870	66	1700	60	1970	42
12	1/2	25	5,5	85	0,55	8	16270	575	2290	81	2100	74	1220	48

Oxygen		Operating pressure		Acetylene	
		bar	PSI		
3	45	0,5-1	7-15	48	

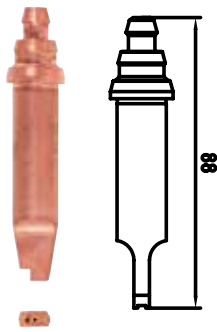
PHS/VVC MACHINE CUTTING NOZZLES - CHROMED - FOR USE WITH PROPANE

USE:
Acetylene fuel gas.



Art. Nr.	Size	Cutting thickness	Cutt. oxygen pressure	Cutting speed	Quantity
0769711	5/0	1 - 4 mm	3 bar	750 mm/min	1
0769712	4/0	4 - 6 mm	3 bar	700 mm/min	1
0769713	3/0	6 - 9 mm	5 bar	650 mm/min	1
0769714	00	9 - 12 mm	6 bar	630 mm/min	1
0769715	0	12 - 20 mm	7 bar	600 mm/min	1
0769716	0 ½	20 - 35 mm	7 bar	550 mm/min	1
0769717	1	35 - 60 mm	7 bar	480 mm/min	1
0769718	1 ½	60 - 75 mm	7 bar	310 mm/min	1
0769719	2	75 - 125 mm	7 bar	280 mm/min	1
0769720	2 ½	125 - 150 mm	6,5 bar	200 mm/min	1
0769721	3	150 - 175 mm	7 bar	180 mm/min	1
0769722	4	175 - 200 mm	6,5 bar	180 mm/min	1
0769723	5	200 - 225 mm	6 bar	150 mm/min	1

HA311-1 SHEET METAL NOZZLE

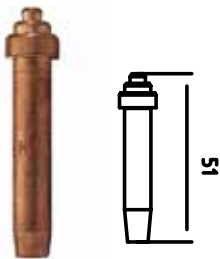


Special cutting nozzle for cutting of thin plates
88 mm long.
Fuel gas: Acetylene

Art. Nr.	Range	Size	Quantity
0768641	0 - 3 mm	0,3	1

AFN TYPE (ORBIT) CUTTING NOZZLES

Fuel gas: Acetylene



Art. Nr.	Range	Size	Quantity
0769416	0 - 3 mm	Sheet Metal ASFN	1
0768674	3 - 6 mm	size 1/32"	1
0769287	6 - 20 mm	size 3/64"	1
0768825	20 - 30 mm	size 1/16"	1

Material Th'ness mm in	Nozzle size	Operating pressure				Gas consumption				Approx. Cutting Speeds			
		Oxygen bar PSI	Acetylene bar PSI	Cutting Ox l/h ft ³ /h	Heating Ox l/h ft ³ /h	Acetylene l/h ft ³ /h	Heating Ox l/h ft ³ /h	mm/m	in/m	mm/m	in/m	mm/m	in/m
3 1/8	S/M	2,1 30	0,3 4	650 30	120 4,5	220 8	110 4						
6 1/4	1/32	2,1 30	0,15 2	710 25	255 9	255 8	255 8						
20 3/4	3/64	2,1 30	0,15 2	1415 50	255 9	225 8	225 8						
25 1	1/16	3,8 55	0,15 2	3400 120	255 9	225 8	225 8						
50 2	1/16	5,3 75	0,20 3	4530 60	310 11	285 10	285 10						

WELDING TORCH

JETSOUND

This torch is light and easy to handle; it has been developed specifically for refrigerator technicians and installers of airconditioning equipment, who require a torch to be easy to handle for reaching narrow hard to get at points. JETSOUND torch allows a reduction in the movement of the operator's wrist. People who have already used the JETSOUND torch appreciate its perfect flame regulation and low flow-rates, thanks to the possibility of regulating oxygen flow by means of a pin (microregulation). This means that the attachment and the knob are on the same axis.



Art. Nr.	Fuel gas	Connections	Length	Weight
0766277	Acetylene	G1/4" / G1/4" LH	360 mm	0,51 kg

JETSOUND ACCESSORIES



Welding nozzles

Art. Nr.	Product	Quantity
548800100122 P	Nozzles for Welding (6 pcs) Acetylene	1
22290270	160 l/h Flexible Welding Attachment	1
22290271	250 l/h Flexible Welding Attachment	1
22290272	315 l/h Flexible Welding Attachment	1
22290273	400 l/h Flexible Welding Attachment	1
22290274	500 l/h Flexible Welding Attachment	1



Flexible welding attachment

Welding range (mm)	Nozzles consumption (l/h)	Pressures (bar)		
		Oxygen	Acetylene	Propane
0,4 - 0,5	40	1 - 1,5	0,2 - 0,5	0,1 - 0,4
0,6	63			
1	100			
1,5	160			
2,5	250			
3	315			
4	400			
5	500			

CADDYPAK

CADDYPAK



The GCE BUTBRO CADDYPAK provides all the qualities of conventional Oxy-Acetylene welding cutting and heating without heavy cumbersome full size cylinders. Weighing only 33 Kgs it is totally portable making it ideal for many applications including:

- FARM REPAIRS
- CONSTRUCTION SITEWORK
- MOBILE REPAIR SERVICES
- FACTORY MAINTENANCE
- GARAGE & MOTOR TRADE
- DIY APPLICATIONS

The robust trolley has been re-designed to give added stability and has an adjustable height clamp to accommodate taller cylinders. Storage for the outfit case is provided on the rear of the trolley. The handle is retractable to enable the whole kit to be carried in a car boot.

The GCE BUTBRO ORBIT complete welding and cutting Caddypak provides welding capacity up to 8mm (5/16") and cutting capacity up to 25mm (1") and heating with acetylene. Just add the cylinders and the kit is ready for immediate use.

N.B. CYLINDERS NOT INCLUDED. GCE BUTBRO torches and nozzles conform to BS EN ISO 5172.

THE OUTFIT COMPRISES:

ORBIT Shank, Mixer & Cutting Attachment, Single Stage, 2 Gauge Oxygen Regulator, Single Stage, 2 Gauge Acetylene Regulator, Slimguard Oxygen Flashback Arrestor, Slimguard Acetylene Flashback Arrestor,

5 Metres Twin Line Fitted Hose, L/W Nozzles Size 2, 5, 7, 10, 13, 3/64" A-FN Type Cutting Nozzle, ASFN Type Sheet Metal Cutting Nozzle, ORBIT Heating Nozzle & Neck, Sunfire Sparklighter, Nozzle Cleaner Outfit, Outfit Spanner, Combination Spanner, Goggles, Data Card, Plastic Carrying Case, Caddypak Cylinder Trolley.



Art. Nr.	Description	Quantity
81789	Caddypak	1

DOUBLE ROLLER GUIDE



Steady and guide your torch over large plates and forgings. Fits all nozzle-mix cutters using ANM/PNM type nozzles.
Fixed by clamping around nozzle thus accommodating either 75 or 90 torch heads.

Art. Nr.	Description	Quantity
70510P	Double roller guide	

LARGE CIRCLE CUTTING ATTACHMENT



Cut accurate circles with this versatile attachment.
It is adjustable to cut circles from 60 mm (2 1/2") up to 425 (17") Dia.

Art. Nr.	Description	Quantity
14008460	Large circle cutting attachment	1

SMALL CIRCLE CUTTING ATTACHMENT



For cutting smaller diameter circles, clamps to tubes of cutter or cutting attachment.

Art. Nr.	Description	Quantity
70514	Small circle cutting attachment	1

CUTTER HEAD NUTS



For use with NM250 cutters and type 3/4/5 cutting attachments.

Art. Nr.	Description	Quantity
9427210	Head nut	7/8" * 20 UNS
		1

For use with Steelmaster 2 cutters.

Art. Nr.	Description	Quantity
9431350	Head nut	M 22x1.5
		5

MARK 4 GAS ECONOMISER



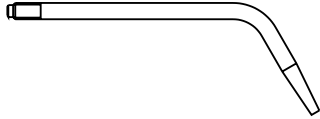
Considerable savings in gas costs can be achieved by the use of a gas economiser in production welding and brazing. The torch is held on the hooked arm when not in use which shuts off gas supply to the torch. When unhooked the torch can be immediately re-ignited from the pilot light without having to re-adjust the valves. 3/8" BSP connections.

Art. Nr.	Description	Quantity
0767763	Mark 4 Gas Economiser	1

WELDING & HEATING NOZZLES

LIGHTWEIGHT SWAGED COPPER NOZZLES

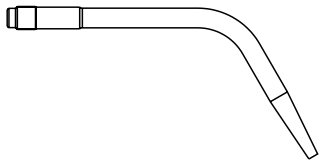
For use on Orbit torch 1/4" × 26 TPI thread.



Art. Nr.	Range	Size	Quantity
0766232 (62401)	to 1 mm	size 1	
0766233 (62402)	1 - 1,5 mm	size 2	
0766234 (62403)	1,5 - 2 mm	size 3	
0766235 (62405)	2 - 2,5 mm	size 5	
0766236 (62407)	2,5 - 3 mm	size 7	
0766237 (62410)	3 - 4 mm	size 10	
0766238 (62413)	4 - 5 mm	size 13	
0766239 (62418)	5 - 6 mm	size 18	
0766240 (62425)	6 - 8 mm	size 25	

TYPE 2/3/4/5 SWAGED COPPER TUBE NOZZLES

For use on Type 2/3/4/5 Welding torch 7/16" × 27 TPI Thread (Sizes 1-90 Type 2 & 3), 31/64" × 27 TPI Thread (Sizes 45-90 using Heavy Duty Mixer)



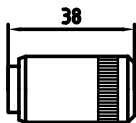
Art. Nr.	Range	Size	Quantity
0766244 (68501)	to 1 mm	size 1	
0766245 (68502)	1 - 1,5 mm	size 2	
0766246 (68503)	1,5 - 2 mm	size 3	
0766247 (68505)	2 - 2,5 mm	size 5	
0766248 (68507)	2,5 - 3 mm	size 7	
0766249 (68510)	3 - 4 mm	size 10	
0766250 (68513)	4 - 5 mm	size 13	
0766251 (68518)	5 - 6 mm	size 18	
0766252 (68525)	6 - 8 mm	size 25	

AHT HEATING NOZZLES

For use on type 3/4/5 equipment. In conjunction with necks 68777 or 68666.

USE:

Acetylene fuel gas.



Art. Nr.	Size	Output	Quantity
48425	AHT 25 heating tip	52 000 Btu/H	1
48450	AHT 50 heating tip	91 000 Btu/H	1
48410	AHT 100 heating tip	139 000 Btu/H	1

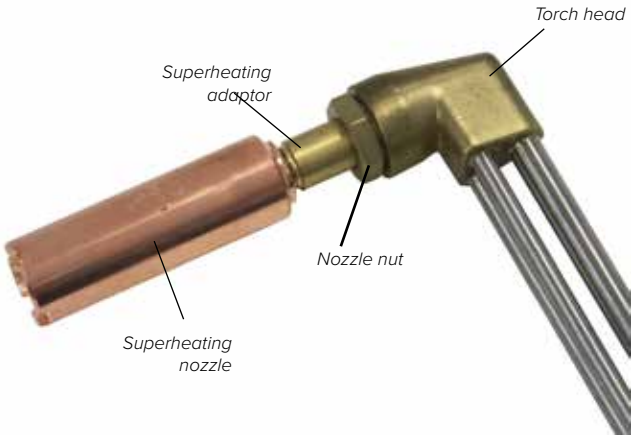
SUPERHEATING NOZZLES



For use on type 3/4/5 blowpipe in conjunction with heavy duty mixer 77555 and necks 78666 or 78777. Can also be used with NM250/Steelmaster in conjunction with superheating adaptor 0768929.

USE:
Propane fuel gas.

Art. Nr.	Size	Output	Quantity
0769472 (78991)	1H	72 000 - 163 000 Btu/H	1
0769473 (78992)	2H	102 000 - 188 000 Btu/H	1
0769474 (78993)	3H	183 000 - 361 000 Btu/H	1
0769475 (78994)	4H	236 000 - 406 000 Btu/H	1
0769476 (78995)	5H	250 000 - 618 000 Btu/H	1
0768929	Superheating adaptor for NM Cutters		



How to fit a superheating adaptor

Place the “three cone end” of the supeheating adaptor into the torch head and fasten using the nozzle nut.

Once the adaptor is in place screw the superheating nozzle onto the adaptor.

HOSE CONNECTION AND FITTINGS

HOSE TAILPIECES



Art. Nr.	Hose inner diameter	Suitable for nut	Pack size
31AEN	5 mm (3/16")	G3/8" LH and RH	1
B599380 (31BEN)	6 mm (1/4")	G1/4" LH and RH	10
B734980 (31EN)	6 mm (1/4")	G3/8" LH and RH	10
B599440 (30EN)	8 mm (5/16")	G3/8" LH and RH	10
9430800 (29AEN)	10 mm (3/8")	G3/8" LH and RH	5

HOSE SPLICERS



Art. Nr.	Hose inner diameter	Pack size
9429620	6,3 mm (5/16")	1
14008094	8 mm (5/16")	1

HOSE CONNECTION NUTS



Art. Nr.	Type	Pack size
B599400 (28AENP)	G1/4" RH	10
B712010 (27AEN)	G3/8" RH	10
B712020 (28BEN)	G1/4" LH	10
B599430 (27BENP)	G3/8" LH	10

HOSE COUPLERS



Art. Nr.	Type	Pack size
25A	G1/4" equal RH	1
14008811S	G3/8" equal RH	1
25B	G1/4" equal LH	1
26B	G3/8" × G1/4" unequal LH	1
4403703P	G3/8" equal LH	1

LOW PRESSURE FINE ADJUSTMENT VALVES AND ADAPTORS (10 BAR)

TWIN OUTLET VALVES WITH SWIVEL NUT ("Y" VALVES)



These allow two blowpipes to be used from one regulator outlet.

Art. Nr.	Gas	Swivel nut	Outlet connection
47A	Oxygen	G3/8" RH	G3/8" RH MALE
47B	Acetylene	G3/8" LH	G3/8" LH MALE

'Y' PIECES, 'T' PIECES FOR BRANCHING TWO HOSE FROM ONE

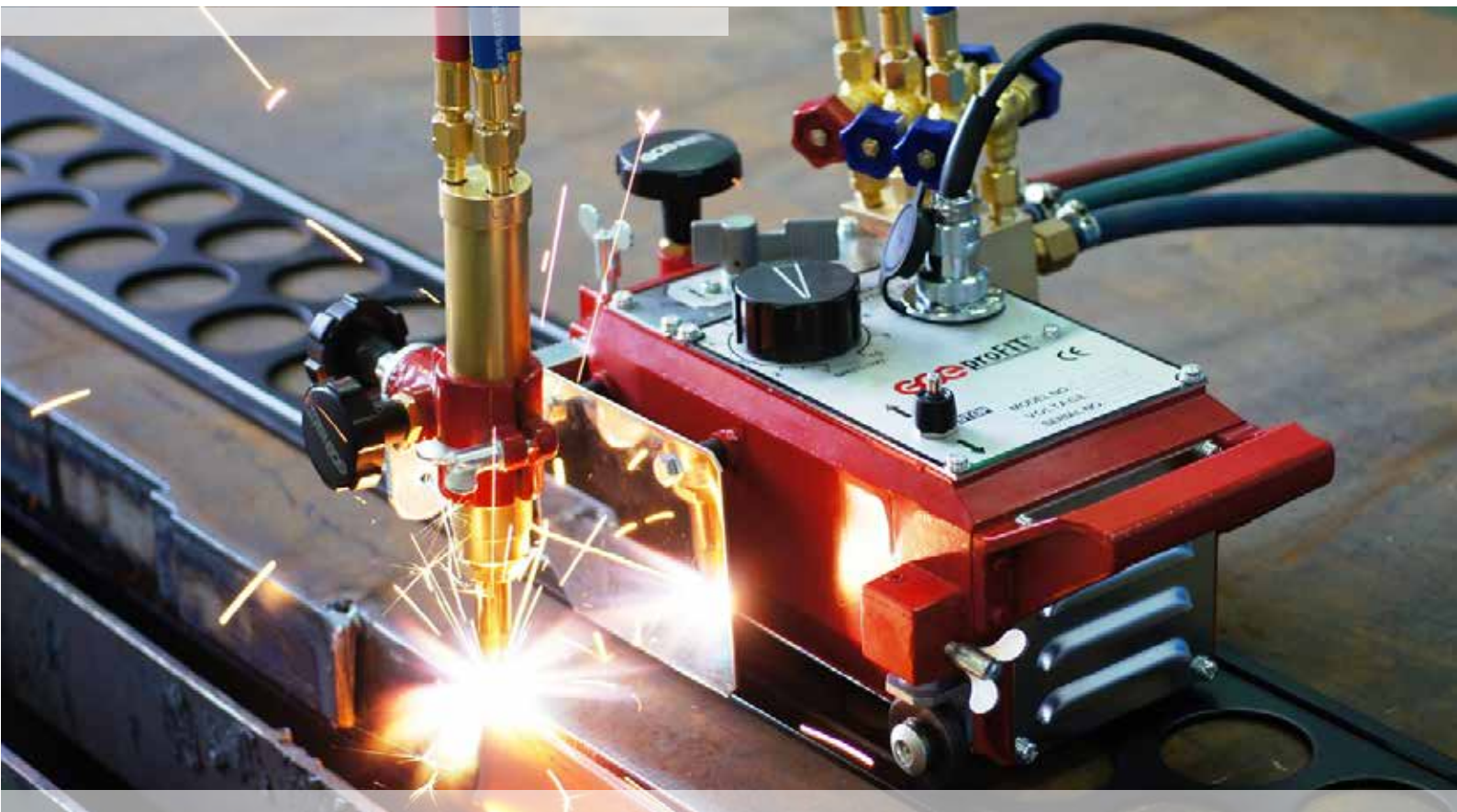


Art. Nr.	Gas	Type
66A	'T' piece with G 3/8" RH/LH nuts and 10 mm nipples	RH
66B	'T' piece with G 3/8" LH nuts and 10 mm nipples	LH

