

ARC WELDING EQUIPMENT
CONSUMABLES
WELDING ACCESSORIES
PERSONAL PROTECTIVE EQUIPMENT



CONTENTS

ARC WELDING EQUIPMENT

Welders ARCONTROL7
Cutters Gladius	8
MIG Torches MIGSTAR PRO and Spare Parts	9
TIG Torches TIGSTAR PRO and Spare Parts	16
Tungsten Electrodes	19
Plasma Torches SOLARIS	23
Air Carbon-ARC Torches	28
Electrode Holders	29
Earth Clamps	32
Cables and Connectors	35

WELDING CONSUMABLES

Stick Electrodes (SMAW-MMA)	37
STAINLESS STEEL Based Alloys (GTAW-TIG)	42
ALUMINUM Based Alloys (GTAW-TIG)	43
IRON Based Alloys (OFW - Brazing)	44
COPPER Based Alloys (OFW - Brazing)	45
COPPER-PHOSPHORUS Based Alloys (OFW - Brazing)	47
SILVER Based Alloys (OFW - Brazing)	50
TIN Based Alloys (Soldering)	54


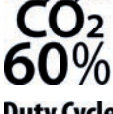


ACCESSORIES

Rubber Hoses in Bulk	59
Rubber Hoses with Fittings	63
Rubber Hoses Tools	68
Apics Lighter	69
Tools (Lighters, Mirrors, Tip Cleaners, Brushes, Hammers).	70
Sprays	73
Markers	75
Brasotek	77
Thermal protection	78
Protective screens (Curtains)	79

PERSONAL PROTECTIVE EQUIPMENT

LCD Masks and Goggles	81
Helmets and Hand Shields	90
Spare Lenses	93
Goggles	94
Workwear	98
Gloves	101

OVERVIEW OF ICONS

	440V Tested		Dimensions		Without Silicones		Temperature
	Antifog		Duty Cycle 35%		Flow		Weight
	Anti-IR&UV		Duty Cycle 60%		Generator Friendly		Welding Positions
	Antiscratch		Duty Cycle AC 35%		Help Button		New Product
	Anti-UV400		Duty Cycle AC 100%		Lead Free		New Designed Product
	Cable Section		Duty Cycle CO₂ 60%		LIFT TIG		
	Cadmium Free		Duty Cycle CO₂ 100%		MIG-MAG		
	CFC Free		Duty Cycle DC 100%		MMA		
	Connection		Wire Diameter		OXYGAZ		
	Connection Bolt Size		Duty Cycle MIX-60		PLASMA		
	Connection Hex Size		Duty Cycle MIX-100		TIG		
	Cutting Thickness		Ecological		Pressure		
	Digital Display		Electrode Diameter		RoHS Complaint		

GCE GROUP OVERVIEW

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

The GCE Group offer 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 have systems that have been granted approval to the environmental standard ISO 14000.

MARKET LEADERS

The GCE Group is today Europe is a 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 as far as 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, 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 fits 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 stake holders.

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.

ARC WELDING EQUIPMENT



DC INVERTER MMA / LIFT TIG WELDING MACHINE

ARCONTROL DIGITAL

ARCONTROL are MMA arc welding machines adopting the latest pulse width modulation (PWM) technology and the insulated gate bipolar transistor (IGBT) power module. Suitable for stick-electrode welding and Tig welding. The high performance and duty cycle make this welding machines suitable also for professionals. Easy and accurate amperage control by means of digital display. Extremely low weight, very small size, portable. Supplied in a hard case and equipped with electrode holder, earth clamp, cables and connectors.



EN 60974-1
EN 60974-10



FEATURES

EXCELLENT PERFORMANCES

- The constant current output makes the welding arc more stable.
- Fast and dynamic response speed reduces the impact from the arc length fluctuation to the current.
- Accurate stepless current adjustment and pre-setting function.

GENERATOR FRIENDLY

Designed to work with diesel generators and to avoid failures due to voltage spikes.

AUTOMATIC PROTECTION

Equipped with temperature, voltage and current sensors for high protection from under voltage, over current, overheating.

EXTRA FUNCTIONS.

Hot Start, Anti-sticking, Arc Force

DIGITAL DISPLAY

Variable amperage control with digital meter, for a welding current instant display.

GENERAL APPLICATIONS

Suitable for MMA arc welding and TIG lift welding.

440V TESTED IN PRODUCTION



Art. Nr.	Description	Qt.	Stock Class
ARC010	ARControl 135 Digital	1	DFW
ARC020	ARControl 160 Digital	1	DFW
ARC030	ARControl 200 Digital	1	DFW

TECHNICAL DATA	ARCONTROL 135	ARCONTROL 160	ARCONTROL 200
Welding Current Range (A)	10-135	10-160	10-200
	25%-135 A	30% -160A	30% -200A
Duty Cycle (40°C 10 min) at max A	60%-112 A	60% -135 A	100%-110A
	100% -105A	100%-120 A	
Electrode Diameter	ø2.5ø3.2	ø2.5ø3.2ø4.0	ø2.5ø3.2ø4.0
Electrode Type	6013, 7018, etc.	6013, 7018, etc.	6013, 7018, etc.
Net Weight (Kg)	3.55 Kg	4.5 Kg	4.6 Kg
Dimensions (mm)	325×114×208	325×114×208	330×135×250
Connections:	25 mm2 (small)	25 mm2 (small)	35 mm2 (big)
Protection Class:	IP23	IP23	IP23
Insulation Class:	H	H	H

DC INVERTER PLASMA CUTTING MACHINE

GLADIUS

GLADIUS machines are a new generation of a portable equipment for manual plasma cutting. They are equipped with inverter technology and pilot arc controller that ensure an optimal current adjustment, excellent performance and cutting quality with increased capability and speed. GLADIUS machines are combined with a high-quality cutting torch (without HF) specifically tested to obtain the maximum performance. Two versions to meet your needs : with or without air compressor.



EN 60974-1
EN 60974-10



FEATURES

EXCELLENT PERFORMANCES

Increases cutting capabilities and speed.
Extends tip's life. Ideal for grid cutting.

AUTOMATIC PROTECTIONS

Equipped with sensors to protect and alarm for overheating and over-current.

LIGHTWEIGHT

Extremely low weight and versatility.

AIR FILTERING

Air filtering with automatic water drainage model without compressor.

EQUIPPED WITH

Earth Clamp (with cable)

Hand Cutting Torch SOLARIS M60 (4 m) with Central connection EURO type



**WITH OR WITHOUT
AIR COMPRESSOR**



Central connection EURO type

Art. Nr.	Description	Qt.	Stock Class
PLPM040	PLASMA CUTTER GLADIUS 40	1	DFW
PLPM040COM	PLASMA CUTTER GLADIUS 40 with COMPRESSOR	1	DFW

TECHNICAL DATA	GLADIUS 40	GLADIUS 40 COMPR
Power Supply Voltage (V):	230 V ± 10% single-phase	230 V ± 10% single-phase
Frequency (Hz):	50/60 Hz	50/60 Hz
Rated Input Power (KW):	4.8 KW	4.9 KW
Rated Input Current (A):	33 A	32 A
Duty Cycle (40°C 10Min):	60% 40A	60% 40A
Max. No Load Voltage (V):	220 V	220 V
Cutting Current Range (A):	20~40 A	20~40 A
Severance Cut (mm):	≤25 mm (Carbon Steel)	≤14 mm (Carbon Steel)
Production Cut (mm):	≤20 mm (Carbon Steel)	≤12 mm (Carbon Steel)
	≤20 mm (Stainless Steel)	≤12 mm (Stainless Steel)
	≤16 mm (Aluminum)	≤12 mm (Aluminum)
	≤12 mm (Copper)	≤5 mm (Copper)
Net Weight (Kg):	5.7 Kg	18 Kg
Insulation Class:	H	H
Protection Class:	IP23	IP23
Cooling:	AF	AF
Use with Power Generator:	YES	NO

MIG WELDING

MIGSTAR PRO

The new powerful generation of GCE MIG torches feature extraordinary technical characteristics, advanced technology and an ergonomic anti-slide shank. They're specifically designed to enable the users to a comfortable and practice operations. Available in two variants: Air cooled and water cooled. Excellent value for money.

CE
EN 60974-7

RoHS
compliant



FEATURES

- Optimum cooling (Air or Water)
- Ergonomic handle with anti-slide rubber inserts.
- Ball joint at the handle improving the handling
- Push button feature to protect against accidental starting
- Strong and ergonomic connection EURO type
- Ball joint at the connection extending the cables lifetime and governing the welding wire feeder.
- Textile covers for water hoses offering maximum protection.
- Non detachable plastic caps for water hoses.
- Contact tip, gas nozzle and liner included.



Anti-slip rubber insert on the handle



Push button feature to protect against accidental starting



Ball joint at the handle improving the handling





Rotating connection to govern welding wire feeder




Strong and ergonomic connection EURO type

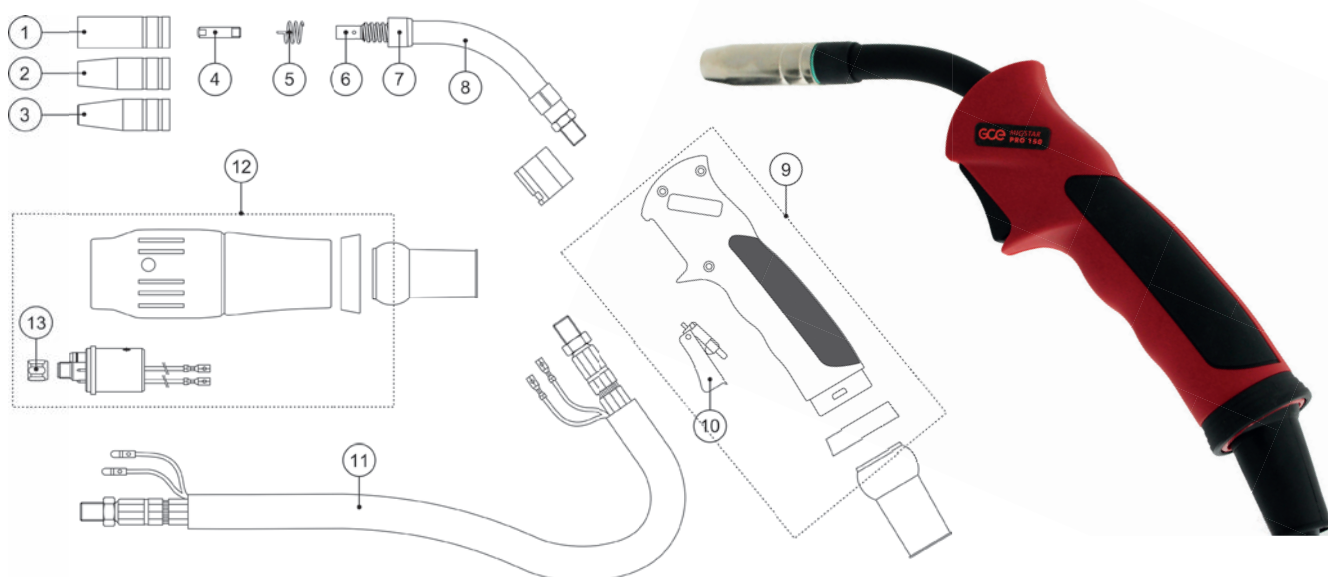
AIR COOLED

Art. Nr.	Descr.	Duty Cycle CO ₂ 60%	Duty Cycle Mix 60%		 mm ²	Qt.	Stock class
102P959A30N	TORCH MIGSTAR PRO 150-3	180 A	150 A	0,6-1,0	16 mm ²	1	DFW
102P959A40N	TORCH MIGSTAR PRO 150-4	180 A	150 A	0,6-1,0	16 mm ²	1	DFW
102P959A50N	TORCH MIGSTAR PRO 150-5	180 A	150 A	0,6-1,0	16 mm ²	1	DFW
103P959A30N	TORCH MIGSTAR PRO 252-3	230 A	200 A	0,6-1,2	25 mm ²	1	DFW
103P959A40N	TORCH MIGSTAR PRO 252-4	230 A	200 A	0,6-1,2	25 mm ²	1	DFW
103P959A50N	TORCH MIGSTAR PRO 252-5	230 A	200 A	0,6-1,2	25 mm ²	1	DFW
112P959A30N	TORCH MIGSTAR PRO 240-3	250 A	220 A	0,6-1,2	25 mm ²	1	DFW
112P959A40N	TORCH MIGSTAR PRO 240-4	250 A	220 A	0,6-1,2	25 mm ²	1	DFW
112P959A50N	TORCH MIGSTAR PRO 240-5	250 A	220 A	0,6-1,2	25 mm ²	1	DFW
114P959A30N	TORCH MIGSTAR PRO 360-3	340 A	300 A	0,8-1,6	42 mm ²	1	DFW
114P959A40N	TORCH MIGSTAR PRO 360-4	340 A	300 A	0,8-1,6	42 mm ²	1	DFW
114P959A50N	TORCH MIGSTAR PRO 360-5	340 A	300 A	0,8-1,6	42 mm ²	1	DFW

WATER COOLED

Art. Nr.	Descr.	Duty Cycle CO ₂ 60%	Duty Cycle Mix 60%		Qt.	Stock class
134P959A30N	TORCH MIGSTAR PRO 511-3	500 A	450 A	0,8-1,6	1	DFW
134P959A40N	TORCH MIGSTAR PRO 511-4	500 A	450 A	0,8-1,6	1	DFW
134P959A50N	TORCH MIGSTAR PRO 511-5	500 A	450 A	0,8-1,6	1	DFW

TORCH MIGSTAR PRO 150 (AIR COOLED)



MIGSTAR PRO 150 – WEAR PARTS

Art. Nr.	Descr.		Dimensions	Pos.	Qt.	Stock class
345P011002	Gas nozzles	145.0041	D.16 mm CYLINDRICAL	1	10	DFW
345P012002	Gas nozzles	145.0075	D.12 mm CONICAL	2	10	DFW
345P013002	Gas nozzles	145.0123	D.9,5 mm CONICAL	3	10	DFW
340P061073	Contact tip E-Cu	140.0008	M6×25 - D.0,6 mm	4	25	DFW
340P081073	Contact tip E-Cu	140.0059	M6×25 - D.0,8 mm	4	25	DFW
340P101073	Contact tip E-Cu	140.0253	M6×25 - D.1,0 mm	4	25	DFW
340P121073	Contact tip E-Cu	140.0387	M6×25 - D.1,2 mm	4	25	DFW
102P002011	Nozzle spring	002.0058		5	10	DFW
102P002037	Contact tip holder/Diffusor	002.0078	M6	6	10	DFW
102P002003	Insulator	002.0050		7	10	DFW
102P001010	Swan neck	002.0009		8	1	DFW



Gas nozzle
CYLINDRICAL



Gas nozzle
CONICAL



Contact tip



Contact tip holder

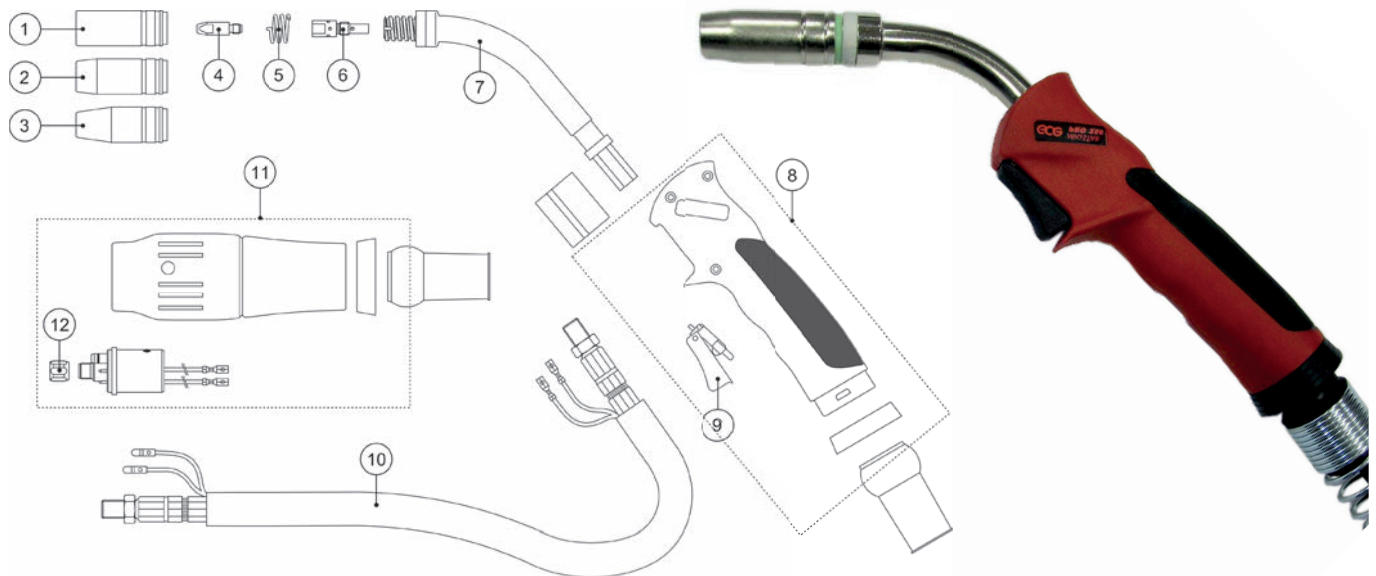
MIGSTAR PRO 150 – SPARE PARTS

Art. Nr.	Descr.	Pos.	Qt.	Stock class
WP90010	Plastic handle complete for MIGSTAR PRO	9	1	MTO
WP90009	Trigger black for MIGSTAR PRO	10	5	DFW
360P161130	Complete cable 16 mm2 3m	11	1	MTO
360P161140	Complete cable 16 mm2 4m	11	1	MTO
360P161150	Complete cable 16 mm2 5m	11	1	MTO
WP90014	Connection EURO set complete for torch air cooled	12	1	MTO
701P002005	Liner nut M12×1	13	10	MTO

Liners for all kind of torches - see next pages

The products listed here are fully compatible with other brands of equipment. References to other companies' products, numbers and registered trademarks are for market's convenience only.

TORCH MIGSTAR PRO 252 (AIR COOLED)



MIGSTAR PRO 252 – WEAR PARTS

Art. Nr.	Descr.		Dimensions	Pos.	Qt.	Stock class
345P011003	Gas nozzles	145.0042	D.18 mm CYLINDRICAL	1	10	DFW
345P012003	Gas nozzles	145.0076	D.15 mm CONICAL	2	10	DFW
345P013003	Gas nozzles	145.0124	D.11,5 mm CONICAL	3	10	DFW
340P061069	Contact tip E-Cu	140.0005	M6×28 - D.0,6 mm	4	25	DFW
340P081069	Contact tip E-Cu	140.0051	M6×28 - D.0,8 mm	4	25	DFW
340P101069	Contact tip E-Cu	140.0242	M6×28 - D.1,0 mm	4	25	DFW
340P121069	Contact tip E-Cu	140.0379	M6×28 - D.1,2 mm	4	25	DFW
340P141069	Contact tip E-Cu	140.0379	M6×28 - D.1,4 mm	4	25	DFW
340P083069	Contact tip CuCrZr	140.0054	M6×28 - D.0,8 mm	4	25	DFW
340P103069	Contact tip CuCrZr	140.0245	M6×28 - D.1,0 mm	4	25	DFW
340P123069	Contact tip CuCrZr	140.0382	M6×28 - D.1,2 mm	4	25	DFW
103P002006	Nozzle spring	003.0013	M6×28 - D.1,2 mm	5	10	DFW
342P006003	Contact tip holder/Diffusor	142.0001	M6×35 mm	6	10	DFW
104P001008	Swan neck	004.0012		7	1	DFW



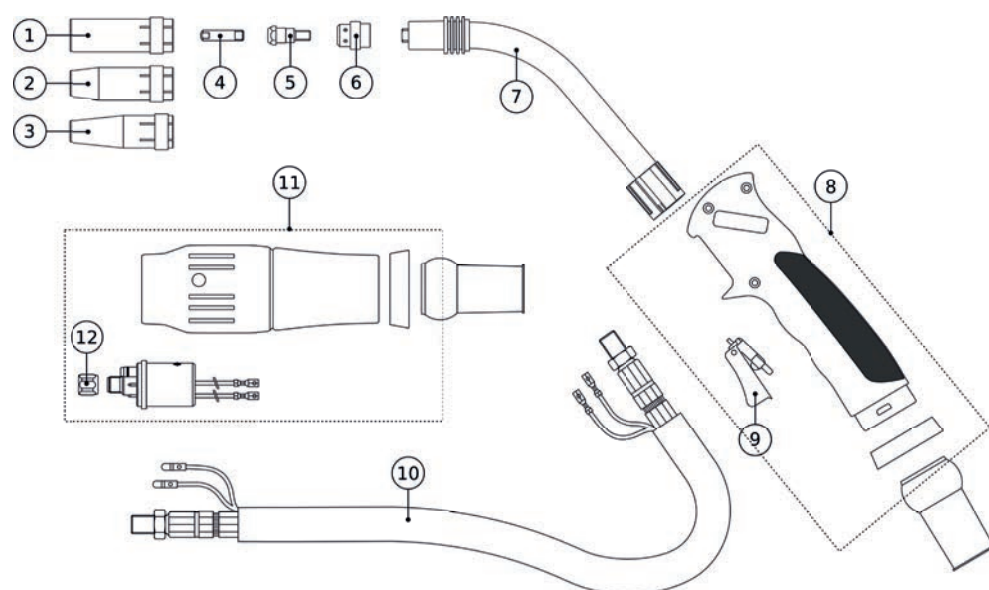
MIGSTAR PRO 252 – SPARE PARTS

Art. Nr.	Descr.	Pos.	Qt.	Stock class
WP90010	Plastic handle complete for MIGSTAR PRO	8	1	MTO
WP90009	Trigger black for MIGSTAR PRO	9	5	DFW
360P251130	Complete cable 25 mm ² 3 m	10	1	MTO
360P251140	Complete cable 25 mm ² 4 m	10	1	MTO
360P251150	Complete cable 25 mm ² 5 m	10	1	MTO
WP90014	Connection EURO set complete for torch air cooled	11	1	MTO
701P002005	Liner nut M12×1	12		

Liners for all kind of torches - see next pages

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TORCH MIGSTAR PRO 240 (AIR COOLED)



MIGSTAR PRO 240 – WEAR PARTS



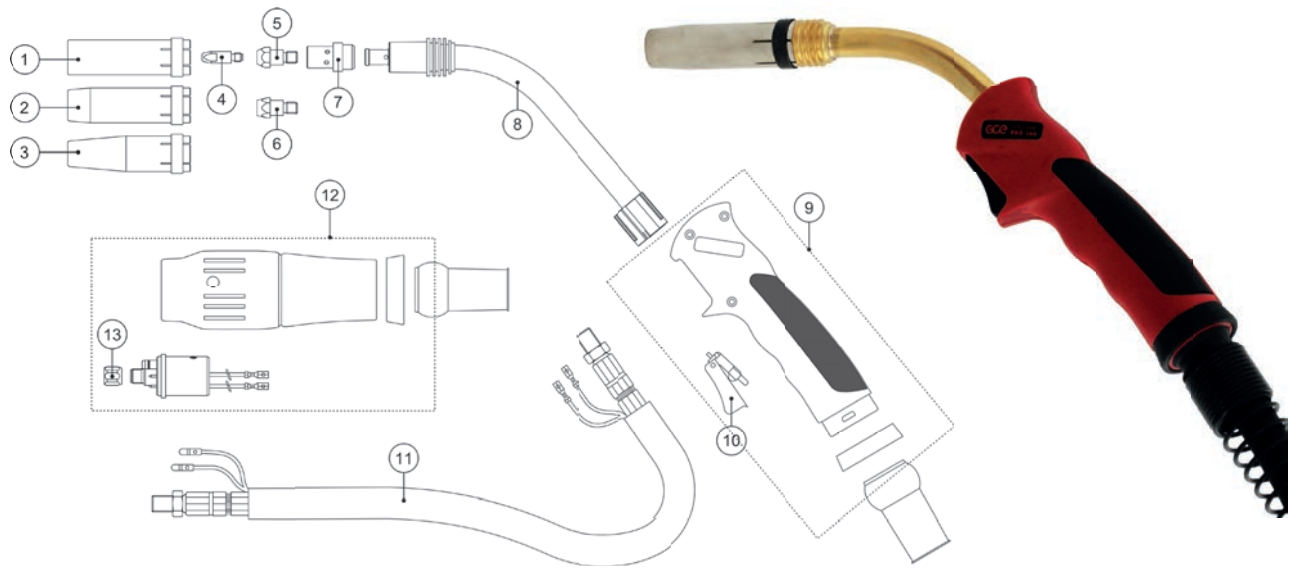
Art. Nr.	Descr.		Dimensions	Pos.	Qt.	Stock class
345P011012	Gas nozzle	145.0047	D.17 mm CYLINDRICAL	1	10	DFW
345P012012	Gas nozzle	145.0080	D.12,5 mm CONICAL	2	10	DFW
345P013012	Gas nozzle	145.0128	D.10 mm CONICAL	3	10	MTO
340P061073	Contact tip E-Cu	140.0008	M6×25 – D.0.6 mm	4	25	DFW
340P081073	Contact tip E-Cu	140.0059	M6×25 – D.0.8 mm	4	25	DFW
340P101073	Contact tip E-Cu	140.0253	M6×25 – D.1.0 mm	4	25	DFW
340P121073	Contact tip E-Cu	140.0387	M6×25 – D.1.2 mm	4	25	DFW
342P006012	Contact tip holder	142.0003	M6×26 mm	5	10	DFW
112P002023	White diffuser Plastic	012.0183	20 mm	6	10	DFW
112P001013	Swan neck	012.0001		7	1	DFW

MIGSTAR PRO 240 – SPARE PARTS

Art. Nr.	Descr.	Pos.	Qt.	Stock class
WP90010	Plastic handle complete for MIGSTAR PRO	8	1	MTO
WP90009	Trigger black for MIGSTAR PRO	9	5	DFW
360P251130	Complete cable 25 mm2...3m	10	1	MTO
360P251140	Complete cable 25 mm2 ...4m	10	1	MTO
360P251150	Complete cable 25 mm2 ...5m	10	1	MTO
WP90014	Connection EURO set complete for torch air cooled	11	1	MTO
701P002005	Liner nut M12×1	12	10	DFW

Liners for all kind of torches - see next pages

TORCH MIGSTAR PRO 360 (AIR COOLED)



MIGSTAR PRO 360 – WEAR PARTS



Art. Nr.	Descr.		Dimensions	Pos.	Qt.	Stock class
345P011010	Gas nozzles	145.0045	D.19 mm CYLINDRICAL	1	10	DFW
345P012010	Gas nozzles	145.0078	D.16 mm CONICAL	2	10	DFW
345P013010	Gas nozzles	145.0126	D.12 mm CONICAL	3	10	DFW
340P061069	Contact tip E-Cu	140.0005	M6×28 - D.0,6 mm	4	25	DFW
340P081069	Contact tip E-Cu	140.0051	M6×28 - D.0,8 mm	4	25	DFW
340P101069	Contact tip E-Cu	140.0242	M6×28 - D.1,0 mm	4	25	DFW
340P121069	Contact tip E-Cu	140.0379	M6×28 - D.1,2 mm	4	25	DFW
340P141069	Contact tip E-Cu	M6×28 -	M6×28 - D.1,4 mm	4	25	DFW
340P083069	Contact tip CuCrZr	140.0054	M6×28 - D.0,8 mm	4	25	DFW
340P103069	Contact tip CuCrZr	140.0245	M6×28 - D.1,0 mm	4	25	DFW
340P123069	Contact tip CuCrZr	140.0382	M6×28 - D.1,2 mm	4	25	DFW
342P006014	Contact tip holder standard	142.0005	M6×28 mm	5	10	DFW
342P008014*	Contact tip holder special	142.0020	M8×28 mm	6	10	DFW
114P102004	White diffuser Plastic	014.0261	32,5 mm	7	10	DFW
114P002005	White diffuser Ceramic	014.0023	32,5 mm	7	10	DFW
114P001001	Swan neck	014.0006		8	1	DWF

* this contact tip holder must be used with contact tip M8 (see spare parts of torch 511)

