



WELDLINE™

by Lincoln Electric

ACCESSORIES

MORE COMFORT & SAFETY FOR WELDERS

CATALOGUE 2020





MORE comfort and safety for welders

WELDLINE® by Lincoln Electric is the transversal brand for the Welder's Environment.

By a complete offer of individual protective equipment as well as tools and accessories dedicated to welding applications, our objective is to create more comfort and safety for the welder. The portfolio is a careful selection of quality products including:

- Welding torches and expendables
- Personal protection equipment
- Other accessories for welding applications

THIS BRAND HAS A TRIPLE COMMITMENT :

Quality products

Chosen by our international team, WELDLINE® by Lincoln Electric products comply with the European standards, always aiming to meet customer's requirements in the best possible way.

Value for money

We use our global purchasing power to ensure that our customers can benefit from quality products with the right price.

Optimized logistics

A single brand supporting Lincoln Electric, OERLIKON & SAF-FRO networks to ensure increase product availability to all our customers.

Products commercialized by SAF-FRO, OERLIKON and LINCOLN ELECTRIC networks.



www.saf-fro.com



www.oerlikon-welding.com



www.lincolnelectric.eu



Download your **safety data sheets**
and **conformity certificates**
on our websites



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1 PERSONAL PROTECTION EQUIPMENT



PROTECTION

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DO YOU OFFER YOUR WELDERS THE BEST POSSIBLE PROTECTION?

THE RISKS

FACE & EYES

90% of all workplace eye injuries are preventable with the use of proper safety eyewear, welding goggles and helmets.

Only 1% of approximately 770 workers suffering face injuries were wearing face protection.

BODY

Every day, people are admitted to burn centers annually with severe arc flash burns.

HAND AND FOREARM

25% of all work place accidents involved hands and fingers

LEGS

Risks of clothes catching fire from welding spatter and molten metal.

FEET

Risks are perforations, falling object, burns and slipping.

THE SOLUTIONS

WELDING HELMET & SAFETY GLASSES

Electronic helmet allow the welder to be immediatly and automatically protected during the welding operation. A pair of safety glasses gives additional protection against i.e. grinding particules.

WELDING JACKET

Welding jacket of flame retardant material of leather to protect the upper body, against welding spatters, grinding particules which permit to avoid burns.

WELDING APRON

Welding apron in premium grade, split or grain leather will protect clothes from welding spatters and grinding particules.

GLOVES & SLEEVES

The choice of welding gloves will depend on the welding application in order to offer the right protection and comfort. Sleeves over the jacket offer an additional protection of the arms.

TROUSERS

Trousers of flame retardant material to protect the lower body against welding spatters, grinding particules and molten metal.

SHOES & GAITERS

Combining welding shoes with gaiters permits to protect completely the bottom of the leg.



Weldline by Lincoln Electric, more comfort and safety for welders.
Discover our offer of quality products at www.weldline.eu



All products have to be in accordance with EU standards and the CE marking is mandatory:
EN 175

HELMETS

Choice of head protection

An **electronic helmet** allows the welder to be immediately and automatically protected when the welding operation begins.

The result is a better efficiency, a better comfort, and at least a better result.

Electronic helmets exist with fixed or variable shade.

The choice depends on the welding process.



	EUROONE	EUROSPEED LS	CHAMELEON 4V LS	EUROLUX 4500 LS	GOLDENARK LS	ZEPHYR 4500 LS FLIP-AIR 4500 LS
To order	W000403823	W000403824	W000403668	W000403672	W000403673	W000403674 W000403675
For welding process	MMA, MIG MAG	MMA, MIG MAG, TIG	Every welding process, especially for TIG	Every welding process	Every welding process	MMA, MIG MAG
Optical class	1/1/2	1/1/2	1/1/2	1/1/2	1/1/2	1/1/2
Lens switching speed	0,06 ms	0,04 ms	0,05 ms	0,04 ms	0,05 ms	0,04 ms
Lens shade	3.5/9-13	3.5/9-13	3/8-13	3/8-13	3/8-13	3/8-13
Independent sensors	2	2	3	4	4	4
TIG Amp Rating	>= 10A DC & >= 10A AC	>= 5A DC & >= 5A AC	>= 5A DC & >= 5A AC	>= 5A DC & >= 5A AC	>= 5A DC & >= 5A AC	>= 5A DC & >= 5A AC
Light Shade technology	No	Yes	Yes	Yes	Yes	Yes
Viewing area (mm ²)	4 312	4 312	4 559	4 312	8 736	5 820
Grinding mode	External	Internal	External	External	External	External
Digital setting	No	No	Yes	Yes	Yes	Yes
Additional features		Delivered with a planch of stickers	-	Xmode & infotrack	Xmode & infotrack	Xmode & infotrack Flow rates: 2 - from 160l/min to 200l/min Flame retardant material Lithium Battery
Weight (g)	490	475	614	542	668	938g + 1760g
Warranty	12 Months	18 Months	2 Years	2 Years	2 Years	2 Years

Passive products (handshields and helmets) would be chosen for punctual or discontinue use. In case of continual welding, **an electronic helmet** is necessary.

Handshields and passive helmets exist for 2 types of applications: **light or heavy duty**.

◆ **Light duty:** you will prefer thermoplastic products (*light, low price, flexible*).

◆ **Heavy duty:** generally polyester with fibreglass (*heat resistant, spatters resistance*).

The **size of the window** depends on countries habits.



**SEE MORE!
WELD BETTER!**

LCD WELDING FILTER

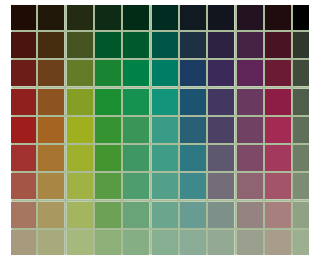
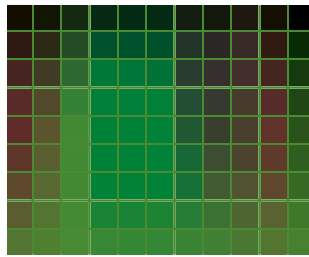
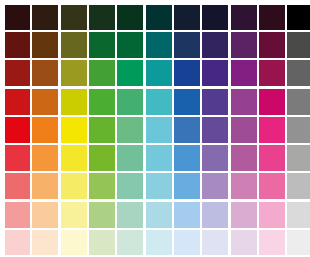
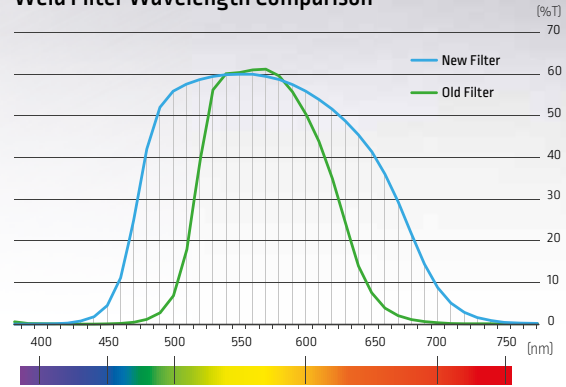


THE NEW RANGE OF HIGH QUALITY AUTODARKENING HELMETS

NEW LIGHT SHADE TECHNOLOGY - NATURAL VISION

- ◆ Natural vision for more comfort for the welders
- ◆ Better color perception for more safety
- ◆ A largest panel color for a clearer vision of the bead and of the environment from shade 3 to 13.

Weld Filter Wavelength Comparison



WELDING FILTER UNAPPLIED

OLD WELDING FILTER

Since it needs to be special coated to protect the harmful rays, the penetration ratio is less than the transparent lens and user feels the color as yellow-green.

NEW LIGHT SHADE WELDING FILTER

New Welding Filter has function of protection against harmful rays and the penetration ratio is increased so user can recognize the object more brighter

Also the recognizable color is enhanced natural color from current yellow-green.

The lens improved as natural color can make the user recognize the object with ungarbled color so it can reduce feeling of fatigue and improve operation efficiency.

ELECTRONIC HELMETS

HEADBAND

With the filter, the headband is one of the main elements that makes an electronic helmet comfortable.

Weldline by Lincoln Electric is always concerned about the user comfort and has developed a series of head bands, that will allow you to combine comfort and ergonomics.

More than a detail, it is the key for comfort and maintenance of the helmet, an essential criteria in choosing your protection.

New comfortable headgear

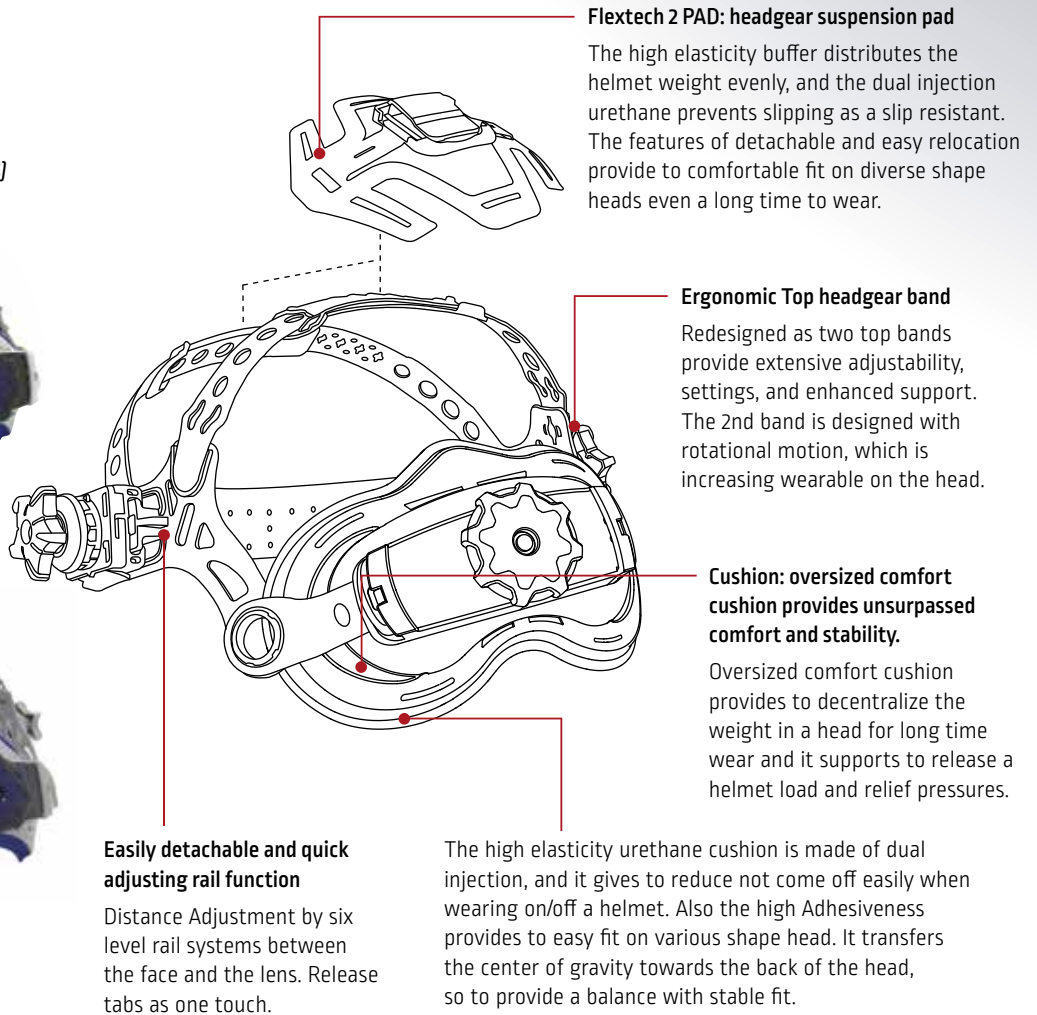
FLEXTECH 1

(for CHAMELEON 4V+ LS and EUROLUX LS)



FLEXTECH 2

(for GOLDENARK)



FLEX ONE

(for EUROONE)



FLEX SPEED LS

(for EUROSPEED LS)



- 1 Removable sweatband
- 2 Setting on the top
- 3 Rack setting
- 4 Comfort cushion

ELECTRONIC HELMETS

EUROONE

All the comfort and security of liquid crystal technology in a protective and comfortable welding helmet.

- ◆ Covering shape for an optimized head protection.
- ◆ External grinding mode.
- ◆ 4 312 mm² – Filter view.

Delivered with:

2 outside protection plates
and 2 inside protection plates,
1 sweat band.

WARRANTY

1
YEAR


	EUROONE
Applications	Every welding process; Not for Laser Welding or Oxyacetylene Welding/Cutting
Type cell	Variable shade DIN 3.5/9-13
Optical class	1/1/1/2
Shade	External variable
Cartridge dimensions	110 x 90 x 9 mm
Weight (Filter + shield + head band)	490g
Viewing area	98 x 44 mm
Clear shade	DIN 3.5
Dark shade	Variable from 9 to 13
Switching time clear-dark	1/16000 s
Sensitivity adjustment	Adjust by infinitely dial knob
Switching time dark-clear	0.1-1.0 s by infinitely dial knob
Sensors	2 optical sensors
Grinding mode (shade 4)	External
Power supply	Solar cells, no battery change required
Protection	Permanent protection against UV and IR
To order	
Helmet	W000403823
LCD cell	W000404067

List of spare parts : see page 14

ELECTRONIC HELMETS

EUROSPEED LS / CHAMELEON 4V+ LS



All the comfort and security of liquid crystal technology in a protective and comfortable welding helmet.

EUROSPEED LS

- ◆ Robustness and comfortable shape.
- ◆ Internal grinding mode.
- ◆ Soft and comfortable sweat band.

Delivered with:

2 outside protection plates and 1 inside protection plate, and 1 sweat band.
1 comfort cushion on the headgear apres 1 sweat band.



WARRANTY
18
MONTH

Blackrobot-version



CHAMELEON 4V+ LS - Digital setting

- ◆ Covering shape for an optimized head protection.
- ◆ 4 plans adjustable headgear delivered with comfort cushion.
- ◆ Auto-start: the LCD cell automatically turns on.
- ◆ Reset button: press the reset button twice to re-initialize the original parameters.
- ◆ The low battery indicator lights when 2-3 days of battery life remain.

Delivered with:

5 outside protection plates and 2 inside protection plates, 1 sweat band and 1 comfort cushion on the headgear.



2011-489



2011-518

WARRANTY
2
YEARS



	EUROSPEED LS / BLACKROBOT	CHAMELEON 4V+ LS
Applications	Every welding process; Not for Laser Welding or Oxyacetylene Welding/Cutting	Every welding process. Recommended for TIG
Type cell	Variable shade DIN 3.5/9 - 13	Variable shade DIN 3/8-13
Optical class	1 / 1 / 1 / 2	
Shade	Internal variable	Variable
Cartridge dimensions	110 x 90 x 9 mm	110 x 90 x 10 mm
Weight (Filter + shield + head band)	475 g	614 g
Viewing area	98 x 44 mm	97 x 60 mm
Clear shade	DIN 3.5	DIN 3
Dark shade	Variable from 9 to 13	Variable from 8 to 13
Switching time clear-dark	1/25000 sec.	1/20000 sec.
Sensitivity adjustment	Adjust by infinitely dial knob	Yes
Switching time dark-clear	0.1-1.0s by infinitely dial knob	Variable from 1 s to 0.1 s
Sensors	2 optical sensors	Sensors 3 independent highly sensible
Grinding mode (shade 4)	External	yes
Power supply	Solar cell + Battery replaceable (2 x AAA Alkaline batteries) Low battery alarm; Test button	2 lithium CR2450 3 Volts batteries + Solar cells
Protection	Permanent protection against UV and IR	Permanent IR-UV filtration
To order		
Helmet	W000403824	W000403668
Blackrobot version	W000403824-1	-
LCD cell	W000404097	W000402680

List of spare parts : see page 14



Grinding mode
with external
button

ELECTRONIC HELMETS

EUROLUX LS



LCD autodarkening welding helmets

- ◆ High Tech LCD autodarkening filter.
- An extra-wide vision: 5 820 mm².

The advantages of the EUROLUX LS helmet

Exclusive design:

- ◆ Easy filter release by simply pressing the push button.
- ◆ Adjustable headgear with 4 positions.

Comfort and protection:

- ◆ Covering shape for an optimized head protection.
- ◆ Optimization of the volume for a better breathing comfort.
- ◆ Manufactured with high resistance synthetic material [Nylon 66].
- ◆ Lightweight and heat resistant.
- ◆ The low battery indicator lights when 2-3 days of battery life remain.

Delivered with:
5 outside protection plates and 2 inside protection plates, 1 sweat band and 1 comfort cushion on the headgear.



Grinding mode with external button

		EUROLUX LS
Optical class		1 / 1 / 1 / 2
Switching time clear-dark		0.05 ms
Switching time dark-clear		10 positions from 0.1 s to 1 s setting per digital key
Sensitivity adjustment		Setting per digital key (10 positions)
Modes	Welding Grinding Cutting X mode* Infotrack system**	Yes shade 8 to 13 per digital key Yes shade 3 (per external button) Yes shade 5 to 9 per digital key Yes Yes
Sensors		4 independent optical sensors Magnetic in «X» mode
Clear shade		DIN 3
Dark shade		Adjustable from 5 to 13
Viewing area		97 x 60 mm
Constant UV/IR protection		Yes
Battery type		2 lithium CR2450 3 Volts
Solar cell		Yes
Temperature scale	Use Storage	From -5 °C to +55 °C From -30 °C to +70 °C
Weight (Filter + shield + head band)		542 g
Standard	LCD filter Helmet	CE EN 379 CE EN 175

To order		
Complete helmet		W000403672
LCD filter		W000402681

* X-mode: this mode allows welding in outdoor conditions or with very low arc current
** Infotrack system: provides useful information

List of spare parts : see page 14

Filter Advance 4500 LS - Infotrack shade 3/8-13:

The top-of-the-range solution for any application:

4 adjustment modes via the LCD screen with digital keys:

- ◆ Welding: variable shades 8-13, 4 optical sensors, sensitivity regulation and return to a clear shade.
- ◆ Grinding: filter activation in clear shade level 3.
- ◆ Cutting, low current welding: adjustable shades 5 to 8 for low intensity TIG process, microplasma, oxy-fuel gas welding...
- ◆ "X mode": adjustable shade 3 to 8-13 with magnetic sensors for outside use or obscured arc welding.

Infotrack system: provides useful information [current time - total welding time - alarm - temperature].



- ◆ Auto-start function: it is not necessary to push the "on" button before starting to weld. Automatic starting.
- ◆ Reset button: press the "reset" button twice to re-initialize the original parameters.
- ◆ Grinding mode: fixed shade 4 is activated, to ensure optimum protection when grinding.



ELECTRONIC HELMETS

GOLDENARK LS

Think bigger.

◆ **Extra wide field of view:**
112 x 78 mm



◆ **All applications:**

4 operating modes : Welding, Cutting, Grinding & X-mode.

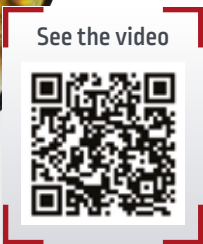
◆ **Multi language help menu**

Available in English, French and Spanish with InfoTrack system.

◆ The low battery indicator lights when 2-3 days of battery life remain.



2016-231



150iw - InfoTrack
(auto darkening welding lens)



External grinding button



4 optical sensors



A display function of arc time Control

The arc time function records the amount of time the lens assembly is dark (exposed to an arc). Arc time is accumulated and displayed hours and minutes as Max. 99 hours 59 minute.



A display function of Current time

You can access to set a current local time.



Timer function

A time-management function with alarms.



Multi-language support

Help menu displays in Korean and English as default setting (up to 6 languages supportable)



Alarm function

Alarm clock functions to turn on alarm at a specific time.



Help menu

Help menu displays abbreviated instructions, modes, and notes on proper usage.

ELECTRONIC HELMETS

Better weight distribution on the head.
Feeling of comfort and maintains more important.



	GOLDENARK LS
Optical class	1/1/2
Viewing area	112 x 78 mm
Switching time clear to dark	0.00005 sec
Switching time dark to clear	Between 0.1 and 1.0 sec
Clear shade	DIN 3
Available shades All shades provide continuous UV and IR protection	- Welding: DIN 8-13 - Cutting: DIN 5-8 - Grinding: DIN 3 - X-mode: DIN 8-13
Color of the cell	Yellow, to help clearing color sorting
Power supply	CR2450 Lithium batteries
Sensors	4 independent
Operating temperature	From -10°C to +55°C
Storage temperature	From -20°C to +70°C
Weight (Filter + shield + head band)	668 g

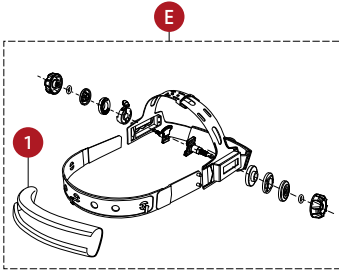
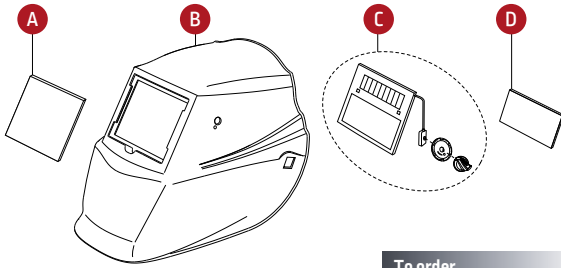
To order	
Electronic welding helmet GOLDENARK	W000403673
LCD filter	W000402683

List of spare parts : see page 14



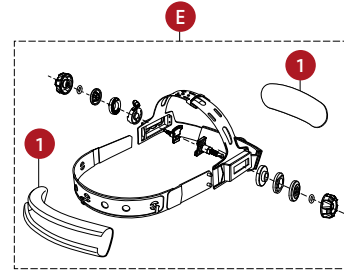
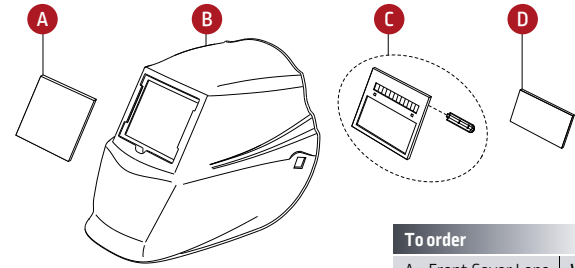
ELECTRONIC HELMETS

Spare parts for EUROONE



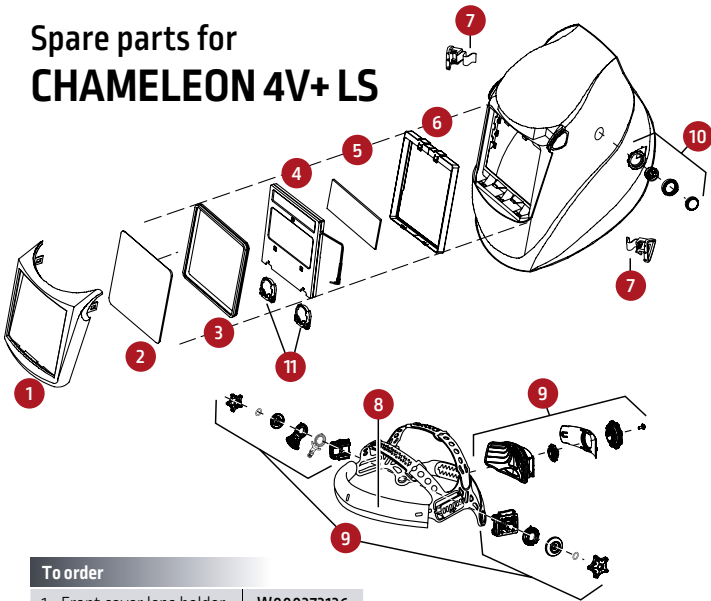
To order	
A - Front Cover Lens	W000404065
B - Shell (Welding Mask)	W000404066
C - Auto-Darkening Filter	W000404067
D - Inside Cover Lens	W000404068
E - Headgear FLEX ONE (including sweatband)	W000404069
1 - Sweatband	W000404073-1