66A

MACHINE CUTTING – PORTABLE MACHINES

CUTTING EQUIPMENT FOR AUTOMATED CUTTING MACHINES



RANGE OF PORTABLE CUTTING MACHINES GCE PROFIT

GCE PROFIT SLM, STRAIGHT LINE CUTTING MACHINE

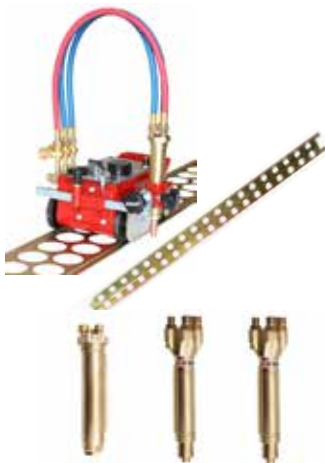
GCE proFIT® SLM is a universal cutting machine with lightweight design mainly for oxy-fuel cutting applications up to 150 mm metal sheet thickness (up to 100 mm with two cutting torches). It is a rugged but precise portable machine which has many features and benefits. For example it can be used for straight cuts guided by the rail, manually-guided shape cuts, circular cuts and Strip Cutting when using two torches. The cutting torch can be fixed in a vertical position or angled for bevel cutting of metal sheet edges. The machine is ideal for small workshops or as an additional tool to a gantry machine. It can be used indoor but also due to its flexibility it can be used outdoors on the construction sites.



FEATURES / ADVANTAGES / BENEFITS

- Lightweight portable machine for one-hand manipulation
- Easy installation and operation
- Interlocking, 1,8 m long guide rail
- All common fuel gases service
- Nozzle mixing (IC 30° cone) cutting torches or BIR+, an injector cutting torch technology
- Basic one-torch configuration can be extended for two-torch operation
- Strip cutting and bevel cutting with two torches
- Precise drive system is ensuring constant cutting speed
- Exact adjustment of the torch position
- High speed of motor drive enables machine to be used also for plasma cutting

GCEproFIT®



TECHNICAL DATA	
Cutting capacity:	up to 150 mm with one torch, up to 100 mm with two torches
Cutting speed:	50 – 1600mm/min
Operation:	forward and reverse with variable speed
Power supply:	230V AC / 50 Hz
Oxygen inlet connection:	G1/4", up to 8 bar, hose min. DN8
Fuel gas inlet connection:	G3/8"LH, up to 1 bar, hose min. DN8
Body dimensions:	175 × 350 × 140 (W × L × H in mm)
Weight:	9,5kg (with one torch configuration)
Rail:	Zn- coated, 1,8m

Art. Nr.	Description
0870613	GCE proFIT SLM 230V with nozzle-mixing cutting torch
0870614	GCE proFIT SLM 230V without cutting torch
0870615	GCE proFIT SLM 110V with nozzle-mixing cutting torch
0870617	Rail track 1,8m, Zinc coated
0870618	Rail track 1,2m, Zinc coated
F25310012*	Cutting torch BIR+ 110/32PMY, G1/4, G3/8, G3/8LH
F25310013*	Cutting torch BIR+ 110/32A, G1/4, G3/8, G3/8LH
F25310014*	Cutting torch nozzle mixing, G1/4, G3/8, G3/8LH
F25310015*	Cutting torch nozzle mixing, 9/16 UNF
0870616	Extension kit for 2-torches
0870665	Circle cutting kit

* One of these torches has to be selected and ordered for the machine item 0870614

BASIC MACHINE PACKAGE INCLUDES:

- Equipment for one torch-cutting application
 - One nozzle mix cutting torch with basic cutting nozzle
- (The basic package of machine 0870614 does not include cutting torch. One of the torches above needs to be selected.)
- Torch holder, torch bar, stainless steel heat shield
 - Internal gas hoses, gas manifold with shut-off valves
 - Power cable 8m with plug DIN
- (Guide rail is not included, to be ordered and delivered separately.)

RANGE OF PORTABLE CUTTING MACHINES GCE PROFIT

GCE PROFIT PCM, PIPE CUTTING MACHINE

GCE proFIT® PCM is a universal manually driven cutting machine for oxy-fuel applications with lightweight design, ideal for cutting of pipes up to 100 mm of tube wall thickness.



TECHNICAL DATA	
Cutting capacity:	up to 100mm of tube wall thickness
Cutting speed:	manually driven
Operation:	forward and reverse manually operated
Oxygen inlet connection	G1/4", up to 8 bar, hose min. DN8
Fuel gas inlet connection:	G3/8"LH, up to 1 bar, hose min. DN8
Body dimensions:	(400 × 500 × 600) (Wx L x H in mm)
Weight:	15 kg
Chain links:	Zn- coated, length 1300 mm, for tube diameter 1000 mm
Art. Nr.	Description
0870648	GCE proFIT PCM 230V with nozzle-mixing cutting torch
3C00448	Additional chain links, 82 detachable links, 2,4m

BASIC MACHINE PACKAGE INCLUDES:

- Manually driven machine
- One nozzle mix cutting torch with basic cutting nozzle
- Torch holder, torch bar, chain tightening mechanism
- Internal gas hoses, gas manifold with shut-off valves
- Basic chain for tube diameter up to 1000 mm
- For ANME/PNME cutting nozzle please see page 43/44

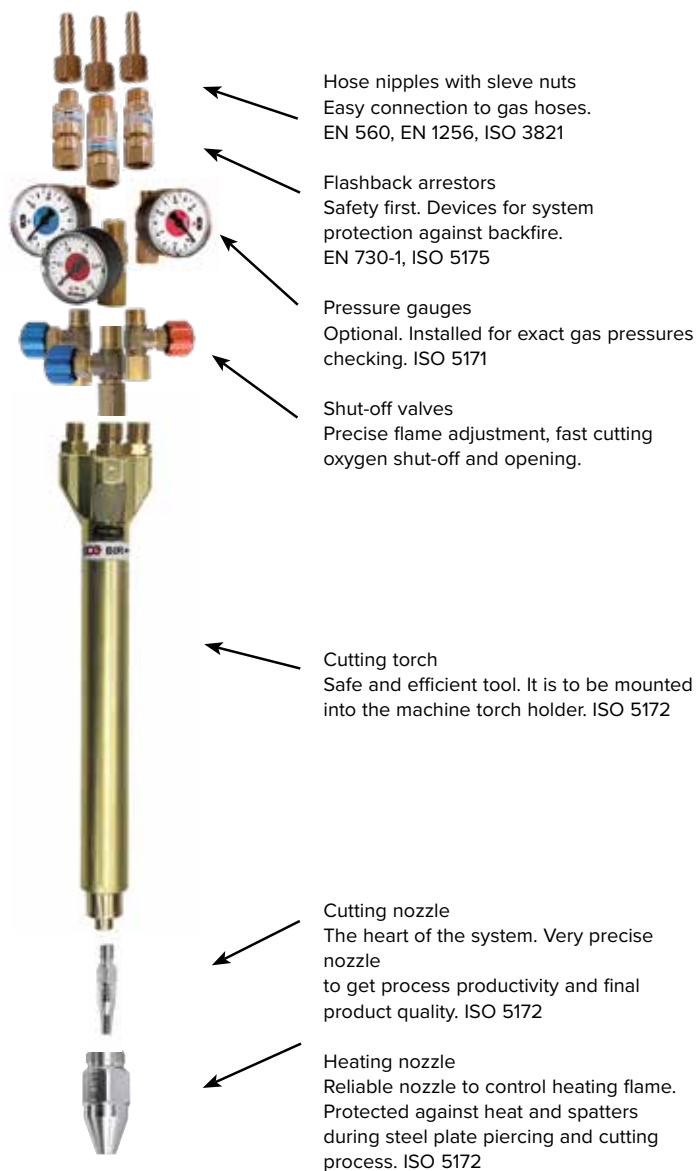


CUTTING EQUIPMENT FOR AUTOMATED CUTTING MACHINES

GCE BIR+

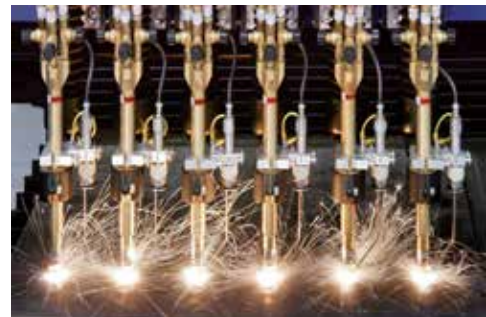
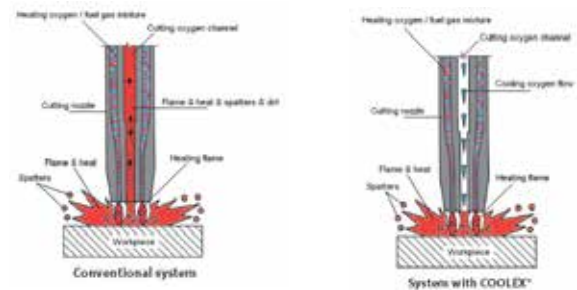
GCE BIR+ is injector cutting system consisting of various types of torches combined with three lines of cutting nozzles. The system can perform steel cutting up to 300mm plate thickness with all common fuel gas types. GCE BIR+ fits to almost all types of automated cutting machines or cutting robots. With its full compliance with EN ISO 5172, robust design and excellent cutting performance, GCE BIR+ is one of the most popular cutting systems.

CUTTING SYSTEM DESCRIPTION



FEATURES / ADVANTAGES / BENEFITS

- High speed oxy-fuel cutting system
- Compatible with all modern cutting machines and robots
- Simple installation of the torch and nozzles
- Safe solution for all fuel gas types
- Easy handling for machine operators
- Detailed cutting parameters charts available
- Cutting performance up to 300mm steel plate thickness
- High quality cuts in accordance with EN ISO 9013
- Prolonged lifetime of the system thanks to incorporated COOLEX®
- Various range of cutting nozzles and accessories for all cutting applications



GENERAL CONDITIONS FOR HIGH QUALITY AND EFFICIENT CUTTING

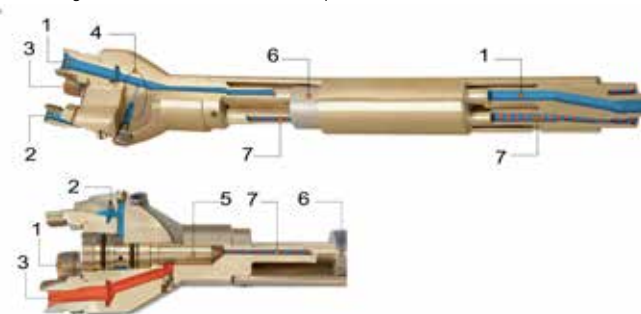
GCE machine cutting nozzles are designed to reach the cuts of quality level 1 according to EN ISO 9013. It is possible to reach maximal cutting speed by setting-up recommended cutting parameters of particular nozzles shown below, cutting of straight cuts, by using of clean metal sheet surface, oxygen with purity 99,5% or better. Correct values of gases pressures are to be measured at the torch inlet. Parameters are prepared for mild steel with maximal carbon content of 0,25%. Quality cutting machine with proper gas supply system, original GCE cutting equipment and new, undamaged, original cutting and heating nozzles are to be applied.

MACHINE CUTTING TORCH BIR+™



Art. Nr.	Length / diameter	Gas	Connection
14055239	110/32	A	G3/8", G3/8"LH, G1/4"
14055218	220/32	A	G3/8", G3/8"LH, G1/4"
14055241	320/32	A	G3/8", G3/8"LH, G1/4"
14055242	110/32	PM	G3/8", G3/8"LH, G1/4"
14055219	220/32	PM	G3/8", G3/8"LH, G1/4"
14055240	320/32	PM	G3/8", G3/8"LH, G1/4"

Other lengths and diameters on customer request.



- 1 Cutting oxygen
- 2 Heating oxygen
- 3 Fuel gas
- 4 COOLEX® flow valve
- 5 Injector
- 6 Aluminium cooling body
- 7 Fuel gas/oxygen mixture

FLASHBACK ARRESTORS FOR MACHINE CUTTING TORCHES EN ISO 5175-1



Art. Nr.	Gas	Connection (EN 560)
14008408	Cutting oxygen	G3/8"
14008263	Heating oxygen	G1/4"
14008278	Fuel gas	G3/8" LH

ADJUSTMENT VALVES



Art. Nr.	Application	Connection (EN 560)
14056015	Cutting oxygen	G3/8"
14056016	Heating oxygen	G1/4"
14056017	Fuel gas	G3/8"LH
203010607P	Oxygen	UNF 9/16"
203010609P	Fuel gas	UNF 9/16"LH

HOSE CONNECTION PARTS



Art. Nr.	Descripton
4599440P	Hose nipple for internal hose diameter 8mm
4599380P	Hose nipple for internal hose diameter 6,3mm
548200018934P	Sleeve nut G3/8
548200018932P	Sleeve nut G3/8LH
4599400P	Sleeve nut G1/4

CUTTING ACCESSORIES



Art. Nr.	Connection (EN 560)
0764659	Bevel cutting attachment
14055509	Strip cutting attachment

CLEANING ACCESSORIES



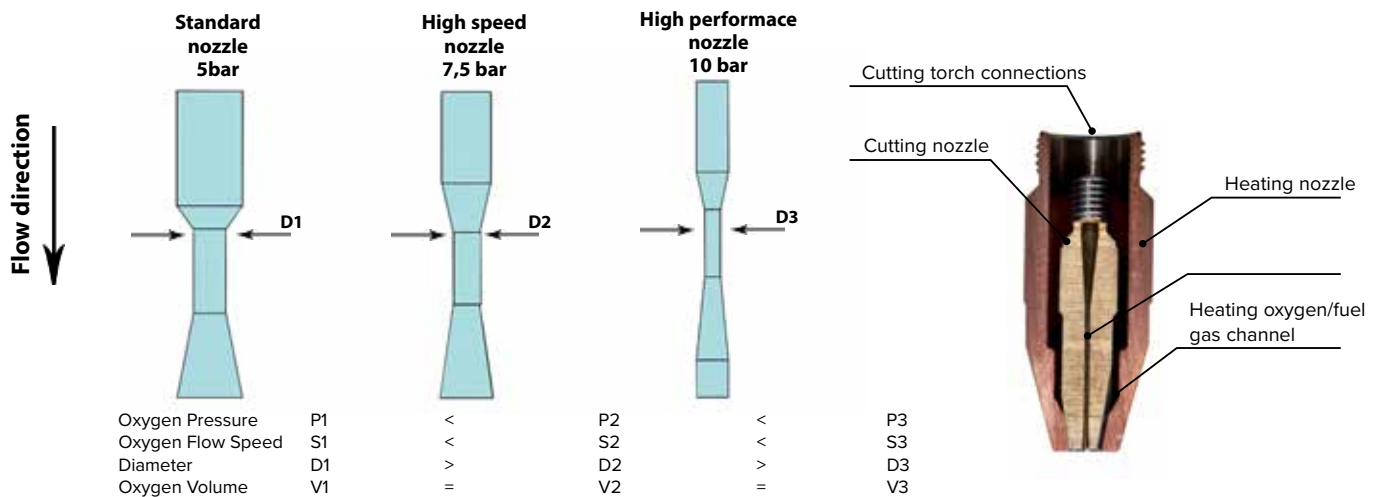
Art. Nr.	Descripton
14008157	Brass cleaning brush
14056010P	Stainless steel conical cleaning needle for cutting oxygen channels
548814071191P	Cleaning needle set (10 pieces)