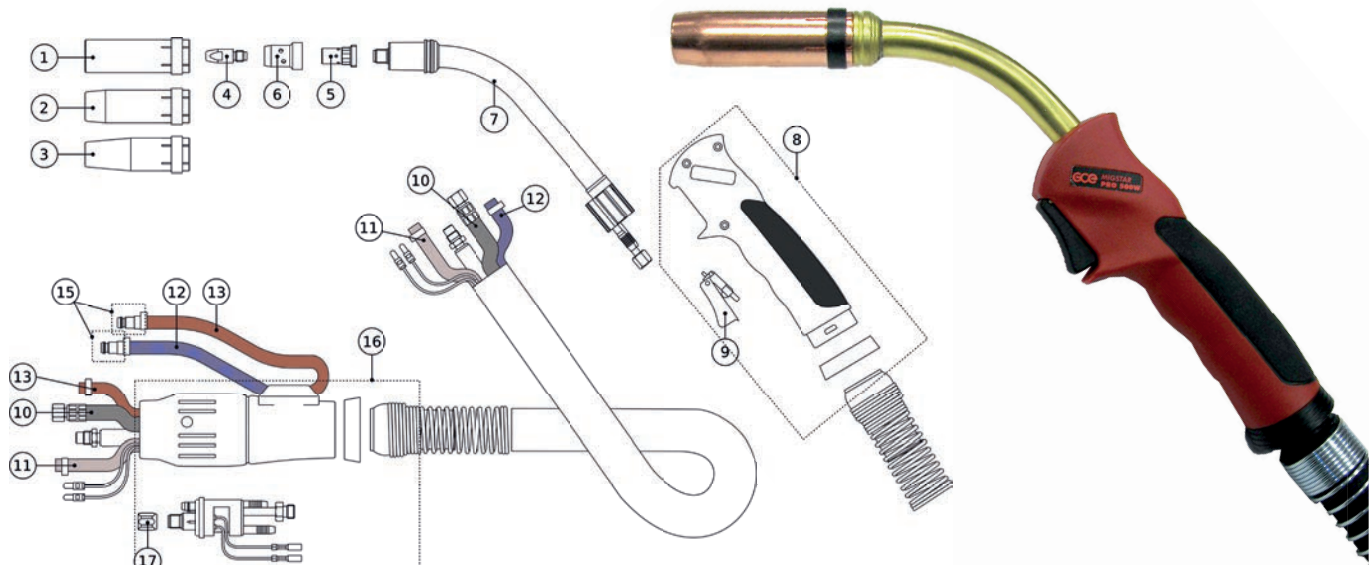
MIGSTAR PRO 360 – SPARE PARTS

Art. Nr.	Descr.	Pos.	Qt.	Stock class
WP90010	Plastic handle complete for MIGSTAR PRO	9	1	MTO
WP90009	Trigger black for MIGSTAR PRO	10	5	DWE
360P501130	Complete cable 42 mm2 3m	11	1	MTO
360P501140	Complete cable 42 mm2 4m	11	1	MTO
360P501150	Complete cable 42 mm2 5m	11	1	MTO
WP90014	Connection EURO set complete for torch air cooled	12	1	MTO
701P002005	Liner nut M12×1	13	10	DWF

Liners for all kind of torches - see next pages

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TORCH MIGSTAR PRO 511 (WATER COOLED)



MIGSTAR PRO 511 – WEAR PARTS

Art. Nr.	Descr.	Dimensions	Dimensions	Pos.	Qt.	Stock Class
345P011030	Gas nozzles	145.0051 L	D.20 mm CYLINDRICAL	1	10	DFW
345P012030	Gas nozzles	145.0085	D.16 mm CONICAL	2	10	DFW
345P013030	Gas nozzles	145.0132	D.14 mm CONICAL	3	10	DFW
340P081262	Contact tip E-Cu	140.0114	M8×30 - D.0,8 mm	4	25	DFW
340P101262	Contact tip E-Cu	140.0313	M8×30 - D.1,0 mm	4	25	DFW
340P121262	Contact tip E-Cu	140.0442	M8×30 - D.1,2 mm	4	25	DFW
340P141262	Contact tip E-Cu		M8×30 - D.1,4 mm	4	25	DFW
340P161262	Contact tip E-Cu	140.0587	M8×30 - D.1,6 mm	4	25	DFW
340P083262	Contact tip CuCrZr(Long life)	140.0117	M8×30 - D.0,8 mm	4	25	DFW
340P103262	Contact tip CuCrZr(Long life)	140.0316	M8×30 - D.1,0 mm	4	25	DFW
340P123262	Contact tip CuCrZr(Long life)	140.0445	M8×30 - D.1,2 mm	4	25	DFW
340P143262	Contact tip CuCrZr(Long life)		M8×30 - D.1,4 mm	4	25	DFW
340P163262	Contact tip CuCrZr(Long life)	140.0590	M8×30 - D.1,6 mm	4	25	DFW
342P008033	Contact tip holder	142.0022	M8x25 mm	5	10	DFW
130P102001	Gas diffuser white plastic	030.0145	28 mm	6	10	DFW
130P102031	Gas diffuser white ceramic	030.0190	28 mm	6	10	DFW
134P001001	Swan neck	032.0002		7	1	DFW



Gas nozzle
CONICAL



Contact tip



Contact tip holder



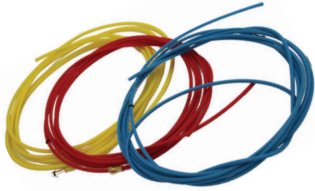
Gas white diffuser

MIGSTAR PRO 511 – SPARE PARTS

Art. Nr.	Descr.	Pos.	Qt.	Stock Class
WP90010	Plastic handle complete for MIGSTAR PRO	8	1	MTO
WP90009	Trigger black for MIGSTAR PRO	9	5	DFW
319P162130GCE	Cable complete (power+water) 3m	10	1	MTO
319P162140GCE	Cable complete (power+water)...4m	10	1	DFW
319P162150GCE	Cable complete (power+water) ...5m	10	1	DFW
302P010000	Gas hose	11	100	DFW
303P050000	Water hose Blue	12	100	MTO
303P060000	Water hose Red	13	100	MTO
701P002064	Quick connection H ₂ O	15	10	MTO
WP90016	Connection EURO set complete for torch water cooled	16	1	MTO
701P002005	Liner nut M12×1	17	10	DFW

The products listed here are fully compatible with other brands of equipment. References to other companies' products, numbers and registered trademarks are for market's convenience only.

LINERS FOR ALL KIND OF TORCHES



LINERS IN TEFLON FOR ALUMINUM WIRES

Art. Nr.	Long	Ø	Color	Qt.	Stock class
326P154035	3 m	0,8-1,0 mm	Blue	1	DFW
326P154045	4 m	0,8-1,0 mm	Blue	1	DFW
326P154055	5 m	0,8-1,0 mm	Blue	1	DFW
326P204035	3 m	1,0-1,2 mm	Red	1	DFW
326P204045	4 m	1,0-1,2 mm	Red	1	DFW
326P204055	5 m	1,0-1,2 mm	Red	1	DFW
326P274735	3 m	1,2-1,6 mm	Yellow	1	DFW
326P274745	4 m	1,2-1,6 mm	Yellow	1	DFW
326P274755	5 m	1,2-1,6 mm	Yellow	1	DFW

LINERS FOR STEEL WIRES

Art. Nr.	Long	Ø	Color	Qt.	Stock class
324P154534	3 m	0,6-0,9 mm	Blue	1	DFW
324P154544	4 m	0,6-0,9 mm	Blue	1	DFW
324P154554	5 m	0,6-0,9 mm	Blue	1	DFW
324P204534	3 m	1,0-1,2 mm	Red	1	DFW
324P204544	4 m	1,0-1,2 mm	Red	1	DFW
324P204554	5 m	1,0-1,2 mm	Red	1	DFW
324P254534	3 m	1,2-1,6 mm	Yellow	1	DFW
324P254544	4 m	1,2-1,6 mm	Yellow	1	DFW
324P254554	5 m	1,2-1,6 mm	Yellow	1	DFW

PLIERS MIG MULTIPURPOSE

Pliers MIG multipurpose professional new type

Allows you to:

- Clean the spatters inside the MIG nozzle without removing
- Screw / unscrew the MIG contact tips
- Cut the exceeding wire out of the contact tip before starting to weld.



Art. Nr.	Descr.	Qt.	Stock class
WP21106	Pliers MIG multipurpose	1	DFW

TIG WELDING

TIGSTAR PRO

The new generation of GCE TIG torches with extraordinary technical characteristics at a very good PRICE! They're provided with a very slim and ergonomic shank, a ball joint at the handle and an ultra soft leather protection for cable (n/a on V version) making them fully handy. Available in two variants: Air cooled and water cooled. The spare parts are fully compatible with standard market torches.

CE
EN 60974-7

RoHS
compliant



FEATURES

- Optimum cooling (Air or Water)
- Very slim and ergonomic handle.
- Ball joint at the handle improving the handling
- Standard trigger version or knob version (model V)
- Plug TIG included (G1/4 - G3/8 - quick connection)
- Soft leather cover for cable (n/a on V version)
- Provided with a spare parts set (ceramic nozzle, collet body, collet, back cup long)



Very flexible



V version (with knob valve)



MAXIMUM EASE OF USE!

All TIGSTAR torches are equipped with connections for all possible needs (1/4", 3/8" or quick).



THE ONLY ONES WITH LEATHER CLAD CABLE!

The first 75cm of torch cable nearest to operator are clad in soft leather (n/a on torches with knob control valve).

This gives great flexibility of movement and very good protection against spatter.

AIR COOLED

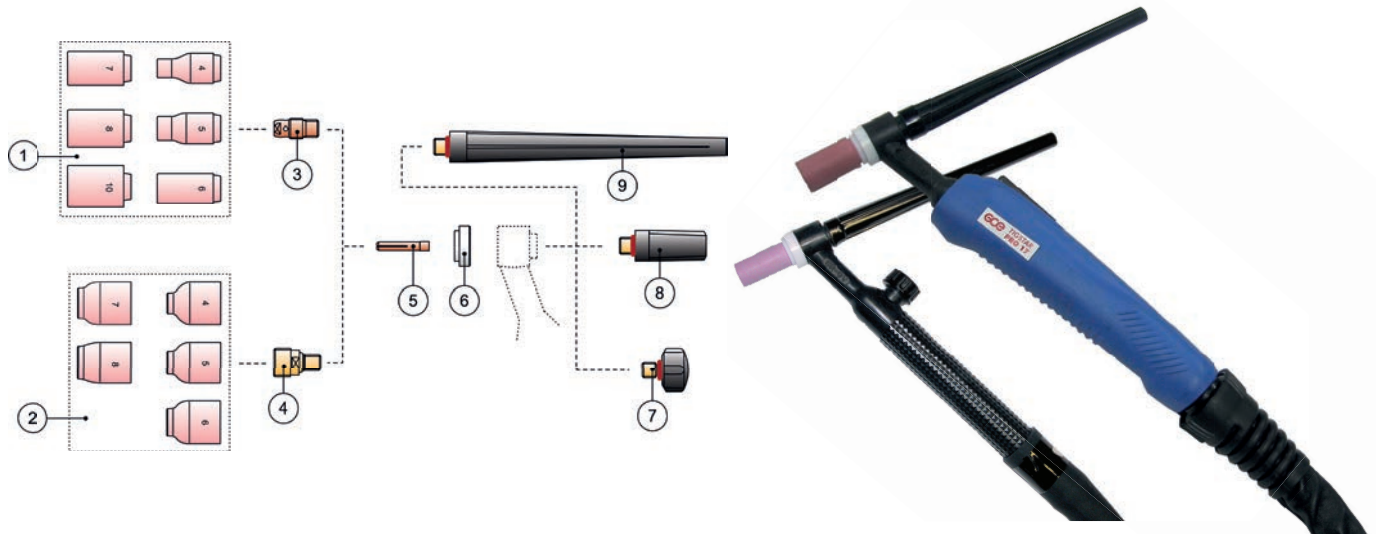
Art. Nr.	Descr.	Duty Cycle DC 35%	Duty Cycle AC 35%	Ø	Ø	Qt.	Stock class
415P09C104N	TIGSTAR PRO 9 4M	110A	95A	0,5-1,6	25 mm (small)	1	DFW
415P09C108N	TIGSTAR PRO 9 8M	110A	95A	0,5-1,6	25 mm (small)	1	MTO
405P09V104N	TIGSTAR PRO 9 V 4M	110A	95A	0,5-1,6	25 mm (small)	1	DFW
415P17C104N	TIGSTAR PRO 17 4M	140A	125A	0,5-2,4	25 mm (small)	1	DFW
415P17C114N	TIGSTAR PRO 17 4M	140A	125A	0,5-2,4	35 mm (big)	1	DFW
415P17C108N	TIGSTAR PRO 17 8M	140A	125A	0,5-2,4	25 mm (small)	1	DFW
405P17V104N	TIGSTAR PRO 17 V 4M	140A	125A	0,5-2,4	25 mm (small)	1	DFW
405P17V114N	TIGSTAR PRO 17 V 4M	140A	125A	0,5-2,4	35 mm (big)	1	DFW
415P26C104N	TIGSTAR PRO 26 4M	180A	150A	0,5-4,0	35 mm (big)	1	DFW
415P26C108N	TIGSTAR PRO 26 8M	180A	150A	0,5-4,0	35 mm (big)	1	DFW
405P26V104N	TIGSTAR PRO 26 V 4M	180A	150A	0,5-4,0	35 mm (big)	1	DFW

WATER COOLED

Art. Nr.	Descr.	Duty Cycle DC 100%	Duty Cycle AC 100%	Ø	Ø	Qt.	Stock class
415P20C104N	TIGSTAR PRO 20 4M	250A	220A	0,5-3,2	35 mm (big)	1	DFW
415P20C108N	TIGSTAR PRO 20 8M	250A	220A	0,5-3,2	35 mm (big)	1	DFW
415P18C104N	TIGSTAR PRO 18 4M	320A	240A	0,5-4,0	35 mm (big)	1	DFW
415P18C108N	TIGSTAR PRO 18 8M	320A	240A	0,5-4,0	35 mm (big)	1	DFW

TORCH TIGSTAR PRO 9 - 9V (AIR COOLED)

TORCH TIGSTAR PRO 20 (WATER COOLED)



TIGSTAR PRO 9 - 9V (AIR) - 20 (H2O) - WEAR PARTS

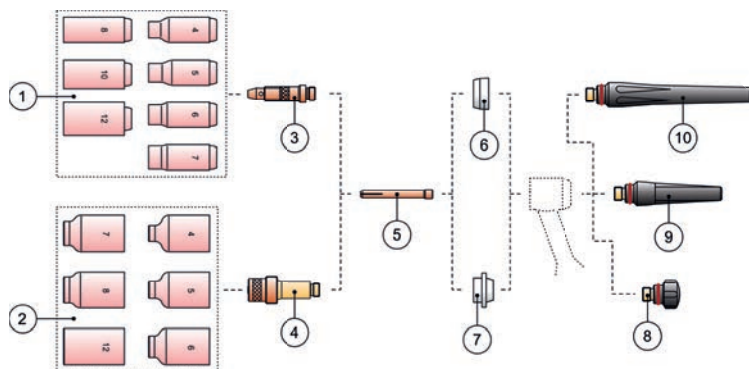
Art. Nr.	Descr.		Diam.	Length	Pos.	Qt.	Stock Class
401P201106	Nozzle Alumina #4	13N08	ø 6,4 mm	30,0 mm	1	10	DFW
401P201107	Nozzle Alumina #5	13N09	ø 8,0 mm	30,0 mm	1	10	DFW
401P201108	Nozzle Alumina #6	13N10	ø 9,8 mm	30,0 mm	1	10	DFW
401P201109	Nozzle Alumina #7	13N11	ø 11,2 mm	30,0 mm	1	10	DFW
401P201110	Nozzle Alumina #8	13N12	ø 12,7 mm	30,0 mm	1	10	DFW
401P201111	Nozzle Alumina #10	13N13	ø 15,7 mm	30,0 mm	1	10	DFW
401P201400	Nozzle Alumina #4 gas lens	53N58	ø 6,4 mm	25,5 mm	2	10	DFW
401P201401	Nozzle Alumina #5 gas lens	53N59	ø 8,0 mm	25,5 mm	2	10	DFW
401P201402	Nozzle Alumina #6 gas lens	53N60	ø 9,8 mm	25,5 mm	2	10	DFW
401P201403	Nozzle Alumina #7 gas lens	53N61	ø 11,2 mm	25,5 mm	2	10	DFW
401P201404	Nozzle Alumina #8 gas lens	53N61S	ø 12,7 mm	25,5 mm	2	10	DFW
401P201000	Collet body	13N26	ø 1,0 mm	20,6 mm	3	10	DFW
401P201001	Collet body	13N27	ø 1,6 mm	20,6 mm	3	10	DFW
401P201002	Collet body	13N28	ø 2,0-2,4 mm	20,6 mm	3	10	DFW
401P201003	Collet body	13N29	ø 3,2 mm	20,6 mm	3	10	DFW
401P201300	Collet body gas lens	45V42	ø 1,0 mm	21,5 mm	4	10	DFW
401P201301	Collet body gas lens	45V43	ø 1,6 mm	21,5 mm	4	10	DFW
401P201302	Collet body gas lens	45V44	ø 2,4 mm	21,5 mm	4	10	DFW
401P201303	Collet body gas lens	45V45	ø 3,2 mm	21,5 mm	4	10	DFW
401P200600	Collet	13N21	ø 1,0 mm	25,4 mm	5	10	DFW
401P200601	Collet	13N22	ø 1,6 mm	25,4 mm	5	10	DFW
401P200604	Collet	13N23M	ø 2,0 mm	25,4 mm	5	10	DFW
401P200602	Collet	13N23	ø 2,4 mm	25,4 mm	5	10	DFW
401P200603	Collet	13N24	ø 3,2 mm	25,4 mm	5	10	DFW
402P200900	Insulator Standard	598882			6	10	MTO
401P200100	Back cap SHORT	41V33		18,0 mm	7	10	DFW
401P200200	Back cap MEDIUM	41V35		53,2 mm	8	10	DFW
401P200300	Back cap LONG	41V24		147,5 mm	9	10	DFW



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TORCH TIGSTAR PRO 17 - 17V - 26 - 26V (AIR COOLED)

TORCH TIGSTAR PRO 18 (WATER COOLED)



TIGSTAR PRO 17 - 17V - 26 - 26V (AIR) - 18 (H2O) - WEAR PARTS

Art. Nr.	Descr.		Diam.	Pos.	Qt.	Stock class
401P170907	Nozzle Alumina #4	10N50	ø 6,4 mm 47,0 mm	1	10	DFW
401P170908	Nozzle Alumina #5	10N49	ø 8,0 mm 47,0 mm	1	10	DFW
401P170909	Nozzle Alumina #6	10N48	ø 9,5 mm 47,0 mm	1	10	DFW
401P170910	Nozzle Alumina #7	10N47	ø 11,2 mm 47,0 mm	1	10	DFW
401P170911	Nozzle Alumina #8	10N46	ø 12,7 mm 47,0 mm	1	10	DFW
1P170912	Nozzle Alumina #10	10N45	ø 15,7 mm 47,0 mm	1	10	DFW
401P170913	Nozzle Alumina #12	10N44	ø 19,0 mm 47,0 mm	1	10	DFW
401P222200	Nozzle Alumina #4 gas lens	54N18	ø 6,4 mm 42,0 mm	2	10	DFW
401P222201	Nozzle Alumina #5 gas lens	54N17	ø 8,0 mm 42,0 mm	2	10	DFW
401P222202	Nozzle Alumina #6 gas lens	54N16	ø 9,8 mm 42,0 mm	2	10	DFW
401P222203	Nozzle Alumina #7 gas lens	54N15	ø 11,2 mm 42,0 mm	2	10	DFW
401P222204	Nozzle Alumina #8 gas lens	54N14	ø 12,7 mm 42,0 mm	2	10	DFW
401P222206	Nozzle Alumina #12 gas lens	54N19	ø 17,2 mm 42,0 mm	2	10	DFW
401P180998	Collet body	10N30	ø 1,0 mm 47,0 mm	3	10	DFW
401P180999	Collet body	10N31	ø 1,6 mm 47,0 mm	3	10	DFW
401P181000	Collet body	10N32	ø 2,4 mm 47,0 mm	3	10	DFW
401P181001	Collet body	10N28	ø 3,2 mm 47,0 mm	3	10	DFW
401P181002	Collet body	406488	ø 4,0 mm 47,0 mm	3	10	DFW
401P181299	Collet body gas lens	45V24	ø 1,0 mm 48,5 mm	4	10	DFW
401P181300	Collet body gas lens	45V25	ø 1,6 mm 48,5 mm	4	10	DFW
401P181301	Collet body gas lens	45V26	ø 2,4 mm 48,5 mm	4	10	DFW
401P181302	Collet body gas lens	45V27	ø 3,2 mm 48,5 mm	4	10	DFW
401P181303	Collet body gas lens	45V28	ø 4,0 mm 48,5 mm	4	10	DFW
402P170500	Collet	10N22	ø 1,0 mm 50,0 mm	5	10	DFW
402P170502	Collet	10N23	ø 1,6 mm 50,0 mm	5	10	DFW
402P170506	Collet	10N23M	ø 2,0 mm 50,0 mm	5	10	DFW
402P170503	Collet	10N24	ø 2,4 mm 50,0 mm	5	10	DFW
402P170504	Collet	10N25	ø 3,2 mm 50,0 mm	5	10	DFW
402P170505	Collet	10N20	ø 4,0 mm 50,0 mm	5	10	DFW
403P171000	Insulator Standard	18CG		6	10	MTO
401P171000	Insulator for gas lens	54N01		7	10	DFW
402P170100	Back cap SHORT	57Y04	23,0 mm	8	10	DFW
402P170150	Back cap MEDIUM	57Y03		9	10	DFW
402P170200	Back cap LONG	57Y02	116,0 mm	10	10	DFW



Nozzle Alumina

Nozzle Alumina
gas lens

Collet body

Insulator for
gas lensCollet body
gas lens

Collet

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TUNGSTEN ELECTRODES

TUNGSTEN PURE - GREEN (WP)

Used mostly for AC welding of aluminium and magnesium and other less critical, low-current applications. It forms and maintains a clean, balled tip when heated and provides good arc stability with a reasonably good resistance to contamination. Typically not used for DC welding.



ISO 6848: WP (W20)

Art. Nr.	Descr.	Oxide addition	Dimension	Qt.	Stock class
400P010175	PURE (Green)	-	1,0×175 mm	10	DFW
400P016175	PURE (Green)	-	1,6×175 mm	10	DFW
400P020175	PURE (Green)	-	2,0×175 mm	10	DFW
400P024175	PURE (Green)	-	2,4×175 mm	10	DFW
400P032175	PURE (Green)	-	3,2×175 mm	10	DFW
400P040175	PURE (Green)	-	4,0×175 mm	10	DFW
400P048175	PURE (Green)	-	4,8×175 mm	5	MTO

TUNGSTEN + THORIUM 2% - RED (WTh20)

Excellent for DC welding (both negative or positive polarity) on carbon steel, stainless steel, nickel and titanium. The most preferred electrode today for its long lifetime and ease of use. The Thorium improves arc ignition and allows for a higher current-carrying capacity. This electrode operates far below its melting temperature, which results in a significantly lower consumption and a greater arc stability. During welding, the Thorium is uniformly dispersed throughout the electrode, which helps the tungsten to maintain its sharpened edge. The Thoriated electrodes deposit less tungsten into the weld puddle than other types, reducing the weld contamination.

Rarely used for special AC welding (very thin aluminium or materials less than 1,5 mm)



ISO 6848: WTh20 (WT20)

Art. Nr.	Descr.	Oxide addition	Dimension	Qt.	Stock class
400P210150	THORIATED (Red)	ThO2 - 2%	1,0×150 mm	10	DFW
400P216150	THORIATED (Red)	ThO2 - 2%	1,6×150 mm	10	DFW
400P220150	THORIATED (Red)	ThO2 - 2%	2,0×150 mm	10	DFW
400P224150	THORIATED (Red)	ThO2 - 2%	2,4×150 mm	10	DFW
400P232150	THORIATED (Red)	ThO2 - 2%	3,2×150 mm	10	DFW
400P210175	THORIATED (Red)	ThO2 - 2%	1,0×175 mm	10	DFW
400P216175	THORIATED (Red)	ThO2 - 2%	1,6×175 mm	10	DFW
400P220175	THORIATED (Red)	ThO2 - 2%	2,0×175 mm	10	DFW
400P224175	THORIATED (Red)	ThO2 - 2%	2,4×175 mm	10	DFW
400P232175	THORIATED (Red)	ThO2 - 2%	3,2×175 mm	10	DFW
400P240175	THORIATED (Red)	ThO2 - 2%	4,0×175 mm	10	DFW
400P248175	THORIATED (Red)	ThO2 - 2%	4,8×175 mm	5	MTO

TUNGSTEN + CERIUM 2% - GREY (WCe20)

This electrode performs best in DC welding at low current settings and works well also in AC processes. It has a good ignition and very good re-ignition at low amperages, good arc stability and long life. Very popular in such applications as orbital tube and pipe fabrication, thin sheet metal work, and jobs involving small and delicate parts. Best used to weld carbon steel, stainless steel, nickel alloys, and titanium, it is a great alternative to thoriated electrode. The use at higher amperages is not recommended because the cerium oxides migrate away, thereby negating their benefits.



ISO 6848: WCe20 (WC20)

Art. Nr.	Descr.	Oxide addition	Dimension	Qt.	Stock class
400P510175	CERIATED (grey)	CeO2 - 2%	1,0×175 mm	10	DFW
400P516175	CERIATED (grey)	CeO2 - 2%	1,6×175 mm	10	DFW
400P520175	CERIATED (grey)	CeO2 - 2%	2,0×175 mm	10	DFW
400P524175	CERIATED (grey)	CeO2 - 2%	2,4×175 mm	10	DFW
400P532175	CERIATED (grey)	CeO2 - 2%	3,2×175 mm	10	DFW
400P540175	CERIATED (grey)	CeO2 - 2%	4,0×175 mm	10	MTO
400P548175	CERIATED (grey)	CeO2 - 2%	4,8×175 mm	5	MTO

TUNGSTEN ELECTRODES

TUNGSTEN + LANTHANUM 1,5% - GOLD (WLa15)

This electrode combines the characteristics of ceriated electrode and thoriated electrode. Like ceriated electrode, it has an excellent arc ignition and an excellent re-ignition, and enable to maintain the arc easily at lower voltages with a good stability. It has an excellent current conductivity, very similar to thoriated electrode and can replace it without welding setting changes worth nothing. It works well on AC or DC electrode negative with a pointed end, or on AC sine wave power sources with a balled end. It maintains easily a sharpened pointed end well, with a benefit for welding steel and stainless steel on DC or AC from square wave power sources.



ISO 6848: WLa15 (WL15)

Art. Nr.	Descr.	Oxide addition	Dimension	Qt.	Stock class
400P910175	LANTHANATED (gold)	La2O3 - 1,5%	1,0×175 mm	10	DFW
400P916175	LANTHANATED (gold)	La2O3 - 1,5%	1,6×175 mm	10	DFW
400P920175	LANTHANATED (gold)	La2O3 - 1,5%	2,0×175 mm	10	DFW
400P924175	LANTHANATED (gold)	La2O3 - 1,5%	2,4×175 mm	10	DFW
400P932175	LANTHANATED (gold)	La2O3 - 1,5%	3,2×175 mm	10	DFW
400P940175	LANTHANATED (gold)	La2O3 - 1,5%	4,0×175 mm	10	MTO
400P948175	LANTHANATED (gold)	La2O3 - 1,5%	4,8×175 mm	5	MTO

TUNGSTEN + LANTHANUM 2% - BLUE (WLa20)

This is an all-purpose tungsten electrode that combines the best features of all the other electrodes. Excellent arc ignition and re-ignition, very good arc stability, excellent current conductivity, the best in maintaining the sharpened end, the longest lifetime. Suitable for the use both on AC or DC. Excellent performance both in low and high amperage applications. It works great for welding carbon steel, stainless steel, nickel alloys, aluminium, magnesium, titanium, cobalt, copper alloys, and all other metals. Perfect to replace, with a longer lifetime, thoriated electrodes in automated systems welding stainless steel on DC. Even during this intensive use, it maintains better the tip geometry.