Spare parts for EUROSPEED LS



To order	
A - Front Cover Lens	W000404065
B - Shell (Welding Mask)	W000404096
C - Auto-Darkening Filter	W000404097
D - Inside Cover Lens	W000404068
E - Headgear FLEX SPEED LS (including sweatband)	W000404098
1 - Sweatband	W000404073

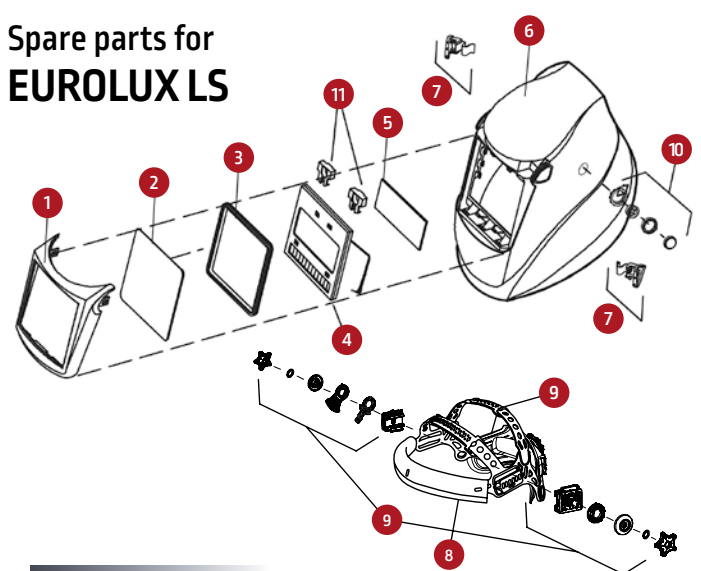
Spare parts for CHAMELEON 4V+ LS



To order	
1 - Front cover lens holder	W000373136
2 - Front cover lens	W000261993
3 - Gasket front cover lens	W000261992
4 - Cell 4V+	W000402680
5 - Inside cover lens	W000261984
6 - Internal lens holder 4V+	W000380495
7 - Lens holder button (left & right)	W000276258
8 - Sweatband	W000402690

To order	
9 - Headgear FLEXTECH 1 (including sweatband)	W000402692
10 - Outside grinding button kit	W000378989
11 - Spare batteries (CR 2450 lithium)	W000260920

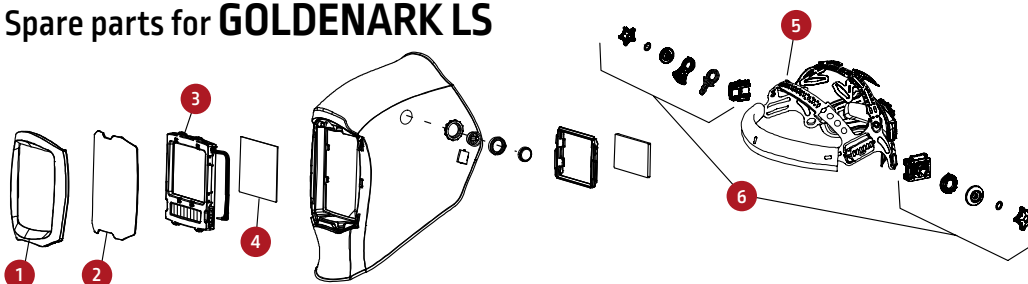
Spare parts for EUROLUX LS



To order	
1 - Front lens holder	W000272829
2 - Outside lens cover	W000261993
3 - Gasket lens cover	W000261992
4 - Auto-darkening lens Assembly Advance 4500	W000402681
5 - Inside lens cover	W000261994
6 - Helmet Shell	Consult us
7 - Buttons, front lens holder (L/R)	W000276258

To order	
8 - Sweatband	W000402690
9 - Headgear FLEXTECH 1 (including sweatband)	W000402692
10 - Kit external grinding button	W000378989
11 - Spare batteries (CR 2450 lithium)	W000260920

Spare parts for GOLDENARK LS



To order	
1 - Front cover lens holder	W000386520
2 - Front cover lens	W000386521
3 - LCD autodarkening cell	W000402683
4 - Inside cover lens	W000386528
5 - Sweatband	W000402693
6 - Headgear FLEXTECH 2 (including sweatband)	W000402694

Pure Stream is an initiative to help reducing the exposure of welding fumes to the welders.



PURE STREAM FUME MANAGEMENT IN 3 STEPS

1. Optimization
2. Ventilation & exhaust
3. Safe work practice and PPE

When used properly, the solutions proposed by LINCOLN ELECTRIC can significantly reduce the amount of fumes inhaled by welders.



GLOBAL SOLUTION TO REDUCE THE EXPOSURE TO WELDING FUMES

Where welding operations are concerned, safety is directly connected to air quality. **PURE STREAM** is not only a customized offer but also an initiative to reduce the exposure of welding fumes to the welders.



ZEPHYR LS CLEANSPACE 2™

Bring fume protection and filtered air directly to the operator in difficult environments and keep it there all day with the **ZEPHYR LS** Powered Air Purifying Respirator or the **CLEANSPACE 2™**.



Contact us for more information.

Helmet standard
CE EN 175
Cell standard
CE EN 379



ELECTRONIC HELMETS

ZEPHYR LS / FLIP'AIR LS



The ultimate welder protection.

Discover a complete solution designed to protect welders in the most effective way.

With the ZEPHYR LS / FLIP'AIR LS solution, you will find in a rugged carry bag:

- ◆ The ZEPHYR or FLIP'AIR helmet,
- ◆ The ZEPHYR air flow system,
- ◆ A protected hose connection,
- ◆ A shoulder strap,
- ◆ A battery charger,
- ◆ An air flow-meter,
- ◆ One extra filter.

Helmet with powered and filtered airflow



Flip-up LCD filter for grinding



Grinding mode with external button



Autodarkening LCD filters with wide vision field.

Filter Advance 4500 LS - Infotrack shade 3/8-13:

The top-of-the-range solution for any application:

4 adjustment modes from an LCD screen with digital keys:

- ◆ Welding: variable shades 8-13, 4 optical sensors, sensitivity regulation and return to a clear shade.
- ◆ Grinding: filter activation in clear shade level 3 [except on FLIP'AIR with its flip-up front filter].
- ◆ Cutting, low current welding: adjustable shades 5 to 8 for low intensity TIG process, microplasma, oxy-fuel gas welding...
- ◆ "X mode": adjustable shade 3 to 8-13 with magnetic sensors for outside use or obscured arc welding

Infotrack system: provides useful information (current time - total welding time - alarm - temperature).

WARRANTY
2
YEARS



ELECTRONIC HELMETS

The ZEPHYR LS / FLIP'AIR LS air flow system

- ◆ Air flow system: **2 flow rates** (low 160 l/min and high 200 l/min).
- ◆ This equipment includes an indication of the **chosen flow**, an indication of the **battery charge**, and **two alarms** in case of flow insufficiency: **a tone and a vibration**. This is important for the welder who is often in a noisy environment. A specific system **sends the tone through the hose** to bring the sound to the welder.
- ◆ The belt, as well as the shoulder strap, is made in **flame retardant material**.
- ◆ The belt includes a cushion to ensure a high comfort level.
- ◆ **Disconnecting the battery is easy** with only one button to push. It is a **lithium battery with an 8-hour lifetime duration**. A stronger one can be put in place for special cases with **14-hour duration ±5%** (on request). No need to fully discharge the Li-Ion battery before recharging it.
- ◆ Opening the filter is simple by turning a quarter to the left. Two symbols indicate if it is locked or open, this is also indicated inside the filter box.

Inside, 3 kinds of filters can be included.

- ◆ One pre filter against the biggest particles
- ◆ One particle filter against the dust (> 0.3 micron)
- ◆ One carbon filter against the fumes and the odour.

The whole system is water proofed.



Hose connection and hose cap.

The connection between the flow system and the helmet is made via the hose. The connection with the air flow system is water proof. The helmet includes a quick connection allowing flexibility when the welder moves his head. The hose is protected with an outer covering (75% cotton, 25% Kevlar).



2008-242



2008-243_ret

Flow circulation

You can choose between:

- ◆ air flow from the top of the helmet **1**
 - ◆ or a lateral flow coming from each side at the mix level **2** (only for ZEPHYR),
 - ◆ or a mix of these two solutions.
- These features ensure excellent welder comfort.



2008-246

	ZEPHYR LS Advance 4500	FLIP'AIR LS 4500 i
Optical class	1 / 1 / 1 / 2	
Switching time light to dark	0.05 ms	
Switching time dark to light	10 positions from 0.1 s to 1 s (setting per digital key)	
Delay setting	10 positions (setting per digital key)	
Mode	Welding Grinding Cutting X mode** Infotrack system**	Yes shade 8 to 13 per digital key Yes shade 4 (per external button) - For FLIP'AIR flip-up LCD for grinding Yes shade 5 to 9 per digital key Yes Yes
Sensors	4 independent optical sensors - Magnetic in «X» mode	
Viewing area	97 x 60 mm	
Constant UV/IR protection	Yes	
Battery type	2 lithium CR2450 3 Volts	
Mix power (battery/cell)	Yes	
Temperature scale	Use : -5 °C to +55 °C - Storage : -30 °C to +70 °C	
Weight	938 g (helmet) + 1760 g (air flow system)	
Standard	LCD filter: CE EN 379 - Helmet: CE EN 175	

* X-mode: this mode allows welding in outdoor conditions or with very low arc current

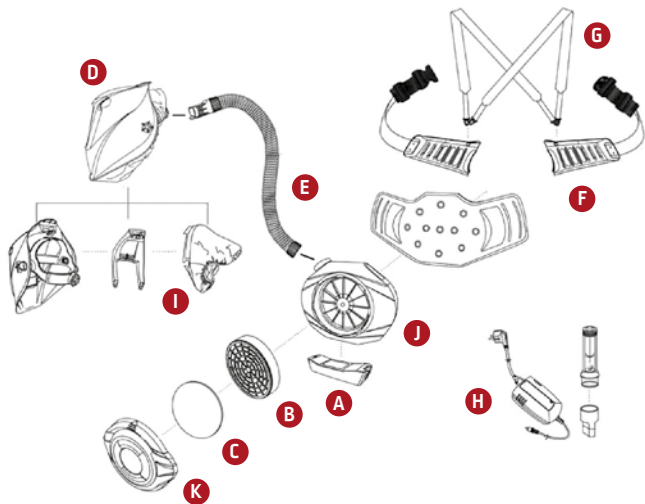
** Infotrack system: provides useful information (current time - total welding time - alarm - temperature)

To order		
Package (helmet + air flow system + LCD filter)	W000403674	W000403675
LCD filter	W000402681	W000402682

List of spare parts : see page 18

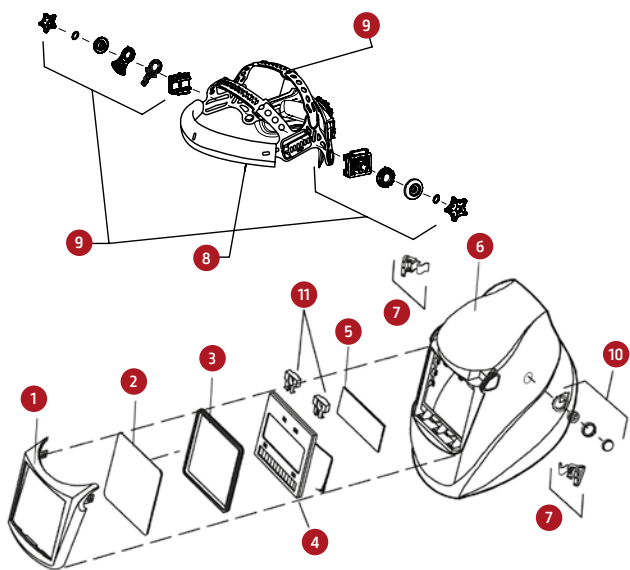
ELECTRONIC HELMETS

Spare parts for ZEPHYR LS / FLIP'AIR LS



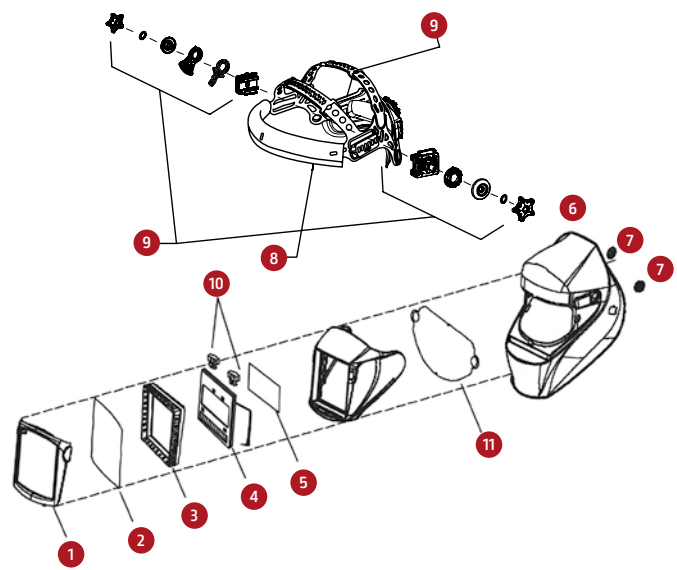
ZEPHYR LS air flow system

To order		
A	8 hours battery (± 5%)	W000271210
A	14 hours battery (± 5%)	W000274379
B	Particle filter P3	W000271208
C	Pre filter	W000271207
	Carbon filter (odours filter)	W000271209
D	ZEPHYR shell without lens	W000271212
E	Hose 110 cm	W000271205
	Hose protective cover	W000271206
F	Comfort belt (size 70 - 113 cm)	W000271203
G	Shoulder strap	W000271204
H	Battery charger	W000271211
I	Green protection ZEPHYR	W000272540
I	Green protection FLIP'AIR	W000382676
J	Motor	W000377929
K	Filter cover	W000378987



ZEPHYR LS 4500

To order		
1	Front Lens Holder	W000272828
2	Outside Lens Cover	W000261993
3	Gasket, Lens Assembly	W000261192
4	Auto-darkening Lens Assembly Advance 4500	W000402681
5	Inside Lens Cover	W000261994
6	Helmet Shell	W000402494
7	Buttons, Front Lens Holder (L/R)	W000276258
8	Fabric Sweatband	W000402690
9	Headgear FLEXTECH 1 (including sweatband)	W000402692
10	Kit external grinding button	W000378989
11	Spare batteries (CR 2450 lithium)	W000260920



FLIP'AIR LS

To order		
1	Front Lens Holder	W000378990
2	Outside Lens Cover	W000375551
3	Gasket, Lens Assembly	W000382321
4	Auto-darkening Lens Assembly Advance 4500	W000402682
5	Inside Lens Cover	W000261994
6	Helmet Shell	W000380263
7	Buttons, Front Lens Holder (L/R)	W000382922
8	Fabric Sweatband	W000402690
9	Headgear FLEXTECH 1 (including sweatband)	W000402692
10	Spare batteries (CR 2450 lithium)	W000260920
11	Grinding cover kit	W000374799

RESPIRATORY PROTECTION

CLEANSPACE2™

A major innovation in personal respiratory protection - a compact and lightweight power unit is cushioned around the back of the neck, counter-balancing the soft silicone low profile mask and providing fresh, clean air, on demand, as you breathe. This unique method of personal respiratory protection delivers significant benefits to workers in industry.



INNOVATION

- ◆ Ergonomic design: compact with no trailing leads, cables or hoses.
- ◆ Patented micro-turbine toroidal motor generates airflow up to 200L/min with only one moving part.
- ◆ Provides positive pressure inside the mask, with an inbuilt pressure sensor that adjusts the air-flow to prevent contamination.
- ◆ Breath activated On/Off operation.

EASE OF USE

- ◆ Simple to fit and use.
- ◆ Changing filters is quick and intuitive.
- ◆ Easy to clean.
- ◆ Fast 2 hour charge.
- ◆ On a single charge up to 11 hours* operating time [*with CleanSpace2™ Endurance Pack].

RELIABLE PROTECTION

- ◆ Light silicone mask, ensures a good face seal for long periods.
- ◆ Robust, reliable micro-turbine motor (up to 10 years operating life).
- ◆ High efficiency pleated particulate filter will remove solid and liquid particles.

COMPATIBILITY

- 📖 Welding & Safety Helmets
- 👓 Goggles, Spectacles and Face Shields
- 🎧 Hearing Protection



COMFORT

- ◆ The soft silicone mask seals gently and easily to your face - available in three sizes, to maximise fit.
- ◆ The AirSensit™ System intelligently delivers air on demand, and in unison with your breathing.
- ◆ Compact and light, the respirator sits at the back of your neck and close to your body.

	CLEANSPACE2™
Comfort Air Flow Settings	3 levels
Maximum Air Flow	200 L/Min
Weight	Power Unit: 485G / Mask: 115 G
Audible Alarm At Ear	75 DB [A]
Life	Motor: 10 years / Battery: 3 years or 500 cycles
Automatic Switch-Off	3 minutes after idle
Internal Battery Duration	Min 4.5 hours (typically > 6 hours)
Internal Battery Charging Time	2 hours (to 95%)
Ac Adaptor Charger Input Range	100 – 240 V
Output Range	13.5 V

To order	
CLEANSPACE2™ respirator unit*	W000386837
Silicon mask small	W000386838
Silicon mask medium	W000386839
Silicon mask large	W000386840
Particle filter P3	W000386841
Pre filter P3	W000386842
Battery charger	W000386843
Head support	W000386844
Large protecting neck	W000386846
Thin protecting neck	W000386847
Adaptor for filter	W000400236
P3 particle high capacity filter	W000400233
Filter A1P3	W000400234
Filter ABE1P3	W000400235

* Composition: 1 power unit + 1 filter P3 + 1 charger + 2 protecting neck (thin & large) + 1 flow test cap + 1 storage bag + 1 harness

PASSIVE HANDSHIELDS

Light duty solutions

Hand TP

- ◆ Thermoplastic handshield.
- ◆ Medium resistance.
- ◆ Delivered without protection glass.
- ◆ Light weight: 332 gr.

Single window 108 x 51 mm

To order W000335125

Single window 98 x 75 mm

To order W000011121



2007-831

Heavy duty solutions

Hand FG

- ◆ Polyester reinforced fibreglass.
- ◆ Excellent resistance to high temperatures (up to 400 °C) and to spatters.
- ◆ UV/IR protection shade 11.
- ◆ Excellent thermal and electrical isolation.
- ◆ Delivered without glass.
- ◆ Weight: 424 gr (without glass).

Window 105 x 50 mm

To order W000372272

Window 110 x 90 mm

To order W000372273



2011-463

Hand FG (sliding window)

- ◆ Reinforced fibreglass.
- ◆ Delivered without glass.
- ◆ Weight: 424 gr.

Sliding window 110 x 90 mm

To order W000011123



2007-830

EARPLUG

EN 352

- ◆ Box of 500 pieces.
- ◆ Without strings.
- ◆ SNR 34 DB.

To order W000010989

Technical description

- ◆ Non-irritating and hypoallergenic foam coating.



PASSIVE HELMETS

Light duty solutions

Helmet TP

- ◆ Thermoplastic helmet.
- ◆ Single window 108 x 51 mm, 98 x 75 mm or 110 x 90 mm.
- ◆ Adjustable "B" headgear.
- ◆ Delivered without glass.
- ◆ Weight: 420 gr.

Window 110 x 90 mm

To order W00011113

Window 98 x 75 mm

To order W00011114



2007-833

Flip-up WTP helmet

- ◆ Thermoplastic helmet.
- ◆ Thermal resistance up to 100 °C.
- ◆ Adjustable "B" headgear.
- ◆ Delivered without glass.
- ◆ Light weight: 450 gr.



2011-481

Flip-up window 105 x 50 mm

To order W000372270

Flip-up window 110 x 90 mm

To order W000374762



PASSIVE HELMETS

Heavy duty solutions

Helmet FG

- ◆ Reinforced fibreglass.
- ◆ High thermal resistance up to 400 °C.
- ◆ Adjustable "B" headgear.
- ◆ Delivered without glass.
- ◆ Weight: 414 gr.



2007-832

Window 105 x 50 mm

To order W000011103

Window 110 x 90 mm

To order W000011104

Flip-up helmet FG

- ◆ Reinforced fibreglass.
- ◆ High thermal resistance up to 400 °C.
- ◆ Adjustable "B" headgear.
- ◆ Delivered without glass.
- ◆ Weight: 574 gr.

Flip-up window
105 x 50 mm

To order W000372271



2011-477

Multi Flip-up

- ◆ Lightweight welding helmet.
- ◆ Optimal use/comfort.
- ◆ Long lifetime.
- ◆ Headgear with rack, rugged and very comfortable.
- ◆ Complete with headgear, sweat band, 2 flip-up lensholder welding lens.
- ◆ Shade 10.



2014-563

Flip-up window
105 x 50 mm

To order W000010804

PASSIVE LEATHER HELMETS

Leather helmets for welding operations in difficult access places, dedicated to short time applications and control.

Folding leather helmet

- ◆ Grain leather.
- ◆ Folding model, ideal for supervisors.
- ◆ Very light (120 grammes).
- ◆ Delivered with 105 x 50 mm shade 11 glass.



2054-53

Window 105 x 50 mm

To order W000011115

Flip-up leather helmet

- ◆ Ideal to work in extremely restricted areas.
- ◆ Adjustable headgear.
- ◆ Comfort foam at the forehead and chin levels.
- ◆ Delivered with one 105 x 50 mm shade 11 glass and two CR39 protection screens.
- ◆ 250 g (without glass).

Application: welding pipe



0254-55

Flip-up window 105 x 50 mm

To order W000011135

SPARE PARTS

Adjustable type "A" headgear

For WELDLUX helmets.



2007-877

To order W000335158

Leather protection for the neck

- ◆ Grain leather.
- ◆ Fixation with adhesive band.
- ◆ Protection of the neck against arc.



1196-022

To order W000335139

Sweat band

Foam band.



2010-951

To order W000260486
(10 pieces pack)

Adjustable type "B" headgear

For TP and FG helmets.



2007-818

To order W000010884

Comfort sweat band

- ◆ Foam band For WELDLUX helmet.
- ◆ Fabric band covered with foam.
- ◆ Velcro closing.
- ◆ Fire-retardant.



2244-077

To order Z00820115
(2 pieces pack)

WELDING GLASSES

WELDGLASS

Choose the lens shade adapted to your working conditions.