OVERVIEW OF CUTTING NOZZLES **GCE BIR+™**

Fuel Gas	Standard cutting	High speed cutting	High performance cutting
A	AC	ASD	AHD
PMYF	PUZ	PSD	PHD

Cutting nozzles are always delivered in the 5 units package, heating nozzle package contains 1 unit

DESIGN OF CUTTING OXYGEN CHANNEL



AC STANDARD CUTTING NOZZLES FOR ACETYLENE



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rate (Nm³/h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001010	3 - 10	730 - 600	2,0 - 3,0	2	0,5	1,3 - 1,7	0,4	0,3
14001011	10 - 25	620 - 410	4,5 - 5,0	2,5	0,5	2,3 - 2,8	0,5	0,35
14001012	25 - 40	410 - 340	4,0 - 5,0	2,5	0,5	2,3 - 2,8	0,5	0,35
14001013	40 - 60	340 - 310	4,0 - 5,0	2,5	0,5	4,1 - 5,1	0,5	0,35
14001014	60 - 100	320 - 250	5,0 - 6,0	3	0,5	8,1 - 9,5	0,5	0,4
14001015	100 - 200	270 - 210	6,5 - 7,5	3,5	0,5	12,0 - 13,0	0,6	0,5
14001016	200 - 300	150 - 110	6,5 - 7,5	6,5 - 7,5	0,5	28,5 - 32,5	1,1	0,8
14001020	3 - 100		Heating nozzle					
14001021	100 - 300		Heating nozzle					

ASD HIGH SPEED CUTTING NOZZLES FOR ACETYLENE



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rate (Nm³/h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001217	3 - 5	800 - 750	2,0 - 3,0	2,0 - 2,5	0,6	0,4 - 0,5	0,4	0,3
14001218	6 - 10	750 - 700	4,0 - 5,0	2,5	0,6	1,2 - 1,5	0,5	0,35
14001219	10 - 25	650 - 500	6,5 - 7,5	2,5	0,6	3,2 - 3,7	0,5	0,35
14001220	25 - 40	500 - 420	6,5 - 8,5	2,5	0,6	4,6 - 5,5	0,5	0,35
14001221	40 - 60	420 - 360	6,5 - 8,5	2,5	0,6	5,6 - 7,1	0,5	0,35
14001222	60 - 100	360 - 270	6,5 - 8,5	2,5	0,6	9,1 - 11,0	0,5	0,35
14001223	100 - 150	270 - 210	6,5 - 7,0	3,5	0,6	12,1 - 12,9	0,6	0,5
14001224	150 - 230	210 - 140	6,5 - 7,5	6,5 - 7,5	0,6	19,4 - 22,0	1,1	0,85
14001225	230 - 300	150 - 110	6,5 - 7,5	6,5 - 7,5	0,6	28,5 - 32,5	1,1	0,85
14001226	3 - 150		Heating nozzle					
14001238	150 - 300		Heating nozzle					

AHD HIGH PERFORMANCE CUTTING NOZZLES FOR ACETYLENE



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rare (Nm ³ /h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001519	3-5	800-750	2,0-3,0	2,5	0,5	0,4-0,5	0,4	0,35
14001520	6 - 10	750 - 700	4,0 - 5,0	3	0,5	1,0 - 1,2	0,5	0,4
14001521	10 - 25	725 - 530	9,0 - 12,0	3	0,5	2,7 - 3,6	0,5	0,4
14001522	25 - 50	530 - 420	8,5 - 11,5	3	0,5	3,6 - 4,6	0,5	0,4
14001523	50 - 80	420 - 330	9,0 - 12,0	3	0,5	6,7 - 8,6	0,5	0,4
14001524	80 - 100	300 - 280	9,5 - 11,5	3	0,6	8,9 - 10,1	0,5	0,4
14001525	100 - 150	280 - 210	6,5 - 7,0	4	0,6	12,1 - 12,9	0,6	0,5
14001526	3 - 150	Heating nozzle						

PUZ STANDARD CUTTING NOZZLES FOR LPG, PROPANE, NATURAL GAS (PMYF)



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rare (Nm ³ /h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001350	3 - 10	600 - 550	2,0-3,0	2	0,2	1,3 - 1,7	1,3	0,33
14001351	10 - 25	560 - 400	4,5 - 5,0	2,5	0,2	2,8 - 3,4	1,5	0,38
14001352	25 - 40	400 - 340	4,0 - 5,0	2,5	0,2	2,8 - 3,4	1,5	0,3
14001353	40 - 60	340 - 310	4,5 - 5,5	2,5	0,2	4,6 - 5,6	1,5	0,38
14001354	60 - 100	310 - 260	5,0 - 6,0	2,5	0,2	8,1 - 9,5	1,5	0,38
14001355	100 - 200	260 - 180	5,5 - 6,5	3,0 - 5,0	0,3	12,6 - 14,4	1,7 - 2,5	0,50 - 0,70
14001356	200 - 300	180 - 110	6,5 - 8,5	5,0 - 7,0	0,3	12,6 - 14,4	2,5 - 3,3	0,70 - 0,90
14001147	3 - 100	Heating nozzle, Propane/natural gas						
14001148	100 - 300	Heating nozzle, Propane/natural gas						
14001587	3 - 100	Heating nozzle, mixed fuel gas						

PSD HIGH SPEED CUTTING NOZZLES FOR LPG, PROPANE, NATURAL GAS (PMYF)



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rare (Nm ³ /h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001227	3 - 6	750 - 740	2,0 - 5,0	1,5	0,2	0,5-1,0	1	0,25
14001228	7 - 15	670 - 560	5,0 - 7,0	2	0,2	1,6 - 2,0	1,3	0,32
14001229	15 - 25	560 - 460	6,0 - 7,0	2	0,2	2,5 - 3,1	1,3	0,32
14001230	25 - 40	460 - 400	6,0 - 7,5	2	0,2	3,8 - 4,5	1,3	0,32
14001231	40 - 60	400 - 340	5,5 - 7,5	2	0,2	4,2 - 5,6	1,3	0,32
14001232	60 - 100	340 - 270	6,0 - 8,5	2	0,2	7,6 - 10,6	1,3	0,32
14001250*	100 - 150	270 - 180	6,5 - 7,5	2,5	0,3	11,5 - 13,0	1,4	0,35
14001233	100 - 200	270 - 180	7,5 - 9,5	4,5	0,6	13,3 - 15,6	2,4	0,6
14001234	200 - 250	180 - 130	6,5 - 8,5	4,5	0,6	18,0 - 22,0	2,4	0,6
14001235	250 - 300	130 - 110	6,5 - 8,5	5	0,6	23,0 - 30,0	2,5	0,62
14001236	3 - 100	Heating nozzle						
14001237	100 - 300	Heating nozzle						

*Cutting nozzle 14001250 preferable for hole piercing. Please use it only together with heating nozzle 14001236 !

PHD HIGH PERFORMANCE CUTTING NOZZLES FOR LPG, PROPANE, NATURAL GAS (PMYF)



Art Nr.	Thickness	Cutting speed	Pressure (bar)			Flow rare (Nm ³ /h)		
			Cutting oxygen	Heating oxygen	Acetylene	Cutting oxygen	Heating oxygen	Acetylene
14001512	6 - 10	750 - 690	4,0 - 5,0	2,5	0,2	1,0 - 1,2	1,3	0,33
14001513	10 - 25	690 - 500	9,0 - 12,0	2,5	0,2	2,7 - 3,6	1,3	0,38
14001514	25 - 50	500 - 390	8,5 - 11,0	2,5	0,2	3,6 - 4,6	1,3	0,38
14001515	50 - 80	390 - 320	9,0 - 12,0	2,5	0,2	6,7 - 8,6	1,3	0,38
14001516	80 - 100	320 - 280	9,5 - 11,0	2,5	0,2	8,9 - 10,1	1,3	0,38
14001517	3 - 100	Heating nozzle, propane						
14001518	3 - 100	Heating nozzle, mixed fuel gas						

SAFETY DEVICES FOR REGULATORS
SAFETY DEVICES FOR TORCHES
QUICK COUPLINGS



SAFETY DEVICES - FLASHBACK ARRESTORS

If using high quality equipment kept in good condition and if such equipment is used properly maintaining all health and safety rules, oxy-fuel cutting and heating equipment is safe to handle. There is no substitute for proper training, safety procedures and adequate caution among those that operate oxy-fuel equipment. The right torch, nozzle and a stable source of gas as well as their professional handling is essential but still may not be sufficient. Daily practice shows that Backfire and Flashbacks not only may happen but happen quite frequently. Extra hardware in the form of reliably working flashback arrestors provides an additional safety barrier protecting the cutting/welding operator and surrounding property against health and safety risks and material damages.

NATURE OF OXY-FUEL RISKS

In the course of proper operation the highly flammable mixture of gases is precisely mixed in the injector, mixer or directly in the cutting nozzle and then ignited and fully combusted right and only at the cutting / welding nozzle orifice. In reality the equipment may get damaged or worn, the gas supply pressure unstable or skills and concentration of the operator not reach necessary levels. Any of these reasons and several others may initiate a chain of events resulting in an accident. The most common mishaps are as follows:

BACKFLOWING

Backflow is a dangerous situation whereby oxygen is pushed into the flammable gas hose (or vice versa) creating a highly flammable/explosive gas mixture inside the flexible hoses. A damaged injector or mixer or – more often – clogged or blocked welding tip or damaged cutting nozzle can also cause a change of inner pressure conditions in the system resulting in backflow. Another case is where the reverse flow of a gas occurs when one cylinder runs out during operation, creating an imbalance of pressure in the system. The non-return valve units – both in check valves and/or flashback arrestors are the only

FLASHBACK

A flashback is a momentary or sustained retrogression of the flame upstream of the mixer, usually in the torch or hoses. This is a potentially dangerous situation, particularly if the flame reaches the hoses, where an explosion will occur, causing a rupture or separation of the hose.

SUSTAINED BACKFIRE

Sustained backfire is the continuous burning of the flame back inside the torch, usually at the mixer or injector. Flames can also travel further upstream and in extreme cases can reach the regulator and gas cylinders. Sustained backfires are often accompanied by a hissing or squealing sound and/or a smoky, sharp pointed flame. The user should immediately close all torch valves to avoid damage or injury. If a sustained backfire continues to burn without closing torch valves, severe damage to the torch, as well as an increased risk of fire, would result

FLASHBACK ARRESTORS

Flashback arrestors (FBAs) are common safety devices that stop or impede the progress of a flame upstream of the insertion point, avoiding back flow and build up of explosive mixtures inside of hoses and can protect the system in case of fire and stop pressure wave in the gas lines. Different FBA provides a different combination of basic safety features:

GCE flashback arrestors are designed to protect the operator. Attention to the following points will greatly reduce the risk of backfire:

- Ensure all equipment is in good condition and regularly checked.
- Ensure all hose connectors are gas tight.
- Follow the manufactures instructions for the torch.
- Ensure pressure settings are correct.
- Purge hoses before lighting torch.
- Keep hands and tools clean. (Oil or grease can cause an explosion when in contact with oxygen).
- In the event of a backfire do not re-ignite the torch until the cause has been determined and remedied.

GCE flashback arrestors require no routine maintenance other than regular checks for external leaks applicable to all gas equipment.

GCE flashback arrestors are sealed and tested during manufacture and no attempt should be made to dismantle or repair the unit. Should there be any doubt about the performance of the unit it should be replaced or returned to the manufacture for service.

SAFETY DEVICES FOR REGULATORS

SAFE-GUARD-5

The latest innovation from GCE the SAFE-GUARD-5 offers the maximum level of protection required by ISO 5175-1 to prevent dangerous flashbacks from reaching the regulator and cylinder supply sources.

There are many conditions that can cause a flashback, the fitting a flashback arrestor is commonsense. By using the Safe-Guard-5 on regulator outlets you reach the highest level of safety available on the market

FEATURES / ADVANTAGES / BENEFITS

- Maximum number of safety features defined by ISO 5175
- High visibility of trip/reset lever coupled with quick acting reset even when pressurised
- Angled inlet to minimise hose damage
- 100% production flame tested for Flashback resistance
- Inspection dates can be marked on product for easy reference

FUNCTIONS :

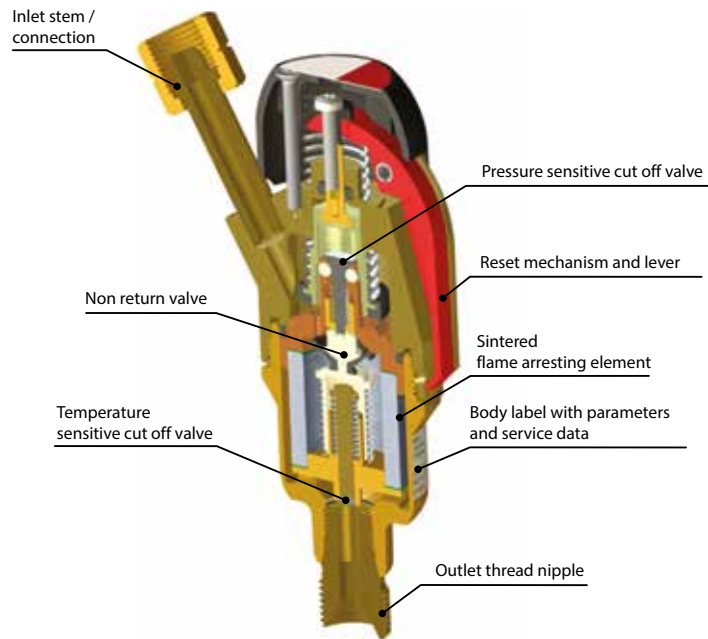
- Flame arresting element (FA)
- Non return valve (NV)
- Pressure sensitive cut off valve (PV)
- Temperature sensitive cut off valve (TV)
- Reset mechanism to clearly advise unit activation (RM)



INTERNAL SAFETY DEVICES

GCE – SIMPLY SAFE

Flash back arrestors must be present on regulators/gas outlets for acetylene by regulations in many countries. In some also required for oxygen. Sever accidents are reported frequently due to disrespects of safety.

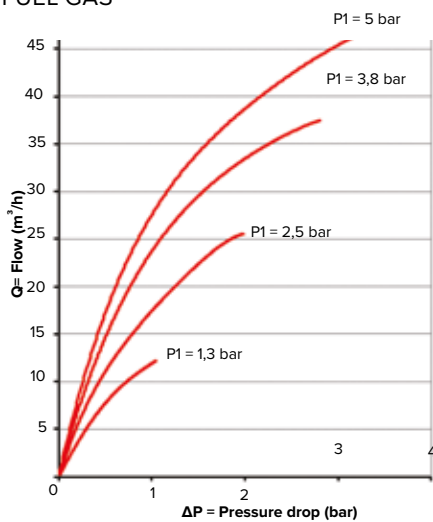


CONVERSION COEFFICIENT

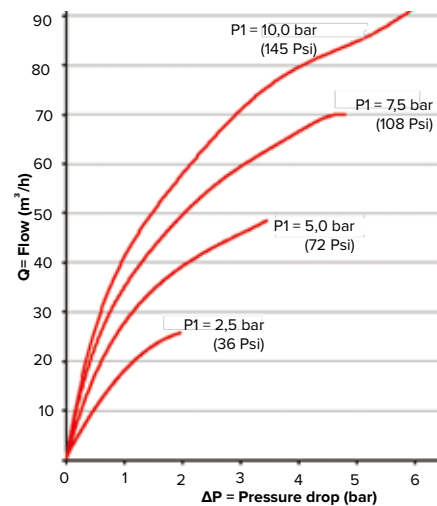
OXYGEN		HYDROGEN		ACETYLENE	
Gas	O_2	H_2	C_2H_2		
Coefficient	$\times 0,95$	$\times 3,75$	$\times 1,04$		
PROPANE		METHANE		ETHYLENE	
Gas	C_3H_8	CH_4	C_2H_4		
Coefficient	$\times 0,8$	$\times 1,33$	$\times 1,02$		

FLOW CHART

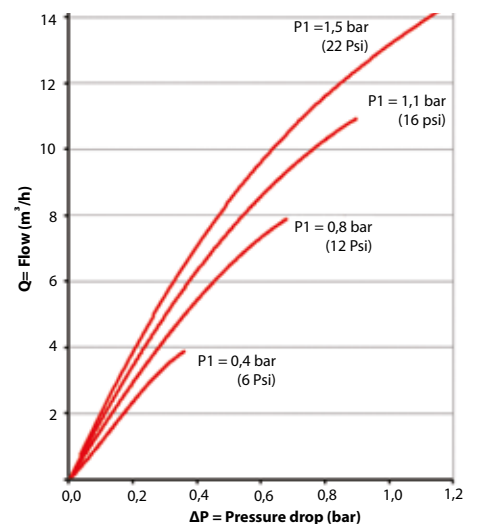
FUEL GAS



OXYGEN



ACETYLENE



Art. Nr.	Gas	Working pressure	Inlet connection	Outlet connection
0764457	Oxygen	0 - 10,0 bar	G3/8"	G3/8"
0764456	Fuel gas	1,5 - 5,0 bar*	G3/8" LH	G3/8" LH
0764462	Oxygen	0 - 10,0 bar	9/16 UNF	9/16 UNF
0764461	Fuel gas	1,5 - 5,0 bar*	9/16 LH UNF	9/16 LH UNF

* Acetylene 1-5 bar, Propane/Hydrogen/Methane/Natural gas 5,0 bar

SAFETY DEVICES FOR REGULATORS

SAFE-GUARD-3

The new Safe-guard 3 for regulator mounting has been redesigned incorporating an improved sintered filter and thermal trip device. Complies with ISO 5175-1..