ISO 6848: WLa20 (WL20)

Art. Nr.	Descr.	Oxide addition	Dimension	Qt.	Stock class
400P310175	LANTHANATED (blue)	La2O3 – 2%	1,0×175 mm	10	MTO
400P316175	LANTHANATED (blue)	La2O3 – 2%	1,6×175 mm	10	DFW
400P320175	LANTHANATED (blue)	La2O3 – 2%	2,0×175 mm	10	DFW
400P324175	LANTHANATED (blue)	La2O3 – 2%	2,4×175 mm	10	DFW
400P332175	LANTHANATED (blue)	La2O3 – 2%	3,2×175 mm	10	DFW
400P340175	LANTHANATED (blue)	La2O3 – 2%	4,0×175 mm	10	MTO
400P348175	LANTHANATED (blue)	La2O3 – 2%	4,8×175 mm	5	MTO

TUNGSTEN ELECTRODES SELECTION

COLOR	TYPE	CURRENT	FOR WELDING	ARC IGNITION	ARC STABILITY	CURRENT CARRYING CAPACITY	LIFETIME
GREEN	Pure	AC	Aluminium, Magnesium, Nickel and their alloys	Medium	Good	Low	Low
RED	Thoriated ThO2 - 2%	DC	Carbon steel, Stainless steel, Nickel alloys and Titanium	Excellent	Excellent	Excellent	Very good
GREY	Ceriated CeO2 - 2%	AC & DC (low amp)	Carbon steel, Stainless steel, Nickel alloys and Titanium	Very good	Very good	Very good	Very good
GOLD	Lanthanated La2O3 - 1,5%	AC & DC	Carbon steel, Stainless steel, Titanium, Aluminium and its alloys	Excellent	Excellent	Excellent	Very good
BLUE	Lanthanated La2O3 - 2%	AC & DC	Carbon steel, Stainless steel, Nickel alloys, Aluminium, Magnesium, Titanium, Cobalt, Copper alloys, etc.	Excellent	Excellent	Excellent	Excellent



PREPARING THE ELECTRODE TIP

The geometry of the electrode end definitely does have an effect on the TIG arc.

In any application, the type and the shape of tungsten helps determine the arc quality and welding performance you will achieve.

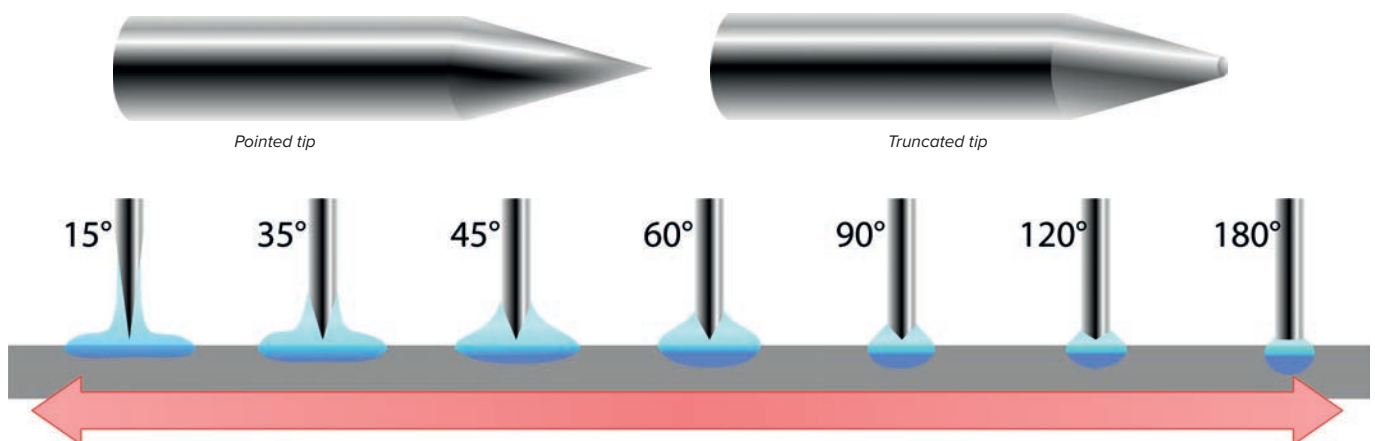
The three geometries for the electrode tip are balled, pointed, and truncated.

BALLED TIP

A balled tip generally is used on pure tungsten and zirconiated electrodes and is suggested for use with the AC process on sine wave and conventional square wave GTAW machines. To ball the end of the tungsten properly, simply apply the AC amperage recommended for a given electrode diameter, and a ball will form on the end of the electrode. The diameter of the balled end should not exceed 1,5 times the diameter of the electrode (for example, a 2,4mm electrode should form a 3,6mm diameter end). A larger sphere at the tip of the electrode can reduce arc stability and can fall off and contaminate the weld.

POINTED AND/OR TRUNCATED TIP

A pointed and/or truncated tip (for pure tungsten, ceriated, lanthanated, and thoriated types) should be used for inverter AC and DC welding processes. Grinding the electrode to a conical shape eases the arc ignition and creates a more focused arc for better welding performance. Choosing a proper geometry and the right grinding angle for the electrode is strategic to obtain the best performance. The right choice depends on the result you want to obtain.



Sharp tip

- Improves the stability of your arc
- While welding with Less amps
- Less weld penetration
- Shorter electrode life
- Wider weld bead
- Easier arc starting

Blunt tip

- Higher chance of the arc wandering
- While welding with more amps
- Better weld penetration
- Longer electrode life
- Narrower weld bead
- Harder arc starting

When welding with low current on thin materials (from 0,1 mm to 1,0 mm), it is recommended to grind the electrode end to a pointed tip. A pointed tip allows the welding current to transfer in a focused arc and helps prevent thin metals (such as aluminium) from becoming distorted.

For higher-current applications, it is recommended to grind the electrode end to a truncated tip.

A truncated geometry prevents the high current to blow off the tip causing weld puddle contamination.

Using a pointed tip for higher-current applications is not recommended.

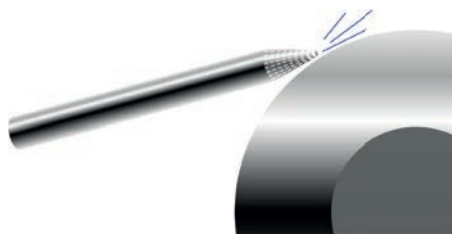


SHARPENING THE ELECTRODE

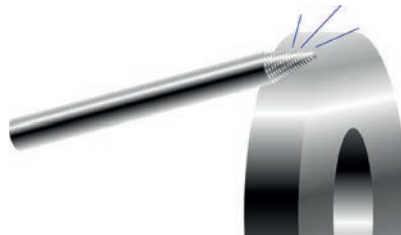
To grind the tungsten properly and to prevent contamination, it is preferable to use a grinding wheel especially designed for tungsten grinding, resistant to tungsten's hardness. Grind the electrode straight on the direction of the wheel at a 90° angle and make sure that the grind marks are lengthwise. This way you reduce the presence of ridges on the tungsten that could create arc wandering or contamination into the weld puddle.

Note: Grinding thoriated tungsten, make sure to collect the dust and have an adequate ventilation system. Follow the manufacturer's MSDS.

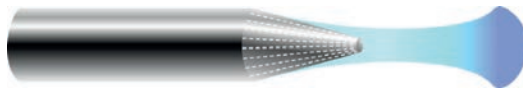
To achieve the proper shape, first grind the tungsten to a taper as explained above, then grind 0,2-0,5 mm the tip of the electrode to obtain a flat end. The flat end helps to prevent the tungsten is transferred through the arc and the formation of a ball end.



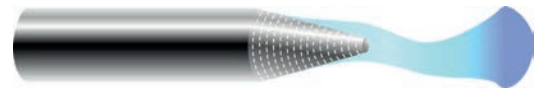
Correct grinding



Incorrect grinding



Straight marks → stable arc



Radial marks → wandering arc

RECOMMENDED AMPERAGE (according to ISO 6848: 2015)

Electrode Diameter (mm)	Direct Current (DC)			Alternative		
	Electrode negative (-)	Electrode positive (-)		Arc Balance 50% electrode (+) 50% electrode (-)		Arc Balance 30% electrode (+) 70% electrode (-)
		Tungsten with oxide additives	Pure Tungsten	Pure Tungsten	Tungsten with oxide additives	Tungsten with oxide additives
1,0 mm	10-75 A	not applicable	not applicable	25-60 A	25-75 A	25-80 A
1,6 mm	45-150 A	10-20 A	10-20 A	50-100 A	40-110 A	40-125 A
2,0 mm	60-200 A	15-25 A	15-25 A	60-130 A	60-130 A	60-150 A
2,4 mm	75-220 A	15-30 A	15-30 A	70-130 A	65-150 A	60-175 A
3,2 mm	85-330 A	20-35 A	20-35 A	90-150 A	75-170 A	75-250 A
4,0 mm	100-400 A	35-50 A	35-50 A	95-170 A	85-210 A	85-310 A
4,8 mm	120-480 A	50-70 A	50-70 A	100-240 A	90-300 A	95-340 A



PLASMA HAND CUTTING

SOLARIS

The **Solaris** torches are the new torches for Hand Plasma Cutting by GCE with excellent performance. High cutting speed and high quality of cut make these torches very efficient. Ergonomic handle and central connections provide ease of use and practicability. Suitable for the most demanding users. Excellent value for money.

CE
EN 60974-7



FEATURES / ADVANTAGES / BENEFITS

- Ergonomic handle
- Trigger protection against accidental starting
- Strong and ergonomic Central connection EURO type
- Ignition with high frequency
- Consumables fully interchangeable with torches of other brands
- Accessories included



IGNITION WITH HIGH FREQUENCY:

Art. Nr.	Descr.	Duty Cycle 60%				Qt.	Stock class
TP001000	SOLARIS B50 – 6m	50 A	4.5-5.0 bar	165 l/min	10-15 mm	1	DFW
TP001010	SOLARIS B70 – 6m	70 A	4.5-5.0 bar	170 l/min	18-24 mm	1	DFW
TP001020	SOLARIS B100 – 6m	100 A	4.5-5.0 bar	180 l/min	24-30 mm	1	DFW
TP001030	SOLARIS B150 – 6m	150 A	4.5-5.0 bar	200 l/min	35-40 mm	1	DFW
TP001100	SOLARIS F81 – 6m	80 A	4.5-5.0 bar	155 l/min	20-25 mm	1	DFW
TP001110	SOLARIS F101 – 6m	100 A	4.5-5.0 bar	180 l/min	25-30 mm	1	DFW
TP001120	SOLARIS F141 – 6m	140 A	4.5-5.0 bar	210 l/min	35-40 mm	1	DFW

IGNITION WITHOUT HIGH

Art. Nr.	Descr.	Duty Cycle 60%				Qt.	Stock class
TP001200	SOLARIS M60 – 4m (6 holes shield cup)	60 A	4.5-5.0 bar	116 l/min	12-20 mm	1	DFW



Ergonomic handle



Trigger protection

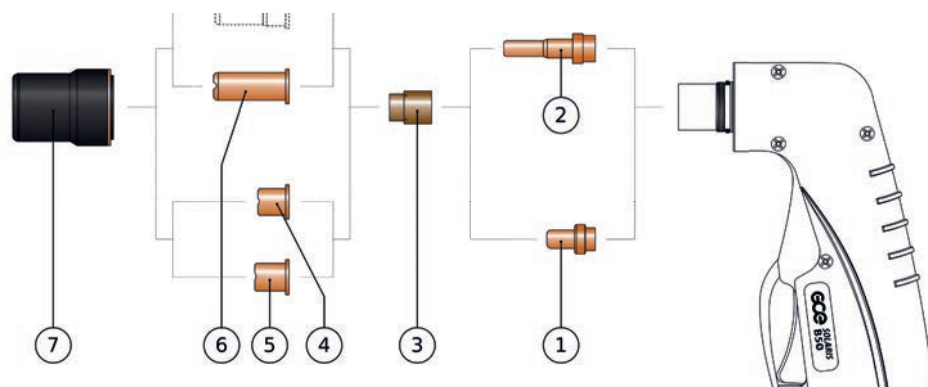


Central connection EURO type



Accessories included

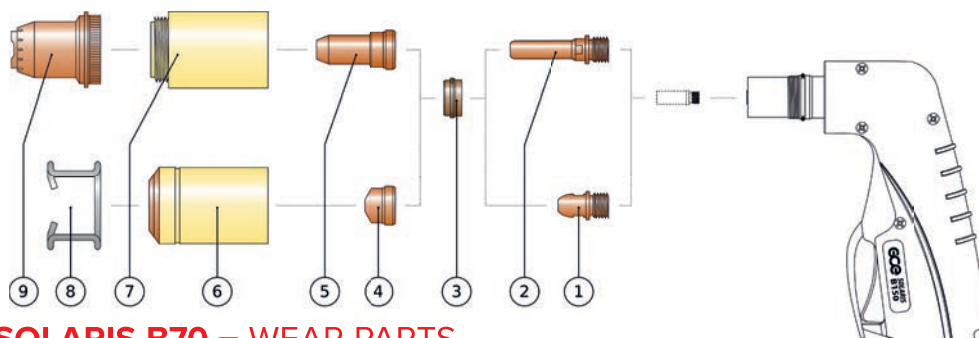
PLASMA TORCH SOLARIS B50



SOLARIS B50 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock Class
TP002200	Electrode Hf	1521 – Hf	1	10	DWF
TP002203	Electrode Extended Hf	1518- Hf	2	10	DWF
TP002150	Swirl ring	20101	3	2	DWF
TP002301-10	Tip D1,0 mm (50A)	1304	4	10	DWF
TP002302-10	Tip D1,0 mm Long life (50A)	1396	5	10	DWF
TP002302-11	Tip D1,1 mm Long life (60A)		5	10	DWF
TP002303-10	Tip Extended D1,0 mm (50A)	1370	6	10	DWF
TP002304-10	Tip Extended D1,0 mm Long life (50A)	1395	6	10	DWF
TP002304-11	Tip Extended D1,1 mm Long life (60A)		6	10	DWF
TP002400	Shield Cup	5710121	7	2	DWF

PLASMA TORCH SOLARIS B70

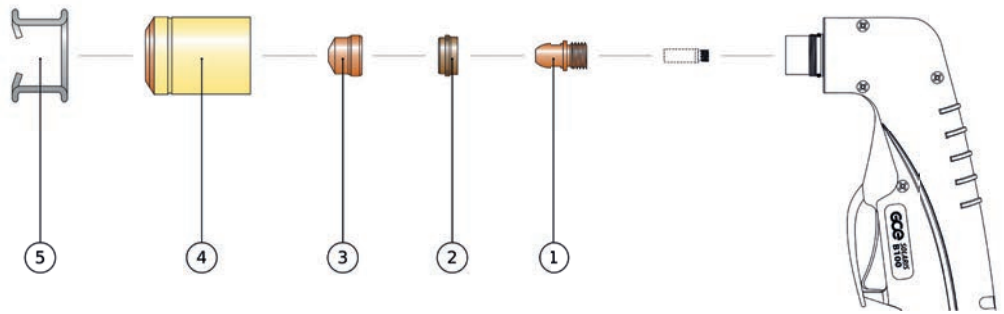


SOLARIS B70 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock Class
TP002201	Electrode Hf	1402	1	10	DWF
TP002204	Electrode Extended Hf	1368	2	10	DWF
TP002150	Swirl ring	20101	3	2	DWF
TP002302-10	Tip D1,0 mm Long life (50A)	1396	4	10	DWF
TP002302-11	Tip D1,1 mm Long life (60A)		4	10	DWF
TP002302-12	Tip D1,2 mm Long life (70A)	1308	4	10	DWF
TP002304-10	Tip Extended D1,0 mm Long life (50A)	1395	5	10	DWF
TP002304-11	Tip Extended D1,1 mm Long life (60A)		5	10	DWF
TP002304-12	Tip Extended D1,2 mm Long life (70A)		5	10	DWF
TP002402	Shield Cup	5710121	6	2	DWF
TP002450	Spacer spring	1394	7	10	DWF

The products listed here are fully compatible with other brands of equipment. References to other companies' products, numbers and registered trademarks are for market's convenience only.

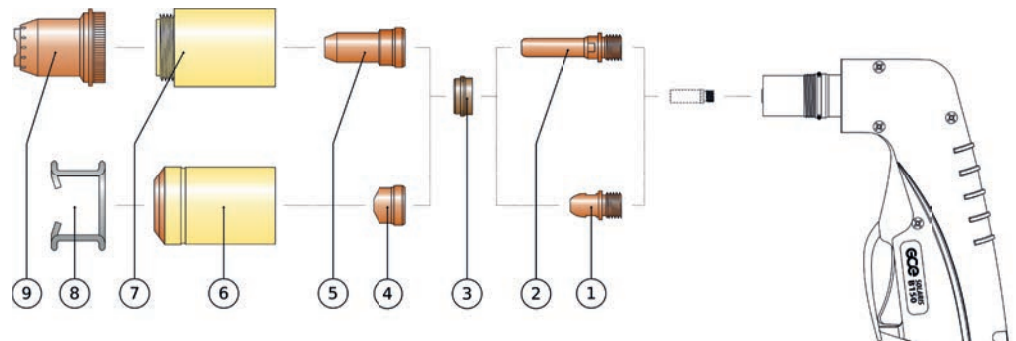
PLASMA TORCH SOLARIS B100



SOLARIS B100 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock Class
TP002202	Electrode Hf	1376	1	10	DFW
TP002151	Swirl ring	1377	2	2	DFW
TP002310-13	Tip D1,35 mm (100A)	1372	3	10	DFW
TP002310-16	Tip D1,6 mm (130A)	1373	3	10	DFW
TP002410	Shield Cup		4		DFW
TP002451	Spacer spring	1386	5	10	DFW

PLASMA TORCH SOLARIS B150

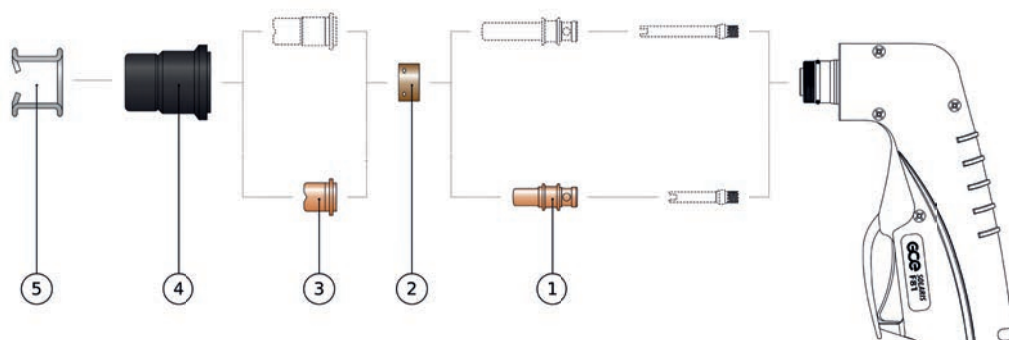


SOLARIS B150 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock Class
TP002202	Electrode Hf	1376	1	10	DFW
TP002205	Electrode Extended Hf	1517	2	10	DFW
TP002151	Swirl ring	1377	3	2	DFW
TP002310-13	Tip D1,35 mm (100A)	1372	4	10	DFW
TP002310-16	Tip D1,6 mm (130A)	1373	4	10	DFW
TP002310-18	Tip D1,8 mm (150A)	1374	4	10	DFW
TP002312-13	Tip Extended D1,35 mm (100A)		5	10	DFW
TP002312-16	Tip Extended D1,6 mm (130A)		5	10	DFW
TP002312-18	Tip Extended D1,8 mm (150A)		5	10	DFW
TP002403	Shield Cup	1389	6	2	DFW
TP002404	Shield Cup Contact	60350	7	2	DFW
TP002451	Spacer spring	1386	8	10	DFW
TP002459	Spacer drag		9	2	DFW

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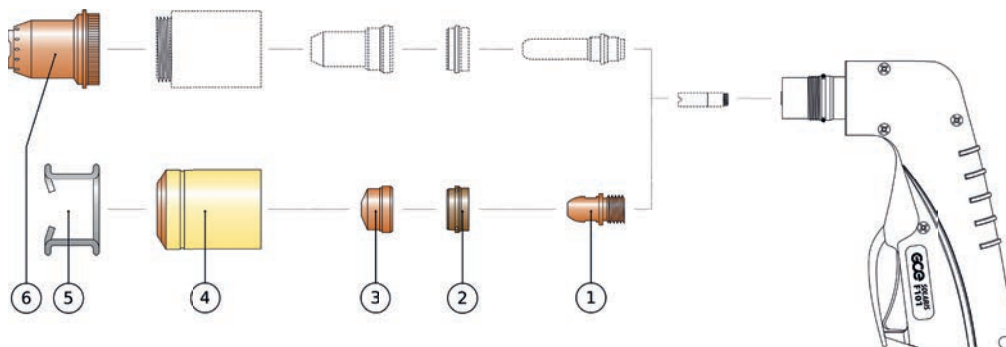
PLASMA TORCH SOLARIS F81



SOLARIS F81 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock Class
TP002206	Electrode Hf	PE0109	1	10	DFW
TP002152	Swirl ring	PE0107	2	2	DFW
TP002313-11	Tip D1,1 mm (60A)	PD0105-11	3	10	DFW
TP002313-12	Tip D1,2 mm (80A)	PD0105-12	3	10	DFW
TP002405	Shield Cup	PC0115	4	2	DFW
TP002452	Spacer spring	CV0028	5	10	DFW

PLASMA TORCH SOLARIS F101

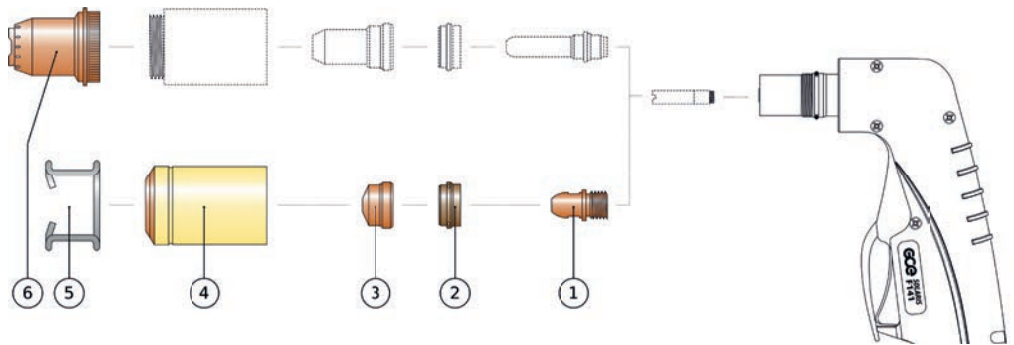


SOLARIS F101 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock class
TP002207	Electrode Hf	PR0101	1	10	DFW
TP002153	Swirl ring	PE0101	2	2	DFW
TP002315-14	Tip D1,4 mm (100A)	PD0101-14	3	10	DFW
TP002315-17	Tip D1,7 mm (130A)	PD0101-17	3	10	DFW
TP002406	Shield Cup Long life	PC0111	4	2	DFW
TP002453	Spacer spring	CV0011	5	10	DFW
TP002459	Spacer drag	CV0009	6	2	DFW

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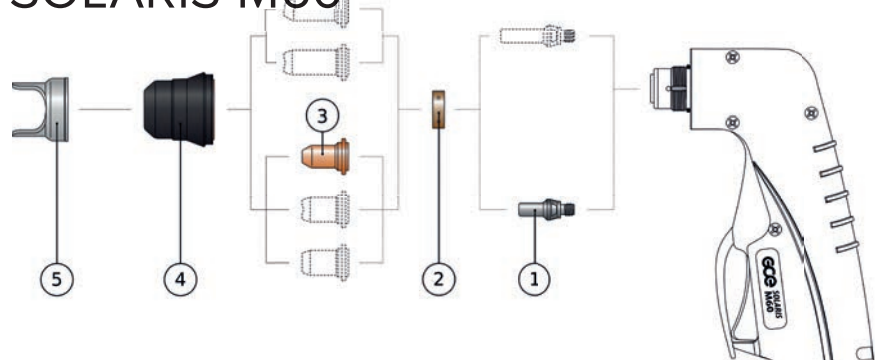
PLASMA TORCH SOLARIS F141



SOLARIS F141 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock class
TP002207	Electrode Hf	PR0101	1	10	DFW
TP002153	Swirl ring	PE0101	2	2	DFW
TP002315-14	Tip D.1,4 mm (100A)	PD0101-14	3	10	DFW
TP002315-17	Tip D.1,7 mm (130A)	PD0101-17	3	10	DFW
TP002408	Shield Cup Long life	PC0102	4	2	DFW
TP002453	Spacer spring	CV0011	5	10	DFW
TP002459	Spacer drag	CV0009	6	2	DFW

PLASMA TORCH SOLARIS M60



SOLARIS M60 – WEAR PARTS

Art. Nr.	Descr.		Pos.	Qt.	Stock class
TP 002212	Electrode – Back striking	52582	1	10	DFW
TP002155	Swirl ring	60028	2	2	DFW
TP002320-08	Tip D.0,8 mm (30A) – Back striking	51318.08	3	10	DFW
TP002320-09	Tip D.0,9 mm (40A) – Back striking	51318.09	3	10	DFW
TP002320-10	Tip D.1,0 mm (50A) – Back striking	51318.10	3	10	DFW
TP002320-11	Tip D.1,1 mm (60A) – Back striking	51318.11	3	10	DFW
TP002412	Shield Cup 6 holes (GLADIUS 40)	60389	4	2	DFW
TP002415	Shield Cup 4 holes (GLADIUS 40 COMP)		4	2	DFW
TP002458	Spacer double pointed	60432	5	2	DFW

The products listed here are fully compatible with other brands of equipment. References to other companies' products, numbers and registered trademarks are for market's convenience only.

AIR CARBON-ARC TORCHES



EN 60974-7

AIR CARBON-ARC GOUGING TORCHES

The air carbon-arc process physically removes metal, not chemically as in oxy-fuel cutting. Gouging or cutting occurs when the intense heat of the arc between the carbon electrode and the workpiece melts part of the workpiece. Simultaneously, air passes through the arc quickly enough to blow the molten material away.



DIMENSIONS

- > Torch: 25 cm
- > Cable: 210 cm (7 ft.)
- > 360° swivel cable (no cable twist)
- > impact and heat resistant insulators

Art. Nr.	Descr.			Qt.	Stock Class
52040	Torch 600 A	for medium duty application	K2	1	DFW
52041	Torch 1000 A	for heavy duty application	K4	1	DFW
52042	Torch 1250 A	for heavy duty application	K5	1	DFW

CARBON ELECTRODES POINTED

Art. Nr.,	Surface	Long	ø	AMP	Qt.	Stock Class
52104	Round	305 mm	4,0 mm (5/32")	90-150	100	DFW
52105	Round	305 mm	4,8 mm (3/16")	200-250	100	DFW
52106	Round	305 mm	6,4 mm (1/4")	300-400	100	DFW
52108	Round	305 mm	7,9 mm (5/16")	350-450	100	DFW
52110	Round	305 mm	9,5 mm (3/8")	450-600	100	DFW
52113	Round	305 mm	12,7 mm (1/2")	800-1000	100	DFW

ELECTRODE HOLDERS



EN 60974-11

PRATICA

Ergonomic handle with anti-slip notches. Clamp with grooves allowing the electrode to be fitted in multi positions for an easier positioning to the work piece.

- > Insulation class B
- > Electrode fixing in 7 positions
- > Solid brass body



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%		
Pratica 1	330 g	200 mm	260 A	200 A	4,0	25-35
Pratica 2	390 g	245 mm	350 A	250 A	5,0	35-50
Pratica 3	480 g	275 mm	520 A	400 A	6,3	50-70

Art. Nr.	Descr.	Qt.	Stock class
17200260	Electrode holder Pratica 1-260	1	DFW
17200350	Electrode holder Pratica 2-350	1	DFW
17200520	Electrode holder Pratica 3-520	1	DFW



EN 60974-11

MUJ SUPER

High specification electrode holder with heavy front insulation and anti-slip handle. The clamp with grooves allows the electrode to be fitted in multi positions for an easier positioning to the work piece. The retaining spring completely protected is easy to remove. The design of the electrode clamp offers extra protection, as the electrode is surrounded by insulating material reducing the possibility of accidental contact with the operator or other metallic parts.

- > Insulation class B



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%		
MUJ-SUPER 1	480 g	230 mm	300 A	200 A	2,5-4,0	25-35
MUJ-SUPER 2	620 g	245 mm	400 A	300 A	4,0-6,3	35-50
MUJ-SUPER 3	680 g	245 mm	500 A	400 A	5,0-5,8	50-70

Art. Nr.	Descr.	Qt.	Stock class
WP21034	Electrode holder MUJ-SUPER 1	1	DFW
WP21035	Electrode holder MUJ-SUPER 2	1	DFW
WP21036	Electrode holder MUJ-SUPER 3	1	DFW

ELECTRODE HOLDERS



EN 60974-11

CROCODILE

Crocodile electrode holders have a ribbed handle providing a firm grip and good balance. The spring is shielded to prevent damage from spatter and cable fixing is by means of a bolt and copper ferrule (supplied). One of the most popular electrode holders on the market, these are heavy duty.