Clear glasses
EN 166
Coloured glasses
EN 169

Current (A)	Coated electrodes	MIG Heavy metals	MIG Light alloys	MAG	TIG	Gouging	PLASMA Cutting	PLASMA Welding
1								
2.5								6
5					8			7
10								8
20	8				9			9
30	9				10			10
40								11
60	10			9	11			12
80		10		10	12		11	12
100			11	11		10		13
150	11	11	11	11	13			13
175			12	12		11	12	
200				13				14
225	12	12		13			13	
250			14	14				15
300				15				
350	13	13						
400								
450								
500								



2007-839



2007-840

WELDING GLASSES

WELDGLASS



Filtering coloured glasses

EN 169 - EN 166

DIMENSIONS 105 x 50 mm				
Skin pack		Shade		Box
5 pieces	W000335009	5	W000010915	100 pieces
5 pieces	W000335010	6	-	100 pieces
5 pieces	W000335011	7	W000010917	100 pieces
5 pieces	W000335012	8	W000010918	100 pieces
5 pieces	W000335013	9	W000010919	100 pieces
5 pieces	W000335014	10	W000010920	100 pieces
5 pieces	W000335015	11	W000010921	100 pieces
5 pieces	W000335016	12	W000010922	100 pieces
5 pieces	W000335017	13	W000010923	100 pieces

DIMENSIONS 98 x 75 mm				
Skin pack		Shade		Box
5 pieces	W000335089	5	W000010939	100 pieces
5 pieces	W000335090	6	W000010940	100 pieces
5 pieces	W000335091	7	W000010941	100 pieces
5 pieces	W000335092	8	W000010942	100 pieces
5 pieces	W000335093	9	W000010943	100 pieces
5 pieces	W000335094	10	W000010944	100 pieces
5 pieces	W000335095	11	W000010945	100 pieces
5 pieces	W000335096	12	W000010946	100 pieces
5 pieces	W000335097	13	W000010947	100 pieces

DIMENSIONS 110 x 90 mm				
Skin pack		Shade		Box
5 pieces	W000335035	5	W000010927	100 pieces
5 pieces	W000335036	6	W000010928	100 pieces
5 pieces	W000335037	7	-	100 pieces
5 pieces	W000335038	8	W000010930	100 pieces
5 pieces	W000335039	9	W000010931	100 pieces
5 pieces	W000335040	10	W000010932	100 pieces
5 pieces	W000335041	11	W000010933	100 pieces
5 pieces	W000335042	12	W000010934	100 pieces
5 pieces	W000335043	13	W000010935	100 pieces

DIMENSIONS 108 x 51 mm				
Skin pack		Shade		Box
5 pieces	W000335047	5	-	-
5 pieces	W000335048	6	W000010952	100 pieces
5 pieces	W000335049	7	W000010953	100 pieces
5 pieces	W000335050	8	W000010954	100 pieces
5 pieces	W000335051	9	W000010955	100 pieces
5 pieces	W000335052	10	W000010956	100 pieces
5 pieces	W000335053	11	W000010957	100 pieces
5 pieces	W000335054	12	W000010958	100 pieces
5 pieces	W000335055	13	-	-

SILVER protane® glasses

EN 169 - EN 166

Skin pack	Dimensions 105 x 50 mm	Shade	Dimensions 133 x 114 mm	Skin pack	Dimensions 98 x 75 mm
5 pieces	W000335025	9	W000335063	5 pieces	W000335173
5 pieces	W000335026	10	W000335064	5 pieces	W000335174
5 pieces	W000335027	11	W000335065	5 pieces	W000335175
5 pieces	W000335028	12	W000335066	5 pieces	W000335176
5 pieces	W000335029	13	W000335067	5 pieces	W000335177

The SILVER PROTANE® glasses will prove their efficiency in all welding operations where the arc heat causes discomfort. The SILVER PROTANE® filter with a gold mirror coating reflects an additional 90% of the infrared radiation and reduces the amount of heat the eyes are exposed to.

- less irritation and therefore less tiredness,
- more precision and better quality work,
- more comfort and better working conditions.

“Test SILVER PROTANE® and weld cool”.

Circular glasses diameter 50 mm

Shade	Skin pack - 10 pieces	Box - 100 pieces
5	W000335085	-
6	W000335086	W000010937
7	W000335087	-
8	W000335088	-
Clear	-	W000010979

Magnifying glass EN 166

Diopter	108 x 51 mm or 105 x 50 mm
+1.0	W000335031
+1.5	W000335032
+2.0	W000335033
+2.5	W000335034

For some precision welding, magnifying the work zone is necessary. These lenses must be used with coloured filtering glasses.



These magnifying glasses can be used with CHAMELEON 4V+, EUROLUX LS and GOLDENARK LS helmets (see pages 10 - 13).

Protection glass or plate CR-39®

EN 166

Dimensions	Clear glass [EN 166]		Protection plate CR-39® [EN 166]	
	Skin pack - 5 pieces	Box - 100 pieces	Skin pack - 5 pieces	Box - 150 pieces
98 x 75 mm	W000335098	W000010950	W000335100	W000335099
105 x 50 mm	W000335018	W000010926	W000335020	W000335019
108 x 51mm	W000335056	W000010962	W000335058	W000335057
110 x 90 mm	W000335044	W000010938	W000335046	W000335045
133 x 114 mm	W000335069	-	W000335071	W000335070

GOGGLES

Choice criteria

Goggles are mainly used to protect the eyes against the light produced by flame welding or cutting or against mechanical particles (grinding for example).

Our products are classified in 3 categories:

- ◆ Welding range
- ◆ Protection range
- ◆ Grinding masks

Marking of the frame:

- ◆ EN 166 standard
- ◆ Resistance to impact: → **A**: High energy impact
→ **B**: Medium energy impact
→ **F**: Low energy impact
→ **S**: Increased strength

Lens marking:

X-X.XXXXX

Possibilities:

- **8**: Short circuit resistance
- **9**: Spatter resistance
- **K**: Abrasion resistance
- **N**: Mist resistance
- **T**: Temperature resistance from -5 °C to +55 °C

Usage (Optical class):

- **1**: Continuous use
- **2**: Medium use
- **3**: Occasional use

Manufacturer's identification

Resistance to impact:

- **A**: High energy impact
- **B**: Medium energy impact
- **F**: Low energy impact
- **S**: Increased strength

Numerical filter scale (protection level)

- UV: **1.2 to 5**
- Infrared (IR): **1.2 to 10**
- Sun filters: **1.1 to 4.1**
- Welding filters: **4 to 14**

Caution: Goggles can not be used for arc welding > 7 due to UV, IR and skin protection requirements.
[recommendations of welding filter glass can be seen on page 21]

Filter identification code

- UV: **2 or 3**
- IR: **4**
- Sun: **5 or 6**
- Welding: **4 to 7**
[see chart]

Welding scale				
	q = acetylene flow rate l/h			
	q ≤ 70	70 < q ≤ 200	200 < q ≤ 800	q > 800
Flame welding Brazing and soldering	4	5	6	7
q = acetylene flow rate l/h				
	900 ≤ q ≤ 2 000	2 000 < q ≤ 4 000	4 000 < q ≤ 8 000	
Oxy-cutting	4	6	7	



Round replacement lenses for the PILOT range

Round lenses in mineral glass Ø 50 mm.

Shade	Skin pack - 10 pieces	Box - 100 pieces	
5	W000335085	W000010925	EN 166 + EN 169
6	W000335086	W000010937	EN 166 + EN 169
7	W000335087	W000010949	EN 166 + EN 169
8	W000335088	-	
Clear	-	W000010979	EN 166 + EN 169

GOGGLES / SPECTACLES

Welding range

PILOT FLIP UP

- ◆ Flip up lenses anti-scratch treated.
- ◆ Elastic headband.
- ◆ Indirect ventilation value.
- ◆ Weight: 137 g.

EN 175



2005-254

Shade 5

To order W000011046

PILOT 1

- ◆ One piece soft black PVC frame allowing quick lens replacement.
- ◆ Elastic headband.
- ◆ Aerated side covers honeycombed casing for good ventilation and to prevent from lens dimming.
- ◆ Weight: 60 g.

EN 166 - EN 169



0947-89

Shade 5

To order W000011047

Shade 6

To order W000011048

PILOT EVEREST

- ◆ Standard black spectacles with foldable polyamide side shields and frame.
- ◆ Central screw for quick lens replacement.
- ◆ Weight: 70 g.



1798-29

Shade 5

To order W000011053

PILOT 2 PLASTIC

EN 175

- ◆ Double cup black plastic frame with nose bridge adjustment.
- ◆ Side ventilation value.
- ◆ Adjustable elastic headband.
- ◆ Weight: 65 g.



2005-253

Shade 5

To order W000011052

PILOT 1 PLASTIC

- ◆ One piece soft black PVC frame allowing quick lens replacement.
- ◆ Elastic headband.
- ◆ Aerated side covers honeycombed casing for good ventilation and to prevent from lens dimming.
- ◆ Weight: 60 g.



2008-755

Clear

To order W000011049

GOGGLES / SPECTACLES

Welding range

CLASSIC OVER WELDING

- ◆ Over spectacles.
- ◆ Polycarbonate.
- ◆ Lateral protection.
- ◆ Protection against high-speed particles - low energy.
- ◆ Protection against high-speed particles at extreme temperatures.
- ◆ Resistance to surface damage by fine particles.
- ◆ Weight: 37 g.



2015-025

EN 166 - EN 167 - EN 168 -
EN 169 - EN 175

Shade 5

To order W000383506

CLASSIC WELDING

- ◆ Anti-scratch surface.
- ◆ Nylon frame and side shields.
- ◆ Changeable polycarbonate lenses.
- ◆ Central screw for quick lens replacement.
- ◆ Weight: 35 g.



2005-057

Shade 5

To order W000011055

Box of 20 tinted lenses (shade 5)

To order W000376663

FASHION WELDING

- ◆ Spectacles.
- ◆ Polycarbonate.
- ◆ Protection against high-speed particles - low energy.
- ◆ Protection against high-speed particles at extreme temperatures.
- ◆ Resistance to fogging of oculars.
- ◆ Resistance to surface damage by fine particles.
- ◆ Weight: 31 g.



2015-023

Shade 5

To order W000383505

Protection range

CLASSIC OVER VISIT

- ◆ Panoramic spectacles also usable as over spectacles.
- ◆ Polycarbonate lens and frame.
- ◆ Protection against high-speed particles - low energy.
- ◆ Protection against high-speed particles at extreme temperatures.
- ◆ Resistance to surface damage by fine particles.
- ◆ Weight: 37 g.



2015-024

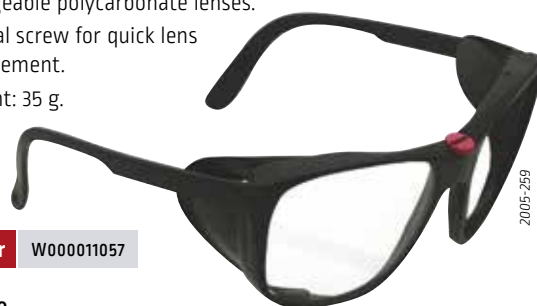
EN 166

Clear

To order W000383507

CLASSIC VISIT CLEAR

- ◆ Anti-scratch surface.
- ◆ Nylon frame and side shields.
- ◆ Changeable polycarbonate lenses.
- ◆ Central screw for quick lens replacement.
- ◆ Weight: 35 g.



2005-259

Clear

To order W000011057

Box of 20 transparent lenses

To order W000376662

GOGGLES / SPECTACLES

Protection range

FASHION VISIT

- ◆ Impact resistant.
- ◆ Polycarbonate single lens.
- ◆ Sports and ergonomic design.
- ◆ Weight: 22 g.

Clear

To order

W000011062



2014-575

EN 166



Grinding masks

FIRST

- ◆ Anti-scratch polycarbonate lens.
- ◆ Direct ventilation.
- ◆ Adjustable elastic headband.
- ◆ Weight: 75 g.

Clear

To order

W000011068



2005-264

EN 166

STAR

- ◆ Anti-scratch and anti-mist treated with adjustable elastic headband.
- ◆ Soft foam for better adherence to the user's face.
- ◆ Weight: 55 g.

Clear

To order

W000011070



2005-265

OVER



2004-962

- ◆ 180° field of vision.
- ◆ Durable and adjustable elastic headband.
- ◆ Indirect ventilation.
- ◆ Anti-mist and anti-scratch treated and wearable as over spectacles or with a respiratory mask.
- ◆ Weight: 85 g.

Clear

To order

W000011069

LEATHER CLOTHES

Standards :

Rules (EU) 2016/425 European Regulation on Personal Protective Equipment

UNI EN ISO 13688:2013: [general requirements for innocuousness, ergonomics and sizes],

UNI EN ISO 11611:2015: [use in welding operations and related procedures]

Products are manufactured according to the Rules (EU) 2016/42

Standard:

Rules (EU) 2016/425 European Regulation on Personal Protective Equipment

UNI EN ISO 13688:2013: [general requirements for innocuousness, ergonomics and sizes],

UNI EN ISO 11611:2015: [use in welding operations and related procedures]

Products are manufactured according to the Rules (EU) 2016/42

Composition:

- **Jacket:** split leather, grain leather
- **Apron, Sleeves and Gaiters:** split leather, grain leather

Use:

Jackets, Apron, Sleeves and gaiters are clothes for welders in Class 2 suitable for use during manual welding techniques in which major drops and splatters are formed, such as, for example: MMA welding (with basic electrode or covered with cellulose), MAG welding (CO₂ or mixed gases), MIG welding (with high current), welding with flux cored wire, plasma cutting, trimming, oxygen cutting, thermal spray painting, and operation of machinery, for example, in tight spaces, welding and cutting in overhead or similar positions, or in narrow spaces.

The garment protects accidental contact with small flames, splattered molten metal, radiating heat and brief accidental electrical contact. Not meant for any other type of protection than the use described above. The manufacturer will not be held responsible for any damage that could occur from such practices.

Gaiters

Gaiters in split leather fastened with straps or with leatherband. Gaiters are used to protect the bottom of the trousers and shoes from sparks and heat generated during welding and grinding operations. Width 30cm.

Technical description:

The gaiters are manufactured in four pieces that are stitched together, completed with adjustable leather belt or velcro strap and under-strap to secure the shoes.



Picture not contractual

**PPE II° category
Certified by EU 425/2016
EN 11611 A1 Class 2**

Gaiters with STRAPS

To order W000404081

Gaiters with VELCRO

To order W000404082



LEATHER CLOTHES

Short and long sleeves

The short and long sleeves in split leather are intended to protect arms from fine welding spatters.



Picture not contractual

Length: +/- 400 mm

To order W000404083

2005-128_ret



Picture not contractual

Length: +/- 600 mm

To order W000404084

2005-127_ret

Technical description

- ◆ Entirely in split leather tanned with chromium salts (*mineral substances*).
- ◆ Fixed with leather straps.
- ◆ Tightening elastic to the wrists.
- ◆ Single size.

Protective limits

- ◆ Due to the presence of the securing straps the sleeves should not be worn when using machinery with moving or rotating parts, without additional protection.
- ◆ The sleeves are not heat resistant and should not be exposed either to convective or radiated heat sources.
- ◆ The sleeves are not meant for any other type of protection than the use described above. The manufacturer will not be held responsible for any damage that could occur from such practices.

Maintenance and storage

- ◆ Recommended storage: a safe dry well ventilated area that is not exposed to direct light.
- ◆ To clean use soap and water to a maximum temperature of 60 °C.
- ◆ Do not use any type of bleach, dry clean, (*perchloride enthymeme*) tumble driers or sharp and abrasive cleaning products.
- ◆ Maximum 30 wash cycles.

LEATHER CLOTHES

Grain leather apron

This apron is designed to protect clothes from welding spatters and grinding particles.

Technical description

- ◆ Protective welding apron in premium grade grain leather tanned with chromium salts (*mineral substances*).
- ◆ Leather strap fixed through bound eyelets to the waist and flap.
- ◆ Single size.

Protective limits

- ◆ Due to the presence of the securing straps, the apron should not be worn when using machinery with moving or rotating parts, without additional protection.
- ◆ The apron is not heat resistant and should not be exposed either to convective or radiated heat sources.
- ◆ The apron is not meant for any other type of protection than the use described above. The manufacturer will not be held responsible for any damage that could occur from such practices.

Maintenance and storage

- ◆ Recommended storage: a safe dry well ventilated area that is not exposed to direct light.
- ◆ To clean use soap and water to a maximum temperature of 60 °C.
- ◆ Do not use any type of bleach, dry clean, (*perchloride ethylene*) tumble driers or sharp and abrasive cleaning products.
- ◆ Maximum 30 wash cycles.



1100 x 800 mm

- ◆ Length: 1100 mm.
- ◆ Width: 800 mm.

Leather straps

To order W000404085

Picture not contractual

LEATHER CLOTHES

Split leather apron

This apron is designed to protect clothes from welding spatters and grinding particles.

Technical description

- ◆ Protective welding apron in premium grade split leather tanned with chromium salts (*mineral substances*)
- ◆ Leather or cotton strap with quick release clips to the waist and flap.

Protective limits

- ◆ Due to the presence of the securing straps the apron should not be worn when using machinery with moving or rotating parts, without additional protection.
- ◆ The apron is not heat resistant and should not be exposed either to convective or radiated heat sources.
- ◆ The apron is not meant for any other type of protection than the use described above. The manufacturer will not be held responsible for any damage that could occur from such practices.

Maintenance and storage

- ◆ Recommended storage: a safe dry well ventilated area that is not exposed to direct light.
- ◆ To clean use soap and water to a maximum temperature of 60 °C.
- ◆ Do not use any type of bleach, dry clean, (*perchloride ethymeme*) tumble driers or sharp and abrasive cleaning products.
- ◆ Maximum 30 wash cycles.



Split leather apron fastening with rapid connection, measures 900x600 mm.

To order W000404087

Split leather apron with eyelets and fabric laces, measures 900x600 mm.

To order W000404088

1100 x 800 mm

- ◆ Length: 1100 mm.
- ◆ Width: 900 mm.

Leather straps, closing by clips

To order W000404086

Closing by clips or cotton straps



Picture not contractual



LEATHER CLOTHES

Split leather welding jacket

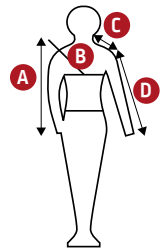
Split leather jacket, comfortable, fastened with snap buttons covered by leather, pocket inside, elastic at the wrist.

Welding jacket in split leather are designed to protect the upper body of the user from fine welding spatters and grinding particles.

Technical description

- The jacket fastens in the front with an overlap of leather and Velcro for additional protection against spatters, the inner neck is made of double cotton for comfort.
- Tightening elastic to the wrists.
- Finished in red trim.
- Length: +/- 780 mm.
- Available sizes: S, M, L, XL, 2XL, 3XL, 4XL and 5XL.

Important:
 choose your size with the hereunder table (cm)

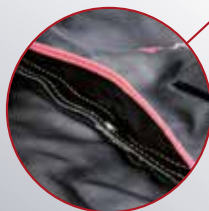


EU size	A	B	C	D
S	64.5	116	44.5	61.5
M	67.0	120	47.0	62.5
L	69.5	124	49.5	63.5
XL	72.0	128	52.0	64.5
2XL	74.5	133	53.5	66.0
3XL	77.0	137	55.0	67.5
4XL	79.5	141	56.5	69.0
5XL	82.0	145	58.0	70.5



To order	
Size S	W000404090-S (On demand)
Size M	W000404090-M (On demand)
Size L	W000404090-L
Size XL	W000404090
Size 2XL	W000404091
Size 3XL	W000404090-3XL (On demand)
Size 4XL	W000404090-4XL (On demand)
Size 5XL	W000404090-5XL (On demand)

Button closure under flap



Breathable



Customize your welding jacket thanks to the removable velcro band



Welding grain leather jacket

Grain leather jacket, comfortable, regular fit, fastened with snap buttons covered by leather, pocket inside, elastic at the wrist.

Half-back flame-retardant cotton.



Breathable



Technical description

- Half of the back is made from flame retardant cotton ensuring a light, flexible Jacket.
- The jacket fastens in the front with an overlap of leather and Velcro for additional protection against spatters, the inner neck is made of double cotton for comfort.
- Tightening elastic to the wrists.
- Finished in red trim.
- Length: +/- 780 mm.
- Available sizes: S, M, L, XL, 2XL, 3XL, 4XL and 5XL.

To order	
Size S	W000404092-S [On demand]
Size M	W000404092-M [On demand]
Size L	W000404092-L
Size XL	W000404092
Size 2XL	W000404093
Size 3XL	W000404092-3XL [On demand]
Size 4XL	W000404092-4XL [On demand]
Size 5XL	W000404092-5XL [On demand]

Button closure under flap



See page 34
 for sizes

With the blank velcro
 add your company
 logo, name, message
 of your choice*.

* Not included

SAFETY SHOES FOR WELDING

WELDLINE safety shoes

- ◆ Our safety shoes always include a toe protection (in steel or in other material with a resistance > 200J).
- ◆ The European directive 89/686/EEC recommends the wearing of safety shoes for workers.
- ◆ Weldline proposes products with toe protection only (>200 J) that can be in steel, aluminium or in fiberplast and with an antipuncture plate in steel or in fibre textile.
- ◆ The standard EN ISO 20345 includes several levels.

SUPER FORJA & SUPER FORJA METAL FREE



2012-636

Picture not contractual

2012-637

Model	Safety level	Toe protection	Antipuncture plate	Outsole	Upper
SUPER FORJA	S3	Steel	Steel	PU/PU	Full-grain leather
SUPER FORJA METAL FREE	S3	Plastic	Non metallic	PU/PU	Full-grain leather

- ◆ The best performance for a reasonable price, fulfilling the most stringent safety footwear technical regulations and quality controls.
- ◆ Extra thick, antispark, waterproof leather.
- ◆ Resistant, agile, comfortable and safe footwear.
- ◆ Ergonomic last and Shock Absorber outsole.
- ◆ Anti-static sole.
- ◆ Extra padded collar for additional comfort.
- ◆ Very breathable lining, resistant to abrasion and wear and tear.

Size	Super Forja	Super forja metal free
36	W000376225*	W000376200*
37	W000376226*	W000376201*
38	W000376229*	W000376202*
39	W000376230*	W000376203*
40	W000376231	W000376204
41	W000376232	W000376206
42	W000376233	W000376215
43	W000376234	W000376216
44	W000376235	W000376217
45	W000376236	W000376218
46	W000376237*	W000376219*
47	W000376238*	W000376220*
48	W000376239*	W000376221*

*On demand

ULYSSE TOTALE & FUSION TOTALE



2012-638

Picture not contractual

2012-638

Model	Safety level	Toe protection	Antipuncture plate	Outsole	Upper
Ulysse Totale	S3	Steel	Non metallic	PU/Nitrile rubber	Full-grain leather
Fusion Totale	S3	Steel	Non metallic	PU/Nitrile rubber	Full-grain leather

- ◆ The over-sized exterior flap provides extra protection against small splashes of molten metal.
- ◆ Top-quality full-grain leather, extra thick, waterproof.
- ◆ Anti-torsion outsole, resistant to oils and hydrocarbons.
- ◆ Extraordinary strength and durability.
- ◆ Especially wide last, does not restrict foot.
- ◆ Extra padding for additional comfort.
- ◆ Extra resistant and long-lasting.
- ◆ Anti-static sole.
- ◆ Very breathable lining, resistant to wear and tear.
- ◆ Anti-heat sole.

Size	Ulysse Totale	Fusion Totale
36	W000376253*	W000376240*
37	W000376254*	W000376241*
38	W000376255*	W000376242*
39	W000376256*	W000376243*
40	W000376257	W000376244
41	W000376258	W000376245
42	W000376259	W000376246
43	W000376260	W000376247
44	W000376261	W000376248
45	W000376262	W000376249
46	W000376263*	W000376250*
47	W000376264*	W000376251*
48	W000376265*	W000376252*

*On demand

SAFETY SHOES FOR WELDING

PANTER-FUSION 49 S3

YOUR SAFETY IN STURDY, COMFORTABLE AND STYLISH WELDING SHOES

Safety boots with special cuff for welding protection. Produced from extra thick full grain leather, breathable and fireproof. Protects against high temperatures, additionally extraordinary strength and durability.



Level of protection	Standard
S3+WG+Hi1+Ci+HRO+AN	EN ISO 20345 EN ISO 20349

PANTER FUSION 49 S3			
Size 36	W49S3T36	Size 43	W49S3T43
Size 37	W49S3T37	Size 44	W49S3T44
Size 38	W49S3T38	Size 45	W49S3T45
Size 39	W49S3T39	Size 46	W49S3T46
Size 40	W49S3T40	Size 47	W49S3T47
Size 41	W49S3T41	Size 48	W49S3T48
Size 42	W49S3T42		



Natural full grain leather combining Maximum Hydrofugation and Flameproof Treatment

- Thick and resistant to tear
- Seams made with flame retardant wire
- Resistant to flame and splashes of molten metal
- Design, yarns, fiber and engineering complying with EN ISO 20349



PU + High Temperature (300 °C) Nitrile rubber

- Resistance to heat contact up to 300 °C
- Resistant to oils and hydrocarbons
- Resistant to abrasion - effective cold and extreme hot insulation
- Electrically insulating
- Special anti-slip design and system of energy absorption in the heel



Heat resistant

- Antifungal
- Antistatic
- Antibacterial

200 J Plastic



- Impact resistant to over 200 joules
- Extra wide
- Very light
- Elastic memory
- Electrically insulating
- Maximum EN ISO 20345 Certification

Puncture Proof Non-Metallic

- Extraordinary flexible and light
- Self molded to the natural shape of the foot without rigidity
- Comfort and protection
- Zero Penetration
- Super Flexible and light
- Maximum EN ISO 20345 Certification

GLOVES

YOUR SAFETY IN PREMIUM QUALITY GLOVES AT A FAIR PRICE

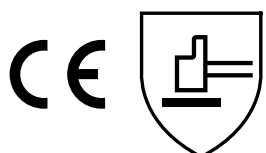
Our gloves are made with leather that have passed specific tests, for thermal and electrical risks. They are considered heat resistance. You can hold a 100-degree hot piece in your hand for 15 seconds.