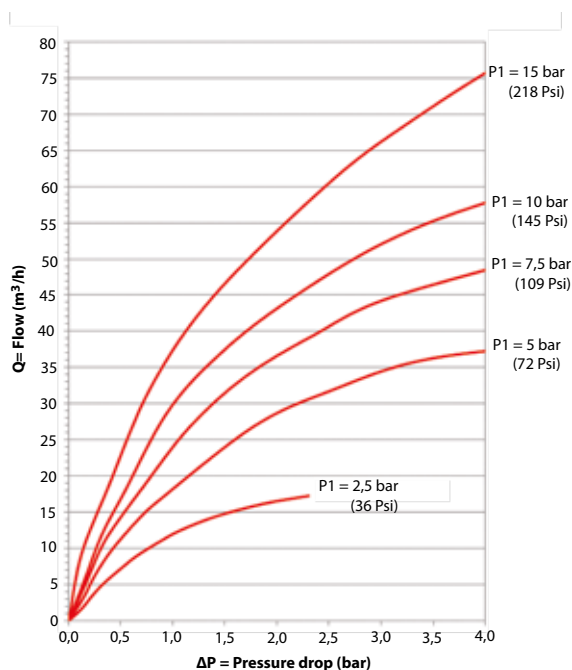
FEATURES / ADVANTAGES / BENEFITS

- FA Sintered flame arresting element
- NV Non return valve to prevent reverse flow of gases
- TV Thermal trip device, activated by heat to permanently cut off the gas supply.

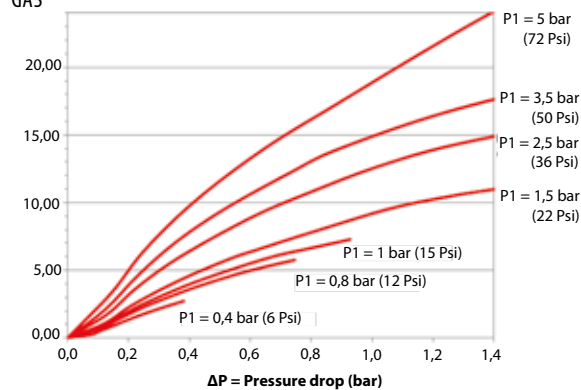


FLOW CHART

OXYGEN



GAS



Art. Nr.	Gas	Maximal working pressure	Inlet connection	Outlet connection
0764470	Oxygen	25 bar	G3/8"	G3/8"
0764471	Fuel gas	1,5 - 5,0 bar*	G3/8" LH	G3/8" LH
0764474	Oxygen	25 bar	9/16 UNF	9/16 UNF
0764475	Fuel gas	1,5 - 5,0 bar*	9/16 LH UNF	9/16 LH UNF

* Acetylene 1-5 bar; Propane/Methane/Natural gas 5,0 bar; Hydrogen 3,5 bar

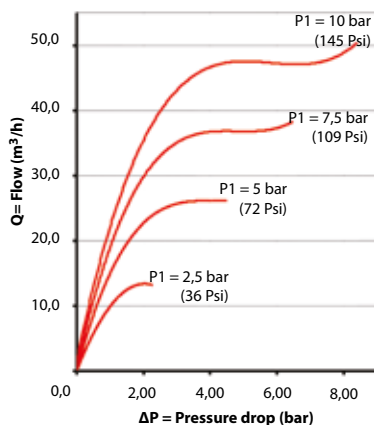
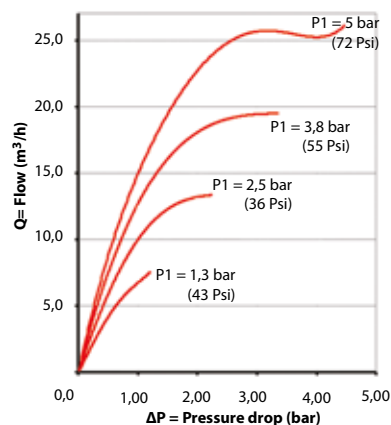
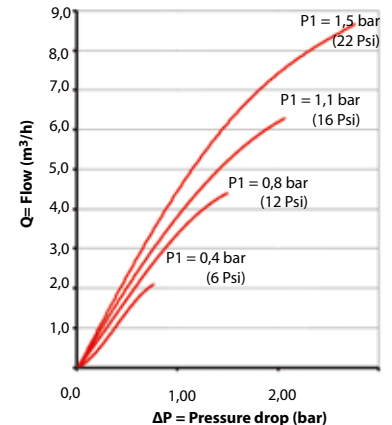
SAFETY DEVICES FOR REGULATORS

SAFE-GUARD-2/MV93

A lightweight torch flashback arrestor specially designed for torch fitting. The unit incorporates the following features:

FEATURES / ADVANTAGES / BENEFITS

- FA SINTERED FLASH ARRESTOR element to quench a flashback.
- NV NON-RETURN VALVE to prevent reverse flow of gases.
- FILTER gauze to prevent foreign matter entering unit.
Conforms to ISO 5172-1.

**FLOW CHART - MV93****OXYGEN****PROPANE, METHANE, ETHYLENE****ACETYLENE**

Art. Nr.	Gas	Connection torch	Connection hose	Suitable for hose	Quantity
81900	Oxygen	G3/8"	G3/8"	Add to existing 6/8/10 inst.	1
81950	Fuel	G3/8" LH	G3/8" LH	Add to existing 6/8/10 inst.	1
81910	Oxygen	G1/4"	G1/4"	Add to existing 6 install.	1
81960	Fuel	G1/4" LH	G1/4" LH	Add to existing 6 install.	1

FLASHBACK ARRESTOR MV 93-TF - G 3/8"

Art. Nr.	Gas	Connection	Inlet connection	Quantity
80900	Oxygen	G3/8"	Ø 6/10 mm hose nipple	1
80950	Fuel	G3/8" LH	Ø 6/10 mm hose nipple	1



FLASHBACK ARRESTOR MV 93-TF - G 1/4"

Art. Nr.	Gas	Connection	Inlet connection	Quantity
80910	Oxygen	G1/4"	Ø 6/10 mm hose nipple	1
80960	Fuel	G1/4" LH	Ø 6/10 mm hose nipple	1



FLASHBACK ARRESTOR MV 93-TT - 7/10 HOSE NIPPLE

Art. Nr.	Gas	Inlet connection	Quantity
80700	Oxygen	Ø 7/10 mm hose nipple	1
80750	Fuel	Ø 7/10 mm hose nipple	1

SAFE-GUARD-1/BV12

Hose check valves prevent the reverse flow of gases beyond the torch inlets. GCE hose check valves are manufactured to our own approved design and the unique method of assembly eliminates the use of soldered or bonded joints. They are suitable to use with Oxygen, Acetylene, Propane or Natural Gas and operate effectively on either nozzle mix or injector type torches or machine cutting torches.



Art. Nr.	Gas	Connection torch	Suitable for hose	Quantity
871121	Oxygen	G3/8"	6 mm hose	1
871122	Fuel	G3/8" LH	6 mm hose	1
871111	Oxygen	G3/8"	8 mm hose	1
871112	Fuel	G3/8" LH	8 mm hose	1
871101	Oxygen	G3/8"	10 mm hose	1
871102	Fuel	G3/8" LH	10 mm hose	1
871131 S	Oxygen	G1/4"	6 mm hose	5
871132 S	Fuel	G1/4" LH	6 mm hose	5



BV 12 RANGE INCLUDING NUT

Art. Nr.	Gas	Connection torch	Suitable for hose	Quantity
871121	Oxygen	G3/8"	6 mm hose	1
871122	Fuel	G3/8" LH	6 mm hose	1
871111	Oxygen	G3/8"	8 mm hose	1
871112	Fuel	G3/8" LH	8 mm hose	1
871101	Oxygen	G3/8"	10 mm hose	1
871102	Fuel	G3/8" LH	10 mm hose	1
871131 S	Oxygen	G1/4"	6 mm hose	5
871132 S	Fuel	G1/4" LH	6 mm hose	5



BV 12 RANGE WITHOUT NUT

Art. Nr.	Ftting	Hose (mm)	Quantity
0863531	G1/4"; 9/16" UNF	6,3	1
0863532	G3/8"; M16x1,5	6,3	1
0863533	G3/8"; M16x1,5	8	1
0863534	G3/8"; M16x1,5	10	1
0763568	G1/4" and G3/8" set of two	6.3/8 twin	1 (2 pcs)

QUICK COUPLINGS IN ACCORDANCE WITH EN561/ISO7289

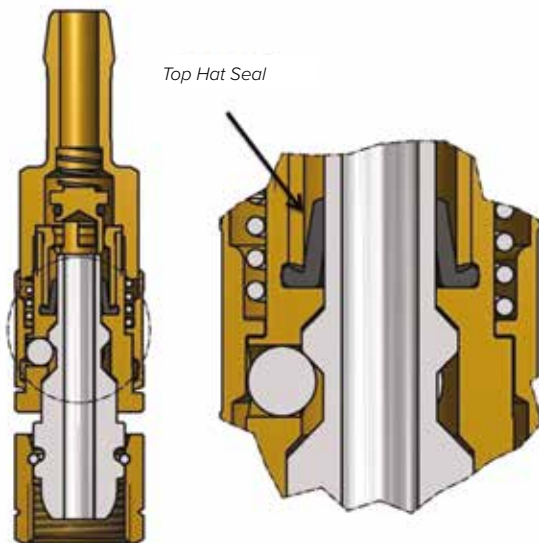
QUICK COUPLINGS

GCE offers a range of Quick Couplings suitable for easy and quick connection to regulators, cutting & welding torches and gas hoses.

They are manufactured in accordance with EN561/ISO7289 standard. The couplings are made of brass and the hose pins made of stainless steel. The couplings are color coded depending on which gas they are used for and available for oxygen, fuel and inert gases.

FEATURES / ADVANTAGES / BENEFITS

- Robust design - For heavy duty usage
- Colour coding - according to gas type
- Pull design - Easy connection without accidental disconnection
- Stainless Steel Coupling Pin - Longer life
- Gas cut-o - Automatically cut o gas ow when disconnected
- To Hat Seal - gives an excellent sealing without any risks for leakage.



ISO Connector

ISO Coupling Pin

ISO Coupling Threaded



Quick Coupler
QC010

Quick Coupler
QC020

QUICK COUPLER
QC030

DESCRIPTION



Quick connection according to EN561 ISO 7289.



Standard hose connection according to EN 560.



Stainless steel Coupling pin with colour coding by O-ring for better recognizing. According to ISO 7289.



Color coded sleeve for easy gas identification.



Standard hose connection according to EN 560. Marking of thread dimension for easy identification.



Hose nipples design according to EN 1256 available for most common sizes of hoses.

NEW TYPE OF MOUNTING



1. Coupling pin put into the Quick connector.



1. Pull the "blue" sleeve of the Quick connector and insert the coupling pin into the Quick connector.

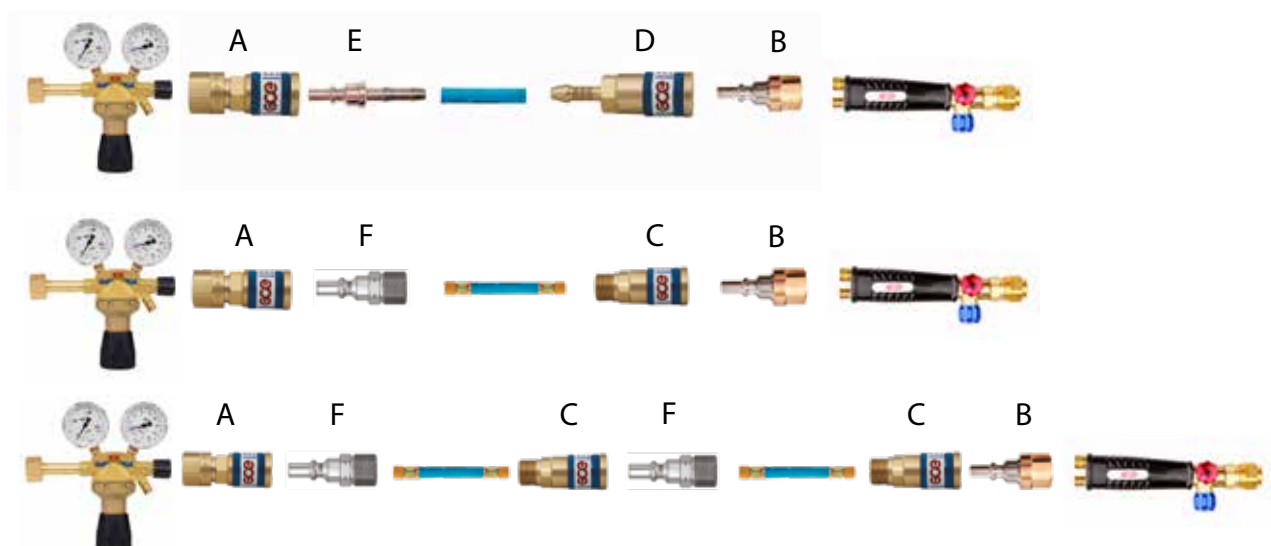


1. Mounting is finished. O-ring is visible.

COMBINATIONS OF CONNECTIONS

The GCE range of quick couplings has several application possibilities. The type QC-010 is developed special for connection to regulators whereas the others can be used in connections between hoses and hoses to torches.