> Insulation class B



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Crocodile 400	455 g	235 mm	400 A	300 A	4,0 35
Crocodile 600	580 g	250 mm	600 A	450 A	6,3 70

Art. Nr.	Descr.	Qt.	Stock class
53104	Electrode holder Crocodile 400	1	DFW
53106	Electrode holder Crocodile 600	1	DFW



EN 60974-11

SHARK

Electrode holder for all welding applications, available for high current values. High impact resistance and very easy to use.

> Insulation class B



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Shark 200	-	-	150 A	115 A	2,5 16
Shark 300	485 g	235 mm	250 A	200 A	3,2 25
Shark 400	-	-	350 A	270 A	4,0 35
Shark 550	600 g	265 mm	500 A	380 A	5,0 50

EXCELLENT
VALUE
FOR MONEY

Art. Nr.	Descr.	Qt.	Stock class
548800000160	Electrode holder Shark 200	1	DFW
548800000260	Electrode holder Shark 300	1	DFW
548800000350	Electrode holder Shark 400	1	DFW
548800000500	Electrode holder Shark 550	1	DFW



EN 60974-11

TWIST

TWIST is an electrode holder completely shielded in the front part. The electrode is positioned at 90 degrees and blocked by rotating the shank. In operation the electrode is completely hidden from the outside reducing the risk of short circuit.

Suitable particularly for welding in plain or vertical.

> Insulation class B



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Twist 400	515 g	220 mm	400 A	300 A	2,5-4,0 50-70
Twist 600	650 g	260 mm	600 A	350 A	4,0-6,3 50-70

Art. Nr.	Descr.	Qt.	Stock class
53524	Electrode holder Twist 400	1	DFW
53526	Electrode holder Twist 600	1	DFW

ELECTRODE HOLDERS



EN 60974-11

VESTALE®

The electrode holder VESTALE® is completely made in France. The design is very compact making the device strong and reliable. The electrode is fixed by screwing. Completely insulated.



TECHNICAL DATA						
Vestale® 500	485 g	-	600 A	500 A	6,3	95

Art. Nr.	Descr.	Qt.	Stock Class
D150102	Electrode holder Vestale® 500	1	DFW



EN 60974-11

COBRA®

COBRA® is an electrode holder entirely made in France with a compact design. The electrode is fixed by brass clamps. Completely insulated.



TECHNICAL DATA						
Cobra®	295 g	-	300 A	250 A	4,0	35

Art. Nr.	Descr.	Qt.	Stock class
D150104	Electrode holder Cobra®	1	DFW



EN 60974-11

STUBBY®

The original STUBBY fixes the electrode by rotating the shank.

> Insulation class: B.



TECHNICAL DATA						
Stubby® 300	450 g	-	400 A	300 A	6,3	50

Art. Nr.	Descr.	Qt.	Stock class
D150103	Electrode holder Stubby® 300	1	DFW



EN 60974-11

STUNTY

The electrode holder STUNTY has a brass body and a handle with rubber shock-proof coating. The electrode can be fixed in two positions by rotating the shank.

> Insulation class: A



TECHNICAL DATA						
Stunty 400	545g	255 mm	300 A	250 A	5,0	50-70

Art. Nr.	Descr.	Qt.	Stock class
D150105S	Electrode holder Stunty 400	1	DFW

EARTH CLAMPS



EN 60974-13



ECO-MAS

Earth clamps designed for semi-professional use, for general use with small welding machines (transformers or small inverters up to 150A). Cable fixing directly at the point of contact.

TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Eco-mas 150	210 g	175 mm	200 A	150 A	16-25
Eco-mas 200	210 g	175 mm	250 A	200 A	25-35

Art. Nr.	Descr.	Shunt	Qt.	Stock class
WP21038	Earth clamp Eco-mas 150	Copper plate	1	DFW
WP21039	Earth clamp Eco-mas 200	Copper braid	1	DFW

ECO-MAS PLUS

Earth clamps designed for semi-professional use, for general use with small welding machines. Cable fixing directly at the point of contact. Insulated handle.



EN 60974-13

TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Eco-mas plus 200	240 g	235 mm	200 A	150 A	16-25
Eco-mas plus 400	265 g	235 mm	400 A	300 A	25-35

Art. Nr.	Descr.	Shunt	Qt.	Stock class
10000022	Earth clamp Eco-mas plus 200	no	1	DFW
10000023	Earth clamp Eco-mas plus 400	Copper plate	1	DFW



EARTH CLAMPS



EN 60974-13

CLASSIC-MAS

HIGH PERFORMANCE earth clamps realized with attention to details. The model 400 is equipped with copper braid inside while the model 650 with double copper braid with the aim to optimize the conductivity and minimize the electric discharge. Thanks to the very good contacts realization, an high conductivity is always guaranteed. The clamp spring is soft and easy to use. For all professional users.



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Classic-mas 1	280 g	170 mm	250 A	200 A	25-35
Classic-mas 2	310 g	200 mm	400 A	300 A	35-50
Classic-mas 3	550 g	210 mm	600 A	500 A	70-95

Art. Nr.	Descr.	Shunt	Qt.	Stock class
WP21009	Earth clamp Classic-mas 1	copper braid	1	DFW
53204	Earth clamp Classic-mas 2	copper braid	1	DFW
WP21037	Earth clamp Classic-mas 3	double copper braid	1	DFW

BRASS-MAS PRO

Earth clamp for professional use. For big welding machines. Cast brass construction.



EN 60974-13

Brass-mas
PRO 300



Brass-mas
PRO 500

TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Brass-mas 2	430 g	165 mm	400 A	300 A	50-70
Brass-mas 3	530 g	175 mm	600 A	500 A	70-95

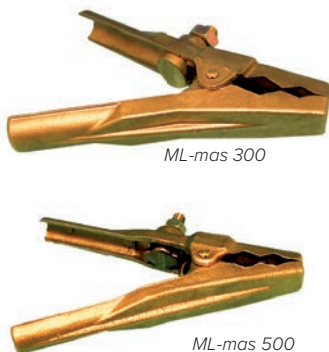
Art. Nr.	Descr.	Shunt	Qt.	Stock class
WP21046	Earth clamp Brass-mas 2	no	1	DFW
WP21041	Earth clamp Brass-mas 3	no	1	DFW



EN 60974-13

ML-MAS

Earth clamp for professional use. For big welding machines. Cast brass construction.



ML-mas 300

ML-mas 500

TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
ML-mas 1	320 g	150 mm	300 A	250 A	16-25
ML-mas 2	405 g	165 mm	350 A	300 A	35-50

Art. Nr.	Descr.	Shunt	Qt.	Stock class
D150215	Earth clamp ML-mas 1	no	1	DFW
D150216	Earth clamp ML-mas 2	no	1	DFW

EARTH CLAMPS



EN 60974-13

X-MAS

Earth clamp with cable fixing at the point of contact.



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
X-mas 300	-	-	400 A	300 A	35
X-mas 400	-	-	500 A	400 A	50
X-mas 500	-	-	600 A	500 A	70
Art. Nr.	Descr.	Shunt	Qt.	Stock class	
B1300A	Earth clamp X-mas 300	no	1	DFW	
B2400A	Earth clamp X-mas 400	no	1	DFW	
B3500A	Earth clamp X-mas 500	no	1	DFW	

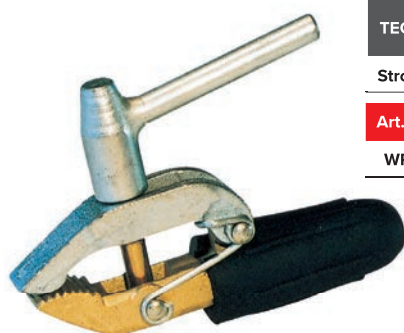


EN 60974-13

STRONG-MAS

ULTRA PROFESSIONAL screw driven earth clamps intended for semi permanent use where a perfect electrical connection is essential (600A). Insulated handle.

- > aluminum body
- > handle in rubber



TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Strong-mas 600	880 g-	168 mm	700 A	600 A	70-95
Art. Nr.	Descr.	Qt.	Stock class		
WP21044	Earth clamp Strong-mas 600	1	DWF		



EN 60974-13

SCREW-MAS

Earth clamps cast out of brass for high conductivity, with a wide footprint to give maximum contact area. Designed for industrial applications where a permanent contact and the maximum conductivity are required.



Screw-mas 500

TECHNICAL DATA			Duty Cycle 35%	Duty Cycle 60%	
Screw-mas 500	725 g	160 mm	600 A	500A	70-95
Art. Nr.	Descr.	Qt.	Stock class		
WP21042	Earth clamp Screw-mas 500	1	DFW		

CABLES AND CONNECTORS




EN 50525-2-31



COPPER CABLES WITH COATING IN PVC

Multipurpose cable with copper conductor, insulated with polyvinyl chloride, flame retardant and oil and chemical resistant.


Art. Nr.		 mm ²	Duty Cycle 60%	Qt	Stock Class
341000111016	PVC	16 mm ²	175 A	100 m	DFW
341000111025	PVC	25 mm ²	230 A	100 m	DFW
341000111035	PVC	35 mm ²	290 A	50 m	DFW
341000111050	PVC	50 mm ²	365 A	50 m	DFW
341000111070	PVC	70 mm ²	460 A	50 m	DFW
341000111095	PVC	95 mm ²	560 A	50 m	DFW
341000111120	PVC	120 mm ²	650 A	50 m	MTO



EN 50525-2-81
Type designation:
H01N2-D

COPPER CABLES WITH COATING IN NEOPRENE (WELDING CABLES)




Arc welding cable with copper conductor, insulated with rubber, flame retardant and oil and chemical resistant.

Art. Nr.		 mm ²	Duty Cycle 60%	Qt.	Stock class
WP21160	Neoprene	16 mm ²	175 A	100 m	MTO
WP21162	Neoprene	25 mm ²	230 A	100 m	DFW
WP21164	Neoprene	35 mm ²	290 A	100 m	DFW
WP21166	Neoprene	50 mm ²	365 A	50 m	DFW
WP21168	Neoprene	70 mm ²	460 A	50 m	DFW






EN 60974-12

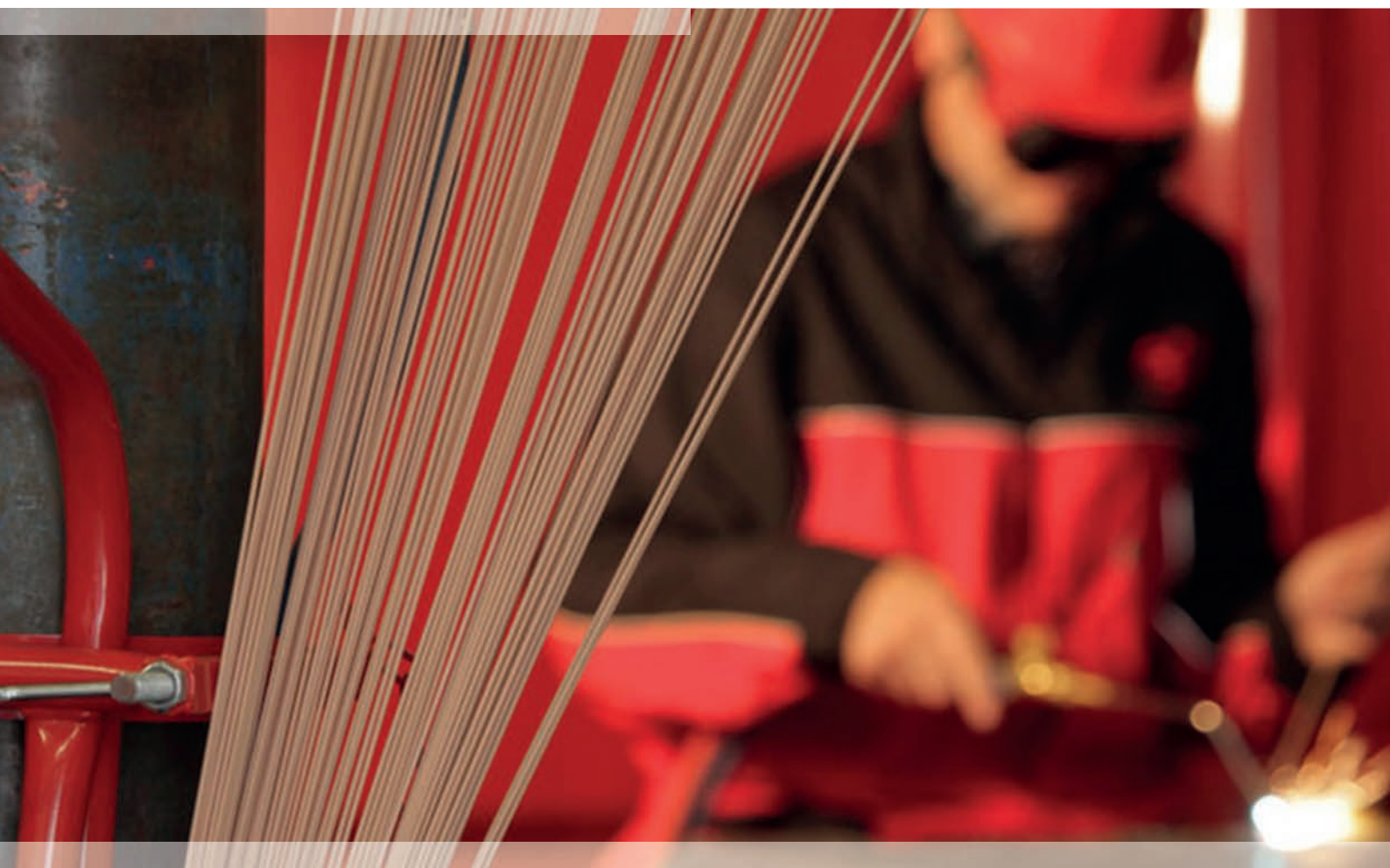
WELDING CABLE SOCKETS & PLUGS

Art. Nr.				 mm ²	Max A	Qt.	Stock class
711P001003	Socket	14 mm	9 mm (small)	10-25 mm ²	200 A	1	DFW
711P001103	Socket	21 mm	13 mm (big)	35-50 mm ²	300 A	1	DFW
711P001203	Socket	21 mm	13 mm (big)	50-70 mm ²	400 A	1	DFW
711P001303	Socket	24 mm	13 mm (big)	70-95 mm ²	500 A	1	DFW
711P001005	Plug	14 mm	9 mm (small)	10-25 mm ²	200 A	1	DFW
711P001005	Plug	21 mm	13 mm (big)	35-50 mm ²	300 A	1	DFW
711P001205	Plug	21 mm	13 mm (big)	50-70 mm ²	400 A	1	DFW
711P001305	Plug	24 mm	13 mm (big)	70-95 mm ²	500 A	1	DFW

MACHINE PANEL SOCKETS

Art. Nr.				 mm ²	Max A	Qt.	Stock class
711P001004	Socket	14 mm	9 mm (small)	10-25 mm ²	200 A	1	DFW
711P001004	Socket	21 mm	13 mm (big)	35-70 mm ²	400 A	1	DFW
711P001304	Socket	21 mm	13 mm (big)	70-95 mm ²	500 A	1	DFW

WELDING CONSUMABLES



ELECTRODES RUTILES FOR MMA WELDING (SMAW)

EN 60974-13

RUTILE ELECTRODE - (ARC MAGIC S)

ALL POSITIONS RUTILE ELECTRODE.

This electrode can really be used universally. It can be used in any position and with many different applications. It provides an exceptional self-assurance for welders. Good weld bead appearance. Easy slag removal.

WELDABLE STEEL RANGE:
General purpose construction steels

MAIN APPLICATION:
Metal structures in general, sheet metal, piping, metal works, containers, tanks, boilers, handicrafts, ironmongery, etc ...

ADVANTAGES:

- Universal all positions
- Excellent handling
- Smooth and stable arc
- Self-releasing slag

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
C101022S	2,0×300 mm	292	3,0	3	DFW
C101023S	2,5×350 mm	220	4,2	3	DFW
C101024S	3,2×350 mm	133	4,0	3	DFW
C101025S	3,2×450 mm	133	5,1	3	DFW
C101026S	4,0×350 mm	88	4,0	3	DFW
C101027S	4,0×450 mm	82	4,7	3	DFW

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E220100S	1,6×300 mm	200	1,2	1	DFW
E220101S	2,0×300 mm	93	1,0	1	DFW
E220102S	2,5×350 mm	56	1,0	1	DFW
E220103S	3,2×350 mm	34	1,0	1	DFW

TECHNICAL DATA

Standards:	ISO 2560-A: E 42 0 RC 11 AWS A5.1: E 6013
Typical Weld Metal Composition (%):	Fe (base) C<0,10 Mn=0,6 Si=0,4 S<0,025 P<0,025
All Weld Metal Mechanical Properties:	Rp0.2 >400 MPa Rm 510-580 MPa A5 >22%
Electrode polarity:	Negative
Output Circuit Voltage (OCV):	~ 40V

RUTILE ELECTRODE WITH HIGH MECHANICAL CHARACTERISTICS - (DIANE TS)

ALL POSITIONS RUTILE ELECTRODE.

Universal rutile electrode to be used in any position and with many different applications. Mechanical characteristics slightly superior to the ARC MAGIC S.

Exceptional operability for welders. Good resistance to splitting and good weld bead appearance. Easy slag removal.

WELDABLE STEEL RANGE:
General purpose construction steels

MAIN APPLICATION:
Metal structures in general, sheet metal, piping, metal works, containers, tanks, boilers, handicrafts, ironmongery, etc ...

ADVANTAGES:

- Universal all positions
- Excellent handling for welders
- Smooth and stable arc
- Self-releasing slag

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
C101331S	2,0×300 mm	292	3,0	3	DFW
C101332S	2,5×350 mm	220	4,1	3	DFW
C101333S	3,2×350 mm	133	4,0	3	DFW
C101335S	4,0×350 mm	88	4,0	3	DFW

TECHNICAL DATA

Standards:	ISO 2560-A: E 42 0 RC 11 AWS A5.1: E 6013
Typical Weld Metal Composition (%):	Fe (base) C<0,10 Mn=0,45 Si=0,4 S<0,025 P<0,025
All Weld Metal Mechanical Properties:	Re >420 MPa Rm 510-580 MPa A5 >22%
Electrode polarity:	Negative
Output Circuit Voltage (OCV):	~ 40V

BASIC ELECTRODES FOR MMA WELDING (SMAW)

BASIC ELECTRODE WITH HIGH WELDABILITY - (DIANE BT)

BASIC ELECTRODE DOUBLE COATED.

Basic coated electrode presenting exceptional welding characteristics due to its double coating. Arc very stable. Almost spatter-free. Easy removal of the slag. Recommended for root passes and on badly prepared joints. INCREDIBLY EASY TO USE.

WELDABLE STEEL RANGE:

Construction steels for general use, Tube steels, Ship steels, Steels for Boiler and Pressure Vessels, High strength steels, Heat resisting steels, Cold tough steels.

MAIN APPLICATION:

Frames, heavy supports, shipbuilding, pressure vessels, metal constructions and all repair works.

ADVANTAGES:

- Excellent handling for welders
- High resistance to cracking
- Smooth and stable arc
- Easy slag removal

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
C102404S	2,5×350 mm	167	3,3	3	DFW
C102405S	3,2×350 mm	89	3,0	3	DFW
C102407S	4,0×450 mm	62	4,0	3	DFW



TECHNICAL DATA	
Standards:	ISO 2560-A: E 38 2 B 12 H10 AWS A5.1: E 7016
Typical Weld Metal Composition (%):	Fe (base) C<0,10 Si0,7 Mn0,9 P<0,02 S<0,02
All Weld Metal Mechanical Properties:	Re 450 MPa Rm 550 MPa A5 27%
Electrode polarity:	Positive
Output Circuit Voltage (OCV):	~ 70V



**NEW
PACKAGING**

STAINLESS STEEL ELECTRODES FOR MMA WELDING (SMAW)

STAINLESS STEEL 316L RUTILE-BASIC ELECTRODE - (INOX RR316LC)



STAINLESS STEEL RUTILE ELEC

It is a Rutile-basic electrode, providing a weld metal in low carbon austenitic stainless steel (316L). Used for welding of 18/8/3 austenitic stainless steels and clad steels. It provides an excellent resistance to corrosion. Smooth welding. Easy slag removal.

ADVANTAGES:

- Low carbon universal stainless steel
- Excellent corrosion resistance
- Excellent handling for welders
- Coating with very low moisture absorption

WELDABLE STEEL RANGE:

18/8/3 type stainless steels (316L) and similar grades.

MAIN APPLICATION:

Chemical and petrochemical industries, ship building, tanks, pipes, heat exchangers, food industry.

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E310101S	1,6×250 mm	235	1,5	1	DFW
E310102S	2,0×300 mm	145	1,7	1	DFW
E310103S	2,5×350 mm	90	2,0	1	DFW
E310104S	3,2×350 mm	55	1,9	1	DFW

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E220105S	2,5×350 mm	15	0,330	1	DFW
E220106S	3,2×350 mm	10	0,350	1	DFW

TECHNICAL DATA

Standards:	ISO 3581-A: E 19 12 3L R 32 AWS A5.4: E316L-16
Typical Weld Metal Composition (%):	Fe (base) C<0,03 Si0,8 Mn0,7 Cr18,5 Ni12,0 Mo2,7
All Weld Metal Mechanical Properties:	Rp0.2 >400 MPa Rm >560 MPa A5 >35%
Electrode polarity:	Positive
Output Circuit Voltage (OCV):	~ 70V



STAINLESS STEEL 312 ELECTRODE - (INOX 29.10R)

STAINLESS STEEL RUTILE ELECTRODE FOR REPAIRING.

Rutile-basic electrode with an enhanced mechanical characteristic of the deposit of stainless steel. Highly resistant to cracking. Welding all low-alloy and high-alloy steels. It is a multipurpose electrode for high security repairs. Soft fusion, nice appearance of the beads, self releasing slag.

WELDABLE STEEL RANGE:

Carbon steel, galvanized steel, stainless steel, tool steel, manganese steel, etc...

MAIN APPLICATION:

Repairing and maintenance on dissimilar, difficult-to-weld or unidentified steels.

Suitable for buffer layers before hardfacing, building up piston rods, gears...

ADVANTAGES:

- Ideally universal
- High resistance
- Stainless deposit
- Nice appearance of the weld beads

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E290101S	2,5×300 mm	95	1,7	1	DFW
E290102S	3,2×350 mm	60	2,0	1	DFW

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E220110S	2,5×300 mm	15	0,270	1	DFW
E220111S	3,2×350 mm	10	0,340	1	DFW

TECHNICAL DATA

Standards:	ISO 3581-A: E 29 9 R 32 AWS A5.4: ~ E312-16
Typical Weld Metal Composition (%):	Fe (base) C<0,10 Mn=0,6 Si=1,0 Cr=29,0 Ni=9,5 Mo=0,5
All Weld Metal Mechanical Properties:	Rp0,2>500 MPa Rm=750/850 MPa A%>20
Electrode polarity:	Positive
Output Circuit Voltage (OCV):	~ 50V



CAST IRON ELECTRODES FOR MMA WELDING (SMAW)

NICKEL PURE ELECTRODE - (FUN N°1)

PURE NICKEL ELECTRODE.

Graphite electrode with high percentage of nickel, for cold repairing of different grades of cast iron. Very soft fusion. High conductivity.

WELDABLE STEEL RANGE:

All grey lamellar cast irons.

MAIN APPLICATION:

Repairing of engine blocks, frames of tool machines, gear reducers, valve and pump bodies, cast parts.

ADVANTAGES:

- Excellent weldability in all positions, without preheating.
- Homogeneous and easy-machining deposit.
- Great deposit extension for lamellar cast iron
- Ideal for repairing old cast iron

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E660101S	2,5×350 mm	105	2,3	1	DFW
E660102S	3,2×350 mm	65	2,2	1	DFW

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E220125S	2,5×350 mm	5	0,100	1	DFW
E220126S	3,2×350 mm	5	0,170	1	DFW

TECHNICAL DATA

Standards: ISO 1071: E C Ni-CI 3 AWS A 5.15: ENi-CI

Typical Weld Metal Composition (%): C1,2 Si<2,0 Mn<1,0 Fe<2,0 Ni>95,0

All Weld Metal Mechanical Properties: Rm >300 MPa Hardness ~180 HB

Electrode polarity: Positive, Negative

Output Circuit Voltage (OCV): ~ 40V



HARDFACING ELECTRODES FOR MMA WELDING (SMAW)

HARDFACING ELECTRODE - (DIROK RB 600)

RUTILE ELECTRODE FOR HARDFACING.

Rutile-basic coated electrode for surfacing of machines and construction parts suffering from wear and tear, as well as of tools made of low-alloyed and cast steels. Resistant to medium abrasion, shock and pressure. Electrodes are easy to weld even on small welding equipment with low open arc voltage. Soft flow, almost no spatters, self releasing slag, nice aspect of the weld beads, crack free deposit, machinable by grinding.

WELDABLE STEEL RANGE:

Low alloyed steels, high alloyed steels, wear plates.

MAIN APPLICATIONS:

Hardfacing of moulds, scrapers, buckets and bucket teeth, excavator parts, chisels, conveyer screws, track links, cutting tools, crusher cones.

ADVANTAGES:

- Universal all positions
- Good resistance to abrasion, shock and pressure
- Self releasing slag
- Machinable by grinding

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E600101S	3,2×450 mm	60	2,8	1	DFW
E600102S	4,0×450 mm	40	2,8	1	DFW

Art. Nr.	Ø×L	Pcs/pack	Kg/pack	Packs/box	Stock class
E220115S	3,2×450 mm	22	1,0	1	DFW

TECHNICAL DATA

Standards: EN 14700: E Fe2

Typical Weld Metal Composition (%): Fe (base) C1,0 Si0,5 Mn1,3 Cr4,5

Hardness: ~ 600 HB ; 55-60 HRC Obtained in pour weld metal, 2-3 layers

Electrode polarity: Negative

Output Circuit Voltage (OCV): ~ 45V



CHOOSING THE PROPER STICK ELECTRODE

GCE offers a selection of the most used electrodes, suitable for most of the professional welding applications.

Application	Product	Feature
Carbon Steel Welding	ARC MAGIC S	Universal
	DIANE TS	Enhanced mechanical characteristics
	DIANE BT	Special for repairing
Difficult weld Steel Welding	INOX 29.10R	Multipurpose, high security
Stainless Steel Welding	INOX RR316LC	Stainless steel 316L
Dissimilar Metals Welding	INOX 29.10R	Multipurpose, high security
Cast Iron Welding	FUN Nº1	Lamellar cast iron
Hardfacing	DIROK RB 600	Universal (55-60 HRC)



	Product	Application	Classification	
Un-alloyed steel	ARC MAGIC S	Universal rutile	ISO 2560-A: E420RC11	AWS A5.1: E6013
	DIANE TS	Universal rutile with enhanced mechanical characteristic	ISO 2560-A: E420RC11	AWS A5.1: E6013
	DIANE BT	Basic, special for repairing	ISO 2560-A: E382B12H10	AWS A5.1: E7016
High-alloyed steel	INOX RR316LC	Stainless steel 316L	ISO 3581-A: E19123LR32	AWS A5.4: E316L-16
	INOX 29.10R	Multipurpose for high security repairs	ISO 3581-A: E299R32	AWS A5.4: E312-16
Cast iron	FUN Nº1	Cast iron welding and repairing	ISO 1071: ECNi-CI3	AWS A5.15: ENi-CI
Hardfacing	DIROK RB 600	Universal for hardfacing	EN 14700: EFe2	

STAINLESS STEEL BASED ALLOYS FOR TIG WELDING (GTAW)

STAINLESS STEEL 308 - (GAZINOX 308L Si)



Filler alloy for TIG welding of stainless steels (304L, 304, 347, 321, etc).

Ideal for:

Welding of piping systems, works of fine thickness equal or lower than 3 mm and for penetration passes.

Suitable also for oxy-acetylene welding (not oxy - propane).

ISO 14343: W 19 9 L Si AWS A5.9: ER308L Si WERKSTOFFNUMMER: 1.4316

Art. Nr.	Description	ØxL	Qt.	Stock class
B100302K	GAZINOX 308 L Si	1,2x 1000 mm	5 kg	MTO
B100303K	GAZINOX 308 L Si	1,6 x 1000mm	5 kg	DFW
B100304K	GAZINOX 308 L Si	2,0 x 1000mm	5 kg	MTO

TECHNICAL DATA

Chemical composition (%):

Fe (base) C 0,02% Si 0,80% Mn 1,75% Cr 20,0% Ni 10,0%

Mechanical properties:

Rm: 590 N/mm2 Rp(0.2): 400 N/mm2 A%: 40%

STAINLESS STEEL 316 - (GAZINOX 316L Si)

Filler alloy for TIG welding of stabilised stainless steels (316, 316L, etc) or not stabilised. Service temperature from -120°C up to +400°C. Applied in the chemical and petrochemical industries, refineries, food industries.