The Personal Protection Equipment protects against risks deriving from operations involving welding operations and related procedures, [CLASS 2] suitable for manual welding techniques with strong formation of splashes and drops such as: MMA welding [with base electrode or cellulose coated], welding MAG [mixed CO₂ or gas], MIG [high current] welding, cored wire welding, plasma cutting, gouging, oxygen cutting, thermal spray painting, and for the operation of machines, for example in limited spaces for welding and cutting in overhead or similar position, in forced positions.

European standard marking gloves:

Mechanical hazards

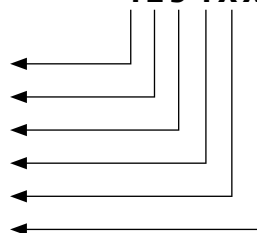
EN 388: 2016



4 2 3 4 x x

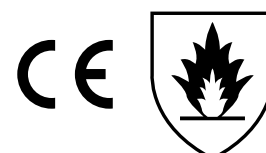
TEST

- Abrasion [0-4]
- Resistance to cutting [0-5]
- Resistance to tearing [0-4]
- Resistance to perforation [0-4]
- TDM resistance to cutting [E]; [A-F]
- Attenuation of impact [P]; [Pass/Fail]



Heat resistance

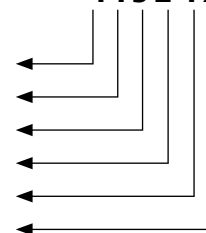
EN 407: 2004



4 1 3 2 4 x

TEST

- Reaction to flame [0-4]
- Contact heat [0-4]
- Convective heat [0-4]
- Radiating heat [0-4]
- Splattering with small quantities of molten metal [0-4]
- Splattering with large quantities of molten metal [0-4]



An index of x indicates that the glove has not been tested for this type of risk.



PROTECTION GLOVES

MIG UNIVERSAL COMFORT



The UNIVERSAL COMFORT gloves are designed to protect the hand during normal welding applications in MMA/MIG/MAG/TIG processes and have a grain leather palm for extra sensitivity.

Glove properties

Heat resistance



Dexterity



Abrasion resistance



Molten metal splashes



To order	
Size 9	WG-MIG-1-CE-T9
Size 10	WG-MIG-1-CE
Size 11	WG-MIG-1-CE-T11

Usage recommendation :

MIG-MAG / MMA

European Standard of gloves

- UNI EN 420:2013+A1:2009
- UNI EN 388:2016
- UNI EN 407:2004
- UNI EN 12477:2001+A1:2005

MIG UNIVERSAL COMFORT +



The UNIVERSAL COMFORT + gloves are designed to protect the hand during normal welding applications in MMA/MIG/MAG processes.

Glove properties

Heat resistance



Dexterity



Abrasion resistance



Molten metal splashes



To order	
Size 9	WG-MIG-2-CE-T9
Size 10	WG-MIG-2-CE
Size 11	WG-MIG-2-CE-T11

Usage recommendation :

MIG-MAG / MMA

European Standard of gloves

- UNI EN 420:2013+A1:2009
- UNI EN 388:2016
- UNI EN 407:2004
- UNI EN 12477:2001+A1:2005

PROTECTION GLOVES

MIG IRON PROTECT



The MIG IRON PROTECT gloves are designed for a high level of protection of the hands during normal welding applications in MMA/MIG/MAG processes.

Glove properties

Heat resistance



Dexterity



Abrasion resistance



Molten metal splashes



To order	
Size 10	WG-MIG-3-CE
Size 11	WG-MIG-3-CE-T11

Usage

recommendation :
MIG-MAG / MMA

European Standard of gloves

EN 420: 2009 3
EN 388: 2016 4 2 3 4 x x
EN 407: 2004 4 1 3 2 4 x
EN 12477: 2001 + A1 2005

MIG IRON PROTECT +



The MIG IRON PROTECT+ gloves are designed to protect for high level of protection of the hands during normal welding applications in MMA/MIG/MAG processes. **The natural grain leather palm gives extra sensitivity.**

Glove properties

Heat resistance



Dexterity



Abrasion resistance



Molten metal splashes



To order	
Size 10	WG-MIG-4-CE
Size 11	WG-MIG-4-CE-T11

Usage

recommendation :
MIG-MAG / MMA

European Standard of gloves

UNI EN 420: 2013+A1:2009
UNI EN 388: 2016
UNI EN 407: 2004
UNI EN 12477: 2001+A1:2005

WELDING GLOVES

TIG FLEX SENSITIVE



The TIG FLEX SENSITIVE gloves are designed to give a high level of dexterity and flexibility for normal welding applications in TIG/Flame processes. The favorite gloves of TIG welders.
Goat leather.

Glove properties

Heat resistance ★★★★★	Dexterity ★★★★★
Abrasion resistance ★★★★★	Molten metal splashes ★★★★★

To order	
Size 8	WG-TIG-8-CE
Size 9	WG-TIG-9-CE
Size 10	WG-TIG-10-CE
Size 11	WG-TIG-11-CE

Usage recommendation :
TIG

European Standard of gloves

- UNI EN 420: 2013+A1:2009
- UNI EN 388: 2016
- UNI EN 407: 2004
- UNI EN 12477: 2001+A1:2005

STOPCALOR ALU



The STOPCALOR ALU gloves are designed for a high level of protection of hands during heavy welding applications.

COMFORT: the Split leather and the cotton fl eece lining which increases the glove's thermal insulation. **RESISTANCE:** the aluminised Kevlar® textile back off ers strong resistance to heat, radiation and small splashes of molten metal. **SAFETY:** the split leather cuff helps to protect a large part of the forearm against mechanical hazards.

Glove properties

Heat resistance ★★★★★	Dexterity ★★★★★
Abrasion resistance ★★★★★	Molten metal splashes ★★★★★

Usage recommendation :
MIG-MAG / MMA

European Standard of gloves

- EN 420: 2003 5
- EN 388: 2003 3143 x x
- EN 407: 2004 41344 x
- EN 12477: 2000 typeA

3143

EN 388

41344X

EN 407

To order	
Size 10	W000010420

EN 532

Accessories: Thermal screen

MIG/MAG and MMA welding processes.
Thermal protection added to a glove.

- ◆ Dimensions 200 x 150 mm.
- ◆ Fitted with two elastic straps at palm and cuff level.
- ◆ Split leather lined with Kevlar. Heat and flame resistant.
- ◆ One aluminized side reflects 95% of radiant heat.
- ◆ Double Kevlar thread seams.
- ◆ Delivered by 2 pieces.

To order	
W000335162	



PROTECTIVE GLOVES

DOCKER

The DOCKER protective gloves are designed in a high quality with reinforced fingers for an increased life span.

Technical description

- ◆ DOCKER protective handling gloves.
- ◆ Palm in grain leather tanned with chorium salts (*mineral substances*).
- ◆ Cotton back.
- ◆ Fabric cuff.
- ◆ Elastic tightening glove back.

Standards and levels of protection

- ◆ These gloves have been examined by a competent CE organisation.
- ◆ Safety comfort and dexterity level = 5.

Limits of protection

- ◆ For use in a dry environment against mechanical risks.



EN 388



EN 388 - EN 420

2009-007

Picture not contractual



WELDING GLOVES

Make sure to protect your hands.

MORE COMFORT & SAFETY FOR WELDERS



2 GENERAL ARC WELDING

WELDING TOOLS AND ACCESSORIES

◆ Cables and connectors	44 – 45
◆ Clamps	46 – 47
◆ Magnetic ground clamps	48 – 49
◆ Hammers / brushes	50
◆ Tools	51
◆ Accessories / Markers	52



The different types of cable

Primary cables:

Three core for single phase or four core for three phase requirement. The current indication is the maximum accepted to be conform to the 287 IEC recommendation.

Standard: H07RN-F

Secondary cables:

A single copper core between the power source and the clamp as well as between the power source and the electrode holder. The current indication is the maximum accepted to be conform to the 287 IEC recommendation.

For length over 10 meters, the section has to be increased.

For secondary cables, the European directive *(2006/95/EC-low voltage directive)* imposes the conformity to one of these two standards. It means that, for safety reasons *(resistance to welding hot projections)*, PVC cables must not be used as welding cables, because they do not meet the standards' requirements.

**Standard: H01N2-E
extra flexible**

**Standard: H01N2-D
flexible**

Reference documents:


- H07RN-F standard for primary cables
- H01N2-E and H01N2-D standards for secondary cables
- Harmonized standard CENELEC HD 516 S2: 1997 / HD 22.6
- § 4.4.5 Document change through amendment A1: 2003
- Communication in the framework *(01/02/2005)* of the low voltage directive





Primary cables

H07RN-F

	A maxi *	To order Linear meter
3 x 1.5 mm ²	16 A	W000010098
3 x 2.5 mm ²	20 A	W000010099
4 x 2.5 mm ²	20 A	W000010100
4 x 4 mm ²	30 A	W000010101
4 x 6 mm ²	37 A	W000010102
4 x 10 mm ²	52 A	W000010103
4 x 16 mm ²	69 A	W000010104
4 x 25 mm ²	92 A	W000010105
4 x 35 mm ²	114 A	W000010106


* According EN 50565-1 (2014) - For a 60 °C temperature of the core and an ambient temperature: 30 °C

Cable connectors DINSE type

Push and twist design




EN 60974-12

Description		A maxi *	To order
1 - Male	10-25 mm ²	200 A	W000010559
	35-50 mm ²	400 A	W000010560
	70-95 mm ²	600 A	W000010561
2 - Female	10-25 mm ²	200 A	W000010562
	35-50 mm ²	400 A	W000010563
	70-95 mm ²	600 A	W000010564
Male + Female	35-95 mm ²	600 A	W000010641

Secondary cables

Extra flexible (H01N2-E) - Flexible (H01N2-D)

	A maxi *			Extra flexible (H01N2-E)	Flexible (H01N2-D)	
	at 100%	at 60%	at 35%	Linear meter	Coil 50 m	Linear meter
16 mm ²	135 A	139 A	150 A	W000010137	W000260274	W000260272
25 mm ²	180 A	190 A	213 A	W000010138	W000260275	W000260273
35 mm ²	225 A	243 A	279 A	W000010139	W000260276	W000260271
50 mm ²	285 A	316 A	371 A	W000010140	W000260277	W000260270
70 mm ²	355 A	403 A	482 A	W000010141	W000260278	W000260269
95 mm ²	430 A	498 A	606 A	W000010142	W000260279	W000260268
120 mm ²	500 A	587 A	721 A	W000010143	-	-

* According EN 50565-1 (2014) - For an ambient temperature: 25 °C

Cables lugs



- ◆ Screw type
- ◆ Diameter: 11 mm
- ◆ Cable: 0-25 mm²

To order W000010094



- ◆ Screw type
- ◆ Diameter: 14 mm
- ◆ Cable: 25-35 mm²

To order W000010095



- ◆ Screw type
- ◆ Diameter: 14 mm
- ◆ Cable: 35-50 mm²

To order W000010096



- ◆ Screw type
- ◆ Diameter: 16 mm
- ◆ Cable: 50-70 mm²

To order W000010640

- ◆ Screw type
- ◆ Diameter: 16 mm
- ◆ Cable: 70-100 mm²

To order W000335165

CLAMPS



The choice of a clamp follows several criteria.

It firstly depends on the maximum amperage you are using.

Then, the kind of contact is important. For light duty or normal use, steel clamps **HIPPO** type, or brass clamps **CROCODILE** type are perfect. For heavy duty or intensive use, you can choose **MUSCLOR**, **DRAGON** or **SERRE-JOINT** types.

Lastly the **MAGNETIC** type is ideal for large component parts and the **ROTARY** for heavy use where the cable turns around the clamp.

Clamp for normal use

Choice criteria	A maxi	Jaw opening (mm)
HIPPO 200	200	38
HIPPO 400	400	50
HIPPO 600	600	50
CROCODILE 300	300	38
CROCODILE 600	600	38



HIPPO 200 / 400 / 600



2004-634

Customer's benefit:

- ◆ Economical steel clamps.

HIPPO 200

To order W000010579

HIPPO 400

To order W000010580

HIPPO 600

To order W000010597

Technical characteristics:

	HIPPO 200	HIPPO 400	HIPPO 600
Amperage	200 at 35%	400 at 35%	600 at 35%
Cable Ø (mm ²)	25	70	70
Weight	208 g	362 g	376 g

CROCODILE 300 / 600



2007-756

Customer's benefit CROCODILE 300:

- ◆ Brass clamps.
- ◆ Brass jaws.

CROCODILE 300

To order W000010577

Customer's benefit CROCODILE 600:

- ◆ Very good contact surface.

CROCODILE 600

To order W000010578

Technical characteristics:

	CROCODILE 300	CROCODILE 600
Amperage	300 at 35%	600 at 35%
Cable Ø (mm ²)	50	95
Weight	405 g	634 g



MAGNETIC 500 / 600



MAGNETIC 500
To order W000010553

Customer's benefit:

- ◆ Large surface contact.
- ◆ Can be placed close to the welding position insuring good electrical contact.

MAGNETIC 600
To order W000010554

Technical characteristics:

	MAGNETIC 500	MAGNETIC 600
Amperage	500 at 35%	600 at 35%
Cable Ø (mm ²)	70	95
Weight	815 g	1722 g

Clamp for bulky parts

Choice criteria	A maxi	Jaw opening (mm)
MAGNETIC 500	500	N/A
MAGNETIC 600	600	N/A
ROTARY 800	800	82
ECR 1500-1	1500	N/A

ROTARY 800

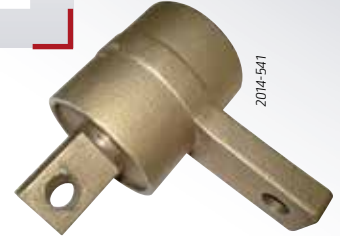
Customer's benefit:

- ◆ Brass clamps.
- ◆ Brass jaws.

To order W000010555

Technical characteristics:

	ROTARY 800
Amperage	800 at 35%
Cable Ø (mm ²)	2 x 95
Weight	3319 g



ECR 1500-1

Customer's benefit:

- ◆ Rotating clamps for heavy duty works in submerged arc welding.

To order W000374086

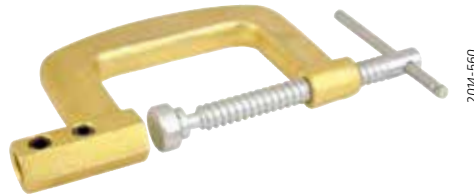
Technical characteristics:

	ECR 1500-1
Amperage	1500 at 100%
Weight	2614 g

Clamp for heavy duty use

Choice criteria	A maxi	Jaw opening (mm)
MUSCLOR 300	300	38
MUSCLOR 600	500	38
SERRE-JOINT 500	500	60
SERRE-JOINT 800	800	75
DRAGON 600	600	38

SERRE-JOINT 500 / 800



SERRE-JOINT 500
To order W000010987

SERRE-JOINT 800
To order W000010988

Customer's benefit SERRE-JOINT 500:

- ◆ Cable fixed with brass sleeve.
- ◆ Improved grip through clamp tightening capacity.

Customer's benefit SERRE-JOINT 800:

- ◆ Cable fixed with brass sleeve.
- ◆ Improved grip through clamp tightening capacity.
- ◆ 3 positions of brass guide.

Technical characteristics:

	SERRE-JOINT 500	SERRE-JOINT 800
Amperage	500 at 35%	800 at 35%
Cable Ø (mm ²)	95	95
Weight	744 g	1187 g

MUSCLOR 300 / 600



MUSCLOR 300
To order W000010583

Customer's benefit:

- ◆ Heavy duty brass clamps, powerful jaws giving excellent grip.

MUSCLOR 600
To order W000010584

Technical characteristics:

	MUSCLOR 300	MUSCLOR 600
Amperage	300 at 35%	600 at 35%
Cable Ø (mm ²)	50	95
Weight	480 g	762 g

DRAGON 600

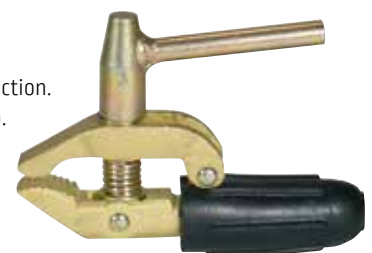
Customer's benefit:

- ◆ Brass jaws, rubber sheath cable protection.
- ◆ Screw tightening giving excellent grip.

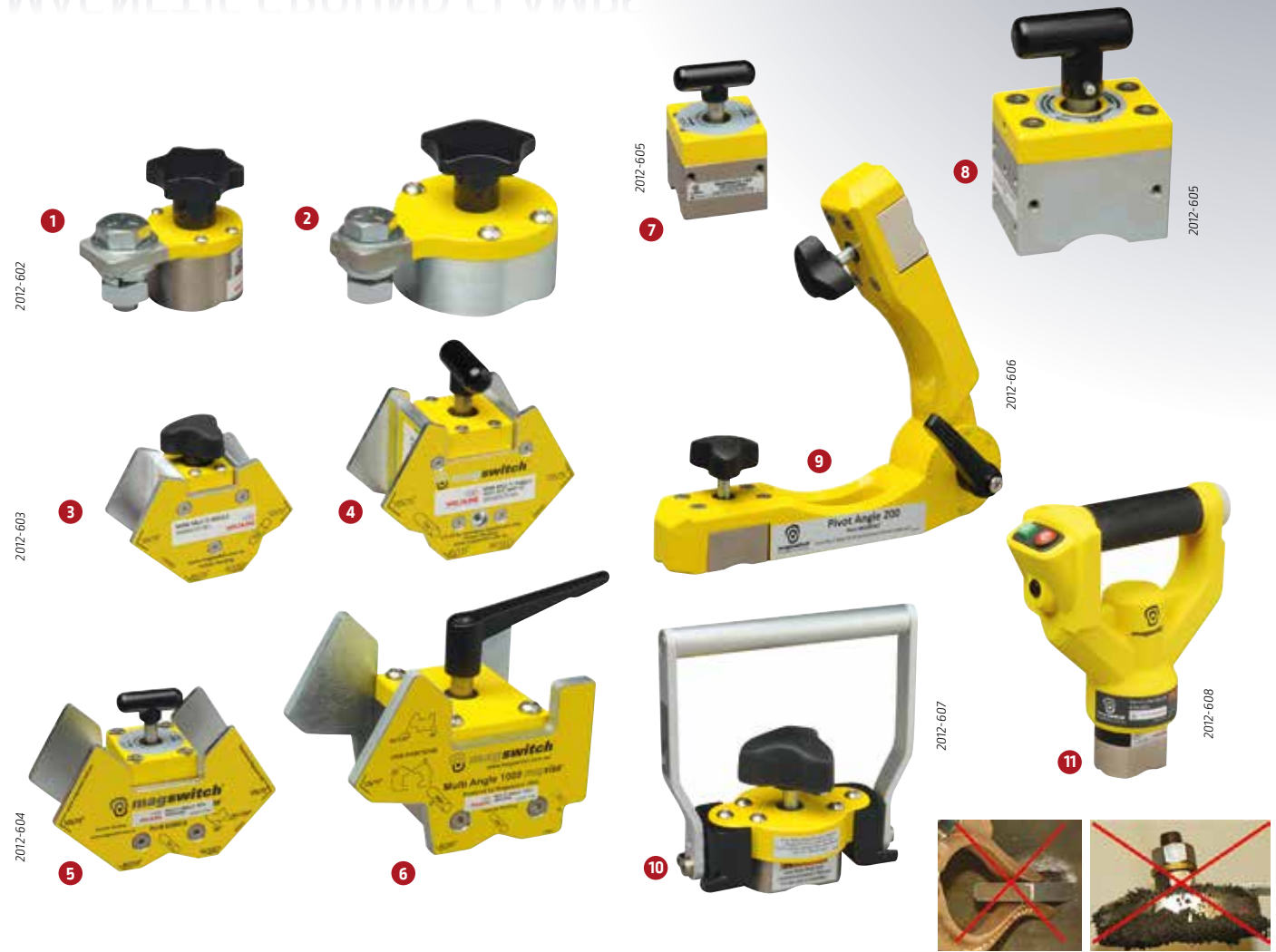
Technical characteristics:

	DRAGON 600
Amperage	600 at 35%
Cable Ø (mm ²)	95
Weight	816 g

To order W000010582



MAGNETIC GROUND CLAMPS



Name	Dimension (mm)			Weight (kg)	Hold on thick steel (kg)	Welding current (A)	Feature & benefit	Cat Nr
	H	W	D					
1 Magnetic ground clamp 300	57	40	69	0,3	40	300 A	Quickly set up	W000373781
2 Magnetic ground clamp 600	66	101	69	0,8	89	600 A		W000373782
3 Mini Multi Angle	65	72	32	0,18	40	N/A	Incredible strong	W000373783
4 Mini Multi Angle/300A ground	87	89	42	0,36	67	300 A		W000373784
5 Muti Angle 400 Mag-Vise	95	129	65	1,13	178	N/A	Super strong hold all slides	W000373785
6 Multi Angle 1000 Mag-Vise	146	184	110	4,25	446	N/A		W000373786
7 Mag Square 150	65	40	40	0,3	67	N/A	Positioning with incredible strong	W000373787
8 Mag Square 600	106	52	75	1,5	268	N/A		W000373788
9 Pivot Angle 200	240	240	91	1,72	90	N/A	From 22 to 270 degrees	W000373789
10 Hand Lifter 60 m Manual	140	120	60	0,64	27	N/A	For sheet dragging or small steel handing works	W000373790
11 Hand Lifter 60 CE, Cordless electric	209	173	75	1,45	27	N/A	For removing parts from cutting tables	W000373791

HAMMERS / BRUSHES

Chipping hammers

The choice of a hammer depends on the kind of steel you are working with [*carbon or stainless steel*] and design, for example wooden handle or not.



Steel head, wooden handle

Weight 660 g
Lenght 315 mm

To order W000010801

2004-632



Steel hammer G type, tubular handle

Weight 410 g
Lenght 300 mm

To order W000010646

2005-271



Steel head, red rubber grip

Weight 240 g
Lenght 260 mm

To order W000010800

2004-609



Stainless steel hammer, red rubber grip

Weight 230 g
Lenght 255 mm

To order W000010556

2012-058



Carbon steel English type, spring handle

Weight 290 g
Lenght 265 mm

To order W000335164

2012-624

Wire brushes

4 rows brass coated steel wires

To order W000010162



0951-11

4 rows steel wires

To order W000010163



0951-13

2 rows stainless steel wires

To order W000010164



0951-04

4 rows stainless steel wires

To order W000010165



0951-12

Special brush for aluminium

To order W000010166

This brush is specially designed to clean aluminium parts before TIG or MIG welding.



1415-51

Rivet wire brush

CARBON STEEL

To order W000335161

STAINLESS STEEL

To order W000335160



2007-815

TOOLS

MAGLITE®

Blister packed

WARRANTY
10
YEARS

Name	AA	2D	3D	4D
Colour	Black			
Composition	Torch, black nylon case, 2 battery LR6	Torch		
Weight	106 g	421 g	506 g	562 g
Diameter	18 mm	-	-	-
Length	145 mm	254 mm	307 mm	369 mm
Battery (type)	2 LR6	2 LR20	3 LR20	4 LR20
To order				
MAGLITE®	W000211967	W000211968	W000211969	W000211970



MAG Charger

- ◆ Nickel-cadmium battery (charger included).
- ◆ Rechargeable up to 1000 times: the most powerful torch.