- > A Quick connector Type QC-010
- > B Coupling nut
- > C Quick connector Type QC-020
- > D Quick connector Type QC-030
- > E Coupling pin - hose nipple
- > F Coupling pin - thread



ISO CONNECTOR



Art. Nr.	Application	Gas	Connection
F28710007	Torch Shank	Fuel gas	G3/8" LH
F28710008	Torch Shank	Fuel gas	9/16 LH UNF
F28710009	Torch Shank	Inert gas	G1/4"
F28710010	Torch Shank	Oxygen	G3/8"
F28710011	Torch Shank	Oxygen	9/16 UNF
F28710012	Torch Shank	Oxygen	G1/4"

ISO COUPLING PIN



Art. Nr.	Application	Gas	Connection
F28710013	Hose	Fuel gas	9 mm
F28710014	Hose	Fuel gas	8 mm
F28710015	Hose	Fuel gas	6,3 mm
F28710016	Hose	Fuel gas	4 mm
F28710017	Hose	Inert gas	6,3 mm
F28710018	Hose	Inert gas	4 mm
F28710019	Hose	Oxygen	6,3 mm
F28710020	Hose	Oxygen	8 mm
F28710021	Hose	Oxygen	9 mm
F28710022	Hose	Oxygen	4 mm

ISO COUPLING THREADED



Art. Nr.	Application	Gas	Connection
F28710023	Hose	Fuel gas	G3/8" LH
F28710024	Hose	Inert gas	G1/4" RH
F28710025	Hose	Oxygen	G1/4" RH
F28710066	Hose	Oxygen	G3/8" RH
F28710067	Hose	Inert gas	G3/8" RH

QUICK COUPLER QC-010



Art. Nr.	Application	Gas	Connection
F28710026	Regulator	Fuel gas	G3/8" LH
F28710027	Regulator	Fuel gas	M16×1,5 LH
F28710028	Regulator	Fuel gas	9/16 LH UNF
F28710031	Regulator	Oxygen	G3/8"
F28710032	Regulator	Oxygen	G1/4"
F28710033	Regulator	Oxygen	M16×1,5
F28710034	Regulator	Oxygen	9/16 UNF
F28710029	Regulator	Inert gas	G1/4"
F28710030	Regulator	Inert gas	G3/8"

QUICK COUPLER QC-020



Art. Nr.	Application	Gas	Connection
F28710035	Hose	Fuel gas	G3/8" LH
F28710036	Hose	Inert gas	G1/4"
F28710037	Hose	Inert gas	G3/8"
F28710038	Hose	Oxygen	G3/8"
F28710039	Hose	Oxygen	G1/4"



QUICK COUPLER QC-030

Art. Nr.	Application	Gas	Connection
F28710040	Hose	Fuel gas	6,3 mm
F28710041	Hose	Fuel gas	4 mm
F28710042	Hose	Fuel gas	8 mm
F28710044	Hose	Inert gas	4 mm
F28710045	Hose	Oxygen	6,3 mm
F28710046	Hose	Oxygen	4 mm
F28710047	Hose	Oxygen	8 mm

PROPANE EQUIPMENT (UNIVERSAL, EUROMAT, LOMAT, REGULATORS, HOSES)



AIR PROPANE EQUIPMENT

UNIVERSAL

Ideal for plumbing, heating, and ventilation trades, the GCE air propane shanks are available in two designs where one is equipped with an adjustable pilot flame. Spot/turbo (copper pipe)/special burners connect directly to the shank for all plumbing applications. Heating heads are connected via stainless tubes for larger heating jobs such as road working/roofing/bitumen heating.

SHANK UNIVERSAL

Combined shut-off valve and adjusting knob.

USE: designed for use with soldering, brazing and heating torches UNIVERSAL



With lever and adjustable pilot flame

Art. Nr.	Type	Gas	Working pressure (bar)	Consumption (kg/h)	Lenght (mm)	Weight (kg)	Torch, Tube, Outlet connection	Inlet connection
0763216	Shank with Lever	P, PB	Up to 4,0	12 kg/h	195	0,36	M 14 x 1	G 3/8" LH

PAINT REMOVER FAN BURNER UNIVERSAL

USE: for removing old work and localised heating.



Art. Nr.	Working pressure (bar)	Consumption PB (g/h)	Output (kW)	Connection	Lenght/Width (mm)	Weight (kg)	Quantity
23705	1,5 - 2,0	20	2,83	M14 x 1	170/40mm	0,19	1

SOLDERING TORCH B UNIVERSAL

USE: for soldering and brazing; for point heating.



Art. Nr.	Type	Gas	Working pressure (bar)	Consumption (g/h)	Output (kW)	Lenght (mm)	Weight (kg)	Connection
0763222	B 3 mm	P, PB	1,0 - 2,5	30 - 39	0,39-0,50	120	0,09	M 14 x 1
0763233	B 5 mm	P, PB	1,0 - 1,5	54 - 66	0,69-0,85	120	0,09	M 14 x 1
0763224	B 7 mm	P, PB	1,0 - 1,5	162 - 210	2,08-2,70	138	0,11	M 14 x 1

BRAZING TORCH TURBO UNIVERSAL

USE: for soldering and brazing, especially of copper piping systems.



Art. Nr.	Type	Gas	Working pressure (bar)	Consumption on PB (g/h)	Output (kW)	Lenght (mm)	Weight (kg)	For copper pipe	Connection
0763225	TURBO Ø12	P, PB	1,5 - 2,5	63 - 112	0,81 - 1,44	155	0,131	12 mm	M 14 x 1
0763226	TURBO Ø14	P, PB	1,5 - 2,5	210 - 338	2,70 - 4,35	178	0,148	18 mm	M 14 x 1
0763227	TURBO Ø17	P, PB	1,5 - 2,5	272 - 384	3,50 - 4,94	184	0,168	22 mm	M 14 x 1
0763228	TURBO Ø20	P, PB	1,5 - 2,5	432 - 532	5,56 - 6,85	210	0,228	28 mm	M 14 x 1

SHRINKWRAP TORCH S-UNIVERSAL

USE::available in two sizes for shrinkwrapping.



Art. Nr.	Type	Gas	Working pressure (bar)	Connection	Consumption PB (g/h)
32003	S - 30 mm	P, PB	1,5	M14 x 1	1900
33670	S - 40 mm	P, PB	1,5	M14 x 1	2500

HEATING TORCH H UNIVERSAL

USE: for industrial heating; roofing and construction work. Use with neck tube.



Art. Nr.	Type	Gas	Working pressure (bar)	Consumption (g/h)	Output (kw)	Length (mm)	Weight (kg)	Connection
0763217	H Ø30	P, PB	1,0 - 4,0	664 - 1056	8,55 - 13,59	88	0,12	M 20 x 1
0763218	H Ø40	P, PB	1,0 - 4,0	1200 - 1902	15,44 - 24,48	90	0,210	M 20 x 1
4069	H Ø45	P, PB	1,0 - 4,0	22500 - 5300	37,9 - 76,2	100	0,25	M 20 x 1
0763219	H Ø50	P, PB	1,0 - 4,0	3780 - 7590	48,68 - 97,69	115	0,30	M 20 x 1
0763220	H Ø60	P, PB	1,0 - 4,0	5030 - 9744	64,74 - 125,41	125	0,34	M 20 x 1
0763221	H Ø80	P, PB	1,0 - 4,0	5650 - 10570	72,72 - 136,04	155	0,63	M 20 x 1

NECK TUBE UNIVERSAL

Manufactured in stainless steel.

USE:

designed to connect UNIVERSAL heating torches to shank UNIVERSAL. Head connection M 20x1 MALE. Torch connection M 14x1 FEMALE.



Art. Nr.	Type	Connection	Weight (kg)	Torch Connection	Weight	Quantity
9381280	75 mm	M14 x 1	0,083	M 20 x 1	0,11 kg	1
9381290	130 mm	M14 x 1	0,113	M 20 x 1	0,11 kg	1
9381300	230 mm	M14 x 1	0,140	M 20 x 1	0,14 kg	1
9381310	350 mm	M14 x 1	0,190	M 20 x 1	0,19 kg	1
9381320	600 mm	M14 x 1	0,288	M 20 x 1	0,29 kg	1
9381330	750 mm	M14 x 1	0,346	M 20 x 1	0,35 kg	1
9381340	1000 mm	M14 x 1	0,443	M 20 x 1	0,44 kg	1

SUPPORT H-UNIVERSAL



USE:

Allows hot heating torches to be rested safely on a horizontal surface. Assembled onto the neck tube of the torch.

Art. Nr.	Weight	Quantity
12476	0,15 kg	1

MULTI-NECK TUBES



USE:
designed to connect UNIVERSAL heating torches to the neck tube.

Art. Nr.	Type	Connection	Width	Weight	Quantity
0763232	2 outlets	M20 × 1	150 mm	0,14 kg	1
0763233	4 outlets	M20 × 1	450 mm	0,29 kg	1

SOLDERING TORCH KIT UNIVERSAL



USE:
for WT soldering iron UNIVERSAL.

Art. Nr.	Connection	Quantity
2527	M14 × 1	1

TECHNICAL DATA

Working pressure:	1,5 bar
Consumption PB:	120 g/h
Output:	110 kW
Length:	140 mm
Weight:	0,19 kg
Gas:	P, PB

SOLDERING IRON UNIVERSAL



USE:
for soldering jobs and roof making. The soldering iron weight is 350g.

Art. Nr.	Connection	Quantity
2543	M14 × 1	1

TECHNICAL DATA

Working pressure:	1,5 bar
Consumption PB:	120 g/h
Output:	1,55 kW
Length:	140 mm
Weight:	0,64 kg
Gas:	P, PB

SET UNIVERSAL ROOFER



CONTENT:
Shank with a gas saver, heating torch H60, neck tube 600 mm, PB hose fitted 5m, DN 6,3. Without regulator.

Art. Nr.	Description	Quantity
0764262	UNIVERSAL Roofer (steel)	1

SETS UNIVERSAL PROPALINE



Propaline 1

Shank with a gas saver, heating torch H50, neck tube 350 mm, torch AT, hose nipple, nut G 3/8" LH

Art. Nr.	Description	Quantity
0763248	Propaline 1	1



Propaline 2

Shank with a gas saver, heating torch H40 and H60, support H, neck tube 350 mm and 600 mm, hose nipple, nut G 3/8" LH.

Art. Nr.	Description	Quantity
0763249	Propaline 2	1



Propaline 3

Shank with a gas saver, brazing turbo torch Ø20, Ø17, Ø14, hose nipple, nut G 3/8" LH.

Art. Nr.	Description	Quantity
0763250	Propaline 3	1



Propaline 4

Shank with a gas saver, heating torch H20, neck tube 600 mm, hose nipple, nut G 3/8" LH.

Art. Nr.	Description	Quantity
0763257	Propaline 4	1



Propaline 4

Shank with a gas saver, heating torch H20, neck tube 600 mm, hose nipple, nut G 3/8" LH.

Art. Nr.	Description	Quantity
0763258	Propaline 5	1

Shank with a gas saver, heating torch H30, neck tube 75 mm, hose nipple, nut G 3/8" LH, lighter.

Art. Nr.	Description	Quantity
0763256	Propaline 6	1

Propaline 6

AIR PROPANE EQUIPMENT

EUROMAT

Piezoelectronic ignition. Torch can be revolved in the shank in 360 degrees. Swiveling hoseconnection. Arresting the control lever of incoming gas valve in the working position. Integrated foldup stand. Use: the shank is used with soldering and brazing EUROMAT torches.



TECHNICAL DATA

Working pressure:	up to 4 bar
Length:	180 mm
Weight:	0,33 kg
Gas:	P, PB
Hose connection:	G 3/8" LH

Art. Nr.	Description	Quantity
3046	Shank	1

BRAZING TORCH TT TURBO-EUROMAT

Piezoelectronic ignition.

USE:

for soldering and brazing jobs, especially of copper pipes.



Art. Nr.	ø	Consumption	Output	Length	Quantity
17137	13 mm	110 g/h	1,43 kW/h	180 mm	1
17186	15 mm	180 g/h	1,55 kW/h	180 mm	1
17202	17 mm	320 g/h	2,86 kW/h	185 mm	1
17210	19 mm	415 g/h	4,89 kW/h	185 mm	1
17228	22 mm	510 g/h	6,58 kW/h	190 mm	1

TECHNICAL DATA

Working pressure:	1,5 - 2,0 bar
Gas:	P, PB

SOLDERING TORCH PT-EUROMAT



USE: for soldering, brazing and point heating.

Art. Nr.	ø	Consumption	Output	Length	Quantity
17129	3 mm	41 g/h	0,53 kW/h	180 mm	1
17137	5 mm	120 g/h	1,55 kW/h	180 mm	1
17145	7 mm	222 g/h	2,86 kW/h	185 mm	1
17152	9 mm	380 g/h	4,89 kW/h	185 mm	1
17160	11mm	511 g/h	6,58 kW/h	190 mm	1

TECHNICAL DATA

Working pressure: 1,5 - 2,0 bar

Gas: P, PB

SHRINK TORCH EUROMAT



Art. Nr.	Type (ø)	Consumption	Output	Lenhgt	Quantity
3822	22 mm	424 g/h	5,46 kW/h	200 mm	1
4226	30 mm	985 g/h	12,7 kW/h	202 mm	1

TECHNICAL DATA

Working pressure: 1,5 - 2,0 bar

Gas: P, PB

PROPALINE - REGULATORS

REGULATOR PROPANE-BUTANE FIX



Art. Nr.	Outlet pressure	Inlet connection	Outlet connection	Quantity
25148	1,5 bar	G 3/8 LH	G 3/8 LH	1
25155	2 bar	G 3/8 LH	G 3/8 LH	1

RUBBER HOSES AND ACCESSORIES



PROPALINE - ACCESSORIES

PROPANE-BUTANE HOSE - FITTED DN 4 × 4



Art. Nr.	Length	Inner Ø	Outer Ø	Quantity
546900002154	1,5 m	4 mm	12 mm	1
546900002162	2,0 m	4 mm	12 mm	1
546900002188	3,0 m	4 mm	12 mm	1
546900002238	4,0 m	4 mm	12 mm	1
546900002196	5,0 m	4 mm	12 mm	1
546900002345	10,0 m	4 mm	12 mm	1

TECHNICAL DATA	
Inlet connection:	G 3/8" LH
Outlet connection:	G 3/8" LH
Pressure class:	PB 30

PROPANE-BUTANE HOSE - FITTED DN 6,3 × 5



Art. Nr.	Length	Inner Ø	Outer Ø	Quantity
546900037184	1,5 m	6,3 mm	17,6 mm	1
546900036202	5,0 m	6,3 mm	17,6 mm	1
546900039792	10,0 m	6,3 mm	17,6 mm	1

TECHNICAL DATA	
Inlet connection:	G 3/8" LH
Outlet connection:	G 3/8" LH
Pressure class:	PB 30

HOSE BREAK VALVE SBS



Designed to fit on outlet connection of the regulator.

USE:

a safety valve for immediate gas flow shut - off in case of sudden flow increasing (hose damage).

Art. Nr.	Type	Nominal flow rate 1,5 bar	Nominal flow rate 4 bar	Quantity
3087	SBS 1	1,5 kg/h	2,2 kg/h	1
3111	SBS 2	4,0 kg/h	6,0 kg/h	1
3129	SBS 3	6,0 kg/h	8,5 kg/h	1
3202	SBS 4	10,0 kg/h	14,0 kg/h	1

ROTATING HOSE NIPPLE



Designed to fit on outlet connection of the regulator.

USE:

a safety valve for immediate gas flow shut - off in case of sudden flow increasing (hose damage).

Art. Nr.	Connection	Quantity
23507	G 3/8 LH	1

RUBBER HOSES - BULK

SINGLE HOSE OXYGEN (BLUE) ISO 3821 (FOR WELDING AND ALLIED PROCESSES)

ISO 3821



WORKING
PRESSURE
20 BAR

Rubber hose for use with Oxygen in cutting and welding and allied processes. Not suitable for LPG, MPS and CNG.

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue synthetic rubber resistant to abrasion and weather
- > Smooth surface

TECHNICAL DATA	
Temperature:	20°C / +60°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821

Art. Nr.	Ø int × Ø ext	Coil	Stock class
RH001000-050	4×11 mm	50 m	DFW
272063035204	6,3×12,3 mm	20 m	DFW
272063035404	6,3×12,3 mm	40 m	DFW
RH004000-050	6,3×13,3 mm	50 m	DFW
RH005000-050	6,3×16,3 mm	50 m	DFW
RH006000-050	8×15 mm	50 m	DFW
RH007000-050	9×16 mm	50 m	DFW
272100035200	10×17 mm	20 m	DFW
272100035400	10×17 mm	40 m	DFW
RH008000-050	10×17 mm	50 m	DFW

* The full length may be a combination of max two short lengths.

SINGLE HOSE ACETYLENE (RED) ISO 3821 (FOR WELDING AND ALLIED PROCESSES)

ISO 3821



WORKING
PRESSURE
20 BAR

Rubber hose for use with Acetylene in cutting and welding and allied processes. Not suitable for LPG, MPS and CNG.

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Red synthetic rubber resistant to abrasion and weather
- > Smooth surface

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821

Art. Nr.	Ø int × Ø ext	Coil	Stock class
RH011000-050	4×11 mm	50 m	DFW
272063035205	6,3×12,3 mm	20 m	DFW
272063035405	6,3×12,3 mm	40 m	DFW
RH014000-050	6,3×13,3 mm	50 m	DFW
RH016000-050	8×15 mm	50 m	DFW
RH017000-050	9×16 mm	50 m	DFW
272100035201	10×17 mm	20 m	DFW
272100035401	10×17 mm	40 m	DFW
RH018000-050	10×17 mm	50 m	DFW

* The full length may be a combination of max two short lengths.

According to standards the welding rubber hoses do not expire. It's reasonable to replace them periodically according to their wear and the common sense. Suggested max lifetime is 5 years after installation. The date marked on the hose is the production date.

RUBBER HOSES - BULK

SINGLE HOSE ARGON (BLACK) ISO 3821 (FOR WELDING AND ALLIED PROCESSES)

ISO 3821



WORKING
PRESSURE
20 BAR

Rubber hose for use with Argon in cutting and welding and allied processes. Suitable also for hydrogen, CO₂, Nitrogen for welding and cutting. Not suitable for LPG, MPS and CNG.