Ideal for:

Welding of piping systems, works of fine thickness equal or lower than 3 mm and for penetration passes.

Suitable also for oxy-acetylene welding (not oxy-propane).



ISO 14343: W 19 12 3 L Si AWS A5.9: ER316LSi WERKSTOFFNUMMER: 1.4430

Art. Nr.	Description	ØxL	Qt.	Stock class
B100402K	GAZINOX 316 L Si	1,2 x1 000 mm	5 kg	DFW
B100403K	GAZINOX 316 L Si	1,6 x 1000 mm	5 kg	DFW
B100404	GAZINOX 316 L Si	2,0 x 1000 mm	5 kg	DFW
B100406K	GAZINOX 316 L Si	2,5 x 1000 mm	5 kg	MTO

TECHNICAL DATA

Chemical composition (%):

Fe (base) C 0,015% Si 0,85% Mn 1,75% Cr 18,5% Ni 12,0% Mo 2,70%

Mechanical properties:

Rm: 600 N/mm2 Rp(0.2): 400 N/mm2 A%: 40%

ALUMINUM BASED ALLOYS FOR TIG WELDING (GTAW)



ALUMINUM (AG5) - (GAZALU AG5)

Filler metal for TIG welding of aluminum alloys. Welding of all aluminum parts. Mg max: 5%. Piping, bodywork, maintenance, marine, rail, automotive.

ISO 18273 : S Al 5356 (AlMg5Cr)

AWS A5.10 : ER 5356

Art. Nr.	Description	Ø x L	Rods/pack	Qt.	Stock Class
B110401K	GAZALU AG5	1,6 x 1000 mm	376	2 kg	DFW
B110403K	GAZALU AG5	2, 0 x 1000 mm	240	2 kg	DFW
B110408K	GAZALU AG5	2,4 x 1000 mm	94	2 kg	DFW
B110404K	GAZALU AG5	3,2 x 1000 mm	84	2 kg	DFW

TECHNICAL DATA

Chemical composition (%):

Al (base) - Si 0,05 - Fe 0,13 - Mn 0,15 - Mg 4,8 - Ti 0,13 - Cr 0,1 - others

Mechanical properties:

Rm: 290 N/mm² Re: 120N/mm² A% : 30

Melting range:

560 - 630° C



ALUMINUM (AS 12) - (GAZALU AS 12)

Filler metal for autogenous welding or TIG welding of aluminium alloys. Welding of aluminium castings with Si>7%. High tensile strength and corrosion-proof. Low melting temperature.

IDEAL FOR:

Aluminum welding OXY-ACETYLENE or TIG. Smooth melting without bubbling and slag.

ISO 18273 : S Al 4047 (AlSi12)

AWS A5.10 : ER 4047

Art. Nr.	Description	Ø x L	Qt.	Stock class
B110501K	GAZALU AS 12	2,0 x 1000mm	5 kg	DFW
B110503K	GAZALU AS 12	3,2 x 1000 mm	5 kg	MTO

TECHNICAL DATA

Chemical composition (%):

Al (base) - Si 12,0 - Fe <0,5 - Cu 0,007 - Mn 0,05 - Mg 0,02 - Zn 0,03 - others

Mechanical properties:

Rm: 140 N/mm² Re: 70N/mm² A% : 18

Melting range:

570 - 590°C

FLUX POWDER (DEOXIDISER)

Art. Nr.	Description	Pack	Qt.	Stock class
B140112	FLUX GAZALU*	200 g	1	DFW

(for aluminium alloys AG5 and AS12)

IRON BASED ALLOYS FOR BRAZING

COPPER COATED MILD STEEL - (GAZOFER Cu)



Filler alloy for autogenous welding of mild steels. Autogenous welding of all pieces in soft steel. Piping, vehicle bodywork and maintenance. Also suitable for use by plumbers and boiler repairers.

Ideal for:

Joining extra soft steels by oxy-acetylene welding (not oxy-propane). Soft melting without bubbling or slag. Copper-plated steel doesn't rust, no mess, no bubbling during welding.

ISO 16120-2 : C10D

Art. Nr.	Description	Ø x L	Rods/pack	Qt.	Stock class
B100201K	GAZOFER CU	1,5 x 1000 mm	674	10 kg	DFW
B100202K	GAZOFER CU	2,0 x 1000 mm	405	10 kg	DFW
B150340	GAZOFER CU	2,0 x 1000 mm	80	1 kg	DFW
B100203K	GAZOFER CU	2,5 x 1000 mm	260	10 kg	DFW
B100204K	GAZOFER CU	3,0 x 1000 mm	180	10 kg	DFW
B150341	GAZOFER CU	3,0 x 500 mm	36	1 kg	DFW
B100205K	GAZOFER CU	4,0 x 1000 mm	101	10 kg	DFW
B100206K	GAZOFER CU	5,0 x 1000 mm	64	10 kg	DFW

TECHNICAL DATA

Chemical composition (%): Fe (base) C=0,11 Mn=0,50 Si=0,30 P=0,035 S=0,035

Mechanical properties: Rm: 600-1100 N/mm² depending on diameter

Melting range: 710-820° C

To be used without FLUX.



BLACK ANNEALED IRON

Offers excellent flexibility and softness thanks to the annealing process.

Ideal for:

Autogenous welding of common steels and iron (in the field of construction, agricultural, mechanical and general steelwork).

ISO 16120-2 : C9D

Art. Nr.	Description	Ø x Long	Rods/pack	Qt.	Stock class
MA10005	IRON	2,0 x 1000 mm	180	10 kg	DFW
MA10010	IRON	3,0 x 1000mm	405	10 kg	DFW

TECHNICAL DATA

Chemical composition (%): Fe (base) C<0,10 Mn=0,50 Si<0,30 P=0,035 S=0,035

Mechanical properties: Rm: 300-450 N/mm²

Melting range: 650-820° C

COPPER BASED ALLOYS FOR BRAZING

BRASS WITH SILICON (FLUX COATED) - (GAZOBRONZE COATED)

For brazing ferrous metals and copper alloys. Brazing of alloys, steels, bronzes, galvanized metals. Pipe making, vehicle bodywork, maintenance, ironmongery, farming implements.

Ideal for:

Brass alloys. High quality resistant and malleable braze welds. Excellent fluidity with no evaporation of zinc on galvanized steels.

ISO 17672: CU471

AWS A5-8: RB CuZn-A



Art. Nr.	Description	Ø x L	Qt.	Stock Class
B130201	GAZOBRONZE COATED	1,5 x 1000mm	174	DFW
B130202	GAZOBRONZE COATED	2,0 x 1000 mm	120	DFW
B130203	GAZOBRONZE COATED	2,5 x 1000 mm	80	DFW
B130204	GAZOBRONZE COATED	3,0 x 1000 mm	60	DFW
B130205	GAZOBRONZE COATED	4,0 x 1000 mm	40	DFW

Art. Nr.	Description	Ø x L	Qt.	Stock class
B150318	GAZOBRONZE COATED	2, 0 x 500 mm	1 kg	DFW
B150319	GAZOBRONZE COATED	3, 0 x 500 mm	1 kg	DFW

TECHNICAL DATA	
Chemical composition (%):	Cu=59 Zn=39,8 Si=0,2 others
Mechanical properties:	Rm: 450 N/mm ² ; A%: 35
Melting range:	870-890° C

BRASS WITH SILICON - (GAZOBRONZE UNCOATED)

For brazing ferrous metals and copper alloys. Brazing of alloys, steels, bronzes and galvanized metals. Pipe making, vehicle bodywork, maintenance, ironmongery, farming implements.

Ideal for:

Brass alloys. High quality, resistant and malleable braze welds. Excellent fluidity with no zinc evaporation on galvanized steel.

ISO 17672: CU471

AWS A5-8: RB CuZn-A



Art. Nr.	Description	Ø x L	Qt.	Stock Class
B130101K	GAZOBRONZE UNCOATED	1,5 x 1000 mm	10 kg	DFW
B130102K	GAZOBRONZE UNCOATED	2,0 x 1000 mm	10 kg	DFW
B130103K	GAZOBRONZE UNCOATED	2,5 x 1000 mm	10 kg	DFW
B130104K	GAZOBRONZE UNCOATED	3,0 x 1000 mm	10 kg	DFW
B130105K	GAZOBRONZE UNCOATED	4,0 x 1000 mm	10 kg	MTO

TECHNICAL DATA	
Chemical composition (%):	Cu=59 Zn=39,8 Si=0,2 others
Mechanical properties:	Rm: 450 N/mm ² ; A%: 35
Melting range:	870-890° C

To be used with FLUX GAZOBRONZE.

FLUX POWDER (DEOXIDISER)

High temperature flux for flame and induction brazing of steels and copper with brass alloys.

EN 1045: FH21

Art. Nr.	Description	Pack	Qt.	Stock class
B140106	GAZOBRONZE	250 g	1	DFW



COPPER BASED ALLOYS FOR BRAZING



BRASS WITH NICKEL (FLUX COATED) - (GAZOBRONZE Ni COATED)

For welding ferrous metals and copper alloys put under a lot of stress. Braze welding of alloys, steels, bronzes, galvanized metals, nickel. Manufacturing of or repairs to tools, tubular structures – wherever the welding is put to the test.

Ideal for:

Brass alloys with high nickel content. Strong mechanical resistance. Flows very Lissely. Extremely flexible coating (difficult to crumble even when you bend the rod).

ISO 17672: Cu 773

ISO 3677: B-Cu49ZnNi(Si)-890/920

AWS A5.8: RB CuZn-D

Art. Nr.	Description	Ø x L	Qt.	Stock Class
B150322	GAZOBRONZE Ni COATED	2,0 x 1000 mm	1 kg	DFW
B150323	GAZOBRONZE Ni COATED	3,0 x 1000mm	1 kg	MTO

TECHNICAL DATA

Chemical composition (%):

Cu=48 Zn=41,6 Ni=10,0 others=0,4

Mechanical properties:

Rm: 750 N/mm² ; A%: 25

Melting range:

890-920° C

To be used without FLUX.

COPPER-PHOSPHORUS BASED ALLOYS FOR BRAZING

COPPER-PHOSPHORUS - (GAZPHOS 01)

Phosphor-copper alloy for brazing copper alloys. Assembly of copper pipes and tubing through capillary action heating, sanitary fittings.

CAPILLARY-ACTION BRAZING:

Flows very smoothly. Copper and phosphor alloy with low fusion point for brazing copper without using pickling products. Reserved exclusively for brazing copper and copper alloys. To be used with an oxyacetylene or oxy-propane welding torch with neutral flame adjustment.

ISO 17672: CuP 180

ISO 3677: B-Cu93P-710/805

AWS A5.8: BCuP-2

Art. Nr.	Description	Ø x L	Rods/pack	Qt.	Stock class
B130408	GAZPHOS 01	2,0 x 500 mm	38	500 g	DFW
B130405	GAZPHOS 01	2,0 x 500 mm	76	1 kg	DFW

TECHNICAL DATA

Chemical composition (%):

Cu=93 P=7

Mechanical properties:

Rm: 500 N/mm² ; A%: 4

Melting range:

710-805° C

For brazing on copper the alloy is self-pickling.

For brazing on brass or bronze use the pickling flux FLUXOBRAZ.

COPPER-PHOSPHORUS WITH SILVER 2% - (GAZPHOS 2)

Phosphor-copper alloy with 2% silver for brazing copper alloys. Assembly of copper pipes and tubing through capillary action. Heating, sanitary fittings. Refrigeration industry.

CAPILLARY-ACTION BRAZING:

Flows very smoothly (thanks in part to the silver). Low fusion point copper and phosphor alloy for brazing copper without pickling products. Reserved exclusively for brazing copper and copper alloys. To be used with an oxyacetylene or oxy-propane welding torch with neutral flame adjustment.

ISO 17672: CuP 279

ISO 3677: B-Cu91PAg-650/820

AWS A5.8: BCuP-6

Art. Nr.	Description	Ø x L	Rods/pack	Qt.	Stock class
B130801	GAZPHOS 2	2,0 x 500 mm	76	1 kg	DFW
B130802	GAZPHOS 2	2,0 x 500 mm	38	500 g	DFW

TECHNICAL DATA

Chemical composition (%):

Cu=91 P=7 Ag=2

Mechanical properties:

Rm: 550 N/mm² ; A%: 6

Melting range:

650-820° C

For brazing on copper the alloy is self-pickling.

For brazing on brass or bronze use the pickling flux FLUXOBRAZ.

FLUX PASTE (DEOXIDISER)

FLUXOBRAZ is a flux paste certified by Certigaz, designed to be used with all the copper-phosphorous and silver alloys.

Working temperature: 500-800° C

EN 1045: FH10

Art. Nr.	Description	Pack	Qt.	Stock class
B140110	FLUXOBRAZ ATG	150 g	1	DFW



READY FOR USE

COPPER-PHOSPHORUS BASED ALLOYS FOR BRAZING



COPPER-PHOSPHORUS WITH SILVER 5%- (GAZPHOS 5)

Copper-phosphor alloy with 5% silver for brazing copper alloys. assembly of copper pipes and tubing through capillary action. Heating, sanitary fittings. Refrigeration industry.

CAPILLARY-ACTION BRAZING:

Flows very smoothly (thanks in part to the silver). Low fusion point copper and phosphor alloy for brazing copper without pickling products. Reserved exclusively for brazing copper and copper alloys. To be used with an oxy-acetylene or oxy-propane welding torch with neutral flame adjustment.

ISO 17672 : CuP 281

ISO 3677 : B-Cu89PAg 650-810

AWS A5.8: BCuP-3

Art. Nr.	Description	Ø x L	Rods/pack	Qt.	Stock class
B130502	GAZPHOS 5	2,0 x 500 mm	19	250 g	DFW

TECHNICAL DATA

Chemical composition (%):	Cu=89 P=6 Ag=5
Mechanical properties:	Rm: 650 N/mm ² ; A%: 8
Melting range:	650-810° C

For brazing on copper the alloy is self-pickling.

For brazing on brass or bronze use the pickling flux FLUXOBRAZ.



COPPER-PHOSPHORUS WITH SILVER 6% ATG APPROVED - (GAZPHOS 6B ATG)

Copper-phosphor alloy with 6% silver for capillary-action HIGH TEMPERATURE brazing of copper piping. FRENCH MINISTRY OF INDUSTRY (ATG) APPROVED. Assembly of copper pipes and tubing through capillary action, e.g. combustible gas piping (except acetylene). All pieces in copper, brass and bronze. Capillary-action brazing for securing pipes and connectors: Flows very smoothly (thanks in part to the silver). Low fusion point copper and phosphor alloy for brazing copper without pickling products. Reserved exclusively for brazing copper and copper alloys. To be used with an oxy-acetylene or oxy-propane welding torch with neutral flame adjustment.

ISO 17672 : close to CuP 283a

ISO 3677 : B-Cu87PAg(Ni)-645/725

AWS A5.8: close to BCuP-4

NF A 81-362: CuP291

ATG APPROVED

Art. Nr.	Description	Ø x L	Rods/pack	Qt.	Stock class
B131003	GAZPHOS 6 B ATG	2,0 x 500 mm	78	1 kg	DFW
B131004	GAZPHOS 6 B ATG	2,0 x 500 mm	39	500 g	DFW
B131005	GAZPHOS 6 B ATG	2,0 x 500 mm	19	250 g	DFW

TECHNICAL DATA

Chemical composition (%):	Cu=86,6 P=7,3 Ag=6,0 Ni=0,1
Mechanical properties:	Rm: 650 N/mm ² ; A%: 8
Melting range:	645-725°C

For brazing on copper the alloy is self-pickling.

For brazing on brass or bronze use the pickling flux FLUXOBRAZ.



READY FOR USE

FLUX PASTE (DEOXIDISER)

FLUXOBRAZ is a flux paste certified by Certigaz, designed to be used with all the copper-phosphorous and silver alloys.

Working temperature: 500-800° C

EN 1045: FH10

Art. Nr.	Description	Pack	Qt.	Stock class
B140110	FLUXOBRAZ ATG	150 g	1	DFW

COPPER-PHOSPHORUS BASED ALLOYS FOR BRAZING



COPPER-PHOSPHORUS WITH SILVER 15% - (GAZPHOS 15)

Copper-phosphor alloy with 15% silver for welding copper alloys. Assembly of copper pipes and tubing through capillary action. Heating, sanitary fittings. Refrigeration industry.

Particularly suitable for electrical connections.

Capillary-action brazing:

Flows very smoothly (thanks to the silver). Ternary copper-silver-phosphor alloy with low fusion point for brazing copper without pickling products. Reserved exclusively for brazing copper and copper alloys. GAZOPHOS 15 is to be used with an oxy-acetylene or oxy-propane welding torch with neutral flame adjustment.

ISO 17672:CuP 284

ISO 3677: B-Cu80AgP-650/800

AWS A5.8: BCuP-5

Art. Nr.	Description	Ø X L	Rods/pack	Qt.	Stock class
B130901	GAZPHOS 15	2,0 x 500 mm	76	1 kg	MTO
B130902	GAZPHOS 15	2,0 x 500 mm	19	250 g	MTO

TECHNICAL DATA	
Chemical composition (%):	Cu=80,0 P=5,0 Ag=15,0
Mechanical properties:	Rm: 650 N/mm ² ; A%: 10
Melting range:	650-800°C

For brazing on copper the alloy is self-pickling.

For brazing on brass or bronze use the pickling flux FLUXOBRAZ.

FLUX PASTE (DEOXIDISER)

FLUXOBRAZ is a flux paste certified by Certigaz, designed to be used with all the copper-phosphorous and silver alloys.

Working temperature: 500-800° C

EN 1045: FH10



Art. Nr.	Description	Pack	Qt.	Stock Class
B140110	FLUXOBRAZ ATG	150 g	1	DFW

SILVER BASED ALLOYS (CADMIUM FREE) FOR BRAZING



SILVER 20% (FLUX COATED) - (GAZARGENT 20 COATED)

Alloy with high silver content (20%) for assembly of steel/brass/copper pieces. assembling badly made pieces. Low-temperature brazing in general.

Capillary-action brazing:

Flows very smoothly (thanks to the silver). Copper-silver-zinc alloy with low fusion point for brazing copper and copper alloys, steels and stainless steels. Extremely flexible coating (it does not crumble when you bend the rod). GAZARGENT 20 is to be used with an oxy-acetylene, oxy-propane or oxy-butane welding torch with neutral flame adjustment.

CADMIUM FREE.

ISO 17672: Ag 220

ISO 3677: B-Cu44ZnAg(Si)-690/810 AWS A5.8: not defined

REDUCED COATING

Art. Nr.	Descr.	Ø x L	Flux ratio	Rods/pack	Weight	Stock class
B130905	GAZARGENT 20 COATED	2,0 x 500 mm	26%	14	250 g	DFW

STANDARD COATING

Art. Nr.	Descr.	Ø x L	Flux ratio	Rods/pack	Weight	Stock class
B130950	GAZARGENT 20 COATED	2,0, x 500mm	40%	45	1 kg	DFW

TECHNICAL DATA

Chemical Composition (%): Ag 20% Cu 44% Zn 35,7% Si 0,2%

Mechanical properties: Rm: 400 N/mm² A%: 20

Melting range: 690-810°C

SILVER 30% (FLUX COATED) - (GAZARGENT 30 COATED)

Alloy with high silver content (30%) for assembly of steel/brass/copper. Wide joints in piping, plumbing, climate control and exchangers. Brazing generally at low temperatures.

Capillary-action brazing:

Flows very smoothly (thanks to the silver). copper-silver-zinc alloy with low fusion point for brazing copper and copper alloys, steels and stainless steels. Extremely flexible coating (it does not crumble when you bend the rod). GAZARGENT 30 is to be used with an oxy-acetylene, oxy-propane or oxy-butane welding torch with neutral flame adjustment.

CADMIUM FREE.

ISO 17672: Ag 130Si

ISO 3677: B-Cu36ZnAgSn(Si)-665/755

AWS A5.8: not defined

REDUCED COATING

Art. Nr.	Descr.	Ø x L	Flux ratio	Rods/pack	Weight	Stock class
B130607	GAZARGENT 30 COATED	2,0 x 500 mm	26%	14	250 g	DFW

TECHNICAL DATA

Chemical Composition (%): Ag 30% Cu 36% Zn 31,5% Sn 2,3% Si 0,1%

Mechanical properties: Rm: 500 N/mm² A%: 18

Melting range: 665-755°C



SILVER BASED ALLOYS (CADMIUM FREE) FOR BRAZING

SILVER 34% (TUBULAR FLUX CORED)-(GAZARGENT 34 CORED)



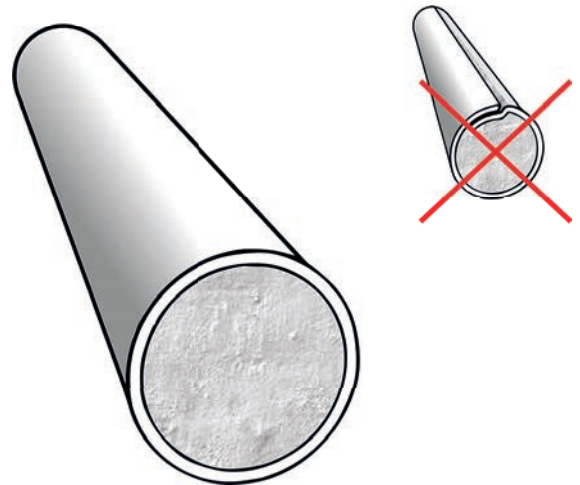
The TBW (Tubular Brazing Wire) is the ultimate major technical evolution in terms of product shape and process (patented worldwide by Selectarc).

The flux is "confined" in an extruded tube (seamless), which guarantees the entirety of the flux characteristics and an excellent brazing process. This innovation offers a simple but highly accurate method of application of the product, and yet still limiting to the strict localizing of the quantity of brazing flux applied.

PRODUCT ADVANTAGES:

- Protection of operators (no contact with the flux)
- Absence of residues after operation (no binder in the flux)
- Adapted to any gap: perfect penetration and impermeability (depending on the alloy)
- Innovative product, unique concept worldwide
- High fluidity and excellent capillarity
- Strong reduction of fumes emissions during application
- Excellent control of deposit of flux and metal
- Optimisation of post-braze cleaning (perfection of process)
- Excellent flux/metal ratio: increased profitability
- Use in flame, induction or oven/furnace brazing
- Assembly of all kind of metals (steel, copper, stainless steel, brass...)
- Less heat required in comparing to solid wire (less mass)
- Ease of storage and transport thanks to the absence of flux coating

WITHOUT SEAM !!!



ISO 17672: Ag 134Si ISO 3677: B-Cu36AgZnSn-630/730 AWS A5.8: not defined

Art. Nr.	Descr.	Ø x L	Flux ratio	Rods/pack	Weight	Stock class
B130651	GAZARGENT 34 CORED	1,6 x 500 mm	12%	16	100 g	MTO

TUBULAR

TECHNICAL DATA	
Chemical Composition (%):	Ag 34% Cu 36% Zn 27,5% Sn 2,5% Si 0,1%
Mechanical properties:	Rm: 500 N/mm ² A%: 18
Melting range:	630-730°C

SILVER BASED ALLOYS (CADMIUM FREE) FOR BRAZING



SILVER 34% (UNCOATED) - ATG APPROVED - (GAZARGENT SC 34B ATG UNCOATED)

UNCOATED ALLOY WITH 34% SILVER, FRENCH MINISTRY OF INDUSTRY (ATG) approved. Alloy for universal use. Brazing, generally at low temperatures, of copper, copper alloys and all kinds of steel, including stainless. Water/gas pipes. Climate control systems. Conforms to French government specifications ATG B521 & B524.

Capillary-action brazing:

Very fluid and elastic (thanks to the silver). Copper-silver-zinc alloy with low fusion point for brazing copper and copper alloys, steels and stainless steels. Excellent capillary attraction even on pieces with very small Description.

GAZARGENT 34 is to be used with an oxy-acetylene, oxy-propane or oxy-butane welding torch with neutral flame adjustment. **CADMIUM FREE.**

ISO 17672: Ag 134

ISO 3677: B-Cu36AgZnSn - 630/730

AWS A5.8: not defined

ATG APPROVED

Art. Nr.	Descr.	Ø x L	Rods/pack	Weight	Stock class
B130640	GAZARGENT SC 34B ATG UNCOATED	2,0x 500 mm	7	100 g	DFW
B130641	GAZARGENT SC 34B ATG UNCOATED	2,0 x 500 mm	18	250 g	DFW

Technical Data

Chemical Composition (%):

Ag 34% Cu 36% Zn 27,5% Sn 2,5%

Mechanical properties:

Rm: 500 N/mm² A%: 20

Melting range:

630-730°C

To be used with the pickling flux FLUXOBRAZ.

FLUX PASTE (DEOXIDISER)

FLUXOBRAZ is a flux paste certified by Certigaz, designed to be used with all the copper-phosphorous and silver alloys.

Working temperature: 500-800° C

Art. Nr.	Description	Pack	Qt	Stock class
B140110	FLUXOBRAZ ATG	150 g	1	DWF



EN 60974-13



SILVER 40% (FLUX COATED) - (GAZARGENT 40 COATED)

COATED ALLOY WITH 40% SILVER. Alloy for universal use. Brazing, generally at low temperatures, of copper, copper alloys and all kinds of steel, including stainless. Water/gas pipes. Climate control systems.

Capillary-action brazing:

Very fluid and elastic (thanks to the silver). Copper-silver-zinc alloy with low fusion point for brazing copper and copper alloys, steels and stainless steels. Excellent capillary attraction. GAZARGENT 40 is to be used with an oxy-acetylene, oxy-propane or oxy-butane welding torch with neutral flame adjustment. **CADMIUM FREE.**

ISO 17672: Ag 140Si

ISO 3677: B-Ag40CuZnSn(Si)-650/710

AWS A5.8: BA9-28

REDUCED COATING

Art. Nr.	Descr.	Ø x L	Flux ratio	Rods/pack	Weight	Stock class
MA40020	GAZARGENT 40 COATED	1,5 x 500 mm	30%	90	1 kg	DFW
B130609	GAZARGENT 40 COATED	2,0 x 500 mm	24%	60	1 kg	DFW
B130611	GAZARGENT 40 COATED	2,0 x 500 mm	24%	15	250	DFW
B130612	GAZARGENT 40 COATED	2,0 x 500 mm	24%	6	100 g	DFW

STANDARD COATING

Art. Nr.	Descr.	Ø x L	Flux ratio	Rods/pack	Weight	Stock class
B130620	GAZARGENT 40 COATED	2,0, x 500 mm	40%	45	1 kg	MTO

TECHNICAL DATA

Chemical Composition (%):

Ag 40% Cu 30% Zn 28% Sn 1,9% Si 0,1%

Mechanical properties:

Rm: 500 N/mm² A%: 17

Melting range:

650-710°C

SILVER BASED ALLOYS (CADMIUM FREE) FOR BRAZING



SILVER 40% (UNCOATED) - (GAZARGENT 40 UNCOATED)

UNCOATED ALLOY WITH 40% SILVER. Alloy for universal use. Brazing, generally at low temperatures, of copper, copper alloys and all kinds of steel, including stainless. Water/gas pipes. Climate control systems.

Capillary-action brazing:

Very fluid and elastic (thanks to the silver). Copper-silver-zinc alloy with low fusion point for brazing copper and copper alloys, steels and stainless steels. Excellent capillary attraction. GAZARGENT 40 is to be used with an oxy-acetylene, oxy-propane or oxy-butane welding torch with neutral flame adjustment. **CADMIUM FREE.** Suitable for food grade.

ISO 17672: Ag 140Si ISO 3677: B-Ag40CuZnSn(Si)-650/710

AWS A5.8: BAg-28

Art. Nr.	Descr.	Ø x L	Rods/pack	Weight	Stock class
B130703	GAZARGENT 40 UNCOATED	1,5 x 500 mm	32	250 g	DFW
B150325	GAZARGENT 40 UNCOATED	2,0 x 500 mm	8	100 g	DFW
B150326	GAZARGENT 40 UNCOATED	2,0 x 500 mm	20	250 g	DFW
B130702	GAZARGENT 40 UNCOATED	2,0 x 500 mm	80	1 kg	MTO

TECHNICAL DATA

Chemical Composition (%):

Ag 40% Cu 30% Zn 28% Sn 1,9% Si 0,1%

Mechanical properties:

Rm: 500 N/mm² A%: 17

Melting range:

650-710°C

To be used with the pickling flux GAZARGENT 750.