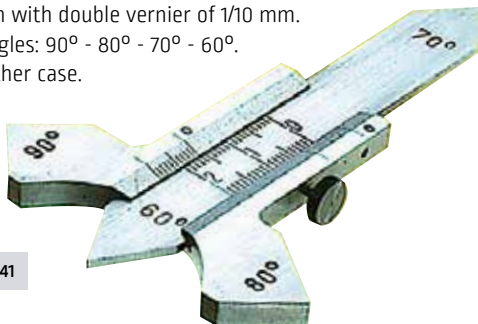
To order W000211929



Spare parts for MAGLITE® charger		To order
Designation	Bulbs	W000211654
Spare bulbs		To order
Designation	2D	W000211973
	3D	W000211974
	4D	W000211975

Welding gauge

- ◆ Accurate measure of the thickness of the welding beads, flat as well as angles of 90°.
- ◆ Capacity of 20 mm with double vernier of 1/10 mm.
- ◆ 4 bevel control angles: 90° - 80° - 70° - 60°.
- ◆ Delivered in a leather case.



To order W000011041

Temperature control stick

- ◆ Easy to use surface indicator.
- ◆ ± 1% accuracy.

Designation and temperature	Per pack of 12 pieces
100 (101 °C - 213 °F)	W000010156
120 (121 °C - 250 °F)	W000011042
150 (149 °C - 300 °F)	W000010157
200 (177 °C - 350 °F)	W000011045
200 (198 °C - 388 °F)	W000010158
250 (253 °C - 488 °F)	W000010159
300 (302 °C - 575 °F)	W000010160
350 (343 °C - 650 °F)	W000010161
370 (371 °C - 700 °F)	W000011043



ACCESSORIES

MIG pliers (original FIX®)

Useful to:

- ◆ Cut the wire
- ◆ Clean the nozzles
- ◆ Unscrew the tips
- ◆ Unscrew the nozzles



Nozzle Ø 12-15 mm

To order W000010453

Nozzle Ø 15-18 mm

To order W000010454

MIG torch stand

Simple stand with magnetic base to keep your work place clean.



To order W000010802



FLOWELD

- ◆ Designed to measure gas flow at the front of MIG/MAG torch
- ◆ Maximum flowrate: 20 l/min (Ar, CO₂ or mixed gas)
- ◆ Accuracy +- 10%
- ◆ Unbreakable

To order W000335159

MARKERS

Paint Marker



The Valve Action is a fast-drying liquid paint marker, that provides long-lasting, wear- and weather-resistant marks, that are safe for almost any surface. Most versatile liquid paint marker in the world, the xylene-free paint reduces user health risks.

Designation	To order
Paint Marker White	W000383103
Paint Marker Yellow	W000383104
Paint Marker Red	W000383105
Paint Marker Blue	W000383106
Paint Marker Green	W000383107
Paint Marker Black	W000383108
Paint Marker Orange	W000383109



Paint Tube



Markal Stylmark is a metal-ball tip marker to mark most surfaces. The aluminum squeeze tube and thick paint makes it suitable for rough, vertical and overhead surfaces with excellent adhesion on oily and wet surfaces. Xylene-free paint reduces user health risk.

Designation	To order
Paint Tube White	W000383110
Paint Tube Yellow	W000383111
Paint Tube Red	W000383112



Paintstik



Quik Stik is a smooth-marking solid paint crayon that dries quickly to leave a bold, permanent mark on most surfaces. The durable plastic twist-up holder prevents breakage. Keep hands, clothing, and toolboxes clean with the industry's largest twist-up solid paint marker.

Designation	To order
Paintstik White	W000383113
Paintstik Yellow	W000383114
Paintstik Red	W000383115



Welding Chalk



The soapstone welding crayon is resistant to heat up to 2000 °C (3630 °F) and will not contaminate welds.

To order W000383116





3 MMA WELDING

WELDING TOOLS AND ACCESSORIES

◆ Electrode holders.....	54 – 57
◆ MMA kits (<i>electrode holder with cable + clamp with cable</i>).....	58
◆ Gouging torches.....	59
◆ Gouging electrodes.....	60
◆ Ovens / Quivers.....	61 – 64
◆ Welding accessories.....	65

For: clamps, connectors, cables, hammers, ceramic backings and others
see chapter 2 “**General arc welding**”

ELECTRODE HOLDERS



The choice of an electrode holder follows several criteria.

- ◆ In Europe, the supplier has to conform to the European standards on these products, for health and safety reasons.

The **CE** marking confirms the conformity of the product to these standards.

DON'T BUY ELECTRODE HOLDERS WITHOUT THIS MARKING.

- ◆ Choose your holder according to the maximal electrode diameter you use. This diameter dictates the maximum amperage and subsequently the size of the welding cable.

Selection criteria for the different type of electrode holders can be seen on the enclosed pages. Obviously the electrode holder will accept all sizes of electrode to the stated maximal diameter.

The lever type electrode holders are divided into two sections, large opening type - that has the optional pre-defined angles and closed head type - that has only a single position option.

Screw type

Very secure grip of the electrode that gives the possibility to twist the electrode once tightened.

Lever type

Secure grip of the electrode between the jaws with pre-defined angles for the electrode position, easy butt ejection.



ELECTRODE HOLDERS



Screw type electrode holders

TWIST 200 / 400



2004-488

Customer's benefit:

- ◆ Economical electrode holders.
- ◆ Insulation class: A.
- ◆ Well balanced, rubber handle, left hand thread.

Technical characteristics:

	TWIST 200	TWIST 400
Amperage	200 at 35%	300 at 35%
Cable cross-section (mm ²)	25 max.	50 max.
Electrode diameter (mm)	3.2 max.	5.0 max.
Weight	335 g	480 g

TWIST 200

To order W000010565

TWIST 400

To order W000010566

VESTALETTE 250



Customer's benefit:

- ◆ Light and totally insulated, fibre glass head long life duration, left hand thread.
- ◆ Insulation class: A.

Technical characteristics:

Amperage	250 at 35%
Cable cross-section (mm ²)	35 max.
Electrode diameter (mm)	4.0 max.
Weight	295 g

To order W000010035 W000010883*

STUBBY 400



2004-215r

Customer's benefit:

- ◆ Well known, fibre glass single part head.
- ◆ Spare parts available, right hand thread.
- ◆ Insulation class: A.

Technical characteristics:

Amperage	400 at 35%
Cable cross-section (mm ²)	70 max.
Electrode diameter (mm)	6.3 max.
Weight	450 g

To order W000010036 W000010879*

Spare parts	To order
MASTER - Head	W000011082
STUBBY - Head	W000260716
MASTER - Insulation	W000011083
STUBBY/MASTER - Spring	W000011084
STUBBY/MASTER - Handle	W000011077
STUBBY - Body	W000011085
VESTALE - Handle	W000011086
VESTALE - Head	W000011087

Choice criteria

Screw type	Model	mm	mm ²
		Maximum	Maximum
Screw type straight	TWIST 200	3.2	25
	TWIST 400	5.0	50
	VESTALETTE 250	4.0	35
	STUBBY 400	6.3	50
	MASTER 400	8.0	95
Screw type curve	VESTALE 500	8.0	95
	CURVA 400	5.0	50
	CURVA 600	6.3	70

MASTER 500



Customer's benefit:

- ◆ Well known, fibre glass single part head.
- ◆ Spare parts available, right hand thread.
- ◆ Insulation class: A.

Technical characteristics:

Amperage	500 at 35%
Cable cross-section (mm ²)	95 max.
Electrode diameter (mm)	8.0 max.
Weight	530 g

To order W000010037 W000010882*

VESTALE 500



Customer's benefit:

- ◆ The heavy duty electrode holder.
- ◆ High resistance.
- ◆ Fibre glass head, left hand thread.
- ◆ Insulation class: A.

Technical characteristics:

Amperage	500 at 35%
Cable cross-section (mm ²)	95 max.
Electrode diameter (mm)	8.0 max.
Weight	470 g

To order W000010038 W000010880*

CURVA 400 / 600



2004-497

Customer's benefit:

- ◆ Curved electrode holders.
- ◆ Insulation class: B.

Technical characteristics:

	CURVA 400	CURVA 600
Amperage	400 at 35%	600 at 35%
Cable cross-section (mm ²)	50 max.	70 max.
Electrode diameter (mm)	5.0 max.	6.3 max.
Weight	540 g	720 g

CURVA 400

To order W000010573

CURVA 600

To order W000010574

* Cat. number for display

ELECTRODE HOLDERS



Lever type closed head electrode holders

SEGURA 300 / 400 / 600



2004-493

Customer's benefit:

- ◆ Economical models.
- ◆ Nylon handle.
- ◆ Brass jaws.
- ◆ Insulation class: B.

SEGURA 300

To order W000010570

SEGURA 400

To order W000010571

SEGURA 600

To order W000010572

Technical characteristics:

	SEGURA 300	SEGURA 400	SEGURA 600
Amperage	300 at 35%	400 at 35%	600 at 35%
Cable cross-section (mm ²)	35 max.	50 max.	70 max.
Electrode diameter (mm)	4.0 max.	5.0 max.	6.3 max.
Weight	415 g	570 g	590 g

COBRA 300

To order W000010039 W000010881*



2011-032

Customer's benefit:

- ◆ Light and multi purpose.
- ◆ Insulation class: A.

Technical characteristics:

Amperage	300 at 35%
Cable cross-section (mm ²)	50 max.
Electrode diameter (mm)	6.3 max.
Weight	420 g

Choice criteria



Maximum



Maximum

SEGURA 300	4.0	35
SEGURA 400	5.0	50
SEGURA 600	6.3	70
COBRA 300	6.3	50
OPTIMUS 300	6.3	70
OPTIMUS 400	8.0	95
OPTIMUS 500	8.0	95

OPTIMUS 300 / 400 / 500



2004-647

Customer's benefit:

- ◆ Economical models.
- ◆ High quality electrode holder.
- ◆ Well-known for intensive use and powerful grip on the electrodes.
- ◆ Specially designed for heavy duty works with a comfortable handle.
- ◆ Insulation class: A.

OPTIMUS 300

To order W000010410

OPTIMUS 400

To order W000010411

OPTIMUS 500

To order W000010412

Technical characteristics:

	OPTIMUS 300	OPTIMUS 400	OPTIMUS 500
Amperage	300 at 35%	400 at 35%	500 at 35%
Cable cross-section (mm ²)	35 max.	50 max.	70 max.
Electrode diameter (mm)	4.0 max.	5.0 max.	6.3 max.
Weight	415 g	570 g	590 g

ELECTRODE HOLDERS



Lever type opened head electrode holders

CAÏMAN 200 / 400 / 600



2004-491

CAÏMAN 200

To order W000010567

CAÏMAN 400

To order W000010568

CAÏMAN 600

To order W000010569

Choice criteria



Maximum



Maximum

CAÏMAN 200	3.2	25
CAÏMAN 400	5.0	50
CAÏMAN 600	6.3	70

Customer's benefit:

- ◆ Economical electrode holders.
- ◆ Polyamide handle, fibre glass reinforced.
- ◆ Brass jaws.
- ◆ Insulation class: B.

Technical characteristics:

	CAÏMAN 200	CAÏMAN 400	CAÏMAN 600
Amperage	200 at 35%	400 at 35%	600 at 35%
Cable cross-section (mm ²)	25 max.	50 max.	70 max.
Electrode diameter (mm)	3.2 max.	5.0 max.	6.3 max.
Weight	370 g	425 g	500 g

Hobby and light duty electrode holders

HOBBY 200

To order W000268399



2004-496

Customer's benefit:

- ◆ An industrial design for light works.

Technical characteristics:

Amperage	200 at 35%
Cable cross-section (mm ²)	25 max.
Electrode diameter (mm)	4.0 max.
Weight	135 g

Choice criteria



Maximum



Maximum

HOBBY 200	4.2	25
CAÏMY 200	3.2	25

CAÏMY 200

To order W000010576



2004-486

Customer's benefit:

- ◆ A small professional tool for light works.
- ◆ Insulation class: B.

Technical characteristics:

Amperage	200 at 35%
Cable cross-section (mm ²)	25 max.
Electrode diameter (mm)	3.2 max.
Weight	220 g

MMA KITS

Kits of accessories for MMA welding: electrode holders, earth clamps, cables and connectors, already assembled.

Advantages:

- ◆ "Ready to weld".
- ◆ A simple and full range in relation with all welding machines.
- ◆ Save 30 minutes of assembly time, before welding.
- ◆ Recommendations in relation to welding processes.

The kits choice depends of several criteria:

◆ Sections of machine sockets:

- Plugs of 9 mm diameter correspond to a cable cross-section between 16 mm² and 25 mm².
- Plugs of 13 mm diameter correspond to a cable cross-section between 35 mm² and 50 mm² (max 90 mm²).

◆ Application & intensity

The range:

- ◆ First digits describe cable diameter.
- ◆ Second digits describe type of connector.



Choice criteria

Choice criteria	I max at 35%	Plug diameter
KIT 25C25	200 A	9 mm
KIT 25C25+	300 A	9 mm
KIT 25C50	300 A	13 mm
KIT 35C50	300 A	13 mm
KIT 50C50	400 A	13 mm
KIT 50C50+	400 A	13 mm

KIT 25C25

MMA power sources' types and applications:

- ◆ Small intensity power sources for semi professional welding.

To order W000011138

Technical characteristics:

I max	200 at 35%
Electrode holder	CAÏMAN 200
Cable length	3 m
Earth clamp	HIPPO 200
Cable length	3 m
Plug diameter	9 mm

KIT 35C50

MMA power sources' types and applications:

- ◆ High intensity power sources for intensive use (up to Ø 4 mm) or work site.

To order W000011139

Technical characteristics:

I max	300 at 35%
Electrode holder	SEGURA 300
Cable length	4 m
Earth clamp	HIPPO 400
Cable length	4 m
Plug diameter	13 mm

KIT 25C25+

MMA power sources' types and applications:

- ◆ Small intensity power sources for working site up to Ø 4 mm.

To order W000260683

Technical characteristics:

I max	300 at 35%
Electrode holder	SEGURA 300
Cable length	3 m
Earth clamp	HIPPO 400
Cable length	2 m
Plug diameter	9 mm

KIT 50C50

MMA power sources' types and applications:

- ◆ High intensity power sources for intensive use (up to Ø 5 mm) or work site.

To order W000260681

Technical characteristics:

I max	400 at 35%
Electrode holder	SEGURA 400
Cable length	4 m
Earth clamp	HIPPO 400
Cable length	4 m
Plug diameter	13 mm

KIT 25C50

MMA power sources' types and applications:

- ◆ High intensity power sources for intensive use (up to Ø 4 mm) or work site.

To order W000260684

Technical characteristics:

I max	300 at 35%
Electrode holder	SEGURA 300
Cable length	3 m
Earth clamp	HIPPO 400
Cable length	3 m
Plug diameter	13 mm

KIT 50C50+

MMA power sources' types and applications:

- ◆ High intensity power sources for intensive use (up to Ø 6.3 mm) or work site.

To order W000260682

Technical characteristics:

I max	400 at 35%
Electrode holder	SEGURA 600
Cable length	4 m
Earth clamp	HIPPO 600
Cable length	4 m
Plug diameter	13 mm

GOUGING TORCHES

FLAIR® 600 / 1600

- ◆ The FLAIR® gouging torch is a high quality torch.
- ◆ The airflow can be regulated on the torch.
- ◆ The recommended air pressure is 7 bar.

Technical characteristics:

	FLAIR® 600	FLAIR® 1600
Current	600 A	1600 A
Electrode Ø max.	10 mm - 3/8"	19 mm - 3/4"

Spare parts	FLAIR® 600	FLAIR® 1600
A Screw MRX 4 x 10 mm (10 pieces)	W000010124	
B Insulation cap (2 pieces)	W000010125	
C Injection nozzle complete with taptite	W000010127	W000011130
D Lever insulation	W000010128	
E Valve	W000010129	
F Safety ring (10 pieces)	W000010131	
G Handle	W000010132	W000401598
H Push-button and link	W000010133	
Monocable	W000010134	W000011128



2007-805_ret

Picture not contractual

MMA WELDING

3

2007-804



GOUGING ELECTRODES

WELDLINE offers a complete range of graphite (carbon) electrodes for gouging.



CARBONAIR

Pointed electrodes

CAUTION: before use, carefully read and understand the safety datasheet available on our websites

Description diameter x lenght (mm)	Quantity per box (thousand)	Gross weight per box (kg)	I mini (A)	I maxi (A)	Air pressure (bars)	Airflow (m ³ /h)	To order
CARBONAIR 4 x 305	0.100	0.78	150	250	4.0	15	W000010645
CARBONAIR 5 x 305	0.100	1.08	200	250	4.0	15	W000010443
CARBONAIR 6.4 x 305	0.050	0.98	320	370	4.0	15	W000010444
CARBONAIR 8 x 305	0.050	1.34	400	450	5.5	40	W000010445
CARBONAIR 10 x 305	0.050	2.15	500	550	5.5	40	W000010446
CARBONAIR 13 x 305	0.050	3.55	800	1 000	5.5	50	W000010447

CARBONAIR PLUS

Jointed electrodes (no stub loss)

This process requires a MMA direct current (DC) power source, a gouging torch and a compressed air source. Please find hereunder a selection table.

Description diameter x lenght (mm)	Quantity per box (thousand)	Gross weight per box (kg)	I mini (A)	I maxi (A)	Air pressure (bars)	Airflow (m ³ /h)	To order
CARBONAIR PLUS 8 x 355	0.050	1.80	500	550	5.5	40	W000010448
CARBONAIR PLUS 10 x 430	0.050	3.22	600	650	5.5	40	W000010449
CARBONAIR PLUS 13 x 430	0.050	4.97	800	1 000	5.5	50	W000010450
CARBONAIR PLUS 16 x 430	0.025	3.70	1 000	1 200	6.9	60	W000010451
CARBONAIR PLUS 19 x 430	0.025	5.17	1 200	1 400	6.9	60	W000010452



OVENS / QUIVERS

Portable quivers

WELDRY PW8 / PW15 / 372 N INOX

- ◆ PW8 and PW15 portable quivers are necessary, for electrodes maintenance, near the welding working place. They preserve the electrodes from moisture, avoiding hydrogen inclusion in the welding joint.
- ◆ PW8 and PW15 portable quivers are provided with a handle, useful for moving. They also contain an extractable basket that avoids waste of heat. PW8 and PW15 ovens are provided with built-in adjustable thermostat.
- ◆ For the 372 N: preset temperature to 120 °C, plated heater resistance against the reservoir electrodes which allows a good repartition of temperature.

CAUTION: before use, carefully read and understand the safety datasheet available on our websites



MADE IN FRANCE



2008-578

WELDRY PW8

To order W000120427

To order (24 V) W000371464



2008-579

WELDRY PW15

To order W000120428



2014-688

WELDRY 372 N INOX

To order W000383150

On request: other models

- Without thermostat
- With thermometer
- With different power supply
- Stainless steel or lacquered finishing

Technical data	WELDRY PW8	WELDRY PW15	WELDRY 372 N - INOX
Capacity (number of electrodes)	100 electrodes Ø 3.25 mm	200 electrodes Ø 3.25 mm	100 electrodes Ø 3.25 mm
Temperature regulation thermostat	up to 120 °C		
Power	0.130 kW	0.275 kW	0.230 kW
Capacity	5 kg	10 kg	5 kg
Power supply	Single-phase 24 V or 230 V - 50/60 Hz		
Internal size	72 x 72 x 470 mm	100 x 100 x 470 mm	Ø 82.5 x 480 mm
External size	140 x 180 x 630 mm	180 x 220 x 630 mm	225 x 535 mm
Net weight	5 kg	8 kg	5.5 kg

All WELDRY ovens are supplied with 2 m long cable

OVENS / QUIVERS

Holding ovens for MMA electrodes

WELDRY MW

- ◆ MW ovens are used to keep the treatment of electrodes after the drying cycle and before the welding process.
- ◆ They preserve the electrodes from moisture, avoiding hydrogen inclusion in the welding joint.
- ◆ Equipped with a digital control panel and two adjustable thermoregulators for air and heating elements protection, positioned in front of the oven.



WELDRY MW2

To order W000120430



WELDRY MW4

To order W000120431



WELDRY MW6

To order W000120454

CAUTION:
before use, carefully read
and understand the safety
datasheet available on
our websites

Technical data	WELDRY MW2	WELDRY MW4	WELDRY MW6
Load capacity	135 Kg - 3 000 electrodes *	270 Kg - 6 000 electrodes *	405 Kg - 9 000 electrodes *
Shelves number	2	4	6
Heating elements	1	1	3
Max. Temperature	Adjustable up to 150 °C - air Adjustable up to 300 °C - heating elements		
Power	1.6 kW	2.7 kW	4.5 kW
Rating	Single phase - 230 V a.c. - 50/60 Hz		Three phase - 380 V a.c. - 50/60 Hz
Internal size (w x d x h)	720 x 510 x 350 mm	720 x 510 x 620 mm	720 x 510 x 890 mm
External size (w x d x h)	830 x 690 x 760 mm	830 x 690 x 1 040 mm	820 x 690 x 1 310 mm
Oven weight	90 kg	123 kg	152 kg
Packaging dimensions (w x d x h)	850 x 710 x 780 mm	850 x 710 x 1 060 mm	840 x 710 x 1 330 mm
Weight for transport	95 kg	135 kg	160 kg

* Quantity of pieces having Ø 3.25 mm

All WELDRY
ovens are
supplied
with 2 m long
cable

OVENS / QUIVERS

Re-baking ovens for MMA electrodes

WELDRY CW

- ◆ This oven is used for electrode re-baking treatment, heating the electrodes between 350 °C and 420 °C for a fixed time. In this way the moisture is removed and a good quality welding without hydrogen intrusion is guaranteed.
- ◆ Equipped with a digital control panel and two adjustable thermoregulators for air and heating elements protection, positioned in front of the oven, allows to set both drying and keeping cycles.



2008-569

WELDRY CW3

To order W000120466



2008-570

WELDRY CW6

To order W000120467



2008-571

WELDRY CW9

To order W000120468

CAUTION:
before use, carefully read
and understand the safety
datasheet available on
our websites

On request: other models
[with fan ventilation system]

Technical data	WELDRY CW3	WELDRY CW6	WELDRY CW9
Load capacity	203 Kg - 4 500 electrodes *	404 Kg - 9 000 electrodes *	608 Kg - 13 500 electrodes *
Shelves number	3	6	9
Heating elements	3	6	9
Max. Temperature	Adjustable up to 350 °C - air Adjustable up to 500 °C - heating elements		
Power	4.6 kW	9.1 kW	13.6 kW
Rating	Three phase - 380 V a.c. - 50/60 H		
Internal size (w x d x h)	560 x 740 x 560 mm	560 x 740 x 980 mm	560 x 740 x 1 430 mm
External size (w x d x h)	800 x 880 x 1 050 mm	800 x 880 x 1 480 mm	800 x 880 x 1 880 mm
Oven weight	140 / 144 kg	200 / 204 kg	266 / 270 kg
Packaging dimensions (w x d x h)	900 x 900 x 1 050 mm	900 x 900 x 1 500 mm	900 x 900 x 1 900 mm
Weight for transport	150 / 154 kg	215 / 219 kg	280 / 284 kg

All WELDRY
ovens are
supplied
with 2 m long
cable

* Quantity of pieces having Ø 3.25 mm

OVENS / QUIVERS

Hopper ovens for flux

WELDRY FW

- ◆ This model of oven is used for re-baking submerged arc welding fluxes, heating the flux between 350 °C and 420 °C for a fixed time. The inside tank is stainless steel made to prevent from the risk of pollution.
- ◆ The resistances are positioned inside the hopper for a direct contact to flux in order to obtain an optimal heating.
- ◆ The built-in digital control equipment with double thermoregulator for air and resistances protection avoids the flux being damaged and allows to set both drying and keeping cycles.