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Black synthetic rubber resistant to abrasion and weather
- > Smooth surface

TECHNICAL DATA			
Temperature:		-20°C / +60°C	
Safety factor:		3:1	
Marking:		In compliance with the below mentioned standard	
Working pressure:		20 bar	
Bursting pressure:		60 bar	
Standards:		ISO 3821	
Art. Nr.	Ø int × Ø ext	Coil	Stock class
272140612040	6×12 mm	40 m	DFW

* The full length may be a combination of max two short lengths.

SINGLE HOSE PROPANE/BUTANE (ORANGE) ISO 3821 (FOR WELDING AND ALLIED PROCESSES)

ISO 3821



WORKING
PRESSURE
20 BAR

Rubber hose for use with Propane/Butane in cutting and welding and allied processes. Suitable for Liquid Petroleum Gas (LPG), Methylacetylene-propadiene (MPS) gas, Compressed Natural Gas (CNG).

- > Inner tube: Synthetic rubber resistant to LPG and Propane/Butane gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Orange synthetic rubber resistant to abrasion and weather
- > Smooth surface

TECHNICAL DATA			
Temperature:		-20°C / +60°C	
Safety factor:		3:1	
Marking:		In compliance with the below mentioned standard	
Working pressure:		20 bar	
Bursting pressure:		60 bar	
Standards:		ISO 3821	
Art. Nr.	Ø int × Ø ext	Coil	Stock class
272321009131	4×11 mm	50 m	DFW
272063035206	6,3×13,3 mm	20 m	DFW
272321063035	6,3×13,3 mm	50 m	DFW
272080035203	8×15 mm	20 m	DFW
272321009136	8×15 mm	50 m	DFW
272321035090	9 ×16 mm	50 m	DFW
272100035202	10×17 mm	20 m	DFW
272100035402	10×17 mm	40 m	DFW
272321311006	10×17 mm	50 m	DFW

* The full length may be a combination of max two short lengths.

According to standards the welding rubber hoses do not expire. It's reasonable to replace them periodically according to their wear and the common sense. Suggested max lifetime is 5 years after installation. The date marked on the hose is the production date.

RUBBER HOSES - BULK

SINGLE HOSE PROPANE/BUTANE (ORANGE) EN 16436-1

EN 16436-1

Rubber hose for transport of Propane, Butane. Suitable for Liquid Petroleum Gas (LPG), Methylacetylene-propadiene (MPS) gas, Compressed Natural Gas (CNG)

- > Inner tube: Synthetic rubber resistant to LPG and Propane/Butane gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Orange synthetic rubber resistant to abrasion and weather
- > Smooth surface

TECHNICAL DATA	
Temperature:	-30°C / +70°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	30 bar
Bursting pressure:	75 bar
Standards:	EN 16436-1

WORKING
PRESSURE
30 BAR

Art. Nr.	Ø int × Ø ext	Coil	Stock class
272030035004	4×12 mm	50 m	DFW
272030005063	6,3×16,3 mm	50 m	DFW

* The full length may be a combination of max two short lengths.

HOSE CLIPS

HOSE CLIPS ONE EAR WITH INSERT

Stainless steel clip with one ear and insert ideal for mounting and to protect the hose from pinches and damages. Ensure uniform compression.



Art. Nr.	Descr.	Material	Hoses	Corrosion	Qt.	Stock class
WP24020	Clip 13 mm 1-EAR	Stainless steel	13-14 mm	> 800h	20	DFW
WP24022	Clip 15 mm 1-EAR	Stainless steel	15-16 mm	> 800h	20	DFW

HOSE CLIPS DOUBLE EAR

Zinc plated steel clip with 2 ears. The 2 ears provide greater adjustability.

Art. Nr.	Descr.	Material	Hoses	Corrosion	Qt.	Stock class
90330	Clip 13-15 mm 2-EARS	Zinc plated steel	13-14 mm	> 96h	20	DFW
90340	Clip 15-18 mm 2-EARS	Zinc plated steel	15-16 mm	> 96h	20	DFW

HOSE CLIPS WITH SCREW

Stainless steel clip with clamping system in zinc plated steel. Useful to clamp a wide range of hoses with a single size. Width is 9×0,6 mm.

Art. Nr.	Descr.	Material	Hoses	Qt.	Stock class
C10000046	Clip SCREW	Stainless steel	8-12 mm	20	DFW
C10000047	Clip SCREW	Stainless steel	10-16 mm	20	DFW
WP90352	Clip SCREW	Stainless steel	12-20 mm	20	DFW

PLIERS FOR HOSE CLIP

Pliers with not sharp jaws to tighten the clips. No damage for both clip and hose.

Art. Nr.	Descr.	Qt.	Stock class
WP24024	Pliers for hose clip	1	DFW



RUBBER HOSES - BULK

TWIN HOSE OXYGEN/ACETYLENE (BLUE/RED) ISO 3821 (FOR WELDING AND ALLIED PROCESSES)

ISO 3821

Rubber twin hose for use with Oxygen/Acetylene cutting and welding and allied processes.
Not suitable for LPG, MPS and CNG

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue/red synthetic rubber resistant to abrasion and weather



WORKING
PRESSURE
20 BAR

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821

Art. Nr.	OX Ø int × Ø ext	ACE Ø int × Ø ext	Coil	Stock class
272333044030	4×11 mm	4×11 mm	25 m	DFW
272333044004	4×11 mm	4×11 mm	40 m	DFW
272333166025	6,3×13,3 mm	6,3×13,3 mm	25 m	DFW
272333066617	6,3×13,3 mm	6,3×13,3 mm	40 m	DFW
272333066100	6,3×13,3 mm	6,3×13,3 mm	100 m	DFW
272333086010	6,3×13,3 mm	8,0×15,0 mm	25 m	DFW
272333068022	6,3×13,3 mm	8,0×15,0 mm	40 m	DFW
272333169025	6,3×13,3 mm	9,0×16,0 mm	25 m	DFW
272333069070	6,3×16,3 mm	9,0×16,0 mm	25 m	DFW
272333088050	8×15 mm	8×15 mm	25 m	DFW
272333088100	8×15 mm	8×15 mm	100 m	DFW
272312727025	10×17 mm	10×17 mm	25 m	DFW
272333110081	10×17 mm	10×17 mm	40 m	DFW

* The full length may be a combination of max two short lengths.

TWIN HOSE OXYGEN/PROPANE (BLUE/ORANGE) ISO 3821 (FOR WELDING AND ALLIED PROCESSES)

ISO 3821

Rubber twin hose for use with Oxygen/Propane cutting and welding and allied processes.
Suitable for Liquid Petroleum Gas (LPG), Methylacetylene-propadiene (MPS) gas, Compressed Natural Gas (CNG)

- > Inner tube OXY: Synthetic rubber resistant to the welding gases
- > Inner tube PROP: Synthetic rubber resistant to LPG and Propane/Butane gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue/orange synthetic rubber resistant to abrasion and weather



WORKING
PRESSURE
20 BAR

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821

Art. Nr.	OXY Ø int × Ø ext	PROP Ø int × Ø ext	Coil	Stock class
272333030609	6,3×16,3 mm	9,0×16,0 mm	50 m	DWF

* The full length may be a combination of max two short lengths.

According to standards the welding rubber hoses do not expire. It's reasonable to replace them periodically according to their wear and the common sense. Suggested max lifetime is 5 years after installation. The date marked on the hose is the production date.

RUBBER HOSES - WITH FITTINGS

SINGLE HOSE OXYGEN (BLUE) ISO 3821 WITH FITTINGS AND NON RETURN VALVE (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



WORKING
PRESSURE
20 BAR

Rubber hose for use with Oxygen in cutting and welding and allied processes.

Not suitable for LPG, MPS and CNG

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue synthetic rubber resistant to abrasion and weather
- > **NON RETURN VALVE** in the outlet

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821(hose) EN 1256 (hose assembly)

Art. Nr.	Ø int × Ø ext	Inlet-Outlet	Coil	Stock class
841065	6×13 mm	G3/8" - G1/4"	5 m	DFW
841067	6×13 mm	G3/8" - G3/8"	5 m	DFW
841068	6×13 mm	G3/8" - G3/8"	10 m	MTO
841071	6×13 mm	9/16"UNF - 9/16"UNF	10 m	MTO
841064	6×13 mm	9/16"UNF - 9/16"UNF	20 m	MTO
841089	8×15 mm	G3/8" - G3/8"	10 m	MTO
841105	10×17 mm	G3/8" - G3/8"	5 m	DFW
841109	10×17 mm	G3/8" - G3/8"	10 m	DFW
841102	10×17 mm	G3/8" - G3/8"	20 m	MTO

SINGLE HOSE ACETYLENE (RED) ISO 3821 WITH FITTINGS AND NON RETURN VALVE (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



WORKING
PRESSURE
20 BAR

Rubber hose for use with Acetylene in cutting and welding and allied processes.

Not suitable for LPG, MPS and CNG

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Red synthetic rubber resistant to abrasion and weather
- > **NON RETURN VALVE** in the outlet

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821(hose) EN 1256 (hose assembly)

Art. Nr.	Ø int × Ø ext	Inlet-Outlet	Coil	Stock class
849065	6×13 mm	G3/8" LH - G1/4" LH	5m	DFW
849064	6×13 mm	G3/8" LH - G3/8" LH	5 m	DFW
849068	6×13 mm	G3/8" LH - G3/8" LH	10 m	MTO
849071	6×13 mm	9/16"UNF LH - 9/16"UNF LH	10 m	MTO
849067	6×13 mm	9/16"UNF LH - 9/16"UNF LH	20 m	MTO
849089	8×15 mm	G3/8" LH - G3/8" LH	10 m	MTO
849105	10×17 mm	G3/8" LH - G3/8" LH	5 m	DFW
849109	10×17 mm	G3/8" LH - G3/8" LH	10 m	DFW
849102	10×17 mm	G3/8" LH - G3/8" LH	20 m	MTO

RUBBER HOSES - WITH FITTINGS

SINGLE HOSE PROPANE/BUTANE (ORANGE) ISO 3821 WITH FITTINGS AND NON RETURN VALVE (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



WORKING
PRESSURE
20 BAR

Rubber hose for use with Propane/Butane in cutting and welding and allied processes.
Suitable for Liquid Petroleum Gas (LPG), Methylacetylene-propadiene (MPS) gas, Compressed Natural Gas (CNG)

- > Inner tube: Synthetic rubber resistant to LPG and Propane/Butane gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Orange synthetic rubber resistant to abrasion and weather
- > **NON RETURN VALVE** in the outlet

TECHNICAL DATA				
Temperature:	-20°C / +60°C			
Safety factor:	3:1			
Marking:	In compliance with the below mentioned standard			
Working pressure:	20 bar			
Bursting pressure:	60 bar			
Standards:	ISO 3821(hose) EN 1256 (hose assembly)			
Art. Nr.	Ø int × Ø ext	Inlet-Outlet	Coil	Stock class
849113	6×13 mm	G3/8" LH - G3/8" LH	5 m	MTO
849114	6×13 mm	G3/8" LH - G3/8" LH	10 m	DFW
849117	8×15 mm	G3/8" LH - G3/8" LH	10 m	DFW
849119	10×17 mm	G3/8" LH - G3/8" LH	5 m	MTO
849120	10×17 mm	G3/8" LH - G3/8" LH	10 m	DFW
849121	10×17 mm	G3/8" LH - G3/8" LH	20 m	DFW

SINGLE HOSE PROPANE/BUTANE (ORANGE) EN 16436-1 WITH FITTINGS

EN 16436-1
EN 1256



WORKING
PRESSURE
30 BAR

Rubber hose for transport of Propane, Butane.
Suitable for Liquid Petroleum Gas (LPG), Methylacetylene-propadiene (MPS) gas, Compressed Natural Gas (CNG).

- > Inner tube: Synthetic rubber resistant to LPG and Propane/Butane gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Orange synthetic rubber resistant to abrasion and weather

TECHNICAL DATA				
Temperature:	-30°C / +70°C			
Safety factor:	3:1			
Marking:	In compliance with the below mentioned standard			
Working pressure:	30 bar			
Bursting pressure:	75 bar			
Standards:	EN 16436-1 (hose) EN 1256 (hose assembly)			
Art. Nr.	Ø int × Ø ext	Inlet-Outlet	Coil	Stock class
546900002154	4×12 mm	G3/8" LH - G3/8" LH	1,5 m	DFW
546900002162	4×12 mm	G3/8" LH - G3/8" LH	2 m	DFW
546900016956	4×12 mm	G3/8" LH - G3/8" LH	2,5 m	DFW
546900002188	4×12 mm	G3/8" LH - G3/8" LH	3 m	DFW
546900002238	4×12 mm	G3/8" LH - G3/8" LH	4 m	DFW
546900002196	4×12 mm	G3/8" LH - G3/8" LH	5 m	DFW
546900002345	4×12 mm	G3/8" LH - G3/8" LH	10 m	DFW
546900002071	4×12 mm	G3/8" LH - M 10×1 LH	2 m	DFW
546900002097	4×12 mm	G3/8" LH - M 10×1 LH	3 m	DFW
546900002113	4×12 mm	G3/8" LH - M 10×1 LH	5 m	DFW
546900037184	6×16 mm	G3/8" LH - G3/8" LH	3 m	DFW
546900036202	6×16 mm	G3/8" LH - G3/8" LH	5 m	DFW
546900039792	6×16 mm	G3/8" LH - G3/8" LH	10 m	DFW

RUBBER HOSES - WITH FITTINGS

TWIN HOSE OXYGEN/ACETYLENE (BLUE/RED) ISO 3821 WITH FITTINGS AND NON RETURN VALVE (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



**WORKING
PRESSURE
20 BAR**

Rubber twin hose for use with Oxygen/Acetylene cutting and welding and allied processes.
Not suitable for LPG, MPS and CNG

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue/red synthetic rubber resistant to abrasion and weather
- > **NON RETURN VALVE** in the outlet

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821 (hose) EN-1256 (hose assembly)

Art. Nr.	OXY Ø int × Ø ext	OXY Inlet-Outlet	ACE Ø int × Ø ext	ACE Inlet-Outlet	Coil	Stock class
849060	6,3×13,3 mm	G3/8"-G1/4"	6,3×13,3 mm	G3/8" LH-G1/4" LH	5 m	DFW
849066	6,3×13,3 mm	G3/8"-G1/4"	6,3×13,3 mm	G3/8" LH-G1/4" LH	10 m	DFW
841060	6,3×13,3 mm	G3/8"-G3/8"	6,3×13,3 mm	G3/8" LH-G3/8" LH	5 m	MTO
849061	6,3×13,3 mm	G3/8"-G3/8"	6,3×13,3 mm	G3/8" LH-G3/8" LH	10 m	MTO
841080	8×15 mm	G3/8"-G3/8"	8×15 mm	G3/8" LH-G3/8" LH	5 m	DFW
841081	8×15 mm	G3/8"-G3/8"	8×15 mm	G3/8" LH-G3/8" LH	10 m	DFW
849110	10×17 mm	G3/8"-G3/8"	10×17 mm	G3/8" LH-G3/8" LH	5 m	MTO
849111	10×17 mm	G3/8"-G3/8"	10×17 mm	G3/8" LH-G3/8" LH	10 m	MTO
849112	10×17 mm	G3/8"-G3/8"	10×17 mm	G3/8" LH-G3/8" LH	20 m	MTO

TWIN HOSE OXYGEN/ACETYLENE (BLUE/RED) ISO 3821 WITH FITTINGS AND TERMINAL CLAMP (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



**WORKING
PRESSURE
20 BAR**

Rubber twin hose for use with Oxygen/Acetylene cutting and welding and allied processes.
Not suitable for LPG, MPS and CNG

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue/red synthetic rubber resistant to abrasion and weather
- > with **TERMINAL CLAMP**

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821 (hose) EN-1256 (hose assembly)

Art. Nr.	OXY Ø int × Ø ext	OXY Inlet-Outlet	ACE Ø int × Ø ext	ACE Inlet-Outlet	Coil	Stock class
14008011	4×11 mm	G1/4" -G1/4"	4×11 mm	G3/8" LH-G3/8" LH	10 m	DFW
14008246	4×11 mm	G1/4" -G1/4"	4×11 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008242	6,3×13,3 mm	G1/4" -G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	10 m	DFW
14008243	6,3×13,3 mm	G1/4" -G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008269	6,3×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	5 m	DFW
14008239	6,3×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	10 m	DFW
14008270	6,3×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	15 m	DFW
14008240	6,3×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008241	6,3×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	30 m	DFW
14008245	6,3×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	40 m	MTO

RUBBER HOSES - WITH FITTINGS

COUPLED HOSES OXYGEN/ACETYLENE (BLUE/RED) ISO 3821 WITH FITTINGS AND TERMINAL CLAMP (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



**WORKING
PRESSURE
20 BAR**

Rubber twin hose for use with Oxygen/Acetylene cutting and welding and allied processes.
Not suitable for LPG, MPS and CNG

- > Inner tube: Synthetic rubber resistant to the welding gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue/red synthetic rubber resistant to abrasion and weather
- > with **TERMINAL CLAMP**

TECHNICAL DATA	
Temperature:	-20°C / +60°C
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821 (hose) EN-1256 (hose assembly)

Art. Nr.	OXY Ø int × Ø ext	OXY Inlet-Outlet	ACE Ø int × Ø ext	ACE Inlet-Outlet	Coil	Stock class
14008222	4×11 mm	G1/4" -G1/4"	4×11 mm	G3/8" LH-G3/8" LH	5 m	DFW
14008223	4×11 mm	G1/4" -G1/4"	4×11 mm	G3/8" LH-G3/8" LH	10 m	DFW
14008224	4×11 mm	G1/4" -G1/4"	4×11 mm	G3/8" LH-G3/8" LH	15 m	MTO
14008225	4×11 mm	G1/4" -G1/4"	4×11 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008217	6,3×13,3 mm	G1/4" -G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	5 m	DFW
14008218	6,3×13,3 mm	G1/4" -G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	10 m	DFW
14008219	6,3×13,3 mm	G1/4" -G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	15 m	DFW
14008220	6,3×13,3 mm	G1/4" -G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008028	6,3 ×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	5 m	DFW
14008029	6,3 ×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	10 m	DFW
14008061	6,3 ×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	15 m	DFW
14008062	6,3 ×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008250	6,3 ×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	25 m	DFW
14008216	6,3 ×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	30 m	DFW
14008237	6,3 ×16,0 mm	G1/4" -G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	40 m	DFW

RUBBER HOSES - WITH FITTINGS

COUPLED HOSES OXYGEN/PROPANE (BLUE/ORANGE) ISO 3821 WITH FITTINGS AND TERMINAL CLAMP
(FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



WORKING
PRESSURE
20 BAR

Coupled rubber hoses for use with Oxygen/Propane cutting and welding and allied processes. Suitable for Liquid Petroleum Gas (LPG), Methylacetylene-propadiene (MPS) gas, Compressed Natural Gas (CNG).