B140115



B140110

FLUX (DEOXIDISER)

Art. Nr.	Description	Pack	Qt.	Stock class
B140115	GAZARGENT 750 (powder)	80 g	1	DFW
B140110	FLUXOBRAZ ATG (paste)	150 g	1	DFW



SILVER 55% (FLUX COATED) - (GAZARGENT 55 COATED)

COATED ALLOY WITH 55% SILVER. Alloy with very high silver content for assembly of stainless steel/brass/copper. Especially suitable for medical gases, purified gases and in the food industry. Alloy for universal use. Brazing, generally at low temperatures, of copper, copper alloys and all kinds of steel, including stainless. Narrow joints on stainless steel. Pipes for water/gas and for purified gases or gases destined for food production. Climate control, sanitary fittings.

Capillary-action brazing:

Very fluid and elastic (thanks to the silver). Ternary copper-silver-zinc alloy with low fusion point and low fusion interval for brazing copper and copper alloys, steels and stainless steels. Excellent capillary attraction. GAZARGENT 2011 is to be used with an oxy-acetylene, oxy-propane or oxy-butane welding torch with neutral flame adjustment. **CADMIUM-FREE.**

ISO 17672: Ag 155Si

ISO 3677: B-Ag55ZnCuSn-630/660

AWS A5.8: not defined

SUITABLE FOR FOODS

Art. Nr.	Descr.	Ø x L	Flux ratio	Rods/pack	Weight	Stock class
B130721	GAZARGENT 55 COATED	1,5 x 500 mm	30%	45	500 g	DFW
B130719	GAZARGENT 55 COATED	2,0 mm x 500 mm	24%	27	500 g	DFW

TECHNICAL DATA

Chemical Composition (%):

Ag 55% Cu 21% Zn 22% Sn 1,9% Si 0,1%

Mechanical properties:

Rm: 500 N/mm² A%: 11

Melting range:

630-660°C

TIN BASED ALLOYS WITH LEAD FOR BRAZING

TIN 33% - Sn33Pb67 (WITH LEAD) - (GAZETAIN B33)

Suitable for zincwork, roofing, tinplate work.

SOLID RODS



Art. Nr.	Description	Ø x L	Pcs/pack	Qt.	Stock class
B135202K	GAZETAIN B33 Rod	8,0 x 350 mm	5	1 kg	DWF

1 rod = 0,18 kg

To be used with the pickling flux GAZETAIN PLUS

STRIPS

Art. Nr.	Description	Size	Pcs/pack	Qt.	Stock class
B135206K	GAZETAIN B33 Strip	13 x 24 x 350mm	2	2 kg	ATO

1 strip = 1,1 kg

To be used with the pickling flux GAZETAIN PLUS.

TECHNICAL DATA	
Chemical composition (%):	Sn=33 Pb=67
Melting range:	183-243°C

TIN 40% - Sn40Pb60 (WITH LEAD) - (GAZETAIN B40)

Suitable for zincwork, heating systems. Paste allows more precise joining of parts.

ISO 9453 : S-Pb60Sn40 (114)

SOLID RODS

Art. Nr.	Description	Ø X L	Pcs/pack	Qt.	Stock class
B135203K	GAZETAIN B40 Rod	8,0 x 350 mm	5	1 kg	ATO

To be used with the pickling flux GAZETAIN PLUS.

FLUX CORED WIRE



B135007K

Art. Nr.	Description	Ø	Qt.	Stock class
B135006K	GAZETAIN B40 Flux cored wire	2 mm	1×250 g	DFW
B135007K	GAZETAIN B40 Flux cored wire	2 mm	1×500 g	DFW
B135011KG	GAZETAIN B40 Flux cored wire	3 mm	1×500 g	DFW

Self-fluxing alloy. The pickling flux GAZETAIN PLUS may be used for additional fluxing.

TECHNICAL DATA	
Chemical composition (%):	Sn=40 Pb=60
Melting range:	183-235°C

TIN BASED ALLOYS LEAD FREE FOR BRAZING

TIN 97% WITH COPPER (LEAD FREE) - Sn97Cu3 - (GAZETAIN B97)

Suitable for plumbing, automotive, electrical and joining of many electronic components.
ISO 9453 : S-Sn97Cu3 (402)

FLUX CORED WIRE

Art. Nr.	Description	Ø	Qt.	Stock
B135010K	GAZETAIN B97 Flux cored wire	2 mm	1×250 g	DFW
B135009K	GAZETAIN B97 Flux cored wire	2 mm	1×500 g	MTO

Self-fluxing alloy.

The pickling flux GAZETAIN PLUS may be used for additional fluxing.

TECHNICAL DATA	
Chemical composition (%):	Sn=97 Cu=3
Melting range:	230-250°C

TIN 96,5% WITH SILVER (LEAD FREE) - (GAZETAIN B96)

Lead free alloy may be used in plumbing installations, particularly where soft water is in use. It is widely used in food handling equipment where lead contamination must be avoided.
ISO 9453 : S-Sn96Ag4 (703)

SOLID WIRE

Art. Nr.	Description	Ø	Qt.	Stock class
B135110K	GAZETAIN B96 Solid wire	2 mm	1×250 g	DFW

To be used with the pickling flux GAZETAIN PLUS.

TECHNICAL DATA	
Chemical composition (%):	Sn=96,5 Ag=3,5
Melting range:	221°C

FLUX GAZETAIN PLUS (CREAM)

Pickling paste suitable for both tin alloys with lead and lead free.
 Soldering of iron-copper, zinc and lead alloys, piping in copper, plumbing, electrical materials, space industry.

Art. Nr.	Description	Qt.	Stock
B140104	FLUX GAZETAIN PLUS (cream)	1×100 g	DFW

TABLE OF USE OF FILLER METALS FOR BRAZING

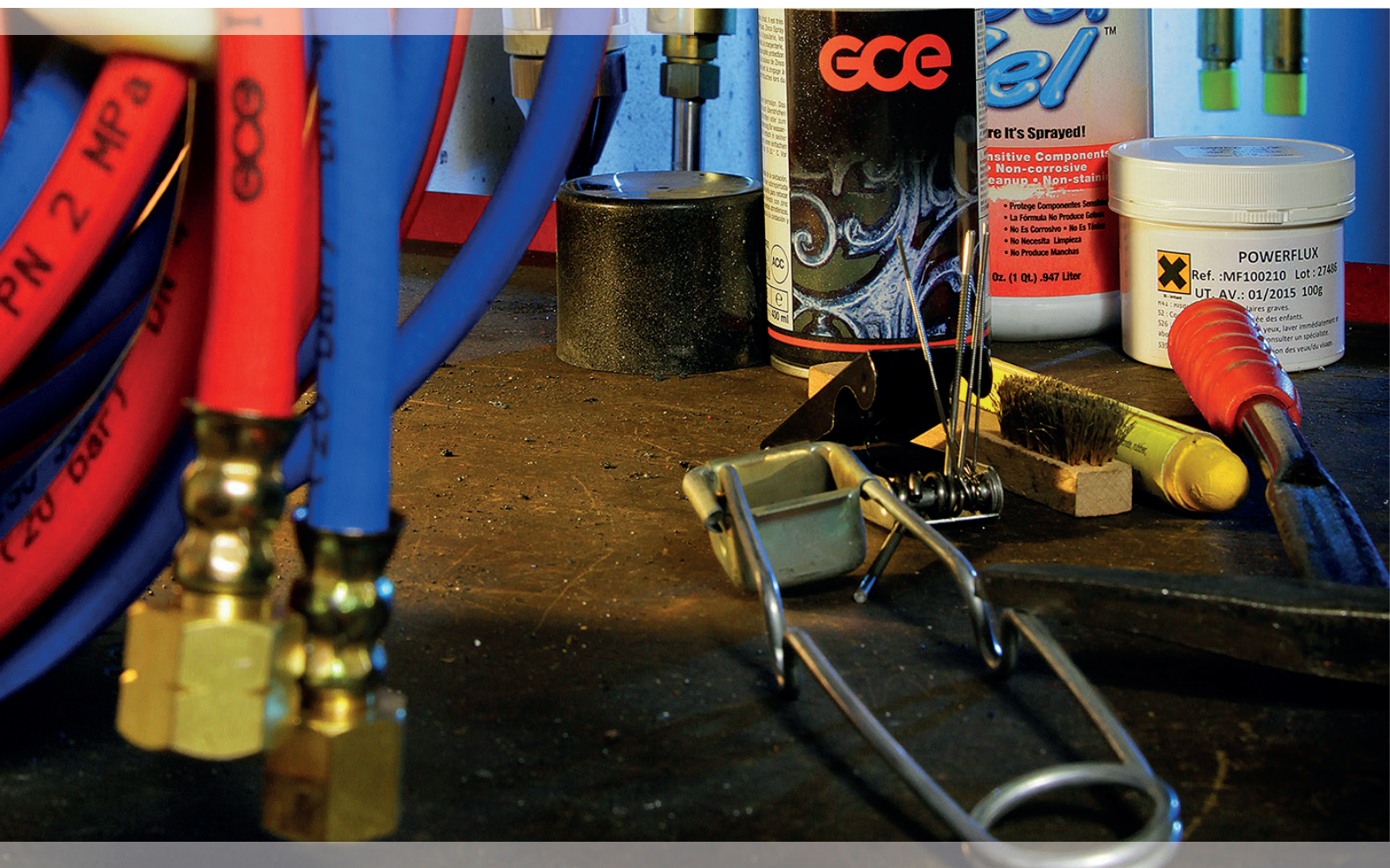
	LEAD	ZINC	ALUMINIUM	NICKEL	CAST IRON	STAINLESS STEEL	GALVANIZED STEEL	IRON/STEEL	BRASS	COPPER
COPPER	Gaze-tain	Gaze-tain	-	Gazargent	Gazargent Gazobronze	Gazargent	Gazobronze Gazargent	Gazobronze Gazargent Gazetainw	Gazobronze Gazphos Gazargent Gazetain	Gazphos Gazobronze Gazargent Gazetain
BRASS	Gaze-tain	Gaze-tain	-	Gazargent	Gazargent	Gazargent	Gazargent	Gazargent Gazetain	Gazobronze Gazargent Gazetain	
IRON/STEEL	Gaze-tain	Gaze-tain	-	Gazargent	Gazargent Gazobronze Gazobronze Ni	Gazargent	Gazobronze Gazargent	Gazofer Gazobronze Gazobronze Ni Gazargent Gazetain		
GALVANIZED STEEL	Gaze-tain	Gaze-tain	-	Gazargent	Gazobronze Gazargent	Gazargent	Gazobronze Gazargent			
STAINLESS STEEL	Gaze-tain	Gaze-tain	-	Gazargent	Gazargent	Gazargent				
CAST IRON	-	-	-	Gazargent	Gazobronze Gazargent					
NICKEL	-	-	-	Gazargent						
ALUMINIUM	-	-	Gazalu							
ZINC	Gaze-tain	Gaze-tain								
LEAD	Gaze-tain									

Do you need help to choose the right filler metal?



Product		Application	Classification			EN 1044
			ISO 3677	DIN 8513	AWS A 5.8	
Brass	GAZOBRONZE	Repair (steels, cast iron and copper)	-	L-CuZn39Sn	RBCuZn-A	CU302
	GAZOBRONZE Ni	For resistant connections (steels, cast iron and copper)	B-Cu 49Zn Ni (Si)-890/920	L-CuNi10Zn	RBCuZn-D	CU305
Copper-Phos	GAZ PHOS 01	Copper brazing	B-Cu 93P-710/805	L-CuP7	BCuP-2	CP202
	GAZ PHOS 2	Multipurpose (copper)	B-Cu 91PAg-650/820	L-Ag2P	BCuP-6	CP105
	GAZ PHOS 5	Refrigeration (copper)	B-Cu 89PAg-650/810	L-Ag5P	BCuP-3	CP104
	GAZ PHOS 6 (ATG)	Gas systems installation	B-Cu 87PAg (Ni)-645/725	L-Ag 6PNi	close to BCuP-4	CP103
	GAZ PHOS 15	Electric connections (copper)	B-Cu 80Ag P-650/800	L-Ag15P	BCuP-5	CP102
Silver	GAZARGEN T 20	Economic multipurpose (steel, brass, copper)	B-Cu 46ZnAgSi-690/810	L-Ag20	-	close to AG206
	GAZARGENT 30	General use (steel, brass, copper)	B-Cu 36ZnAgSn-665/755	L-Ag30Sn	-	AG107
	GAZARGENT 34	Small gap joining (steel, brass, copper)	B-Cu 36AgZnSn-630/730	L-Ag34Sn	-	AG106
	GAZARGENT 34 (ATG)	Gas systems installation	B-Ag 36AgZnSn-650/730	L-Ag34Sn	-	AG106
	GAZARGENT 40	Food and sanitary	B-Ag 40CuZnSn-650/710	L-Ag40Sn	BAG-28	AG105
	GAZARGENT 55	Medical, pure gases	B-Ag 55ZnCuSn-630/660	L-Ag55Sn	-	AG103
Product		Application	Classification			
			ISO 16120-2		ISO 9453	
Iron	GAZOFE CU	For mild steels	C10D		-	
	BLACK ANNEALED IRON	General purpose (steels, iron)	C9D		-	
Tin	GAZETAIN B33	Zinc, tin, lead	-		-	
	GAZETAIN B40	Zinc, tin, lead	-		S-Pb60Sn40 (114)	
	GAZETAIN B97	Automotive, electronic	-		S-Sn97Cu3 (402)	
	GAZETAIN B96	Food (zinc, tin)	-		A-Sn96Ag4 (703)	

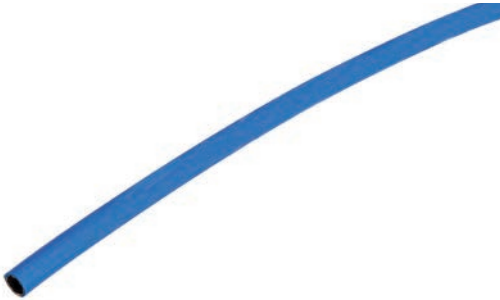
ACCESSOIRES



RUBBER HOSES - BULK

SINGLE HOSE OXYGEN (BLUE) (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

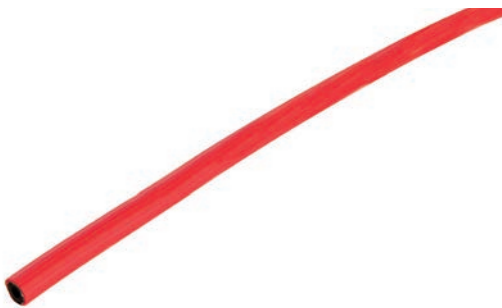
TECHNICAL DATA	
Temperature:	20°C / +60°C
Safety factor:	3:1
Marking:	In compliance with the below mentioned standard
Working pressure:	20 bar
Bursting pressure:	60 bar
Standards:	ISO 3821

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) (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) (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) (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

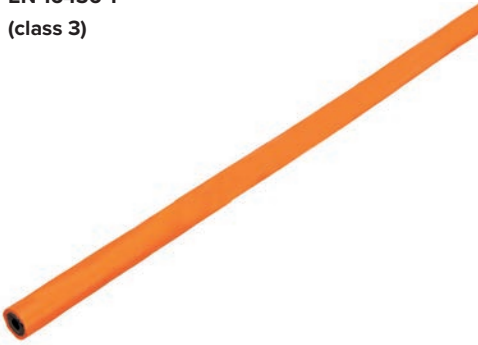
* The full length may be a combination of max two short lengths.

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
(class 3)



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)

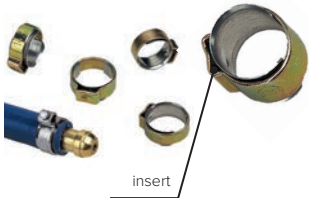
- > Inner tube: Synthetic rubber resistant to LPG and Propane/Butane gases
- > Reinforcement: High tensile synthetic textile
- > External cover: Orange synthetic rubber resistant to abrasion and weather
- > Smooth surface

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 (class 3)

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

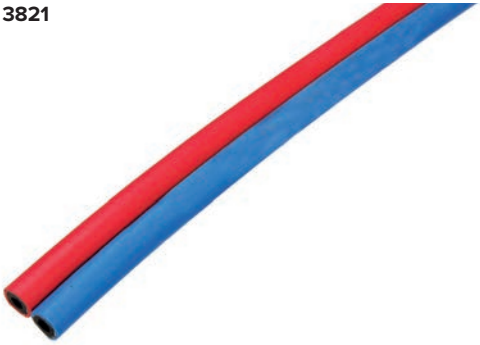
Pliers with not sharp jaws to tighten the clips. No damage for both clip and hose.

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

RUBBER HOSES - BULK

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

ISO 3821



**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

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) (FOR WELDING AND ALLIED PROCESSES)

ISO 3821



**WORKING PRESSURE
20 BAR**

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

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) WITH FITTINGS AND NON RETURN VALVE (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



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)

**WORKING PRESSURE
20 BAR**

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) WITH FITTINGS AND NON RETURN VALVE (FOR WELDING AND ALLIED PROCESSES)

ISO 3821
EN 1256



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)

**WORKING PRESSURE
20 BAR**

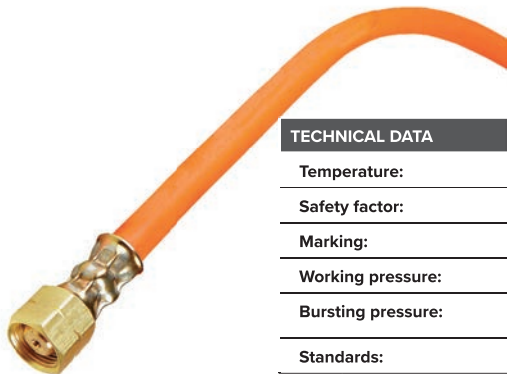
Art. Nr.	Ø int × Ø ext	Inlet-Outlet	Coil	Stock class
849065	6×13 mm	G3/8" LH - G1/4" LH	5m	DFW
849064	6×13 mm	G3/8" LH - G3/8" LH	5 m	DFW
849068	6×13 mm	G3/8" LH - G3/8" LH	10 m	MTO
849071	6×13 mm	9/16"UNF LH - 9/16"UNF LH	10 m	MTO
849067	6×13 mm	9/16"UNF LH - 9/16"UNF LH	20 m	MTO
849089	8×15 mm	G3/8"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

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 PROPANE/BUTANE (ORANGE) 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) 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

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

TWIN HOSE OXYGEN/ACETYLENE (BLUE/RED) 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) 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

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

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

ISO 3821
EN 1256



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**

WORKING PRESSURE
20 BAR

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

ISO 3821
EN 1256

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

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**

WORKING PRESSURE 20 BAR

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

and

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

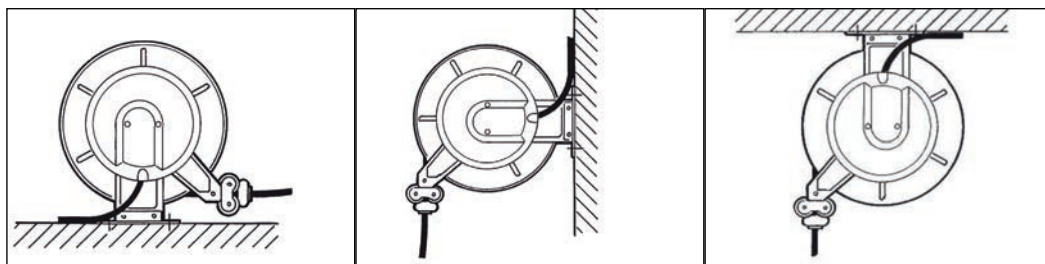
It can host:

hose 6×13 up to 25m

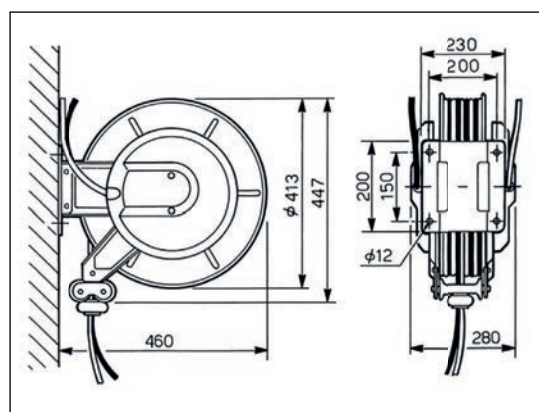
hose 8×15 up to 20m

hose 10×17 up to 15m

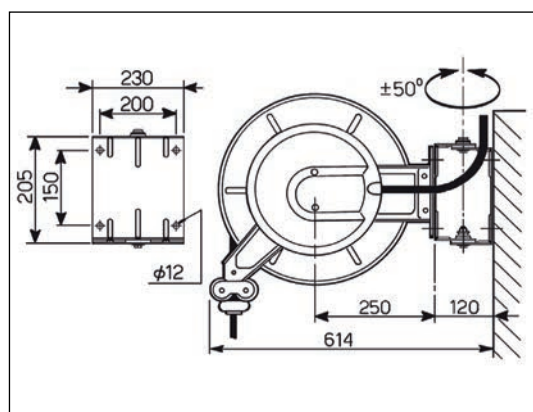
ONLY 20 KG!



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

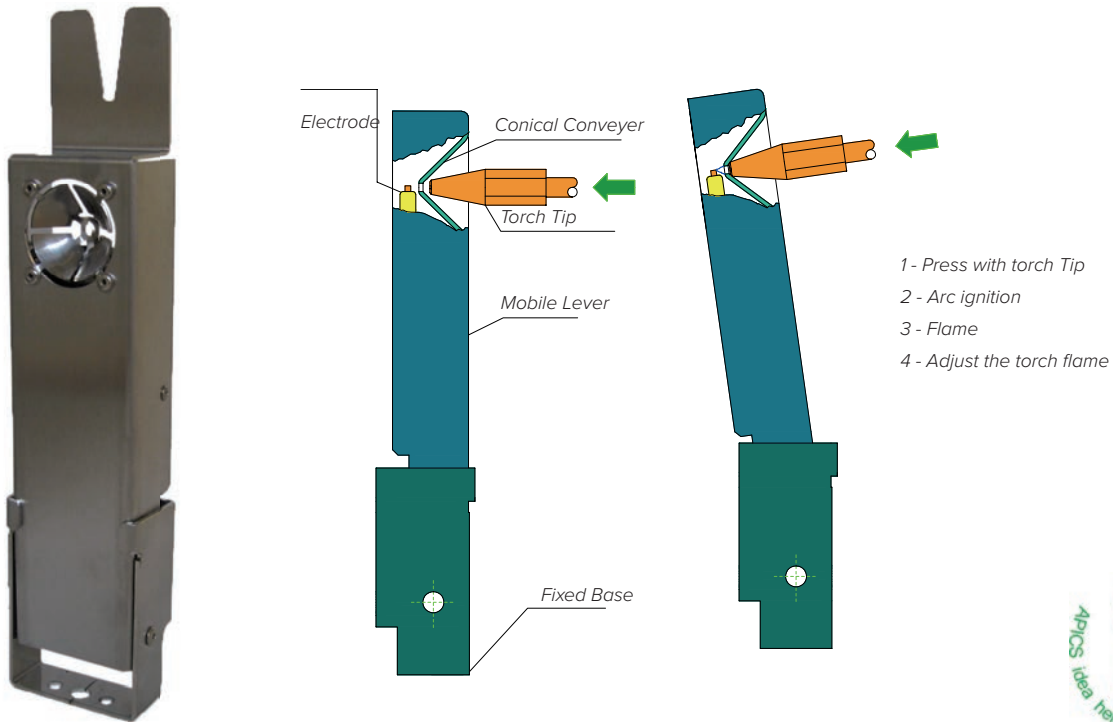
NEW! APICS



Directive 2004/108/EC
EN 55014-1
EN 55014-1 +EC +A1 +IS1

ARE YOU WORKING WITH A GAS ECONOMISER?

Do you really want to pay for pilot lights which are on all day long?
Do you want to improve the safety of your working environment?
Looking to increase efficiency?



APICS is a "stand alone" lighter for oxy/acetylene Brenner for welding cutting and heating. Can also be used for oxy/propane in conjunction with an existing conventional gas economiser.

PILOT FLAME CAN DEFINITELY BE SWITCHED OFF!

So:

- No naked flames in the workplace.
- No need to light pilot in the morning, switch off in the evening. No need to adjust gas levels during the course of the day.
- No build up of combustible gases in the event of pilot light being extinguished.

How does it work?

Through a new patented ignitor system.

HANDS FREE (COMPARED TO SPARK LIGHTERS)!

Simply fix APICS to the work bench, then press with the torch tip to ignite ...

Maintenance free! Constructed in long lasting stainless steel.

Apics helps the environment by reducing CO₂ emissions (200kg CO₂ is estimated emission from a pilot flame economiser).

Spare parts kit includes:

- 1 electrode ceramic high voltage + spring + sealing ring
- 1 conical conveyer AISI 430
- 2 pieces (inner + outer) of high temperature heat-shrink lining

LIGHTERS

Art. Nr.	Descr.	Qt.	Stock class
548026032009	APICS SAFE LIGHTER Piezo Electric	1	DFW
548026032010	APICS SPARE PARTS KIT	1	DFW

TOOLS

LIGHTERS



Art. Nr.	Descr.	Qt.	Stock class
14008541P	Set 5 Lighters with spring	1	DFW
14008546	Spare flint for Lighter with spring 3×20 mm	10	DFW



Art. Nr.	Descr.	Qt.	Stock class
54800003001BP	Set 5 Lighters with cup	1	DFW
F161008EMB	Lighter with cup + 5 flints (blister)	1	DFW
5480003001XC	Spare flint for Lighter with cup	10	DFW
9430570	Set 50 spare flints for Lighter with cup	1	DFW

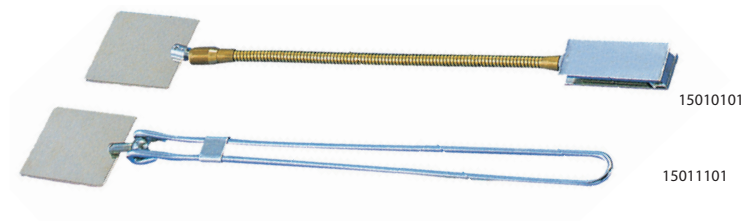


Art. Nr.	Descr.	Qt.	Stock class
9430830	Set 10 Lighters gun	1	DFW
548809562651P	Set 10 spare flints for Lighter gun 2,4×4,1 mm	1	DFW



TOOLS

MIRROR



Resistant to temperatures up to 600°C



Art. Nr.	Descr.	Qt.	Stock class
15010101	Mirror 70×80×1 in steel with Magnetic base	1	DFW
15011101	Mirror 70×80×1 in steel with Handle	1	DFW

SPARE PARTS

Art. Nr.	Descr.	Qt.	Stock class
15013101	Spare mirror plate 70×80×1 in steel	10	DFW
F161001EMB	Set 5 Spare mirror plates 70×80×1 in steel (blister)	1	ATO

NOZZLE CLEANER

Art. Nr.	Descr.	Qt.	Stock class
F161054EMB	Nozzle Cleaner BLISTER ø 0,5-2,3 mm	12 needles	DFW
548814071191P	ø 0,5-1,6 mm *	(10 pcs) 14 needles	DFW
9430860	ø 0,5-1,6 mm *	(12 pcs) 14 needles	DFW
9430850	ø 0,5-2,8 mm *	(12 pcs) 10 needles	DFW

*not in blister



F161054EMB



9430850

9430860

TOOLS



BR 1

14008472



BR 2

14008475



BR 5

14008480



BR JUNIOR

14008157



WIRE BRUSHES

Art. Nr.	Descr.	Qt.	Stock class
14008472	Wire Brush BR1 Steel	4	DFW
14008475	Wire Brush BR2 Stainless Steel	4	DFW
14008480	Wire Brush BR5 Brass	4	DFW
14008157	Wire Brush JUNIOR Brass	4	DFW

Characteristics	Bristles	Rows	Wire Type	Wire Ø
Wire Brush BR1	Steel	4	Smooth	0,30-0,35 mm
Wire Brush BR2	Stainless Steel	4	Smooth	0,30-0,35 mm
Wire Brush BR5	Brass	4	Rippled	0,30-0,35 mm
Wire Brush JUNIOR	Brass	3	Rippled	0,15 mm



CHIPPING HAMMERS

Art. Nr.	Descr.			Qt.	Stock class
WP21103	Chipping hammer with metal handle	260 mm	260 g	1	DFW
WP21104	Chipping Hammer with wooden handle	270 mm	240 g	1	DFW

SPRAYS



ANTISPATTER PLUS SPRAY

ANTISPATTER PLUS 400ml is an ECO-Friendly spray to prevent the welding spatter to adhere to the torch nozzle, and the workpiece. Post-weld cleaning requirements are reduced to a minimum.