WELDRY FW100

To order W000120469



WELDRY FW200

To order W000120470



WELDRY FW400

To order W000120471

CAUTION:
before use, carefully read
and understand the safety
datasheet available on
our websites

On request: other models
*(with one or two hoppers - with single
or double digital control equipment)*

Technical data	WELDRY FW100	WELDRY FW200	WELDRY FW400
Load Capacity	60 kg	160 kg	320 kg
Max. Temperature	Adjustable up to 350 °C - air Adjustable up to 500 °C - heating elements		
Power	4 kW	6.6 kW	7.9 kW
Rating	Three phase - 380 V a.c. - 50/60 Hz		
Internal size (w x d x h)	530 x 390 x 640 mm	690 x 690 x 740 mm	690 x 690 x 740 mm <i>(each hopper)</i>
External size (w x d x h)	670 x 710 x 1 300 mm	825 x 819 x 1 330 mm	1 620 x 850 x 1 340 mm
Oven weight	90 kg	116 kg	210 kg
Height of the flap door for flux feeding	a = 500 mm	a = 450 mm	
Packaging dimensions (w x d x h)	690 x 750 x 1 320 mm	850 x 860 x 1 350 mm	1 640 x 870 x 1 360 mm
Weight for transport	100 kg	130 kg	225 kg

All WELDRY
ovens are
supplied
with 2 m long
cable

WELDING ACCESSORIES

See more
page 50

4 rows steel wires

To order W000010163



4 rows stainless steel wires

To order W000010165



Steel head, wooden handle

Weight 660 g
Length 315 mm



To order W000010801







WELDLINE™
by Lincoln Electric

4 TIG WELDING

TIG WELDING

4

WELDING TOOLS AND ACCESSORIES

◆ TIG torches	68 – 73
◆ Tungsten electrodes	74 – 75
◆ Other accessories	76 – 77

TIG TORCHES

WTT2

STANDARD RANGE

Simple and reliable, this range is adapted to the most common applications.



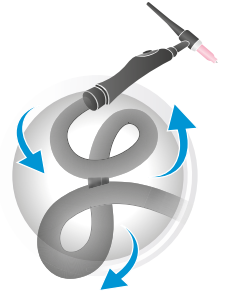
Standardised wear parts.



Handle, made with high temperature silicon rubber.



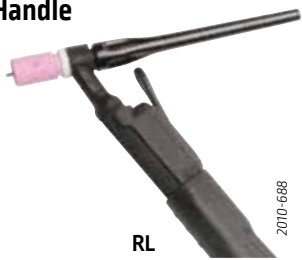
Easy pivoting handle (for EB handles).



Extra-flexible high performance cable.

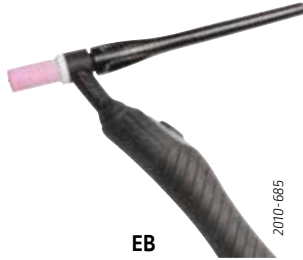


Handle



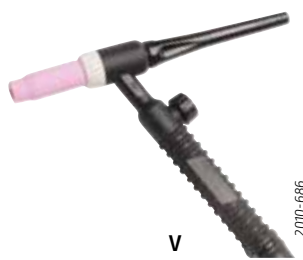
RL

2016-688



EB

2016-685



V

2016-686



EB-FLEX

2015-673

Air cooling

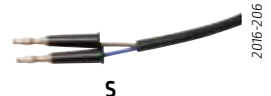
MODEL		WTT2 9		WTT2 17		WTT2 26			
Duty cycle at 40 °C	60%	80 A		100 A		130 A			
	35%	110 A		135 A		180 A			
Original equipment	back cap	Long							
	nozzle	Ø 9.6 mm				Ø 12.8 mm			
	electrode	Ø 1.6 mm		Ø 2.0 mm		Ø 2.4 mm			
Length		4 m	8 m	4 m	8 m	4 m	8 m		
Handle	RL	Connection	S	W000278878	W000278923	W000278883	W000278918	W000278888	W000278914
			C5B	W000278879	W000278922	W000278884	W000278917	W000278890	W000278913
	EB		S	W000278877	W000278929	W000278881	W000278920	W000278886	W000278916
			C5B	W000278875	-	W000278882	W000278919	W000278887	W000278915
	V		V (Conn. 9 mm)	W000278876	-	W000278880	-	-	-
			V (Conn. 13 mm)	-	-	W10529-17-4V	-	W000278885	-
	EB-FLEX		S / C5B	W000382781	-	W000382782	W000382783	W000382784	W000382785

Connections



C5B

2016-207



S

2016-206

Connector:

Shaped cable output for a better robustness.



Air cooling

2016-206



Water cooling

2016-209

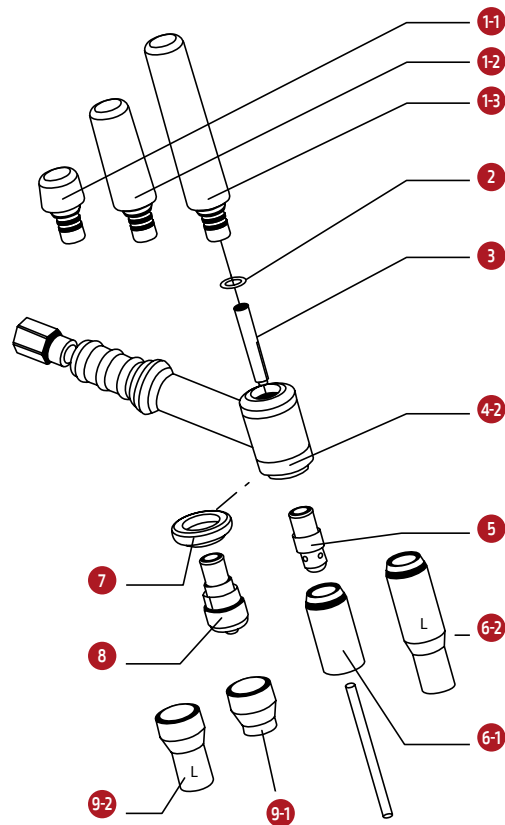
Water cooling

MODEL		WTT2 20 W		WTT2 18 W			
Duty cycle at 40 °C	100%	200 A		320 A			
	60%	250 A		350 A			
Original equipment	back cap	Long					
	nozzle	Ø 12.8 mm		Ø 16 mm			
	electrode	Ø 2.4 mm		Ø 3.2 mm			
Length		4 m	8 m	4 m	8 m		
Handle	RL	Connection	S	W000278893	W000278906	W000278897	W000278900
			C5B	W000278894	W000278905	W000278898	W000278899
	EB		S	W000278891	W000278911	W000278895	W000278902
			C5B	W000278892	W000278909	W000278896	W000278901
	EB-FLEX		S / C5B	W000382786	W000382787	W000382788	W000382789

TIG TORCHES

WTT2 TIG torches wear parts

		WTT2 9 / 9V WTT2 20W	WTT2 17 / 17V WTT2 26 / 26V WTT2 18W
1-1	Back cap short	W000306398	W000306399
1-2	Back cap medium	W000306400	-
1-3	Back cap long	W000306402	W000306403
2	Back cap O-ring	W000306404	W000306405
4-2	Sealing ring	W000306396	W000306397
3	Collet	Ø 1.0	W000306406
		Ø 1.6	W000306407
		Ø 2.0	W000306408
		Ø 2.4	W000306409
		Ø 3.2	W000306410
		Ø 4.0	-
5	Collet body	Ø 1.0	W000306376
		Ø 1.6	W000306377
		Ø 2.0	W000306378
		Ø 2.4	W000306455
		Ø 3.2	W000306379
		Ø 4.0	-
6-1	Nozzle	Ø 6.4	W000306417
		Ø 8.0	W000306418
		Ø 9.6	W000306419
		Ø 11.2	W000306420
		Ø 12.8	W000306421
		Ø 16.0	W000306422
		Ø 19.2	-
6-2	Long nozzle	Ø 4.8	W000306456
		Ø 6.4	W000306457
		Ø 8.0	W000306458
		Ø 9.6	W000306459
		Ø 11.2	-
7	Gas Lens sealing ring	W000306396	W000306466
8	Gas Lens collet body	Ø 1.0	W000306385
		Ø 1.6	W000306386
		Ø 2.0	W000306460
		Ø 2.4	W000306387
		Ø 3.2	W000306388
		Ø 4.0	-
9-1	Gas Lens nozzle	Ø 6.4	W000306429
		Ø 8.0	-
		Ø 9.6	W000306431
		Ø 11.2	W000306432
		Ø 12.8	W000306433
		Ø 16.0	-
9-2	Long Gas Lens nozzle	Ø 8.0	-
		Ø 9.6	-
		Ø 11.2	-
		Ø 12.8	W000306470



Wear parts box

For an easier maintenance of the WTT2 torches, two boxes are available.

Box for WTT2 9 / 9V / 20W

To order W000371535

Box for WTT2 17 / 26 / 18W

To order W000371536



Gas Lens

The gas diffuser concentrates the flux in a homogenous and focused way around the tungsten electrode, which allows to get the electrode out much more than the nozzle.

This permits to access to the difficult access welding joints.



TIG TORCHES

PROTIG NG S & III S

The range of PROTIG includes 4 air cooled, and 3 water cooled versions.

All torches are supplied ready to use, the standard fitting table gives more information.

Advantages:

- ◆ Wear parts and accessories the same for the whole PROTIG range.
- ◆ Improved robustness.
- ◆ The blade trigger may be oriented around the handle *(only for PROTIG III S)*.
- ◆ Robust metal trigger *(only for PROTIG III S)*.
- ◆ Neoprene sleeve with good maneuverability.
- ◆ 1 reference: the C5B connection of the torch fitted as standard, a banana plug included also.

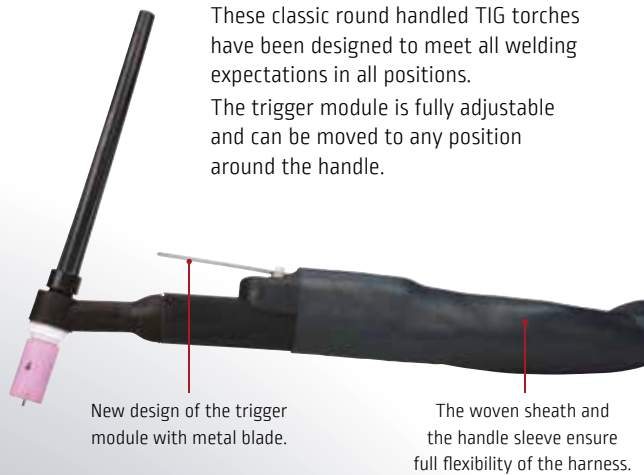


Air cooled

MODEL			PROTIG 10		PROTIG 20		PROTIG 30		PROTIG 40	
Duty cycle 35%			125 A		150 A		200 A		250 A	
Duty cycle 60%			80 A		100 A		130 A		200 A	
Fitted as standard	back cap		Long							
	nozzle		Ø 10 mm				Ø 12 mm			
	electrode		Ø 1.6 mm		Ø 2.0 mm		Ø 2.4 mm			
Length			5 m	8 m	5 m	8 m	5 m	8 m	5 m	8 m
PROTIG III S	Connection	C5B/S	W000382715-2	W000382716-2	W000382717-2	W000382718-2	W000382719-2	W000382720-2	W000382721-2	W000382722-2
PROTIG NG S			W000278394-2	W000278395-2	W000278396-2	W000278397-2	W000278398-2	W000278399-2	W000278400-2	W000278401-2

PROTIG III S

The round handle with a blade trigger (RL).



These classic round handled TIG torches have been designed to meet all welding expectations in all positions. The trigger module is fully adjustable and can be moved to any position around the handle.

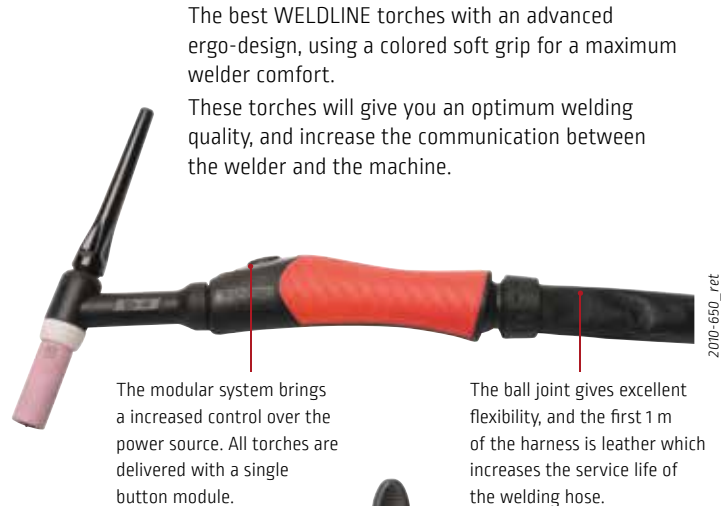
New design of the trigger module with metal blade.

The woven sheath and the handle sleeve ensure full flexibility of the harness.



PROTIG NG S

The ergonomic handle with button (EB).



The best WELDLINE torches with an advanced ergo-design, using a colored soft grip for a maximum welder comfort. These torches will give you an optimum welding quality, and increase the communication between the welder and the machine.

The modular system brings a increased control over the power source. All torches are delivered with a single button module.

The ball joint gives excellent flexibility, and the first 1 m of the harness is leather which increases the service life of the welding hose.



TIG TORCHES



Water cooled

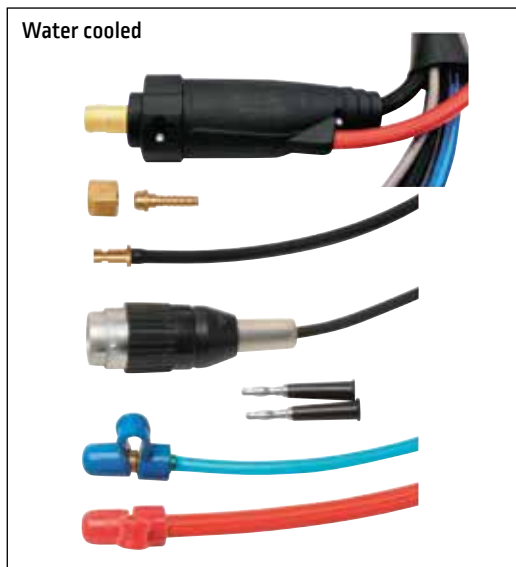
MODEL			PROTIG 10W		PROTIG 35W		PROTIG 40W	
Duty cycle 100%			220 A		350 A		450 A	
Fitted as standard	back cap		long					
	nozzle		Ø 12.8 mm		Ø 15 mm		Ø 14 mm	
	electrode		Ø 2.4 mm		Ø 3.2 mm		Ø 3.2 mm	
Length			5 m	8 m	5 m	8 m	5 m	8 m
PROTIG III S	Connection	C5B/S	W000382723-2	W000382724-2	W000382725-2	W000382726-2	W000382727-2	-
PROTIG NG S			W000278402-2	W000278403-2	W000278404-2	W000278405-2	W000278406-2	W000278407-2

⚠ Some machines require the use of the plug module p/n WP10529-5, see the section "Plug kits and button modules" at page 73.

Connectors, adapters

Connectors

The connectors to the machine are a new design, compact and fully protected delivering both strength and quality. All hoses are rubber with a woven sheath for heavy duty work.



Adapters

For old torches with central gas to be connected to power sources with separate gas, use **W000306140**.



For torches with separate gas to be connected to power sources with central gas, use **W000306141**.



Dinse 9 to 13 mm - **W000306139**



Dinse 13 to 9 mm - **038055011**



TIG TORCHES

PROTIG NG S & III S

NEW

Wear parts

WELDLINE sets the standard for wear parts, ensuring maximum quality for both welding and gas protection.

Gas lens, for welding where access is difficult

The gas lens collet body **8** is supplied with a filter **9** and a sealing ring **7**.
The ring **7** or the filter **9** are supplied on their own.

PROTIG 40 W

Nozzles 6 10 : choice of diameter

Welding current (A)	70	90	120	200	350
Diameter (mm)	6	8	10	12	15

PROTIG 40 W

A - insulating nut **W000306452**
 B - nozzle seals **W000167673**
 C - water distributor **W000306454**

Wear parts box

A complete kit for all applications. The kit includes electrode collets, nozzles, back caps and collet body.

PROTIG 10 / 10W	W000306441
PROTIG 20	W000306442
PROTIG 30	W000306443
PROTIG 40 / 35W	W000306444
PROTIG 40W	W000306445

Modular system:

Standard delivery for EB all torches is a single button module. Other control module formats are available to order.



Other buttons

1 Horizontal potentiometer	W000279370 [4,7 Kohm]	WP10529-3 [10 Kohm]
2 Vertical potentiometer	W000279246 [4,7 Kohm]	WP10529-4 [10 Kohm]
3 3 buttons module	WP10529-2	
4 Blade	W000279245	

2011-005_ret

Adjustable heads

As an option, adjustable torch bodies are available, designed to make welding in limited access locations easier with a choice of 2 heads, small and large which are mounted on air cooled or water cooled bodies.



Choose one body and one head to get a complete torch.

- Air cooled body (10/20) **W000279381**
- Water cooled body (10W) **W000279382**
- Head PROTIG NG 10/10W **W000279383**
- Head PROTIG NG 20 **W000279384**

⚠ Refer to the instruction manual to see the different connections for the modules. For potentiometer adapt the wiring to the welding machine.













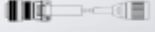
TIG TORCHES

Wear parts are common for both RL or EB handles.

		PROTIG 10 / 10W	PROTIG 20	PROTIG 30	PROTIG 35W / 40	PROTIG 40W
1 - Back cap	short	W000306220	W000306223	W000306223	W000306225	W000306227
	medium	W000306221	-	-	-	-
	long	W000306222	W000306224	W000306224	W000306226	W000306228
2 - Back cap o-ring		W000306229	W000306230	W000306230	W000306231	W000306232
3 - Sealing ring		W000306210	W000306211	W000306211	W000306212	-
4 - Electrode collet	Ø 1.0	W000306236	W000306241	W000306246	W000306252	-
	Ø 1.6	W000306237	W000306242	W000306247	W000306253	-
	Ø 2.0	W000306238	W000306243	W000306248	W000306254	-
	Ø 2.4	W000306239	W000306244	W000306249	W000306255	W000306262
	Ø 2.5	W000306259	W000306260	W000306261	-	-
	Ø 3.2	W000306240	W000306245	W000306250	W000306256	W000306263
	Ø 4.0	-	-	W000306251	W000306257	W000306264
Ø 4.8	-	-	-	W000306258	W000306265	
5 - Collet body all diameters		W000306205	W000306206	W000306207	W000306208	W000306200
5* - Collet body heavy duty		-	-	-	* W000306201	-
6 - Nozzle	Ø 6.4	W000306269	W000306273	W000306277	W000306277	-
	Ø 8	W000306270	W000306274	W000306278	W000306278	-
	Ø 9.6	W000306271	W000306275	W000306279	W000306279	-
	Ø 11	-	-	-	-	W000306282
	Ø 12.8	W000306272	W000306276	W000306280	W000306280	-
	Ø 14	-	-	-	-	W000306283
	Ø 15.7	-	-	W000306281	W000306281	-
6L - Long nozzle	Ø 4.8	W000306456	-	-	-	-
	Ø 6.4	W000306457	-	W000306462	W000306462	-
	Ø 8	W000306458	-	W000306463	W000306463	-
	Ø 9.6	W000306459	-	W000306464	W000306464	-
	Ø 11.2	-	-	W000306465	W000306465	-
	Ø 12.8	-	-	-	-	-
	Ø 14	-	-	-	-	-
Ø 15.7	-	-	-	-	-	
7 - Gas lens sealing ring		W000306210	W000306216	W000306216	W000306217	-
8 - Gas lens collet body		W000306213	W000306214	W000306214	W000306215	-
9 - Gas lens filter		W000306218	W000306219	W000306219	W000306219	-
10 - Gas lens nozzle	Ø 8	W000306284	W000306287	W000306287	W000306287	-
	Ø 9.6	W000306285	W000306288	W000306288	W000306288	-
	Ø 11.2	W000306286	-	-	-	-
	Ø 12.8	-	W000306289	W000306289	W000306289	-
	Ø 15.7	-	W000306290	W000306290	W000306290	-
10L - Long gas lens nozzle	Ø 8	-	W000306467	W000306467	W000306467	-
	Ø 9.6	-	W000306468	W000306468	W000306468	-
	Ø 11.2	-	W000306469	W000306469	W000306469	-
	Ø 12.8	-	W000306470	W000306470	W000306470	-

* For the collet body « heavy duty », use the gas lens nozzles

Choose your module & your plug kit for Protig NG S

Button modules		 or 	 or 	 or 	 or 				
Reference	WP10529-2	W000279246 (4.7 Kohm)	W000279370 (4.7 Kohm)	W000279246 (4.7 Kohm)	W000279370 (4.7 Kohm)	W000279246 (4.7 Kohm)	W000279370 (4.7 Kohm)	WP10529-4 (10 Kohm)	WP10529-3 (10 Kohm)
Plug kit	· No plug kit needed · Torch is connected to the machine through the C5B plug (5 pins)	+  WP10529-6		+  WP10529-7		+  WP10529-8		+  WP10529-9	
Work with	· Invertec 220/300/400 TPX · Aspect 200 · Prestotig 200 AC/DC · Prestotig 315/415 DC · Citotig 200 AC/DC · Citotig 315/415 DC	· Prestotig 210 DC · Prestotig 310 DC · Prestotig 410 DC · Prestotig 240 AC/DC · Prestotig 310 AC/DC		· Prestotig 210 AC/DC · Prestotig 250 AC/DC · Prestotig 350 AC/DC		· Saxotech 170/220 · Saxotig 160 AC/DC · Prestotig 180/220 Pro		· All Lincoln machines with pedal control · Prestotig 315/415 DC · Prestotig 315 AC/DC · Citotig 315/415 DC · Citotig 315 AC/DC	

The above modules work only with the PROTIG NG S torches (EB handle).

Remark for users of Prestotig/Citotig II DC, 240/310 AC/DC & 350W in water cooled configuration: plug kit p/n WP10529-5 must be adopted while using TIG torches with single button.

TUNGSTEN ELECTRODES

A complete range of tungsten electrodes:

- Pure tungsten,
- Tungsten + cerium,
- Tungsten + lanthanum,
- Tungsten + rare earths ⁽¹⁾.

Product advantages :

- ◆ Very high life cycle
- ◆ Perfect arc ignition
- ◆ Very stable arc
- ◆ Tip longevity

CAUTION:
before use, carefully read and understand the safety datasheet available on our websites

Choice criteria

Type	Metal		Arc stability	Striking	Lasting	Thermal resistance
	Aluminium	Steel & Stainless steel				
WP - Pure tungsten	*		**	*	*	*
WCe 20 - Cerium 2%		*	**	*	**	**
WLa 15 - Lanthanum 1,5%	**	**	**	**	**	**
WLa 20 - Lanthanum 2%	*	**	**	**	**	**
WS 2 - Rare earths ⁽¹⁾ 2%	*	*	**	**	**	**

*** Excellent - ** Good - * Average

⁽¹⁾ Rare earths = any of the abundant metallic elements, including scandium (atomic number 21), yttrium (39), and the 15 elements from 57 to 71 (lanthanide series include lanthanum and cerium) in the Mendeleyev classification.