- > Inner tube OXY: Synthetic rubber resistant to the welding gases
- > Inner tube PROP: Synthetic rubber resistant to LPG and Propane/Butane gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Blue/Orange synthetic rubber resistant to abrasion and weather
- > with **TERMINAL CLAMP**

TECHNICAL DATA						
Temperature:			-20°C / +60°C			
Marking:			In compliance with the below mentioned standard			
Working pressure:			20 bar			
Bursting pressure:			60 bar			
Standards:			ISO 3821 (hose) EN-1256 (hose assembly)			
)						
Art. Nr.	OXY Ø int × Ø ext	OXY Inlet-Outlet	ACE Ø int × Ø ext	ACE Inlet-Outlet	Coil	Stock class
14008227	6,3×13,3 mm	G1/4"-G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	5 m	DFW
14008228	6,3×13,3 mm	G1/4"-G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	10 m	DFW
14008229	6,3×13,3 mm	G1/4"-G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	15 m	DFW
14008230	6,3×13,3 mm	G1/4"-G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008231	6,3×13,3 mm	G1/4"-G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	25 m	MTO
14008232	6,3×13,3 mm	G1/4"-G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	30 m	DFW
14008233	6,3×13,3 mm	G1/4"-G1/4"	6,3×13,3 mm	G3/8" LH-G3/8" LH	40 m	DFW
14008236	6,3×16,0 mm	G1/4"-G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	20 m	DFW
14008249	6,3×16,0 mm	G1/4"-G1/4"	9,0×16,0 mm	G3/8" LH-G3/8" LH	40 m	DFW

RUBBER HOSES - TOOLS



GAS WELDING HOSE REELS

The HOSE REELS OSV is a professional device to distribute the welding gases (oxygen, acetylene, propane) to the workplace without leaving the hoses around the workshop.

The hose reel is equipped with an AUTOMATIC REWIND system which allows an easy recall of the hose.

Supplied WITHOUT HOSE, it is equipped with G3/8M connections and can be combined with fitted hose (sold separately). In addition, it is equipped with nuts and hose nipples for a full compatibility with different hose sizes and gases.



- > The hose can be stopped at the desired length
- > The hot-galvanized steel structure is moulded and coated with electrostatic polyester powder, resistant to UV rays.
- > The open structure allows an easy assembly and replacement of the hose and the control of the rewinding
- > The hose guide can be fixed in 3 different positions allowing the installation in multiple positions
- > Lateral covers to protect the hose connections

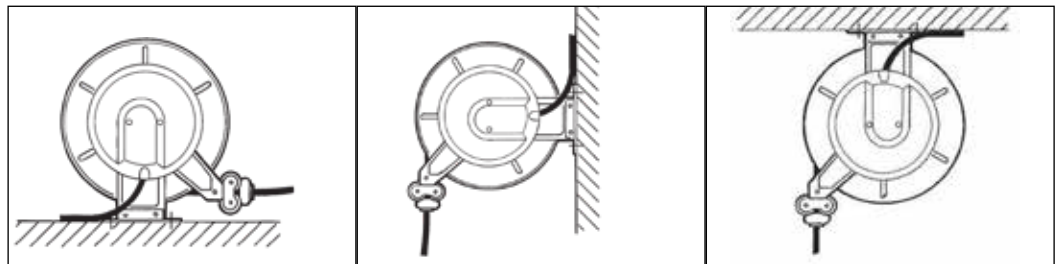
It can host:

hose 6×13 up to 25m

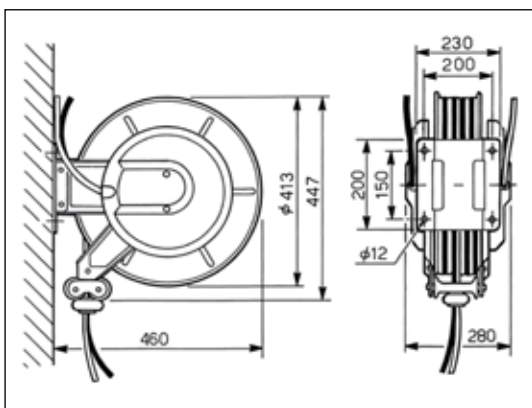
hose 8×15 up to 20m

hose 10×17 up to 15m

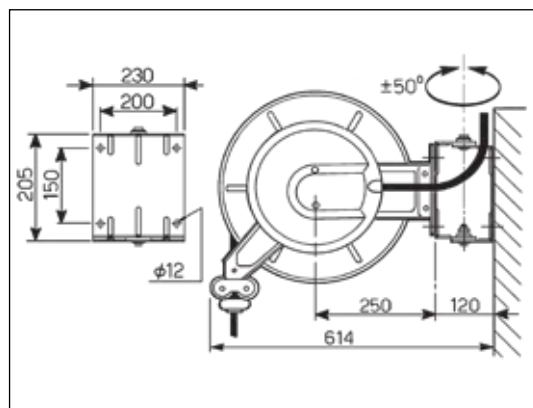
ONLY 20 KG!



Art.Nr.	Description	QTY	Stock class
TH030100	HOSE REELS OSV without hose	1	MTO
TH030200	SWIVEL BRACKET	1	MTO



Standard configuration



Option with Swivel bracket



Swivel bracket

GENERAL SAFETY PRECAUTIONS AND RECOMMENDED PROCEDURES

GCE BUTBRO RUBBER HOSE

Use only hose in good condition, fitted with special hose connections attached by permanent ferrules. Do not expose the hose to heat, traffic, slag and sparks from welding and cutting operations, oil or grease. Scrap it as soon as it becomes leaky. Good hose will re-pay the cost many times by long life, safe operation and elimination of waste through leaks.

GCE BUTBRO PRESSURE REGULATORS

Always treat a regulator as a precision instrument. Do not expose it to knocks, jars or violent pressure caused by the sudden opening of the cylinder valve. Release the pressure on the control spring when shutting down. Never use the regulator on any gas except for that for which it was designed do not use regulator with broken gauges. Never use oil or grease.

GCE BUTBRO BLOW PIPES / CUTTERS

For lighting up and extinguishing any type of blow pipe the maker's instructions should always be followed. To clean the nozzle, use the manufacturer's nozzle cleaner set.

GCE BUTBRO GOGGLES

Goggles should be worn at all times when welding and cutting.

ASSEMBLY OF EQUIPMENT

1. Stand both both cylinders vertical. Oxygen cylinders are painted black. Acetylene are painted maroon, and propane cylinders are painted red.
2. See that joining surfaces in cylinder valves and regulators are free from oil and grease.
3. Open the valve on the oxygen cylinder momentarily in order to sniff the cylinder valve, dislodging dirt or obstructions, close valve.
4. Open a fuel gas cylinder valve as in item 3.
5. Check pressure rating on regulator is suitable for cylinder in use. Screw the oxygen regulator in to the oxygen cylinder valve. The cylinder valve and the regulator inlet stem, and the regulator outlet connection have a right hand screw thread.
6. Screw the fuel gas regulator in to the gas cylinder valve. The cylinder valve, the regulator inlet and the regulator outlet have left hand screw thread.
7. Tighten the regulator in to the cylinder valve Do not use excessive force, but make certain that the joints are gas tight.
8. Connect the hose to the screwed outlets of the regulator by means of screw connections secured in the ends of the hose.
Blow the hose through before attaching to regulator or to the blow pipe in order to remove dust or dirt, or chalk when the hose is new.
OXYGEN MUST NOT BE USED FOR THIS PURPOSE.
9. Connect the other ends of the hose, that fitted with a hose check valve; to the blow pipe, the fuel gas hose to the left hand connections, the oxygen hose to the right hand connection. Keep the blow pipe control valves closed.
10. Fit the appropriate sized nozzle to the blow pipe. To obtain best possible results from GCE BUTBRO blow pipes always use GCE BUTBRO precision nozzles.

LIGHTNING UP PROCEDURE WELDING BLOW PIPES

11. Open the cylinder valve slowly by means of the cylinder key. Do not open suddenly or there may be serious damage to the regulator and the possibility of

an accident. Open the cylinder valve spindle one turn only. Open the fuel gas control valve on the blowpipe and adjust the regulator to give the correct working pressure (this ensures that any air or oxygen is purged from the hose). Repeat the above procedure for the oxygen side.

12A. Open the fuel gas control valve and light gas preferably by means of a GCE BUTBRO spark light making sure that the spark lighter is held at right angles to the nozzle.

12B. Reduce or increase the acetylene supply to the blow pipe valve until the flame just ceases to smoke.

12C. Slowly turn on the oxygen by the blow pipe control valve until the white inner cone in the flame is sharply defined with the merest trace of an acetylene haze. The blow pipe is now correctly adjusted for welding.

CUTTING BLOW PIPES

A. Proceed with assembly of the equipment exactly as outlined for the welding equipment, but remember the following points.

B. After fitting the correct size cutting nozzle, open the cylinder valves and after purging both hoses set the working oxygen pressure on the regulator with the oxygen passing through the cutting oxygen valve on the cutter, hence out through the nozzle. Shut all the valves on the blow pipe, open the fuel gas valve slowly and ignite the gas. Open the heating oxygen valve on the cutter slowly, and adjust the flame to neutral. Now depress the cutting oxygen lever and again adjust the heating gas controls to give a neutral flame. Depress the cutting oxygen lever, and the cutter is ready for use. These instructions apply to the nozzle mix type cutters since these are of the most modern design.

C. When cutting with a combined welding/cutting torch, the oxygen valve on the shank should remain fully open and all adjustments to the oxygens stream made with the oxygen valve on the cutting attachment, as detailed in (B above).

CLOSING DOWN PROCEDURE

13A WELDING EQUIPMENT

Turn off the acetylene first by the blow pipe control valve and then the oxygen. Close the cylinder valve. Open the blow pipe valves one at a time to release the pressure in the hose, i.e. open the oxygen valve and close it; open the fuel gas valve and close it. Unscrew the pressure regulating screws on the oxygen and acetylene regulators.

13B. CUTTING BLOW PIPES

On completion of the work, close the oxygen cutting valve, then the fuel gas and heating oxygen valves. Close the cylinder valves, open and close the cutter, oxygen and fuel gas valves one at a time to release pressure in the hose, unscrew the pressure regulating screws on the oxygen and acetylene regulators.

14. It is most important to emphasise the earlier instructions, that prior to re-lighting either the welding blow pipe or the cutter, the hoses must be purged to ensure a pure and adequate supply of oxygen/fuel gas. Back-fires may occur by one of a combination of circumstances, e.g. defective equipment, incorrect gas pressures, incorrect lighting-up procedure or careless handling of the blow pipe in use, such as permitting the nozzle to touch the work, overheating the tip of the nozzle, or working with a loose nozzle. Usually the back-fire is arrested at the injector in case of low pressure equipment or the source where the gases are mixed, e.g. the head of the cutting blowpipe, and if prompt action is taken in turning off first the oxygen, and then the blowpipe may be re-lit as soon as the cause of the trouble has been eliminated.

In some cases, however, a back-fire may pass beyond the torch and go back into either the oxygen or the fuel gas hoses; it is then termed a 'flash-back' and its

effect is more serious in that it may result in immediate damage to hoses and regulators. In extreme cases there is also a possibility of injury to the operator. The outward signs of flash-back may be squealing or hissing noise, sparks coming out of the nozzle; heavy black smoke; or the blowpipe handle may get hot. If the flame burns back far enough it may even burst through the hose.

Both blow-backs and flash-backs can be avoided by adherence to recommended procedure in the case of

equipment. Investigation shows that such occurrences often occur purely through overfamiliarity leading eventually to neglect of ordinary safeguards.

For example, the blowpipe settings, or a light being applied before the flow of fuel gas is properly established.

IF THE FLAME SNAPS OUT WHEN THE BLOW PIPE IS IN USE IT IS BECAUSE:

- A. The regulator pressure, and/or gas flow, are incorrect - either too high or too low.
- B. The nozzle has been obstructed.
- C. The nozzle is held too close to the work.
- D. The nozzle has become overheated.

When this happens completely shut both the blowpipe valves, check the regulator setting, cylinder pressures, and re-light in accordance with the procedure. In the case of 'D', close the acetylene valve, reduce oxygen flow to a trickle, and plunge the nozzle and head into cold water.

GCE BUTBRO HOSE CHECK VALVES

The hose check valve is a safeguard which will operate independently and without attention from the operator. The device is essentially a non-return valve, the purpose of which is to prevent back feeding or the reverse flow of gases. It must in all cases be fitted to the inlet connections of the blowpipe.

GCE BUTBRO FLASHBACK ARRESTORS

The GCE BUTBRO flashback arrestor is a device to be fitted in the system to protect the upstream equipment. GCE BUTBRO flashback arrestors can be mounted to regulators, in line or to torches depending on the application. The flashback arrestor will contain between 1 and 5 features, depending on its specification.

FA Sintered flame arresting element to put out the flame.

NV Non return valve to prevent the reverse flow of gases.

PV Pressure trip device to temporarily shut off gas supply. The device can be reset after the problem is corrected.

TV Thermal trip device - to permanently shut off gas supply in the case of overheating.

SI Status indicator shows if the unit is ready for use.