- > NOT CARCINOGENIC
- > It does not generate fumes
- > Scented with Menthol
- > Paintable: Treated surfaces can be painted, galvanized, chrome-plated, etc...

Art. Nr.	Descr.	Language	Qt.	Stock class
WP22002	ANTISPATTER PLUS 400 ml	(EN-FR-DE-IT-ES)	25	DFW
WP22003	ANTISPATTER PLUS 400 ml	(HU-RO-PL-PT-CZ)	25	DFW



ANTISPATTER SPRAY NOT FLAMMABLE

ANTISPATTER NOT FLAMMABLE 300ml (400g)

Silicone free, ecologically friendly spray which is used to stop weld spatter from adhering to the torch nozzle and the work piece. This spray doesn't contain flammable propellant.

- > Paintable: Treated surfaces can be painted, galvanized, chrome-plated, etc...

Art. Nr.	Descr.	Language	Qt.	Stock class
392P000071	ANTISPATTER 300 ml spray	(HU-RO-PL-PT-CZ)	25	DFW



ANTISPATTER CREAM 300 G

ANTISPATTER Cream 300g

For specific protection of the torch nozzle from weld spatter. Dip the torch nozzle into the cream, shake to remove excess, then start welding operation.

Art. Nr.	Descr.	Language	Qt.	Stock class
WP22009	ANTISPATTER CREAM 300 g	(IT)	1	DFW



ANTISPATTER LIQUID

ANTISPATTER Liquid

Antispatter liquid to be applied with a brush.

It is used to stop weld spatter from adhering to the torch nozzle and the work piece.

- > Paintable: Treated surfaces can be painted, galvanized, chrome-plated, etc...

Art. Nr.	Descr.	Language	Qt.	Stock class
WP22008	ANTISPATTER 5 L Tank	(IT)	5	DFW
WP220080	ANTISPATTER 25 L Tank	(IT)	25	DFW

SPRAYS



GALVANIZING SPRAY

For really fast professional results, ideal for protecting freshly exposed metal surfaces from atmospheric oxidation. Also acts as a primer for subsequent painting.

Art. Nr.	Descr.	Language	Qt.	Stock class
WP22005	ZINCSpray 400 ml	(IT-FR-DE-GB-ES)	25	DFW
WP22005B	ZINCSpray 400 ml	(HU-RO-PL-PT-CZ)	25	DFW
WP220051	INOXSPRAY 400 ml	(IT)	12	DFW



GAS LEAK DETECTOR SPRAY

GAS LEAK DETECTOR is a spray that once sprayed on pipes and surfaces reveals the gas leak via the formation of bubbles. Ideal for plumbers and HVAC engineers to check all the pipes connections. Safe and convenient, replaces completely the old method with soapy water. Can also be used on refrigeration systems to verify refrigerant gas leakage.

Art. Nr.	Descr.	Language	Qt.	Stock class
WP22028	GAS LEAK Detector 400 ml	(IT-FR-DE-GB-ES)	25	DFW
WP22028B	GAS LEAK Detector 400 ml	(HU-RO-PL-PT-CZ)	25	DFW



GAS LEAK DETECTOR SPRAY OXYGEN COMPATIBLE

GAS LEAK DETECTOR OXYGEN COMPATIBLE is a spray that once sprayed on pipes and surfaces reveals the gas leak via the formation of bubbles. It is compatible with OXYGEN hence it can be used to detect leaks on oxygen systems.

> NON FLAMMABLE

Art. Nr.	Descr.	Language	Qt.	Stock class
548900140303	GAS LEAK OX Detector 400 ml*	(IT-FR-DE-GB-ES)	6	DFW

* Oxygen Compatible



MULTISPRAY

Multispray is a highly searching fluid with five functions; Penetrating agent for rusted nuts/bolts. Water repellent action. Antioxidant preventing rust formation. General lubrication. Metal polish. The lubrication properties of this spray are particularly long lasting, making it a must have tool for general use in the workshop.

Art. Nr.	Descr.	Language	Qt.	Stock class
WP22036	MULTISPRAY 400 ml	(IT-FR-DE-GB-ES)	12	DFW



CRACK DETECTORS SPRAY

TESTING OF SEAMS

First use the cleaner to prepare the surface, making sure it is free from oil and grease which could affect results. Apply the dye and wait approx 15 minutes penetration to occur. Remove any excess dye with water, dry, and then apply the developer. Any defects will color the developer in 10-15 minutes.

Art. Nr.	Descr.	Language	Qt.	Stock class
WP22030	Spray Cleaner 400 ml		12	DFW
WP22032	Spray Penetrant 400 ml	RED	12	DFW
WP22034	Spray Developer 400 ml	WHITE	12	DFW

MARKERS

MARKER B

Markal Paintstik® B Markers are true lead free paints in stick form . Weather-resistant, UV-resistant. Ideal for layout, color coding, fabrication and identification. Marks through oil and water. Marks on smooth, rough, rusty or dirty surfaces.



- > Non-toxic.
- > For use on metal, wood, plastic, concrete, rubber, glass, card-board and paper.
- > Marking range: -46°C +66°C

Art. Nr.	Color	Qt.	Stock class
548900080226	Green	12	DFW
548960080220	White	12	DFW
548960084811	Yellow	12	DFW
548960084812	Red	12	DFW



MARKER BALL STYLMARK

Marker STYLMARK® is a marker in tube suitable for many kind of surfaces: metal, ceramic, glass, wood, paper, plastic.

Fast drying paint, very well resistant to temperatures up to 200°C.

Paint formula without halogens, sulphides, lead, cadmium, zinc, mercury.

- > NON TOXIC
- > 50ml tubes double wall reinforced (Aluminum-Plastic) to avoid accidental spillage.
- > Operating temperature: -20°C +70°C
- > Tip Ball 3mm (1/8")

Art. Nr.	Color	Qt.	Stock class
WP23040	Yellow	10	DFW
WP23041	White	10	DFW
WP23042	Red	10	DFW



BALL MARKER (LIQUID IN BOTTLE)

Liquid paint marker with ball tip. An ideal replacement for tube markers.

Much less waste of color. Features an auto cleaning closure to prevent clogging.

Unbreakable plastic bottle very durable and resistant to impact or crushing.

Suitable for any hard surface, wet, oily or rippled (metal, wood, glass, plastic, concrete, stones, etc.)

- > Lead free, NON TOXIC. The paint dries in 5 min.
 - > Resistant to weather and fade.
 - > Operating temperature: -46°C +66°C
- Tip Ball 3 mm (1/8")



Art. Nr.	Color	Qt.	Stock class
548900084600	White	1	DFW
548960084601	Yellow	1	DFW



MARKERS

VALVE ACTION MARKER



Valve Action is a quick-drying liquid paint marker suitable for long-lasting markings, resistant to wear and weathering.

The paint is Xylene-free, reduces the health risks and is safe for the use on any surface.

Suitable for steel, iron, plastics, glass, rubber, textiles

- Quick drying permanent paint.
- Xylene-free paint
- For low corrosion applications
- Round tip wear resistant D.3 mm
- Metal tank to reduce the risk of breaking.



Art. Nr.	Color	Qt.	Stock class
548900096820	WHITE	12	DFW
548900096821	YELLOW	12	MTO
548900096823	BLACK	12	MTO

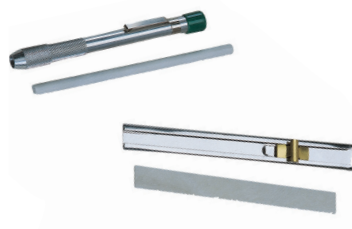


Delivered in practical plastic bags with 10 pcs.

MARKER SOAPSTONE

Marker in soap-stone available in round or flat shape. A holder can be purchased separately to protect markers, prevent break up in use, and allow maximum consumption of the product.

Art. Nr.	Descr.		Qt.	Stock Class
548960080129	Soapstone FLAT	125×4×12 mm	20	DFW
548960080130	Soapstone ROUND	125× 0 5 mm	20	DFW



Art. Nr.	Descr.	Qt.	Stock class
548960080140	HOLDER for Soapstone Flat	1	DFW
548960080141	HOLDER for Soapstone Round	1	DFW

BRASOTEK

BRASOTEK is an innovative product for the preparation of the joints before brazing. This liquid product allows for a perfect cleaning through chemical reaction without any hazard for the operator. Once applied with the extremely practical marker, BRASOTEK develops a protective coating that keeps the pieces clean and deoxidized much longer (up to 2 hours).

Oxidation is the worst enemy of welds.

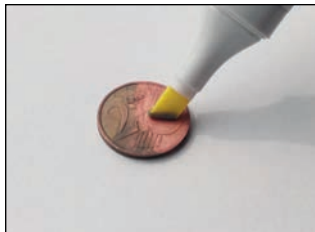
BRASOTEK removes completely all the dirt and the oxides from the surfaces to be joined facilitates the preheating by improving heat distribution and helping to prevent burns.

It reduces the preparation time because the pieces are processed only once, without the need for multiple applications. For brazing alloys copper-copper, copper-iron, copper-brass, copper-bronze, copper-inconel, and aluminum materials.

Particularly suitable in the sectors of refrigeration, maintenance, installers, etc.

FEATURES

- NON-TOXIC, NON-POLLUTING
- Reduced use of fluxes
- Significant working time reduction.
- Reduction of risks for the operator.
- Perfect welding of different metals (copper-brass, copper-bronze, coppersteel).
- Cost saving
- Double tips marker or big size marker (22 mm)



PATENTED
FORMULA



Art. Nr.	Description	Qt.	Stock class
WP25000	BRASOTEK KIT (Marker + 1 Cartridge)	1	DFW
WP25001	BRASOTEK KIT XL (Marker + 2 Cartridges)	1	DFW
WP25010	BRASOTEK REFILL SET (4 Cartridges)	1	DFW



THERMAL PROTECTION

HELIOS 1000 THERMAL MAT



Insulating thermal mat made of high-quality silica fibers coupled both sides with felt layers of PAN (carbon fiber). This mat is perfect when there's the need to protect small things near the piece to be welded from high temperatures and welding spatters above all when welding on-site. Suitable for welders that operate on-site (repair of cars, small workshops, heating & ventilation, plumbing, etc.).

- Asbestos-free and ceramics-free.
- Usable from both sides.
- Reinforced edges with stitching.
- Black color anti-glare.
- Resistant to most chemicals.
- Excellent flexibility and handling.

PROTECTION FROM HEAT UP TO 1000°C.

TECHNICAL DATA	
Material:	silica fibers and carbon fiber
Dimensions:	210×290 mm
Heat protection:	up to 1000°C

Code	Désignation	Unité	Classe
A200153	Écran thermique HELIOS 1000 sous blister	1	DFW

PROTECTIVE SCREENS

TRANSECO - MOBILE PANEL WITH WELDING CURTAIN

ISO 25980



TRANSECO is a mobile protective screen, but at the same time very stable. Thanks to its overlapping feet it can be combined and expanded. The frame is made from steel tube with epoxy powder coating. The curtain with its folded edges comes stretched between the top and the bottom. The kit comes complete for an easy assembly. Protective against hazardous UV- and IR- rays and resistant ignition.

TECHNICAL DATA	
Frame size:	145 x 187 cm (LxH)
Curtain size:	140 x 160 cm (LxH)
Ground clearance:	0,4 mm
Weight:	8,2 Kg
Curtain thickness	0,4 mm

Code	Désignation	Couleur	Unité	Classe
TTOTTVET75M	TransEco T75M	Dark green (matt)	1	DFW
TTOTTVET40	TransEco T40	Red	1	MTO

Welding curtains and screens are not a personal protective equipment

PROTECTIVE SCREENS

TRANSFLEX - MOBILE PANEL WITH WELDING CURTAIN

ISO 25980



TRANSFLEX is a mobile protective screen mounted on wheels for increased mobility.

The frame is made of steel tube coated with epoxy powder. The curtain can be hung to the top of frame by means of sliding hooks supplied with the kit. The kit comes complete for an easy assembly.

Protective against hazardous UV- and IR- rays and resistant to ignition.

TECHNICAL DATA	
Frame size:	210 x 195 cm (L x H)
Curtain size:	130 x 160 cm (L x H) x2 pcs - total coverage 210 cm
Ground clearance:	approx.30 cm

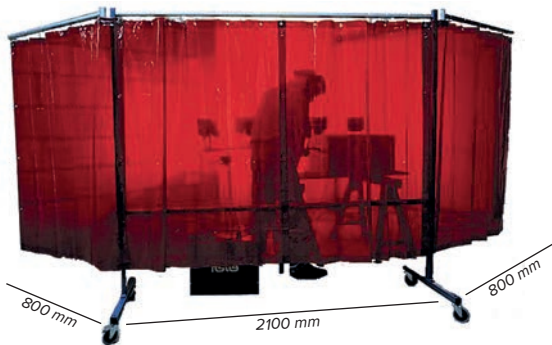
Art. Nr.	Description	Thickness	Colour	Qt.	Stock class
TTOTTVS075M	TransFlex T75M	0,4 mm	Dark green (matt)	1	MTO
TTOTTVS040	TransFlex T40	0,4 mm	Red	1	MTO

SPARE PARTS

Art. Nr.	Description	Thickness	Colour	Qt.	Stock class
TTVT75M130160	Curtain 130x160 mm	0,4 mm	Dark green (matt)	1	MTO
TTVT40130160	Curtain 130x160 mm	0,4 mm	Red	1	MTO
TTOZROLLE100	Set of 4 wheels			1	MTO

TRANSFLEX - MOBILE PANEL WITH WELDING CURTAIN (WITH EXTENSIONS)

ISO 25980



TRANSFLEX WITH EXTENSIONS is mobile protective screen mounted on wheels for increased mobility. The frame is made of steel tube coated with epoxy powder and is provided with two side extensions swivel that allow to reach 3,7 m opening and separate the workplace with a single device. The curtain can be hung to the top of frame by means of sliding hooks supplied with the kit. The kit comes complete for an easy assembly. Protective against hazardous UV- and IR- rays and resistant to ignition.

TECHNICAL DATA	
Frame size:	210 x 195 cm (L x H) + 2 arms 80cm
Curtain size:	130 x 160 cm (L x H) x3 pcs - total coverage 370 cm 57 x 160 cm (L x H) x3 pcs - total coverage 370 cm
Ground clearance:	approx. 30 cm

Art. Nr.	Description	Thickness	Colour	Qt.	Stock class
TTOTTVST75M	TransFlex T75M	0,4 mm	Dark green (matt)	1	MTO
TTOTTVST40	TransFlex T40	0,4 mm	Red	1	MTO
TTOTTLST40	TransFlex T40	1,0 mm	Red	1	MTO

INCLUDING WHEELS

SPARE PARTS

Art. Nr.	Description	Thickness	Colour	Qt.	Stock class
TTVT75M130160	Curtain 130x160 mm	0,4 mm	Dark green (matt)	1	MTO
TTVT40130160	Curtain 130x160 mm	0,4 mm	Red	1	MTO
TTOZROLLE100	Set of 4 wheels		Red	1	MTO

PERSONAL PROTECTIVE EQUIPMENT



THE LCD RANGE YOUR CHOICE!!

ONE OF THE MOST IMPORTANT LCD RANGES ON THE MARKET WHEN IT COMES TO EYE PROTECTION!

The GCE range includes many models designed to satisfy even the most demanding welders and suitable for any kind of usage.

Starting from economic model, ideal for basic and standard usages, up to the most professional models with digital regulation and ventilation.

All our filters provide an instant auto-darkening for better user safety, and have the following features:

- Shade selection
- Delay Adjustment (Dark to Light time delay)
- Sensitivity Adjustment

The most professional models are suitable for pulsed arc welding MIG /TIG , where the pulses would otherwise cause (at low value) a momentary opening of the darkened lens. Some models are equipped with the innovative ColorView optical technology.



THE COLORVIEW OPTICAL TECHNOLOGY

Stop to the green shades. Now weld in colors!

The ColorView optics is a new advanced technology that lets you see the workpiece in real colors. Finally we can say stop to watching in green shades. The auto-darkening filters equipped with ColorView optics allow you to see all the colors of your workpiece.

Welding in colors allows you to better distinguish the welding arc and better control the temperature of the workpiece. It also allows a better view of the environment around the piece (for instance, for controlling the parameters of the welding systems).

A really improved comfort during welding.



*New welding filter with
ColorView optical technology*



*Traditional welding filter
with Green shade*

WHAT TO LOOK AT WHEN CHOOSING A LCD MASK SUITABLE FOR TIG WELDING

The TIG welding is a process of arc welding with infusible electrode (tungsten) that allows to perform high-quality joints. This technology uses a very low amperage current to start the welding arc.

A mask for TIG welding must therefore ensure high sensitivity to low amperages.

The sensitivity depends on the quality of the sensors, the number of sensors and on the quality of the electronics.

But setting always the sensitivity to maximum is not a good idea because if the welder works near others operators, it may happen that their arc interferes with the mask, obscuring it. It is therefore opportune adjusting the sensitivity to avoid this kind of problems.

AUTODARKENING HELMET WITH VENTILATION

MACH 3 CV WIND

Mach 3 Wind is an integrated protection system which combines the high technology of a LCD filter with digital controls with the advanced Powered Air Purifying Respirator (PAPR) with rechargeable battery. The ventilation system, the connection equipment and the lightweight helmet ensure comfort and ease of use rarely seen before. The new LCD filter ColorView Infotrack allows to see the workpiece in colors and to monitor the welding time and environment's temperature.

CE
EN 379
EN 12941



Supplied in a sporty bag



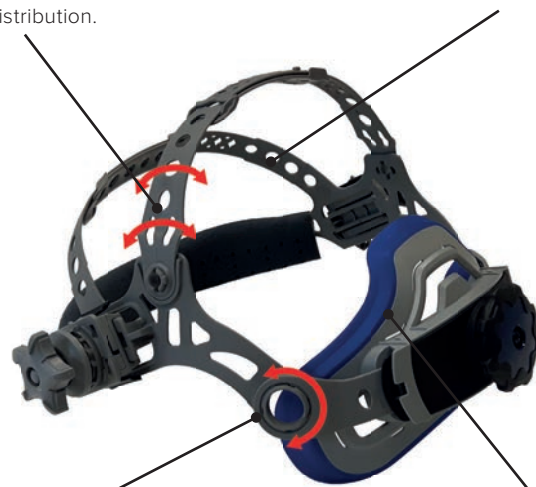
EXTRAORDINARY HEADGEAR

Tilting back strap

The tilting rear strap fits the head shape and allows for better weight distribution.

Two straps on the headtop.

Ultrasoft straps adjustable in length provide for better comfort.



Tilting cushion pad joints

The tilting joint of the neck bracket enables natural adaptation to the head shape.

Integrated comfort cushion pad.

The new comfort cushion wraps completely the nape, providing better weight distribution and thus minimizing the neck strain.

THE NEW COLORVIEW OPTICAL TECHNOLOGY

STOP TO THE GREEN SHADES. NOW WELD IN COLORS !

The ColorView optical technology lets you see the workpiece in real colors.

INFOTRACKSYSTEM

The InfotrackSystem monitors the welding arc time and detects the workplace temperature.

Moreover, with clock and alarm .



WE CAN MAKE YOUR WORK ENVIRONMENT HEALTHIER AND MORE COMFORTABLE !

VENTILATION UNIT FEATURES

- Particle filter certified EN 12941 TH2 P(SL) (typically 2 months use)
- Odour filter with active charcoal (optional)
- Acoustic and vibration alarm where ventilation is not effective
- Adjustable ventilation air flow (160 l/min or 200 l/min)
- Rechargeable battery (typical 10 hours use)
- Battery Recharge time: 3 hours
- Battery charger included
- Supplied with belt and shoulder bands (for a better comfort)
- Flow meter included to verify actual system ventilation
- Air hose length: 87cm
- Weight: PAPR 1350g - Air hose 220g
- WARRANTY: 12 months

HELMETS WITH LCD FILTER

- OPTICAL CLASS: 1/1/1/2
- Large viewing area for maximum comfort (97×60 mm)
- 4 sensors
- Environment's Temperature measurement.
- Welding Time tracking and Alarm setting.
- Digital regulation of all the parameters on a LCD display
- Clear shade: #3
- WELD-mode (# 9- 13) suitable for MIG/TIG welding
- CUT-mode (# 5-9) suitable for Oxygas cutting and welding
- X-mode (# 9-13 high sensitive) suitable for Plasma and all the processes requiring high sensitivity
- GRIND-mode (external button) suitable for grinding operations
- Sensitivity adjustment
- Reaction time: 0,04 msec
- Delay time adjustment (dark to light time)
- Headgear light and fully adjustable
- Weight: Helmet 610g
- WARRANTY: 24 months

Art. Nr.	Descr.	Qt.	Stock class
AD020001	Mach 3 CV WIND - INFOTRACK with ColorView LCD filter	1	DFW

MACH 3 CV WIND - SPARE PARTS FOR HELMET

Art. Nr.	Descr.	Qt.	Stock class
19009013WTK	Helmet blue MACH 3 CV WIND	1	DFW
AD030006	LCD filter MACH 3 CV WIND- ColorView, Infotrack	1	DFW
WP110350	Battery for LCD filter (CR2450 Lithium battery)	1	DFW
19009017C	External Protective Lens curved MACH 3	5	DFW
19009019	Internal Protective Lens 63×106×1	10	DFW
19009028C	Rubber gasket for curved glass	1	DFW
19009029C	Front filter frame blue for curved glass	1	DFW
19009038	Heat protection frame for LCD (aluminium), (protection up to 80°C)	1	MTO
AD030001	Headgear MACH with extended pad	1	DFW
14008384	Sweatband for headgear MACH	5	DFW
19009021	Face sealing hood in blue cotton	1	DFW
19009011	Air hose (87 cm) complete with connectors and cover (blue)	1	DFW

Magnifying lenses on request

MACH 3 CV WIND - SPARE PARTS FOR VENTILATION UNIT

Art. Nr.	Descr.	Qt.	Stock class
19009007	Ventilation unit cover	1	DFW
19009008	Sparks filter	1	DFW
19009005	Pre-filter	10	DFW
19009003	Particle filter TH2 P (SL)	1	DFW
19009009	Odour filter with active charcoal (optional)	1	DFW
19009027	Ventilation unit (Motor cover)		DFW
19009023	Battery for ventilation unit	1	DFW
19009025	Battery Charger Single	1	DFW
19009030	Belt set	1	DFW
19009031	Belt cushion	1	MTO
19009032	Shoulder strap	1	DFW



AUTODARKENING HELMETS

MACH 3 CV

Mach 3 CV is a LCD mask designed to satisfy the most exigent welders. Suitable for TIG, PLASMA and OXYGAS cutting and welding. This helmet is one of the most performant on the market. The new LCD filter ColorView Infotrack with digital control allows to see the workpiece in colors and to monitor the welding time and environment's temperature. This mask is equipped the new comfortable headgear.



EN 379

**IT WORKS WITH BATTERIES + SOLAR CELLS**

TECHNICAL DATA	
Optical Class:	1/1/1/2 (one of the best on the market)
Viewing Area:	97×60 mm (max comfort)
Sensing:	4 sensors
Reaction time:	0,04 msec
Sensitivity:	digital adjustment
Delay time:	digital adjustment
Clear shade:	#3
WELD mode:	# 9-13 (MIG/TIG)
CUT mode:	# 5-9 (OXYGAS)
X mode:	# 9-13 (PLASMA and high sensitivity processes)
GRIND mode:	external button
Optionals:	Magnifying lenses
Headgear:	New model COMFORT Multiple positions adjustment
Standards:	EN-379 (filter) EN-175 (helmet)
Warranty:	24 months



Extraordinary headgear

THE NEW COLORVIEW OPTICAL TECHNOLOGY

**STOP TO THE GREEN SHADES.
NOW WELD IN COLORS !**

The ColorView optical technology lets you see the workpiece in real colors.

INFOTRACKSYSTEM

THE INFOTRACKSYSTEM MONITORS THE WELDING ARC TIME AND DETECTS THE WORKPLACE TEMPERATURE.

Moreover, with clock and alarm.

Art. Nr.	Descr.	Qt	Stock class
AD010001	Mach 3 CV - INFOTRACK with ColorView LCD filter	1	DFW

LCD AUTODARKENING HELMETS

ECLIPSE 3.s

Eclipse 3.s is an extraordinary and professional TIG mask, extra sensitive at an incredible price! The new LCD filter has now the variable shade selection 5-9 and 9-13. Provided with 4 sensors and an incredibly large view area for a great improvement of working conditions. Very high quality performance.

CE
EN 379



OPTICAL CLASS

1-1-1-1

(the best in the world)



IT WORKS WITH BATTERIES + SOLAR CELLS

TECHNICAL DATA	
OPTICAL CLASS:	1/1/1/1 (the best class)
Viewing Area:	100×60 mm Extra large
Sensing:	4 sensors
Reaction time:	0,08 msec
Sensitivity:	stepless adjustment
Delay time:	stepless adjustment (from 0,1 sec to 0,9 sec)
Clear shade:	#4
WELD mode:	# 9-13 (MIG/TIG)
CUT mode:	# 5-9 (OXYGAS)
GRIND mode:	YES
Headgear:	New model with multiple positions adjustment
Standards:	EN-379 (filter) EN-175 (helmet)
Warranty:	24 months



THE NEW COLORVIEW OPTICAL TECHNOLOGY

STOP TO THE GREEN SHADES. NOW WELD IN COLORS !

The ColorView optical technology lets you see the workpiece in real colors.



New LCD filter with shade selection 5-9 and 9-13.
Extremely intuitive control panel.



New headgear with adjustment of nose-filter distance.

Art. Nr.	Descr.	Qt.	Stock class
AD010003	Eclipse 3.s - 5/9 - 13	1	DFW

LCD AUTODARKENING HELMETS

MACH 2 CV

Mach 2 CV is a LCD mask specifically designed for TIG welding. It works with batteries and solar cells. The new LCD filter with ColorView optical technology allows to see the workpiece in colors and thanks to the very quick reaction time (0,05m sec) it provides a very high quality performance. This mask is equipped the new headgear with extended nape cushion pad, for optimal comfort.

CE
EN 379



IT WORKS WITH BATTERIES + SOLAR CELLS

TECHNICAL DATA	
OPTICAL CLASS:	1/1/1/2 (one of the best on the market)
View Area:	97×47 mm double LCD layer
Sensing:	2 sensors
Reaction time:	0,05 msec
Sensitivity:	internal adjustment stepless
Clear shade:	#3
Delay time:	internal adjustment stepless (from 0,1sec to 1,0sec)
Dark shade:	# 9-13 external adjustment
Grinding mode:	
Optionals:	Magnifying lenses
Headgear:	New model COMFORT Multiple positions adjustment
Standards:	EN-379 (filter) EN-175 (helmet)
Warranty:	24 months



THE NEW COLORVIEW OPTICAL TECHNOLOGY

STOP TO THE GREEN SHADES.

NOW WELD IN COLORS !

The ColorView optical technology lets you see the workpiece in real colors.



Extraordinary headgear

Art. Nr.	Descr.	Qt.	Stock class
AD010002	Mach 2 CV - with ColorViewLCD filter	1	DFW

LCD AUTODARKENING HELMETS

ECLIPSE 2.s

Eclipse 2.s is a very reliable mask for MIG/Electrode welding, working only with solar cells (no batteries). The new LCD filter has now one of the best optical class on the market and now comes with an enlarged viewing area and the grind function.



EN 379



IT WORKS WITHOUT BATTERIES

TECHNICAL DATA	
OPTICAL CLASS:	1/1/1/2 (one of the best on the market)
View Area:	96×42 mm
Sensing:	2 sensors
Reaction time:	0,1 msec
Sensitivity:	internal adjustment stepless
Delay time:	internal adjustment stepless (from 0,1sec to 0,9sec)
Clear shade:	#4
Dark shade:	# 9-13 external adjustment
Grinding mode:	yes
Headgear:	Multiple positions adjustment
Standards:	EN-379 (filter) EN-175 (helmet)
Warranty:	



New LCD filter with upgraded optical class and enlarged viewing area.