TUNGSTEN ELECTRODES



**Highest lifetime,
Higher current density,
Less grinding, Faster starts
and better arc stability**

Nertal WP	
Ø mm	150 mm length
	To order
1.0	S03710250
1.6	S03710251
2.0	S03710252
2.4	S03710506
2.5	S03710268
3.2	S03710507
4.0	S03710254
4.8	S03710510
6.0	S03710256

Nertal La 20	
Ø mm	150 mm length
	To order
1.6	S03710651
2.0	S03710652
2.4	S03710653
3.2	S03710655
4.0	S03710656
4.8	W000381291

Nertal Ce 20	
Ø mm	150 mm length
	To order
1.0	S03710530
1.6	S03710531
2.0	S03710533
2.4	S03710534
3.2	S03710537
4.0	S03710538
4.8	S03710539

WP - Pure tungsten

Light alloy (green tip)

Ø mm	150 mm length	175 mm length
	To order	
1.0	W000010009	-
1.6	W000010010	W000010375
2.0	W000010011	W000010376
2.4	W000010012	W000010377
3.0	W000010013	-
3.2	W000010014	W000010378
4.0	W000010015	W000335152

WLa 20 - Lanthanum 2%

Light alloy (using AC current), steel and stainless steel (using DC current) (blue tip)

Ø mm	75 mm length	150 mm length	175 mm length
	To order		
1.0	W000011144	W000010373	-
1.6	W000011145	W000010016	W000010385
2.0	-	W000010017	W000010386
2.4	W000011146	W000010018	W000010387
3.0	-	W000010019	-
3.2	-	W000010020	W000010388
4.0	-	W000010021	W000010389

WCe 20 - Cerium 2%

Steel and stainless steel (grey tip)

Ø mm	150 mm length	175 mm length
	To order	
1.0	W000010022	-
1.6	W000010023	W000335153
2.0	W000010024	W000010381
2.4	W000010025	W000335154
3.0	W000010026	-
3.2	W000335150	W000335157
4.0	W000010028	W000335155

WS 2 - Rare earths 2%

Light alloy (using AC current), steel and stainless steel (using DC current) (turquoise tip)

Ø mm	175 mm length
	To order
1.0	W000335166
1.6	W000335167
2.0	W000335168
2.4	W000335169
3.0	W000335170
3.2	W000335171
4.0	W000335172

WLa 15 - Lanthanum 1.5%

Light alloy (using AC current), steel and stainless steel (using DC current) (gold tip)

Ø mm	150 mm length
	To order
1.0	W000402632
1.6	W000402663
2.0	W000402664
2.4	W000402665
3.0	W000402666
3.2	W000402667
4.0	W000402668

See the batch number on the tungsten electrode packaging and consult your conformity certificate on our websites

Recommended welding intensities

Electrode diameter	Direct current	Alternating current	
	Tungsten with oxide addition	Pure tungsten	Tungsten with oxide addition
1.0 mm	10 A to 70 A	15 A to 55 A	15 A to 70 A
1.6 mm	20 A to 100 A	45 A to 90 A	60 A to 125 A
2.0 mm	50 A to 140 A	65 A to 125 A	85 A to 160 A
2.4 mm	70 A to 170 A	80 A to 140 A	120 A to 210 A
3.0 mm	100 A to 210 A	140 A to 180 A	140 A to 230 A
3.2 mm	130 A to 250 A	150 A to 190 A	150 A to 250 A
4.0 mm	150 A to 350 A	180 A to 260 A	240 A to 350 A

OTHER ACCESSORIES

TIG torch stand



To order W000010803

Simple stand with magnetic base to keep your work place clean.

OPTICLEAN II

Inverter-technology installation for cleaning, polishing and marking of stainless steel.



See page 103

TIG SHARP

Portable electric tool for tungsten electrodes sharpening

Characteristics:

- ◆ All you need to sharpen your tungsten electrodes (all ranges) delivered in a practical metal case:
 - Sharpening machine
 - Clamp to lock the machine on a bench
 - Standard blue head for the electrodes diameter 1.6 / 2.0 / 2.4 / 3.2 mm
 - Nozzle connectable on a vacuum cleaner for extraction of tungsten dusts
 - Electrode holder to clamp TIG electrodes
 - Tools to assemble and dismantle
- ◆ For an accurate sharpening:
 - Choose the electrode diameter
 - Select the grinding angle (10° to 70°)
 - Start the machine
 - Insert the electrode and turn it slowly
- ◆ An incredible result:
 - The grind is perfect
 - The grinding angle is very precise
 - Longitudinal sharpening, precise and symmetric angle.



WARRANTY
2
YEARS

This equipment has to be connected to a vacuum extraction for dusts



To order W000011035

Technical characteristics:

Voltage:	220-230 volts
Frequency:	50 - 60 Hz
Power:	400 W
Amperage:	1.8 A
Disk speed:	30.000 rpm
Weight:	1.85 kg

Warranty: 2 years.
Conform to EU standards

EN 50144-2-3
EN 60745-1
EN 60745-1/A1

Other products of the range:

Red head:
(for tungsten electrodes Ø 1.0 / 4.0 / 4.8 / 6.0 mm)

To order W000011037

Spare blue head:
(for tungsten electrodes Ø 1.6 / 2.0 / 2.4 / 3.2 mm)

To order W000011038

Spare diamond disk:

To order W000011036

OTHER ACCESSORIES

CHAMELEON 4V+ LS

See page 10



Gloves TIG



See page 42

Cooling liquid FREEZCOOL



See page 101







WELDLINE™
by Lincoln Electric

5 PLASMA CUTTING

5 PLASMA CUTTING

CUTTING TOOLS AND ACCESSORIES

◆ PLASMA Torches 80 – 82

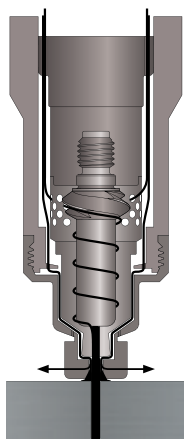
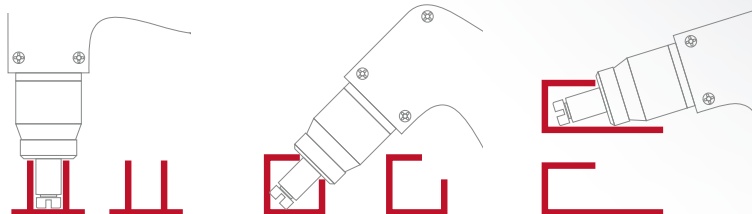
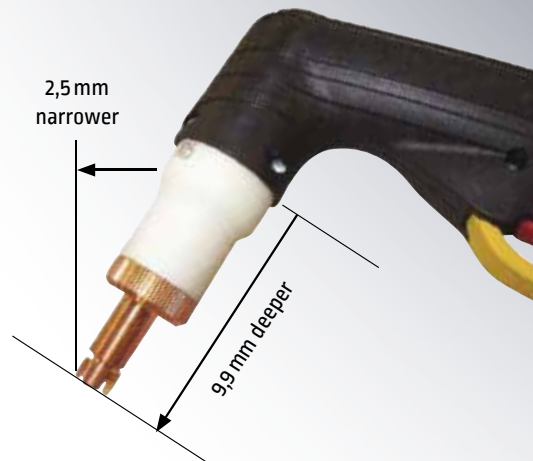
PLASMA TORCHES

MODERN TORCH TECHNOLOGY

LC65 and LC105

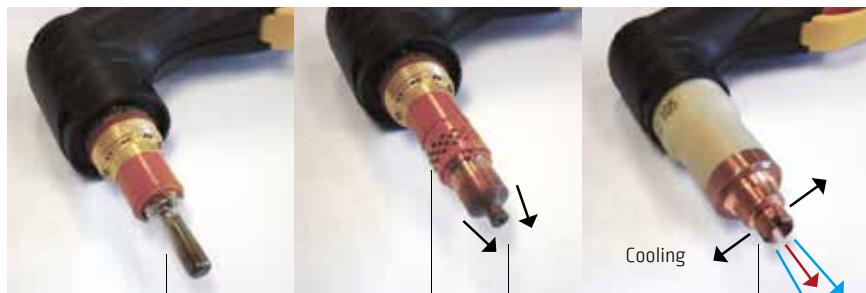
The new torches with longer life time (running cooler). More cutting thickness, higher speed, standard and grid cutting.

- No HF
- Small electrode diameter
- High air-flow
- High speed rotating air
- Primary and secondary flow
- Concentrated plasma
- Long life electrodes and nozzles
- Torch connection - central connector, 9-pin



LC105 torch design with drag cup

HIGHER TRAVEL SPEED AND LONGER LIFE TIME CONSUMABLES



Small diameter Electrode with "screw"

Air-flow through "diagonal" drilled holes in the direction of the "screw"

As a result high speed circular air flow around the electrode

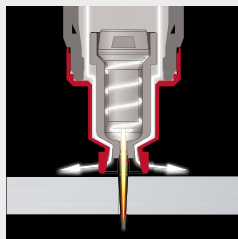
Cooling

Primary Plasma beam in the middle. Secondary air stream with cold air concentrating the Plasma beam

Secondary air-stream cold
Plasma Beam hot

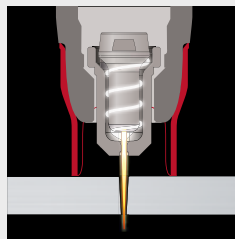


CONTACT
OPTION 1



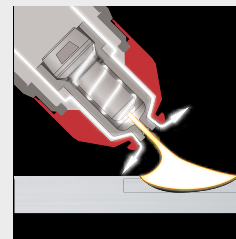
Convenient for the operator, simply drag the nozzle on the plate. Wellprotected nozzle.

STAND-OFF
OPTION 2



Maximum flexibility and visibility of the plasma stream.

GOUGE
OPTION 3



Allowing you to gouge different materials.

PLASMA TORCHES

LC 25

To order PTH-C25A-SL-3MR



LC 25

Air cooled
96 l/min@5.0 bar
25A@60%
10mm mild steel
12mm severance

ELECTRODE



W03X0893-75A

GAS DISTRIBUTOR



W03X0893-5R

TIP



W03X0893-76A (25A)

SHIELD CUP BODY



W03X0893-77A

SPACER



W03X0893-78R

LC 65 (hand)

To order

75 m	PTH-061A-CX-7M5A
15 m	PTH-061A-CX-15MA



LC 65

Air cooled
130 l/min@5.0 bar
60A@60%
25mm mild steel
30mm severance

ELECTRODE



W03X0893-25A
(contact, stand off,
shielded & gouging)

GAS DISTRIBUTOR



W03X0893-50R

TIP



W03X0893-26A
(40A)
(contact)



W03X0893-27A
(40A)

W03X0893-28A
(50A)

W03X0893-29A
(60A)
(stand off)



W03X0893-33A
(50A)

W03X0893-34A
(60A)
(shielded)



W03X0893-39A
(gouging)



W03X0893-40A
(40A)

W03X0893-54A
(60A)
(extended)

RETAINING CAP



W03X0893-41A

SPACER



W03X0893-14R

SHIELD CAP

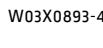


W03X0893-44A

SHIELD CUP BODY



W03X0893-43A



W03X0893-48A



W03X0893-21A

W03X0893-53A
(extended)

ELECTRODE



W03X0893-25A

GAS DISTRIBUTOR



W03X0893-50R

TIP



W03X0893-52A (40A)
W03X0893-33A (50A)
W03X0893-34A (60A)

SHIELD CUP BODY



W03X0893-43A

SHIELD CAP



W03X0893-46A

LC 65 (machine)

To order

75 m	PTM-061A-CX-7M5A
15 m	PTM-061A-CX-15MA



LC 65M

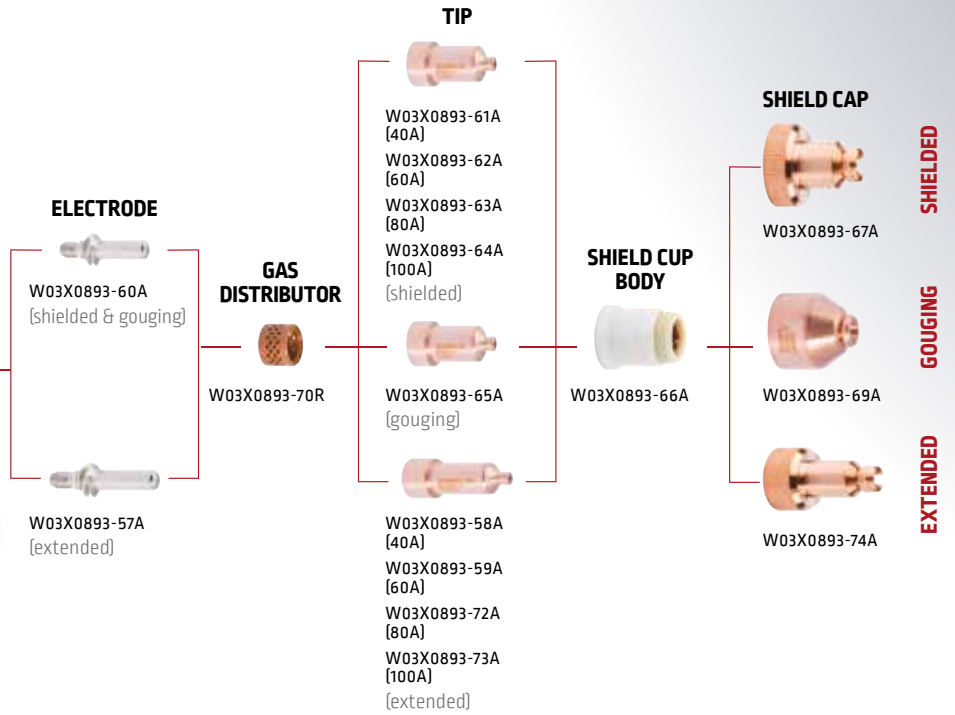
Air cooled
130 l/min@5.0 bar
60A@60%
25mm mild steel
30mm severance

CONTACT
STAND OFF
SHIELDED
GOUGING
EXTENDED
SHIELDED

PLASMA TORCHES

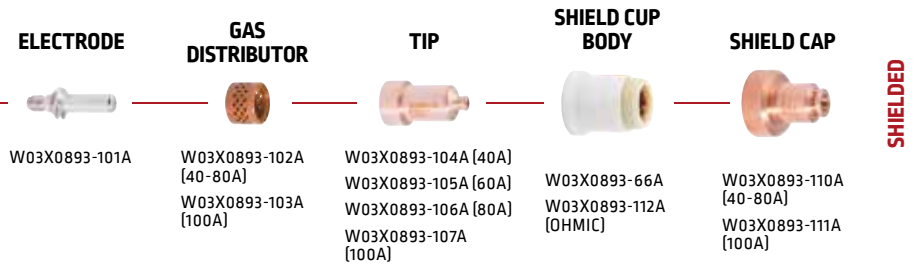
LC 105 (hand)

To order	
7.5 m	PTH-101A-CX-7M5A
15 m	PTH-101A-CX-15MA



LC 105 (machine)

To order	
7.5 m	PTM-101A-CX-7M5A
15 m	PTM-101A-CX-15MA



WEAR PART BOX FOR PLASMA TORCH

PLASMA-BOX



PLASMA-BOX LC25
W03X0893-118A



PLASMA-BOX LC105
W03X0893-115A



PLASMA-BOX LC65
W03X0893-113A



PLASMA-BOX LC105M
W03X0893-117A

CUTTING CIRCLES



AIR FILTER LAF1250
W88X1456A
W8800117R (filter cartridge)

BEVEL TOOL

W03X0893-119A





WELDLINE™
by Lincoln Electric

6 MIG/MAG WELDING



MIG/MAG WELDING

6

WELDING TOOLS AND ACCESSORIES

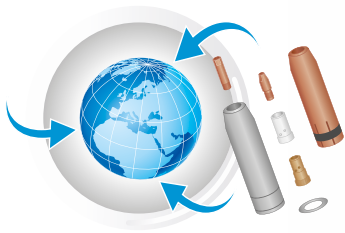
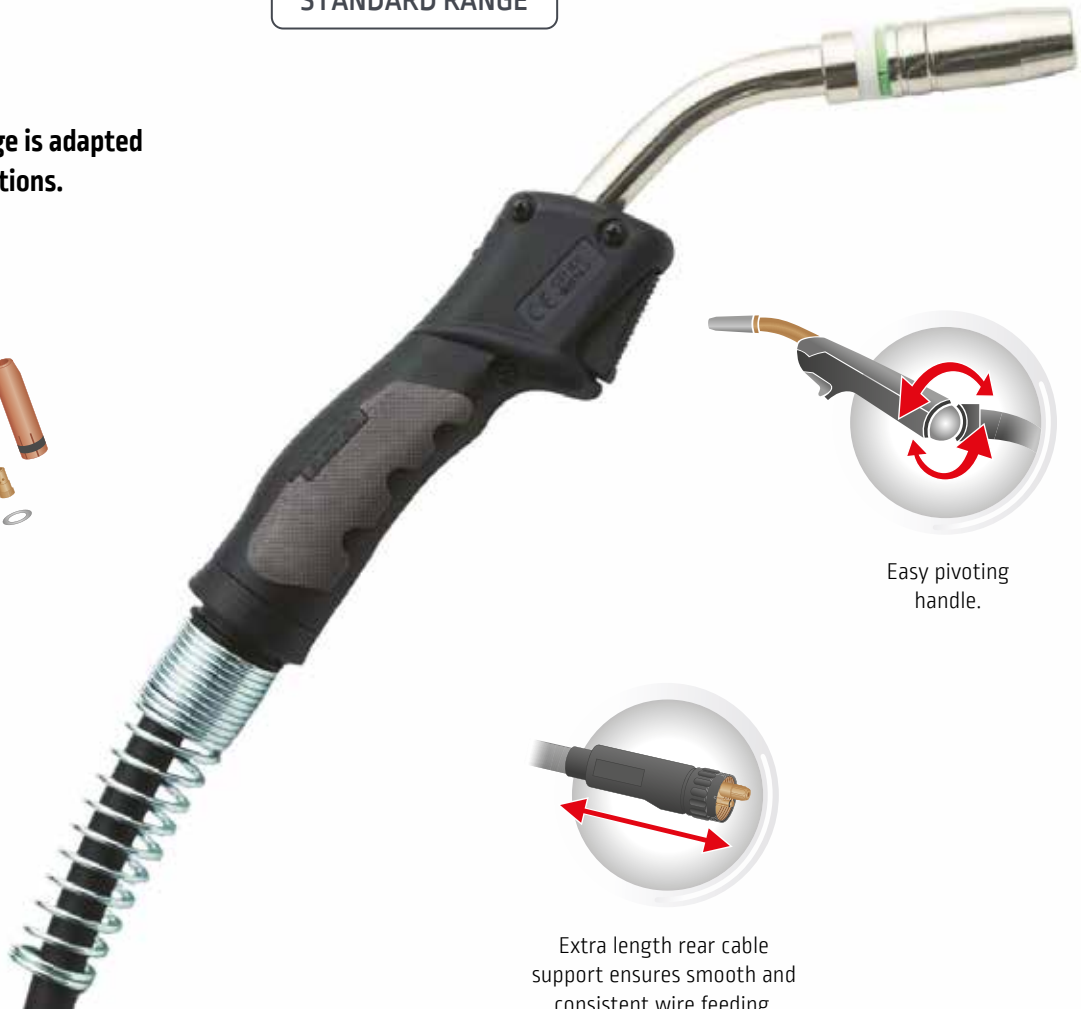
◆ MIG/MAG Torches	84 – 88
◆ Zirconium contact tip / Maintenance boxes	86
◆ Ceramic backings	87
◆ Other accessories	88

MIG/MAG TORCHES

LGS2

Simple and reliable, this range is adapted to the most common applications.

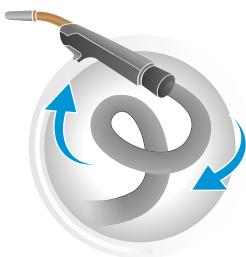
STANDARD RANGE



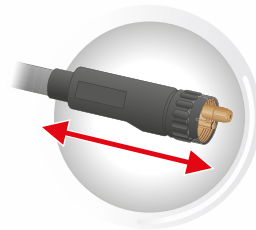
Wear parts compatible with the most common standard in Europe.



Easy pivoting handle.



Extra-flexible cable.



Extra length rear cable support ensures smooth and consistent wire feeding.

MODEL	AIR COOLING				WATER COOLING
	LGS2-150G	LGS2-250G	LGS2-240G	LGS2-360G	LGS2-505W
Duty cycle (CO ₂ shielding gas)	180 A @ 60%	230 A @ 60%	250 A @ 60%	330 A @ 60%	500 A @ 100%
Applications	Thin plates, automotive industry	Thin plates, light fabrication	Thin plates, light fabrication	Vessel manufacture, steel structures	Heavy duty, high production
Wire diameter	Up to 1.0 mm	Up to 1.2 mm	Up to 1.2 mm	Up to 1.6 mm	Up to 2.4 mm
Original equipment	Contact tip	0.8 mm	1.0 mm	1.0 mm	1.2 mm
	Conical nozzle	12 mm	15 mm	12.5 mm	16 mm
To order					
3 m	W10429-15-3M	W10429-25-3M	W10429-24-3M	W10429-36-3M	W10429-505-3M
4 m	W10429-15-4M	W10429-25-4M	W10429-24-4M	W10429-36-4M	W10429-505-4M
5 m	W10429-15-5M	W10429-25-5M	W10429-24-5M	W10429-36-5M	W10429-505-5M

ZIRCONIUM CONTACT TIP

LGS2 MIG/MAG torches can be equipped with CuCrZr contact tips that bring excellent performances compared to standard copper contact tips (Cu).

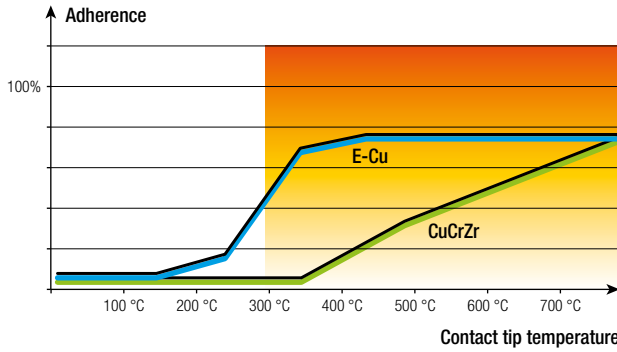
The wear:

The electrical conductivity being superior in a CuCrZr alloy, the arc transfer will meet less resistance and the contact tip will wear out less rapidly.

The lifetime:

The mechanical and thermal resistances also being superior to a copper alloy, the constraints, especially due to the wire friction and to the arc temperature, will be better tolerated with a CuCrZr contact tip.

Used in robotic welding for these advantages, the CuCrZr contact tip can improve the manual MIG/MAG welding performances as well.



Torch model	Screw thread	Wire diameter (mm)	To order
LGS2 150 G / LGS2 240 G	M6 x 25	0.6	W000010823
		0.8	W000010824
		1.0	W000010825
		1.2	WP10440-12C
LGS2 250 G	M6 x 28	0.8	W000010830
		1.0	W000010831
		1.2	W000010832
LGS2 360 G / LGS2 505 W	M8 x 30	0.8	W000010840
		1.0	W000010841
		1.2	W000010842
		1.32	WP10445-132C
		1.6	W000010843

MAINTENANCE BOXES

MIG-BOX for LGS2

The storage you were missing !



Features:

- ◆ Dimensions 36 x 24 x 5 cm.
- ◆ Plastified pieces guide included.
- ◆ Until 80 consumables.

Features & benefits:

- ◆ No more losses.
- ◆ All the pieces on hand.
- ◆ Wear parts compatible with the most common standard in Europe.
- ◆ Ready-to-use.