2. RECOMMENDED MEDIUM DUTY CUTTING SYSTEM

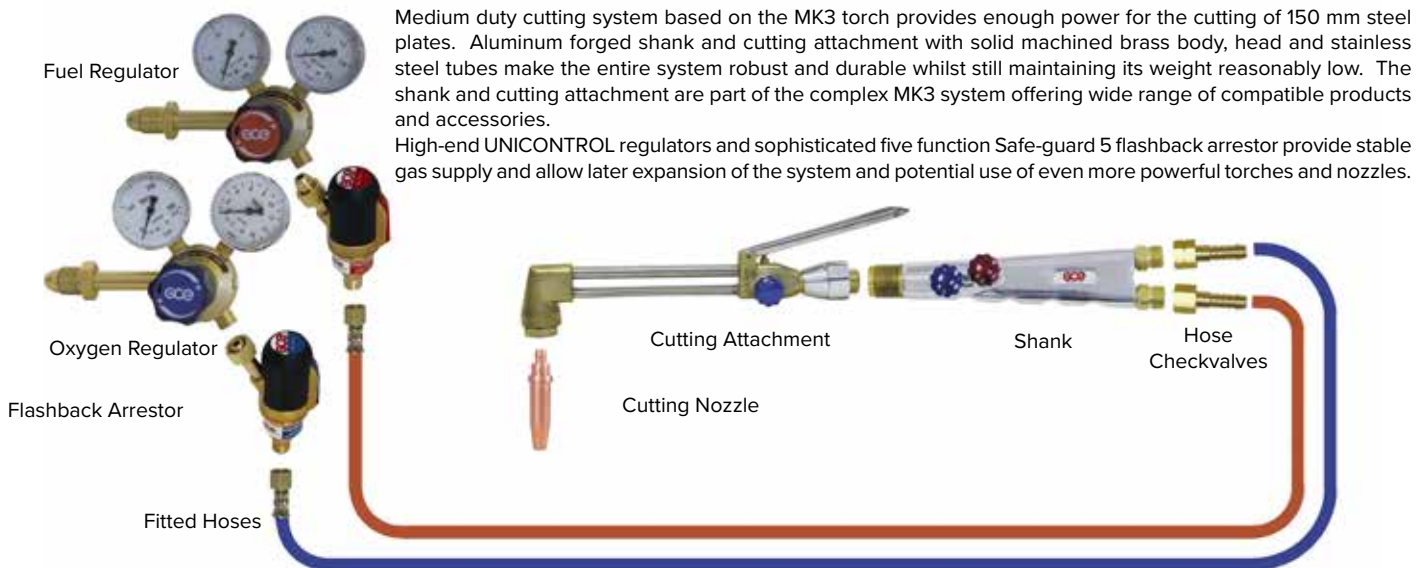


Plate thickness	Nozzle ACE	Nozzle PROP	Torch	Checkvalve	Hose	Flahback Arrestor	Regulators	
3 - 6	0768554	0768880	0766241 - MK3 Shank + 0766242 - MK3 Cutting Attachment	871121 - BV12 G3/8" × 6,3 RH	Hose 6,3 × 13,3	0764457 Safe-guard 5 OXY G3/8" RH	0783652 UNICONTROL OXYGEN	
5 - 12	0768555	0768886		+		+		
10 - 75	0768556	0768879						
70 - 100	0768557	0768878		871122 - BV12 G3/8" × 6,3 LH		0764456 Safe-guard 5 FUEL G3/8" LH	0783640 UNICONTROL ACETYLENE	
90 - 150	0768558	0769481						

3. RECOMMENDED HEAVY DUTY CUTTING SYSTEM

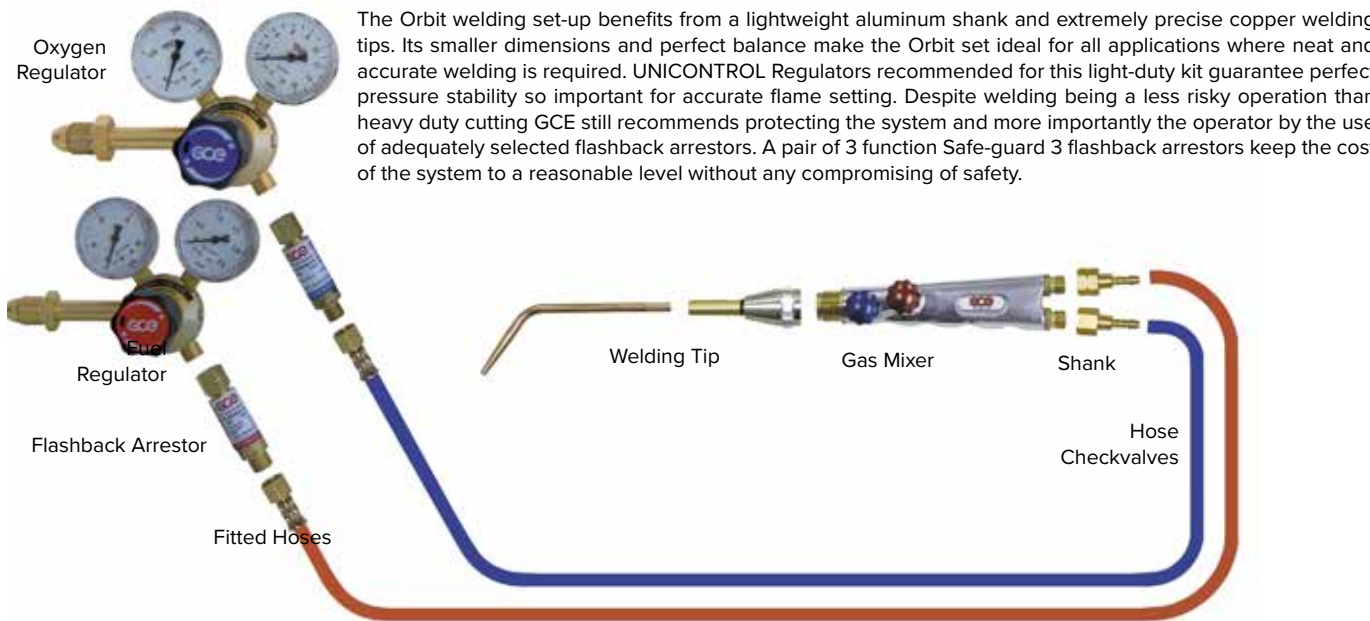


Plate thick-ness	Nozzle ACE	Nozzle PROP	Torch	Checkvalve	Hose	Flahback Arrestor	Regulators
3 - 6	0768670	0769494	88090C* - NM250 Cutting Torch 490 mm or 0766226 - NM250 Cutting Torch 700 mm	871111 - BV12 G3/8" × 8 RH	Hose 8 × 15	0764424 Safe-guard 5 OXY G3/8" RH + 0764425 Safe-guard 5 FUEL G3/8" LH	0783652 UNICONTROL OXYGEN + 0783640 UNICONTROL ACETYLENE
5 - 12	0768635	0769495		or G3/8 × 10 RH			
10 - 75	0768599	0769496		871101			
70 - 100	0768636	0769497		+			
90 - 150	0768662	0769498		871112 - BV12			
140 - 200	0768598	0769499		G3/8" × 8 LH			
190 - 300	0769041	0769501		or G3/8 × 10 LH 871102			

* Please see also other cutter options. Universal or Steelmaster (X511)

OXY-FUEL WELDING SYSTEMS

1. RECOMMENDED LIGHT DUTY WELDING SYSTEM



Oxygen Regulator

Fuel Regulator

Flashback Arrestor

Fitted Hoses

Welding Tip

Gas Mixer

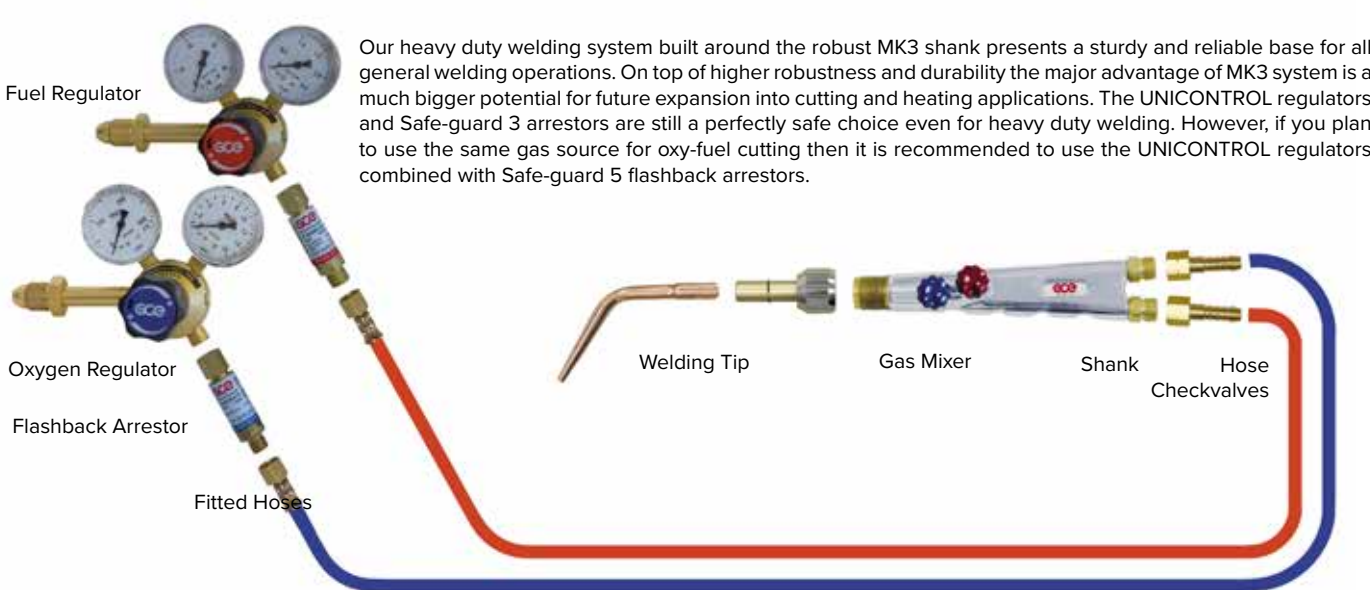
Shank

Hose Checkvalves

The Orbit welding set-up benefits from a lightweight aluminum shank and extremely precise copper welding tips. Its smaller dimensions and perfect balance make the Orbit set ideal for all applications where neat and accurate welding is required. UNICONTROL Regulators recommended for this light-duty kit guarantee perfect pressure stability so important for accurate flame setting. Despite welding being a less risky operation than heavy duty cutting GCE still recommends protecting the system and more importantly the operator by the use of adequately selected flashback arrestors. A pair of 3 function Safe-guard 3 flashback arrestors keep the cost of the system to a reasonable level without any compromising of safety.

Plate thickness	Welding tip	Torch	Checkvalve	Hose	Flashback Arrestors	Regulators
1 - 8 mm	0766232	0766229 - Shank ORBIT	871131 - BV12 HCV 1/4 × 6,3 RH	Hose 6,3 × 13,3	0764470 Safe-guard 3 OXY G3/8"	0783652 UNICONTROL OXYGEN
	0766240	+ 0766231 - MIXER ORBIT	+ 871132 - BV12 HCV 1/4 × 6,3 LH		+ 0764471 Safe-guard 3 FUEL G3/8"LH	+ 0783640 UNICONTROL ACETYLENE

2. RECOMMENDED HEAVY DUTY WELDING SYSTEM



Fuel Regulator

Oxygen Regulator

Flashback Arrestor

Fitted Hoses

Welding Tip

Gas Mixer

Shank

Hose Checkvalves

Our heavy duty welding system built around the robust MK3 shank presents a sturdy and reliable base for all general welding operations. On top of higher robustness and durability the major advantage of MK3 system is a much bigger potential for future expansion into cutting and heating applications. The UNICONTROL regulators and Safe-guard 3 arrestors are still a perfectly safe choice even for heavy duty welding. However, if you plan to use the same gas source for oxy-fuel cutting then it is recommended to use the UNICONTROL regulators combined with Safe-guard 5 flashback arrestors.

Plate thickness	Welding tip	Torch	Checkvalve	Hose	Flashback Arrestor	Regulators
1 - 8 mm	0766244	0766241 - Shank MK3	871121 - BV12 G3/8" × 6,3 RH	Hose 6,3 × 13,3	0764470 Safe-guard 3 OXY G3/8"	0783642 UNICONTROL OXYGEN
	0766252	+ 0766243 - Mixer MK3	+ 871122 - BV12 G3/8" × 6,3 LH		+ 0764471 Safe-guard 3 FUEL G3/8"LH	+ 0783640 UNICONTROL ACETYLENE

OXY-FUEL HEATING SYSTEMS

The precise selection of the correct heating torch is always entirely dependent on the application you need to solve. It is important to know if you plan on brazing, straightening, surface treatment or other thermal treatment. It is always necessary to know the temperature level you need to reach and the speed of preheating.

If required to straighten a welded construction then a torch with a very concentrated flame is needed.

If required for preheating of metal (casting or forging) a completely different torch must be used to heat up the bigger component's surface.

To keep all heating torches working properly it is necessary to use high flow Safe-guard 5 FBA with powerful UNICONTROL regulators. 8 mm hoses are a key factor in delivering enough gases for reliable performance.

Even proper equipment cannot guarantee reliable function if gas supply is not strong enough.

ACETYLENE TORCHES

Max. acetylene supply from a 50-liter bottle = approximately 1 m³/h.

Reliable function of these torches is guaranteed only with supply from an acetylene bundle.

PROPANE TORCHES

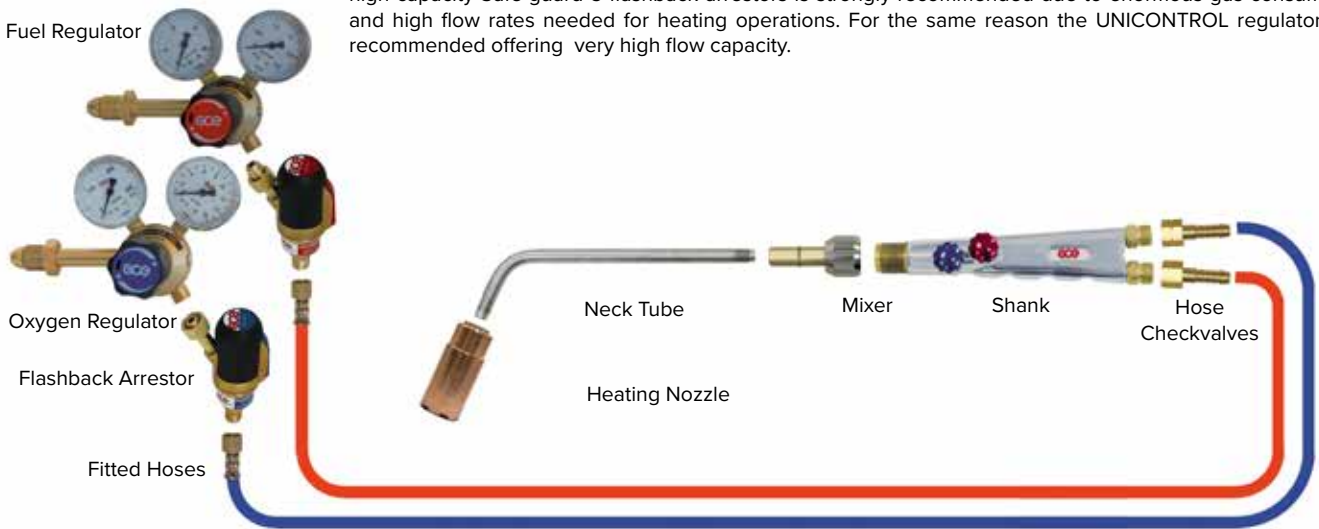
Max. propane supply from a 33-kg bottle = approximately 1,6 m³/h.

Reliable function of these torches is guaranteed only with supply from a propane bundle or tank.

See also page 27 for typical assemblies and other options for Welding/Cutting and Heating using MK3 equipment.

1. RECOMMENDED HEATING SYSTEM

GCE recommend the MK3-based heating system for heating, flame straightening, stress-relieving and other related flame applications. GCE offers a wide selection of specialized torches, burners and superheating heads compatible with standard MK3 shank and gas mixer. Despite propane often being the gas of choice the use of high capacity Safe-guard 5 flashback arrestors is strongly recommended due to enormous gas consumption and high flow rates needed for heating operations. For the same reason the UNICONTROL regulators are recommended offering very high flow capacity.



Nozzle	Torch	Checkvalve	Hose	Flashback Arrestors	Regulators
0769472	0766241 - MK3 Shank	871111 - BV12		0764457	0783652
-	+	G3/8" × 8 RH		Safe-guard 5 OXY G3/8" RH	UNICONTROL OXY-
0769476	0766253 - MK3 Mixer	+	Hose	+	GEN
	+	871112 - BV12	8 × 15	0764457	+
	0766254 Neck Tube	G3/8" × 8 LH		Safe-guard 5 FUEL G3/8" LH	0783656
					UNICONTROL LPG

NOTES

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

CENTRAL GAS SYSTEMS RANGE **DRUVA TECH** ALSO AVAILABLE

- gas manifolds and stabilizers
- pressure monitors, gas alarms and valves
- terminal units

For more information please see the separate catalogue or visit our web site gcegroup.com

A close-up photograph of a male technician with a beard, wearing a blue safety harness and red protective gloves, working on a complex industrial valve assembly. The valve has a black handle with the GCE logo and a brass body with various fittings and a pressure gauge. The background is a blurred industrial setting.

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