Headgear with multiple position adjustment


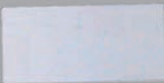




Art. Nr.	Descr.	Qt.	Stock class
AD010004	Eclipse 2.s - with new LCD filter	1	DFW

LCD AUTODARKENING HELMETS

SPARE PARTS

	EXTERNAL PROTECTIVE LENS	INTERNAL PROTECTIVE LENS	HEADGEAR	SWEATBAND	HELMET	NAPE CUSHION
						
AD010001 MACH 3	19009017C (curved) 5 pcs	19009019 (63 ×106×1) 10 pcs	AD030001 1 pcs	14008384 5 pcs	19009013TK 1 pcs	AD030002 1 pcs
AD010002 MACH 2	WP110346 (shaped) (100 ×122) 10 pcs	WP110344 (51 ×107) 10 pcs	AD030001 1 pcs	14008384 5 pcs	14008382 1 pcs	AD030002 1 pcs
AD010003 ECLIPSE 3.s	WP110360 (114 ×133) 5 pcs	WP110330 (66 ×106) 5 pcs	AD030003 1 pcs	WP11476 5 pcs	AD030004 1 pcs	Not available
AD010004 ECLIPSE 2.s	WP110343 (97 × 118) 10 pcs	WP11474S (47 ×103,5) 10 pcs	HG2001 1 pcs	WP11476 5 pcs	AD030005 1 pcs	Not available

SPARE PARTS (DISCONTINUED MODELS)

	EXTERNAL PROTECTIVE LENS	INTERNAL PROTECTIVE LENS	HEADGEAR	SWEATBAND	HELMET	NAPE CUSHION
						
19009000 MACH III DIN 9-13	19009017C (curved) 5 pcs	19009019 (63×106×1) 10 pcs	WP110347TK 1 pcs	14008384 5 pcs	19009013TK 1 pcs	WP110349 1 pcs
19008001 MACH II DIN 9-13	WP110346 (shaped) (100 ×122) 10 pcs	WP110344 (5 ×107) 10 pcs	WP110347 TK 1 pcs	14008384 5 pcs	14008382 1 pcs	WP110349 1 pcs
0764703E ECLIPSE 3 9-13	WP110360 (114 ×133) 5 pcs	WP110330 (66×106) 5 pcs	HG2001 1 pcs	WP11476 5 pcs	AS4001F 1 pcs	Not available
0764702E ECLIPSE II 9-13	548980003920 (90×110) 10 pcs	WP11474S (47×103,5) 10 pcs	HG2001 1 pcs	WP11476 5 pcs	AS3000F 1 pcs	Not available
WP11444SEU OPTOVARIO 9-13 SE	WP11500 (shaped) 100 × 120 10 pcs	548980003920 (90 ×110) 10 pcs	WP11504 1 pcs	WP11420 -16 2 pcs	WP11502 1 pcs	Not available
WP11444HQ OPTOVARIO 9-13 HQ	WP110346 (shaped) (100 ×122) 10 pcs	WP110344 (51 ×107) 10 pcs	WP110347 1 pcs	14008384 5 pcs	Not available	Not available

WHAT FEATURES DEFINE THE QUALITY OF A LCD MASK?

THE OPTICAL CLASS

The optical class is defined by the standard EN-379 and is one of the most important characteristics to look at when choosing a LCD mask.

It is composed of 4 values which corresponds to the rating of 4 optical features.

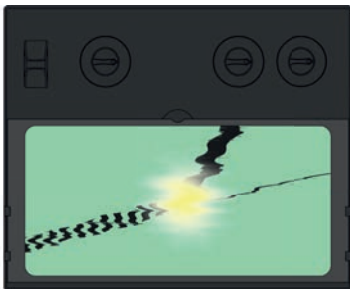
The rating may be 1 (excellent), 2 (good) or 3 (sufficient).

Feature 1 : OPTICAL CLASS

This is the evaluation of LCD surface.

Is the view perfectly regular?

Are there image's distortions?



Feature 2 : LIGHT DIFFUSION

This is the evaluation of homogeneity of LCD in dark status.

Are there areas lighter or darker?



Feature 3 : LIGHT TRANSMITTANCE

This is the evaluation of Light Transmittance.

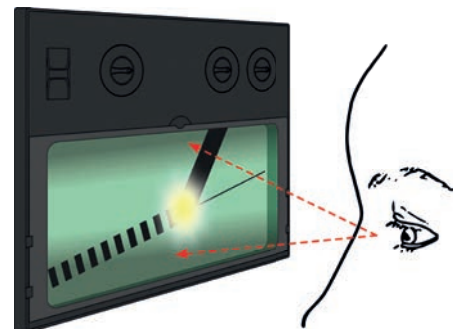
Does the light pass through the filter without spreading in a bigger halo?



Feature 4 : ANGULAR DEPENDENCY

This is the evaluation of the darkening variation depending on the viewing angle.

Looking through the filter in different directions (for instance during overhead welding) is the dark status always the same?



FOR EXAMPLE A FILTER WITH INDICATION 1/1/1/2 WILL HAVE:

- Excellent Optical Class (1)
- Excellent Class of light Diffusion (1)
- Excellent light transmission (1)
- Good angular dependence (2)

SWITCHING TIME FROM CLEAR TO DARK STATUS.

Usually the switching time is 0,02-0,05 msec. This is very good and possible only with LCD filters working with batteries support. The LCD filters working only with solar cells may reach a switching time 0,1-0,3 msec, anyway very good.

0,1 msec is a tenth of a thousandth of a second, a speed practically imperceptible to the human eye.

This feature is clearly indicated in our catalogue.

THE SOLAR CELLS WHAT ARE THEY FOR?

The solar cells provide the power to the LCD filter.

On some models they can be the unique power supply.

The strength is that it's never necessary to replace the batteries. The weakness is that the switching time cannot be less than 0,1 msec (anyway very good).

On some other models they can be the additional power to the batteries.

The strength is that the switching time can be less than 0,1 msec (also 0,05 msec) and a longer batteries lifetime.

The weakness is that the user is forced to replace the batteries when necessary.

HELMETS & SHIELDS



EUROPE (90 × 110) - VERONA (75 × 98) - LYON (51 × 108)

Extraordinary!

With the Europe, Verona and Lyon range you do not commit to flip front or fixed front style at the time of purchase.
The style can be changed after purchase with the cassette for flip option, which can be quickly and easily assembled onto the mask without the need for any special tools.
In this way the inventory of complete helmets can be reduced by holding a small stock of cassettes.
The headgear is fully adjustable for maximum comfort.
Supplied without lenses.

- > Material: Polypropylene
- > Dimensions: 210×345×180 mm
- > Weight: 420 g
- > Headgear: fully adjustable for maximum comfort
- > Standard: EN-175



FLIP OPTION !!

Art. Nr.	Descr.	View Area	Qt.	Stock class
548910000017	Helmet Europe	90×110 mm	5	DFW
WP11064	Helmet Verona	75×98 mm	5	DFW
G100223	Helmet Lyon	50×108 mm	5	DFW

OPTIONALS - FLIP SYSTEM CASSETTE

Art. Nr.	Descr.	Qt.	Stock class
WP11065E	Flip for helmet Europe (90×110)	1	DFW
WP11065	Flip for helmet Verona (75×98)	1	DFW
G100223F	Flip for helmet Lyon (50×108 - 50×105)	1	DFW



SPARE PARTS

Art. Nr.	Descr.	Qt.	Stock class
548100000020	Headgear for all models	1	DFW

EURO (90 × 110)

The helmet EURO is an strong helmet made from polyamide fiberglass-reinforced which prolong durability.
Provided with comfortable headgear.



- > Material: Polyamide fiberglass-reinforce
- > Dimensions: 380×260×210 mm
- > Weight: 440 g
- > Heat resistance: up to 140°C
- > Standard: EN-175

Art. Nr.	Descr.	View Area	Qt.	Stock class
17001804	Helmet EURO	90×110 mm	1	DFW

HELMETS & SHIELDS

CE



COMFORT (75 × 98)

The helmet COMFORT is a cellulose fibre helmet with a professional headgear adjustment system which can be modified while wearing the helmet. It is particularly suitable for those application where the user is unable to hold the mask with the hands.
Supplied without lens.

- > Material: Cellulose fiber
- > Dimensions: 325×210×178 mm
- > Weight: 320 g
- > Standard: EN-175
- > PPE Category:II

Art. Nr.	Descr.	View Area	Qt.	Stock class
548914011003	Helmet COMFORT	75×98 mm	10	DFW

VISOR

Visor is a face shield for eyes and face protection. Standard headgear, with the possibility to hold clear shield for grinding, or shade 5 shield for cutting and welding.

CE



- > Standard: EN-166
- > PPE Category: III
- > Antiscratch (mod. DIN 5)
- > IR&UV Protections (mod. DIN 5)
- > UV Protection (mod. CLEAR)



Art. Nr.	Descr.	Standards	Qt.	Stock class
WP14032	Visor Holder		1	DFW
WP14034	Visor Shield Clear 2 mm	EN 166 - EN 170	1	DFW
WP14037	Visor Shield Clear 1 mm	EN 166 - EN 170	1	DFW
WP14036	Visor Shield DIN5 2 mm	EN 166 - EN 169 - EN 175	1	DFW

HAND SHIELDS

CE



MM1010 (GLASS 90 × 110 MM)

Hand shield in polyamide provided with quick coupling handle.

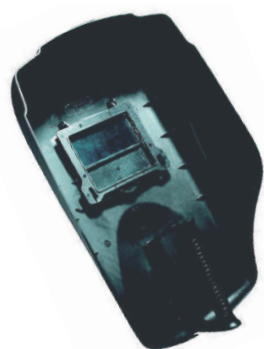
- > Material: polyamide
- > Dimensions: 240×395×98 mm
- > Weight 305 g
- > Standard: EN-175

Art. Nr.	Descr.	View area	Qt.	Stock class
548910000016	Hand shield MM1010	90×110 mm	1	DFW

HELMETS & SHIELDS

STR SIMPLE (GLASS 50 × 105 MM)

STR SIMPLE is a black nylon hand shield showing good heat resistance in the event of accidental contact with hot electrodes.



Art. Nr.	Descr.	View Area	Qt.	Stock class
G100202	Hand shield STR SIMPLE	50×105 mm	1	DFW

CE

ELETTRA (GLASS 75 × 98 MM)

ELETTRA is a hand shield made from cellulose fiber. It is one of the most popular masks for the use with small-medium machines (up to 250A). The new and exclusive „quick glass“ fixing system allows a very speedy change of the 75×98 mm lenses without the need of any tool. No metallic rivets are used in the production process!

Supplied without lens.

- > Material: Cellulose fiber
- > Dimensions: 75×255×378 mm
- > Weight: 260 g
- > Standard: EN-175
- > PPE Category: II



Art. Nr.	Descr.	View Area	Qt.	Stock class
548914011001	Hand shield ELETTRA	75×98 mm	20	DFW

VULCAN (GLASS 75 × 98 MM)

VULCAN is a professional hand shield manufactured from cellulose fiber. It has a specific design with inclined throat protection making the mask suitable for welding in uncomfortable positions. It is suitable for all kind of electrode welding and -MAG applications.

The new and exclusive „quick glass“ fixing system allows a very speedy change of the 75×98 mm lenses without the need of any tool. No metallic rivets are used in the production process!

Supplied without lens.

- > Material: Cellulose fiber
- > Dimensions: 260×390×81 mm
- > Weight: 320 g
- > Standard: EN-175
- > PPE Category: II



Art. Nr.	Descr.	View Area	Qt.	Stock class
548914011002	Hand shield VULCAN	75×98 mm	20	DFW

SPARE PART LENSES

IR & UV Protection



LENSES 75 × 98 MM

Art. Nr.	Shade		Color	Dimension	Qt.	Stock class
WP11021	Glass	Clear	Clear	75×98 mm	100	DFW
WP11072	Glass	DIN9	Green	75×98 mm	10	DFW
WP11074	Glass	DIN10	Green	75×98 mm	10	DFW
WP11076	Glass	DIN11	Green	75×98 mm	10	DFW
WP11078	Glass	DIN12	Green	75×98 mm	10	DFW
WP11066	Glass	DIN10	SILVERED MIRROR	75×98 mm	10	DFW
WP11067	Glass	DIN11	SILVERED MIRROR	75×98 mm	10	DFW
WP11022	Glass	DIN12	SILVERED MIRROR	75×98 mm	10	DFW

LENSES 90 × 110 MM

Art. Nr.	Material	Shade	Color	Dimension	Qt.	Stock class
54898003921	Glass	Clear	Clear	90×110 mm	100	DFW
48980055011	Glass	DIN8	Green	90×110 mm	10	DFW
548980055012	Glass	DIN9	Green	90×110 mm	10	DFW
548980055013	Glass	DIN10	Green	90×110 mm	10	DFW
548980056013	Glass	DIN11	Green	90×110 mm	10	DFW
548980050013	Glass	DIN12	Green	90×110 mm	10	DFW
548980057014	Glass	DIN13	Green	90×110 mm	10	DFW
548980057015	Glass	DIN14	Green	90×110 mm	10	DFW
548900200100	Glass	DIN10	SILVERED MIRROR	90×110 mm	10	DFW
548900200110	Glass	DIN11	SILVERED MIRROR	90×110 mm	10	DFW
548900200120	Glass	DIN12	SILVERED MIRROR	90×110 mm	10	DFW
548900200130	Glass	DIN13	SILVERED MIRROR	90×110 mm	10	DFW

IR & UV Protection



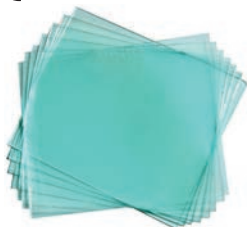
IR & UV Protection



LENSES 50 × 105 MM

Art. Nr.	Material	Shade	Color	Dimension	Qt.	Stock class
G100208	Polycarbonate	Clear	Clear	50×105 mm	10	DFW
G100209	Glass	Clear	Clear	50×105 mm	100	DFW
G100210	Glass	DIN9	Green	50×105 mm	10	DFW
G100211	Glass	DIN10	Green	50×105 mm	10	DFW
G100212	Glass	DIN11	Green	50×105 mm	10	DFW
G100213	Glass	DIN12	Green	50×105 mm	10	DFW
100214	Glass	DIN13	Green	50×105 mm	10	DFW

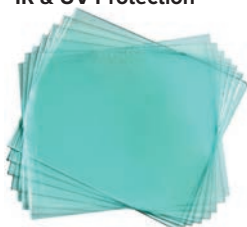
IR & UV Protection



LENSES 51 × 108 MM (2" × 4¼")

Art. Nr.	Material	Shade	Color	Dimension	Qt.	Stock class
55799	Polycarbonate	Clear	Clear	51×108 mm (2" × 4¼")	10	DFW
55700	Glass	Clear	Clear	51×108 mm (2" × 4¼")	10	DFW
55710	Glass	DIN10	Green	51×108 mm (2" × 4¼")	10	DFW
55711	Glass	DIN11	Green	51×108 mm (2" × 4¼")	10	DFW
55712	Glass	DIN12	Green	51×108 mm (2" × 4¼")	10	DFW

IR & UV Protection



LENSES 83 × 108 MM (3¼" × 4¼")

Art. Nr.	Material	Shade	Color	Dimension	Qt.	Stock class
55699	Polycarbonate	Clear	Clear	83×108 mm (3¼" × 4¼")	10	DFW

GOGGLES

CE

ULTRAFLEXIBLE
FRAME

FLEXER

FLEXER is an extraordinary goggle with aggressive design and attention to detail. The curved profile with wraparound lenses provides extra coverage around the eyes and the extremely flexible frame fits the face without adjustments. Provided with anti-slip nose pad in soft rubber. Impact-resistant polycarbonate lenses. Easier to stow than normal goggles.

- > Optical class: 1
- > Weight: 31 g
- > Antiscratch
- > Antifog (mod. DIN 5)
- > IR&UV Protection (mod. DIN 5)
- > UV Protection (mod. CLEAR)
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock class
WP14028	FLEXER DIN5	EN 166, EN 169, EN 175	10	DFW
WP14029	FLEXER clear	EN 166, EN 170	10	DFW

CE



PANORAMIC

PANORAMIC google has a wide field of view. This is the perfect solution for applications where front and side protection is required. High quality at an affordable price, ideal in a tough environment. Protection from the side screens.

- > Optical class: 1
- > Weight: 34 g
- > Antiscratch
- > IR&UV Protection (mod. DIN 5)
- > UV Protection (mod. CLEAR)
- > Adjustable in lenght and inclination (mod. DIN 5)
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock class
WP14021	PANORAMIC DIN5	EN 166, EN 169, EN 175	10	DFW
WP14022	PANORAMIC CLEAR	EN 166, EN 170	10	DFW

CE



VISUAL ROUND

VISUAL ROUND combines comfort with practicality. Equipped with tilting side shields with slits for ventilation. The 50 mm round lenses made from glass are quickly replaceable by the screw on the top of the goggle.

- > Optical class: 1
- > Weight: 46 g
- > Replaceable lenses diam. 50mm in glass
- > Antiscratch
- > IR&UV Protection
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock class
17008790	VISUAL ROUND DIN5	EN 166, EN 169, EN 175	5	DFW

GOGGLES

CE



TRADITIONAL

A traditional style goggle with lenses in glass for use in welding and grinding applications. Easy replacement of lenses by the screw in the centre of the goggle. Provided with tilting side protection against spatters with vertical slits for ventilation.

Optical class: 2 (DIN 5)

- > Weight: 54 g
- > Replaceable lenses in glass
- > IR&UV Protection
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock class
WP14048	TRADITIONAL DIN5	EN 166, EN 169, EN 175	1	DFW

SPARE PARTS

Art.Nr.	Descr.	Qt.	Stock class
WP14052	1 pair Spare lenses DIN5	5	DFW

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VISUAL SWIM

VISUAL SWIM is a boval style goggle with frame in aluminium with borders in soft rubber and equipped with side vents.

The 50mm round lenses made from glass are easy replaceable by screw-system. The excellent fit to the face is provided by the adjustable elastic headband.

Optical class: 1

- > Weight: 91 g
- > Replaceable lenses diam. 50mm in glass
- > Side vents



Art.Nr.	Descr.	Standards	Qt. class	Stock
17007170	VISUAL SWIM DIN5	EN 166, EN 169	1	DFW

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VISUAL FLIP METAL

VISUAL FLIP METAL is a goggle equipped with a very resistant frame in aluminium with borders in soft rubber and with side vents. The lenses are made from of glass and can be replaced. The flip-up device allows quick switch of lenses for different applications.

- > Weight: 109 g
- > Replaceable lenses diam. 50mm in glass
- > Side vents
- > IR&UV Protection



Art.Nr.	Descr.	Standards	Qt.	Stock class
17107200	VISUAL FLIP METAL DIN5	EN 166, EN 169, EN 175	1	DFW

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VISUAL FLAME

VISUAL FLAME is the classic flame cutting/welding goggle. The frame is made of soft and heat resistant PVC with vents and elastic headband. The lenses are made of glass and can be easily replaced. Comfortable, light and inexpensive.

- Optical class: 1
- > Weight: 64 g
- > Replaceable lenses in glass
- > Antiscratch
- > IR&UV Protection (mod. DIN 5)
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock class
548914014011	VISUAL FLAME DIN5	EN 166, EN, 167, EN 168, EN 169, EN 175	1	DFW

GOGGLES

CE



BOMBER

Extraordinary goggle with curved and sporty design and side protection specifically designed to have the maximum view. Strong and wide legs and adjustable in length and inclination. Impact-resistant polycarbonate lenses.

- > Optical class: 1
- > Weight: 36 g
- > Antiscratch
- > UV Protection
- > Adjustable in length and inclination
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock class
WP14061	Bomber TR clear	EN 166, EN 170	10	DFW

CE



PANORAMA

PANORAMA is a goggle for protection against projection of particles. It can be used in conjunction with prescription glasses. Ideal for use where the goggle must be removed frequently. The big side vents offer maximum comfort even when worn for long time.

- > Lenses are in polycarbonate.
- > Optical class: 1
- > Weight: 43 g
- > UV Protection
- > Side vents
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt. class	Stock
17006500	PANORAMA CLEAR	EN 166, EN 170	10	DFW

CE



SKI

SKI is a mask/goggle for professional use.

The indirect ventilation with air intakes keeps the mist formation to a minimum and allows protection against large dust particles, droplets and splashes of liquid.

The essential frame with the adjustable elastic headband is ideal for each type of fit and allows the use in conjunction with prescription glasses.

Lenses are in polycarbonate.

- > Optical class: 1
- > Weight: 71 g
- > Antiscratch
- > Antifog
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock class
17004430	SKI CLEAR	EN166	10	DFW

GOGGLES



SKI FLIP

SKI FLIP is a mask/goggle suitable for multiple operations without changing goggles!
Fitted with 4 vents (diam. 2,5mm) to avoid misting.
The soft nylon frame with elastic headband is fully adjustable to each type of fit.
The flip-up device allows quick switching from clear to shaded lenses.
Both framed lenses and flip-up lenses are in polycarbonate diameter 50 mm and are replaceable.

- > Optical class: 1
- > Weight: 133 g
- > Replaceable lenses
- > Antiscratch
- > IR&UV Protection
- > PPE Category: II



Art.Nr.	Descr.	Standards	Qt.	Stock Class
17007220	SKI Flip DIN5	EN166, EN 169, EN 175	1	DFW
G100137EMB	SKI Flip DIN5 in blister	EN166, EN 169, EN 175	1	DFW



COVER PROF DIN5

COVER PROF is a complete system to protect your head and eyes. It combines the practicality of a goggle with flip/up (clear + DIN5 lens) and a leather hood for head protection in an unique device.
it provides protection for neck, throat, face and head while vents avoid lens misting.
The lenses are replaceable.

- > Optical class: 1
- > Weight: 321 g
- > Replaceable lenses
- > Antiscratch
- > IR&UV Protection
- > PPE Category: II



Art. Nr.	Descr.	Standards	Qt.	Stock class
WP13100	Cover Prof DIN 5	EN166, EN 175	1	DFW



IV & IR PROTECTION



LENSES ROUND 50 MM

Art. Nr.	Material	Shade	Color	Dimensions	Qt.	Stock class
548980000050	Glass	Clear	Clear	Diam. 50 mm	20	DFW
548980050102	Glass	DIN 4	Green	Diam. 50 mm	10	DFW
548980051042	Glass	DIN 5	Green	Diam. 50 mm	10	DFW
548980051043	Glass	DIN 6	Green	Diam. 50 mm	10	DFW
548980051044	Glass	DIN 7	Green	Diam. 50 mm	10	DFW
548980051045	Glass	DIN 8	Green	Diam. 50 mm	10	DFW
548980051046	Glass	DIN 9	Green	Diam. 50 mm	10	DFW
548980051047	Glass	DIN 10	Green	Diam. 50 mm	10	DFW
548980051048	Glass	DIN 11	Green	Diam. 50 mm	10	DFW

WORKWEAR

CE



JACKET CLASS

The JACKET CLASS combines the good resistance and the high quality of Italian leather manufactured to obtain an extraordinary softness product, with a modern design and the maximum comfort. The Jacket is equipped also with buttons protection flap with easy and quick Velcro closure (useful in case of emergency).

- > Made of bovine leather
- > The back is made from a single piece, seamless
- > Cuffs with elastic closure sewn from inside
- > Micro-holes in the armpits for improved breathability
- > Free of chemical dyes
- > Free of substances toxic for humans
- > closure with buttons and velcro
- > STANDARD: UNI EN ISO 11611
- > PPE CATEGORY: II



EUROPEAN PREMIUM PRODUCT

Completely hand crafted in Italy with Italian extra-soft leather and certified.

Art. Nr.	Descr.	Color	Size	Qt.	Stock class
WP13024	CLASS L	White	52/L	1	DFW
WP13026	CLASS XL	White	54/XL	1	DFW
WP13027	CLASS XXL	White	56/XXL	1	DFW

CE



SLEEVES

Supplied in pairs, these leather sleeves offer maximum protection for your arms from welding spatters. This product must be used in conjunction with appropriate welding gloves.

- > Made from two pieces of bovine leather
- > Cuffs with elastic closure sewn from inside
- > Free of chemical dyes
- > Free of substances toxic for humans
- > STANDARD: UNI EN ISO 11611
- > PPE Category: II



AVAILABLE IN TWO VERSIONS:

With ELASTICS - quick and easy to put on and remove with stretch armbands.

With STRINGS - professional version, longer and more protective for shoulders, with drawstrings that pass behind the neck assuring stable positioning during welding.

Art. Nr.	Descr.	Color	Size	Qt.	Stock class
WP13062	SLEEVES with ELASTICS (1 pair)	White	40×22 cm	1	DFW
WP13064	SLEEVES with stringCS (1 pair)	White	60×24 cm	1	DFW

WORKWEAR

CE

BALACLAVAS

Balaclava caps, produced from flame retardant cotton PROBAN, these offer good protection from sparks emitted from welding and grinding operations. The cotton PROBAN can be washed many times and still retain its characteristics, different from standard cotton that can lose its characteristics after 2 or 3 washes.

- > STANDARD: UNI EN ISO 11611
- > PPE CATEGORY: I



Art. Nr.	Descr.	Protection	Qt.	Stock class
12064	PRO	Head, throat	1	DFW
12068	TOTAL	Head, throat, neck, shoulders	1	DFW

CE

APRONS

Leather apron to protect the body from welding spatters.
STANDARD: UNI EN ISO 11611

- > PPE Category: II
- > Made from a single piece of bovine leather, seamless
- > Free of chemical dyes
- > Free of substances toxic for humans
- > Fastening strings in leather without buckle



Art. Nr.	Descr.	Size	Color	Qt.	Stock class
12010	Apron SMALL	60×90 cm	White	1	DFW
12010L	Apron BIG	80×110 cm	White	1	DFW

CE

GAITERS

Gaiters made from leather with quick connection for foot protection against welding spatters.
STANDARD: UNI EN ISO 11611

- > PPE Category: II
- > Made of bovine leather
- > Side closure with velcro and protective flap
- > Strings for anchoring to shoes
- > Free of chemical dyes
- > Free of substances toxic for humans



Art. Nr.	Descr.	Color	Height	Qt.	Stock class
WP13018	Gaiters (1pair)	White	30 cm	1	DFW

GLOVES

**MANUDOCK REINFORCED – (GENERAL PURPOSE GLOVES)**

Five fingers protection gloves. Palm in cow split leather, back in cotton fabric.

- > EN 420
- > EN 388 (2 3 3 1)
- > Dexterity Level 3



Art. Nr.	Descr.	Size	Qt.	Stock class
G100315	Manudock reinforced	10	12	DFW

**MECANO SOUPLE BIG – (GENERAL PURPOSE GLOVES)**

Five fingers protection gloves made from pig split leather.

- > EN 420
- > EN 388 (2 1 1 1)
- > Dexterity Level 4



Art. Nr.	Descr.	Size	Qt.	Stock class
G100313	Mecano Souple Big	10	12	DFW

**MUJ-SOLO**

MUJ-SOLO is one of the best glove when it comes to protection and comfort at work. No other glove offers such a combination of softness (by grain leather), durability (by the special type of leather) and the additional „heat protection" offered by the innovative insert. This insert is specially treated to improve its insulation properties, offering enhanced safety to the operator. Invisible seams make the glove exceptionally comfortable and extremely elegant. The prolonged cuff offers a high degree of protection to the lower arm. Ideal for professional repetitive use, this glove is available in either right hand or left hand versions.

- > PPE Category: II
- > EN 420
- > EN 388 (2 1 3 2)

SUITABLE FOR MIG WELDERS



Art. Nr.	Descr.	Size	Qt.	Stock class
548914013005	MUJ-SOLO for Right hand	10	1	DFW
548914013006	MUJ-SOLO for Left hand	10	1	DFW

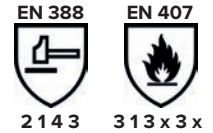
GLOVES



LUCIFER 150° – (GLOVES FOR WELDERS)

Five fingers protection gloves for welders made from leather with full lining in cotton and covered seams.
Length 35 cm.

- > EN 420
- > EN 388 (2 1 4 3)
- > EN 407 (3 1 3 x 3 x)
- > EN 12477 Type A
- > Dexterity Level 3



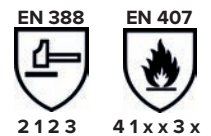
Art. Nr.	Descr.	Size	Qt.	Stock class
G10050	Lucifer 150°C	11	10	DFW

SOUDARGON – (GLOVES FOR WELDERS)



Five fingers protection gloves for welders made from leather with full lining in cotton and covered seams.
Length 35 cm.

- > EN 388 (2 1 2 3)
- > EN 407 (4 1 x x 3 x)
- > EN 12477 Type B
- > Dexterity Level 4



Art. Nr.	Descr.	Size	Qt.	Stock class
G100318	Soudargon 15cm	11	10	DFW

SUITABLE FORB TIG WELDERS

NOTES

NOTES

REGIONAL OFFICES

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