MIG-BOX LGS2 150G

To order W000387234

MIG-BOX LGS2 240G

To order WP10429-K240

MIG-BOX LGS2 250G

To order W000387235

MIG-BOX LGS2 360G

To order W000387236

MIG-BOX LGS2 505W

To order W000387237

CERAMIC BACKINGS

Choice of KERALINE slat type depending on the welding process

	MMA	TIG	MIG/MAG	SAW		MMA	TIG	MIG/MAG	SAW
KERALINE TA 1	-	✓	✓	-	KERALINE TR 2	✓	-	✓	-
KERALINE TA 2	-	✓	✓	-	KERALINE TR 3	✓	-	✓	-
KERALINE TA 3	✓	-	✓	-	KERALINE TR 4	✓	-	✓	-
KERALINE TF 1	-	✓	✓	-	KERALINE TR 5	✓	-	✓	-
KERALINE TF 2	-	✓	✓	-	KERALINE TR 6	✓	-	✓	-
KERALINE TF 3	✓	-	✓	-	KERALINE TM 1	✓	✓	✓	✓
KERALINE TR 1	✓	-	✓	-	KERALINE TM 2	✓	✓	✓	✓



Ceramic on aluminium-tape

Type	To order	Dimensions (mm)	3D diagram	Application	Packing
KERALINE TA1 - 6 mm	W000010391				600 mm / piece 10 pieces per bag (6 meters) 6 bags/carton (36 meters)
KERALINE TA2 - 9 mm	W000010392				
KERALINE TA3 - 13 mm	W000010393				
KERALINE TF1 - 6 mm	W000010394				
KERALINE TF2 - 9 mm	W000010395				
KERALINE TF3 - 13 mm	W000010396				
KERALINE TR1 - 6 mm	W000010397				600 mm / piece 50 pieces per bag (30 meters) 5 bags/carton (150 meters)
KERALINE TR2 - 7 mm	W000010398				
KERALINE TR3 - 8 mm	W000010399				600 mm / piece 20 pieces per bag (12 meters) 8 bags/carton (96 meters)
KERALINE TR4 - 9 mm	W000010400				
KERALINE TR5 - 12 mm	W000010401				600 mm / piece 20 pieces per bag (12 meters) 5 bags/carton (60 meters)
KERALINE TR6 - 15 mm	W000010402				

Ceramic on metallic support

Type	To order	Dimensions (mm)	3D diagram	Application	Packing
KERALINE TM1 - 13 mm	W000010403				600 mm / piece 10 pieces per bag (6 meters) 7 bags/carton (42 meters)
KERALINE TM2 - 18 mm	W000010404				

OTHER ACCESSORIES

SPRAYMIG H₂O / CERASKIN

See page 97



FLUXO S 190 / P 125 / R 175

See page 100



GALVASPRAY

See page 98



MIG pliers



See page 52

MIG IRON PROTECT +

See page 40



EUROSPEED LS

See page 10



FLOWELD

See page 52



MIG torch stand

See page 52





7 FLAME

WELDING TOOLS AND ACCESSORIES

- ◆ Hoses / Automatic roller for oxygen hoses..... 89
- ◆ Quick action coupling 90 – 91
- ◆ Cutting nozzles and other flame accessories 92



Gas	Ø (mm)	Maximum pressure (bar)	Coil length (m)	To order
Single hoses				
Acetylene	6.3 x 12	10	5	W000010055
Oxygen	6.3 x 12	10	5	W000010056
Acetylene	6.3 x 12	10	10	W000010081
Oxygen	6.3 x 12	10	10	W000010057
Acetylene	6.3 x 12	10	20	W000010058
Oxygen	6.3 x 12	10	20	W000010059
Acetylene	6.3 x 12	10	40	W000010060
Oxygen	6.3 x 12	10	40	W000010061
LPG*	6.3 x 12	10	20	W000010052
LPG*	6.3 x 12	10	40	W000010062
Acetylene	10 x 16	20	10	W000010064
Oxygen	10 x 16	20	10	W000010065
Acetylene	10 x 16	20	20	W000010066
Oxygen	10 x 16	20	20	W000010067
Acetylene	10 x 16	20	40	W000010068
Oxygen	10 x 16	20	40	W000010069
LPG	10 x 16	20	20	W000010053
LPG/Acetylene*	10 x 16	20	40	W000010071
Oxygen	8 x 14	20	50	W000010079
Acetylene	8 x 14	20	50	W000010080
Argon	6.3 x 12	10	40	W000010072
Argon	10 x 16	20	40	W000010073

Twin hoses				
TWIN (Oxygen - Acetylene)	6.3 x 12	10	20	W000010077
TWIN (Oxygen - Acetylene)	6.3 x 12	10	40	W000010063
TWIN (Oxygen - Acetylene)	8 x 14	20	50	W000010078
TWIN (Oxygen - Acetylene)	10 x 16	20	20	W000010054
TWIN (Oxygen - Acetylene)	10 x 40	20	40	W000010070
TWIN (Oxygen - LPG)*	10 x 16	20	40	W000010076
TWIN (Ox-Ad)	10 x 16	20	40	W000010070

* Propylene excluded



0876-071_ret



2017-348



2017-350



2017-228

THE DATE PRINTED ON THE HOSE IS THE MANUFACTURING DATE

AUTOMATIC ROLLER FOR OXYGEN HOSES

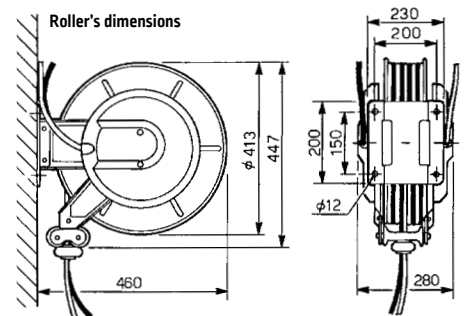
TUBEREEL



Automatic roller for twin hoses diameter 8 or 10 mm.

- ◆ Automatic roller for twin hoses diameter 8 or 10 mm.
- ◆ Allows the operator to choose the hose length suitable to his application
- ◆ Maximum length for inside diameter 8 mm: 20 m
- ◆ Maximum length for inside diameter 10 mm: 15 m
- ◆ Provided without hoses

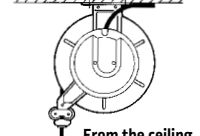
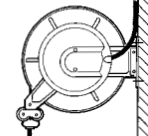
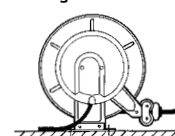
To order W000260575



On the ground

On a wall

From the ceiling



QUICK ACTION COUPLINGS

QUICKMATIC II



QUICKMATIC II is the new range of quick couplings designed and manufactured by Weldline.

Safety, Performance and Easy to Use are keys words that characterize this new range.

QUICKMATIC II is available in several versions:

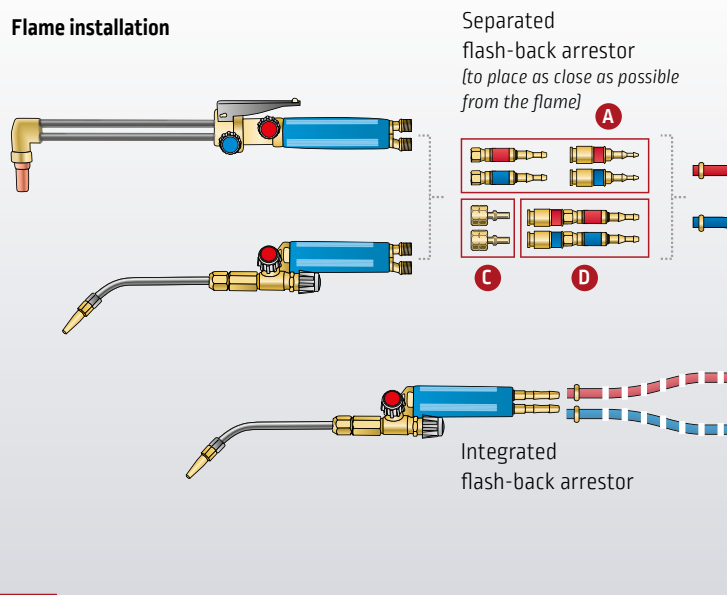
- ♦ By type of gas - presence of a mechanical coding
- ♦ For mounting on the regulator, between pipes and on the blowpipe
- ♦ With integrated FBA (Flash Back Arrestor)

Advantages:

- ♦ **Safety**
 - Gas flow stopped during disconnection due to an internal mechanism
 - Specific design limiting accidental disconnections
- ♦ **Ease of use and ergonomics**
 - «Push System» connection with automatic locking
 - Studied design to allow to use with one hand
- ♦ **Performances**
 - 4 levels of tightness
 - Compatible with any welding or cutting blowpipe thanks to limited pressure losses

Recommendations for use

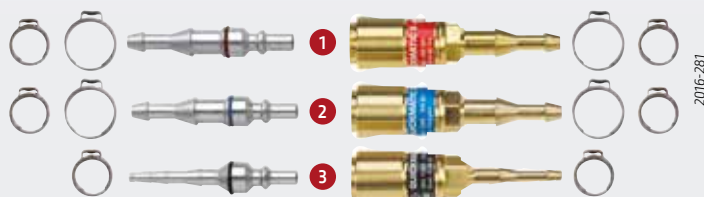
Flame installation



To order

Connection between hoses **A**

QUICKMATIC II	Ø hoses (mm)	To order	
		Female connector	Male connector
1 Fuel Gas	6.3 and 10	W000011002	W000011005
	6.3 and 8	W000386369	
2 Oxygen	6.3 and 10	W000011001	W000011004
	6.3 and 8	W000386370	
3 Neutral gas (Argon, ...)	4 and 6.3	W000011003	W000011006



Also available in kits :

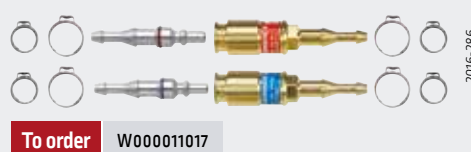
Females kit



Males kit

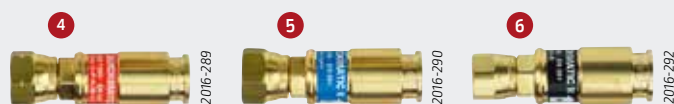


Female / Male kit



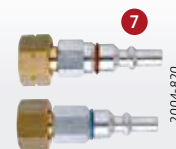
Regulator connection **B**

QUICKMATIC II	Thread	Ø hoses (mm)	To order	
			Female connector	Male connector
4 Fuel gas	M16 x 150 Left	6 and 10	W000011008	W000011005
	3/8" Left		W000011011	
5 Oxygen	M16 x 150 Right	6 and 10	W000011007	W000011004
	3/8" Right		W000011010	
	1/4" Right		W000011009	
6 Neutral gas (Argon, ...)	12 x 100 Right	4	W000011012	W000011006
	3/8" Right		W000386358	
	1/4" Right		W000386359	



Blowpipes' entry connection **C**

QUICKMATIC II	Thread	To order	Male connector
7 Fuel gas	16 x 150 Left	W000011014	
Oxygen	16 x 150 Right	W000011013	

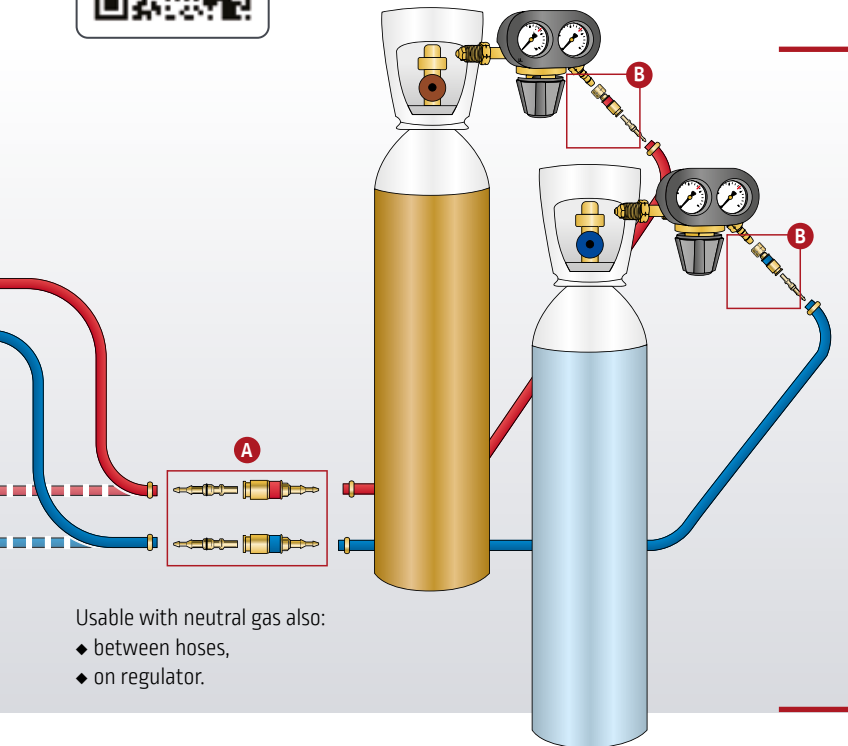


QUICKMATIC II with integrated FBA **D**

SECURTOP 662	Inlet hoses (mm)	Outlet	To order
Oxygen	Ø 6.3 and 10	QUICKMATIC II female	W000386367
	Ø 6.3 and 8		W000386368
Fuel Gas	Ø 6.3 and 10		W000386365
	Ø 6.3 and 8		W000386366
Kit Oxygen + Fuel gas	Ø 6.3 and 10	W000400169	
	Ø 6.3 and 8	W000400170	



Visit our factory



Usable with neutral gas also:

- ◆ between hoses,
- ◆ on regulator.

Mounting on thread

QUICKMATIC II	Thread	To order	Female coupling
8 Fuel gas	16x150 Left	W000386360	
	3/8 Left	W000386362	
9 Oxygen	16x150 Right	W000386361	
	3/8 Right	W000386363	
	1/4 Right	W000386364	



Technical characteristics and usable gases:

Label		Gas		Pressure max. (bar)	Max Flowrate (m³/h)*
Letter	Color	Name	Letter		
F	Red	Acetylen	A	1,5	14
		Propane	P	5	22
		Hydrogen	H	10	215
		Methane	M	5	40
		MPS	Y	5	24
		Propylene	L	5	22
O	Blue	Oxygen	O	20	65
N	Black	Air	D	20	90
		CO ₂	B		73
		Nitrogen, neutral gas	N		92

* Maximal flowrate without flash-back arrestor



7 FLAME

CUTTING NOZZLES AND ACCESSORIES

G1 cutting nozzles and IC cutting nozzles

G1 profile	Gauge (mm)	Cutting thickness (mm)	IC profile
Acetylene			Acetylene



0327-033

W000262059	7/10	3-10	W000262089
W000262060	10/10	10-25	W000262091
W000262061	12/10	25-50	W000262093
W000262062	16/10	50-80	W000262094
W000262063	20/10	80-120	W000262095
W000262064	25/10	120-200	W000262096
W000262065	30/10	200-300	W000262097



0327-031

Propane			Propane
W000262066	7/10	3-10	W000262098
W000262067	10/10	10-25	W000262099
W000262068	12/10	25-50	W000262100
W000262069	16/10	50-80	W000262101
W000262070	20/10	80-120	W000262102
W000262071	25/10	120-200	W000262105
W000262072	30/10	200-300	W000262106

PROTECFLAM

Heat shield protection for walls and floors during gas welding, brazing or soldering.

PROTECFLAM
Single use
200 x 250 mm

Asbestos free



2006-397

To order W000271449

Blister pack of 3 shields

PROTECFLAM TECH

Very flexible (*memory effect*)
Long life duration - Both sides usable
200 x 250 mm

No toxic fumes release

To order W000276078



2005-272R

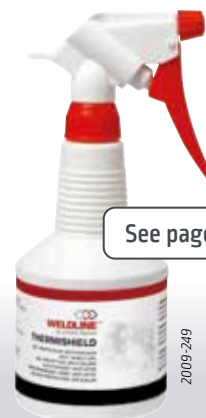
Tip cleaners

Used to clean welding and cutting nozzles to restore nozzle performance. Contains a range of round needle files in a metal carry case.



To order W000290900

THERMISHIELD



See page 98

2009-249

Spark lighter



To order W000010978



Traditional tool with five renewal flints.



To order W000211924

Gun model with ten renewal flints.

Inspection mirrors

Mirror with magnetic stand

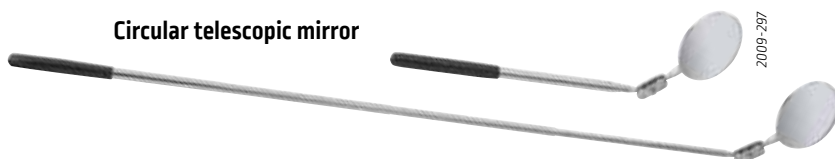
To order W000010557



To order W000010558

Spare part: mirror.

Circular telescopic mirror



2009-297

2009-298

For all angle viewing. Fast and accurate visual inspection of hidden areas with an almost limitless number of positions.

To order W000273291



WELDLINE™
by Lincoln Electric

8 LIQUIDS & SPRAYS



WELDING TOOLS AND ACCESSORIES

◆ Anti-spatters.....	97
◆ Anti-corrosion / Heat protection	98
◆ Cracks detection	99
◆ Non destructive cracks detection	100
◆ Cooling liquid for torches / Leakage control.....	101
◆ Stainless steels treatment	102
◆ Cleaning, polishing and marking of stainless steels.....	103



ANTI-SPATTERS

CERASKIN

Welding anti-spatters spray with ceramic coating

CERASKIN is a rapid drying ceramic coating spray providing exceptional protection of welding equipment and welded parts from damage caused by spatters.

Product features:

- ◆ An exceptionally fast drying, long lasting and durable ceramic coating formulated to withstand the most demanding requirements in the professional welding environment.
- ◆ The ceramic base makes a barrier and prevents weld spatters adhering to welding equipment and welded parts.
- ◆ CERASKIN grants 8 consecutive hours welding work [1 working day], without any further adds of product.
- ◆ Volume: 400 ml [net] - 520 ml [nominal].



2010-382

To order W000277679

SPRAYMIG H₂O

Anti-spatters spray and liquid

- ◆ Water based and odourless.
- ◆ No influence on porosity and cold cracks.
- ◆ No influence of the content of diffusible hydrogen in the weld metal.
- ◆ Solvent and silicone free.
- ◆ Biodegradable.
- ◆ Allows parts to be lacquered.
- ◆ Easily washed off parts.

Description:

- ◆ Spraymig H₂O silicone-free water-based anti-spatters based on highly efficient water soluble substances.
- ◆ It prevents spatters from sticking to nozzles, tips, and work pieces robots, and extends nozzle life considerably.
- ◆ It permits rapid changing and cleaning of the nozzles.
- ◆ Painting, galvanizing, lacquering of parts is possible.
- ◆ A preliminary test is recommended.
- ◆ Very low consumption for a high effectiveness.

Physical and chemical properties:

- ◆ Aspect: liquid uncoloured clear.
- ◆ Density at 20 °C: 1.00.
- ◆ Pure pH: 7
- ◆ Volume: Spray: 400 ml [net], 520 ml [nominal] - Drum: 20 liters.
- ◆ Propellant gas: dimethylether.
- ◆ Base: water - based emulsion of organic substances.

CAUTION:
before use, carefully read
and understand the safety
datasheet available
on our websites



2007-394

Spray [400 ml]

Drum [20 liters]

To order W000010001

To order W000011074

SPRAYMIG SIB

Anti-spatters spray

- ◆ Silicone based.
- ◆ Do not for use on any parts that are about to be painted.
- ◆ Use on cold parts.
- ◆ Use on nozzles only and outside contact tip.

Specifications:

- ◆ SPRAYMIG SIB is a preventive maintenance product for MIG/MAG torches.
- ◆ To be used on cold parts only, do not use on threads or inside contact tips [as the product is electrically insulating].
- ◆ Volume: 400 ml [net] - 520 ml [nominal].
- ◆ Propellant gas: aliphatic hydrocarbons.
- ◆ Base: silicone and isoparaffinic solvent.



2010-382

To order W000011093

SPRAYMIG SVB

Anti-spatters spray

- ◆ Silicone free.
- ◆ Compatible with paint.
- ◆ Use on cold parts.
- ◆ Use on nozzles only and outside contact tip.

Specifications:

- ◆ SPRAYMIG SVB is an anti-spatters silicone free spray for welding applications.
- ◆ Volume: 400 ml [net] - 520 ml [nominal].
- ◆ Propellant gas: aliphatic hydrocarbons.
- ◆ Base: biodegradable synthetic polymers.



2007-394

To order W000011092

SPRAYMIG SVD

Anti-spatters spray

- ◆ Silicone free.
- ◆ Compatible with paint.
- ◆ Use on cold parts.
- ◆ Use on nozzles only and outside contact tip.
- ◆ Dichloromethane solvent.

Specifications:

- ◆ SPRAYMIG SVD is an anti-spatters silicone free spray for welding applications.
- ◆ Volume: 300 ml [net] - 520 ml [nominal].
- ◆ Propellant gas: aliphatic hydrocarbons.
- ◆ Base: Synthetic oil not siliconic.
- ◆ Dichloromethane solvent.



2009-250

To order W000271574

ANTI-SPATTERS

NETMIG

Anti-spatters dip

To order W000011071

- ◆ Protects nozzles and contact tips from spatters by immersion.
- ◆ Silicone and solvent free.
- ◆ Odourless.

Specifications:

- ◆ Prevents spatters adhering:
 - To torch nozzles and contact tips,
 - To positioners and jaws of welding lathes.
- ◆ Does not clog threads or apertures.
- ◆ Does not cause porosity. Silicone and solvent free. Odourless.
- ◆ Base: waxes and oil.
- ◆ Volume: 300 gr.



ANTI-CORROSION

GALVASPRAY

- ◆ Protection of welded joints.
- ◆ Permits welded parts to be lacquered.

Specifications:

- ◆ GALVASPRAY sprays a zinc protective finish.
- ◆ High resistance to oxidation and corrosion (*more than 80 hours in salty fog*)
- ◆ Quick drying (*about 5 minutes*) and no dripping.
- ◆ Volume: 400 ml (*net*) - 520 ml (*nominal*).
- ◆ Propellant gas: propane/butane.
- ◆ Base: zinc powder in a vegetal resin.

Instructions for use:

- ◆ Clean and degrease the area to be treated.
- ◆ Shake the can before use at least for 1 minute.
- ◆ Spray at 25 cm distance from the piece by short and regular passes.

To order W000011094



HEAT PROTECTION

THERMISHIELD

Heat shield gel

Description:

- ◆ It is designed to stop heat from travelling through most metals during welding, brazing or soldering.
- ◆ It prevents from distortion of metals and even plastics caused by the heat of a welding torch.
- ◆ Volume: 500 ml

Instructions for use:

- ◆ Shake well before use and spray the product over the surface to be protected.
- ◆ Use in well ventilated areas only.

To order W000274839

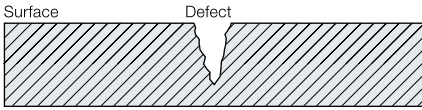




CRACKS DETECTION

FLUXO

This non destructive technique allows the detection of cracks opening on the surface of the plate helping a visual control, due to the cracks becoming visible (30 to 50 µm).



A wide range of materials:

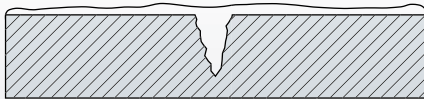
Steel, ceramic, plastic, glass...

Many industries:

- ◆ Boilers maker ◆ Founders ◆ Petrochemical
- ◆ Railway ◆ Nuclear ◆ Shipyard ◆ Automotive...

1 Cleaning

Product: FLUXO S190 - CLEANER



+ Product:

- ◆ Perfect cleaning without dry rest.
- ◆ Quick drying (evaporation).
- ◆ Spray: - Spraying in all positions.

Spray based on Butane (extremely flammable).
Solvent: Heptane.

Necessity for protection (petroleum based) solvent.



2012-279

3 Cleaning

Product: water



4 Developer

Product: FLUXO R175 - DEVELOPER



+ Product:

- ◆ Thin and uniform film and transparent film. After drying, the white surface appears.
- ◆ Very good surface coverage due to the thin granulometry.
- ◆ Quick drying of the solvent included in the developer.
- ◆ Spray: works in all position.
- ◆ Very good identification of the cracks under white light.

Butane/propane spraying.



2012-278

2 Penetrant spray

Product: FLUXO P125 - PENETRANT



+ Product:

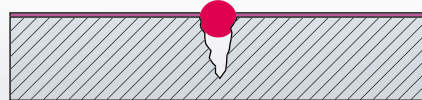
- ◆ Temperature of use: 0 °C to 50 °C. Easy to use even on hot plates.
- ◆ Good impregnation. A single spray lasts more than 30 min without drying.
- ◆ Powerful penetration. Due to its viscosity.
- ◆ Spray: works in all positions.
- ◆ Very good identification of cracks under white light.
- ◆ Easy to remove with water. No "ground" noise.

Butane/propane spraying (extremely flammable).

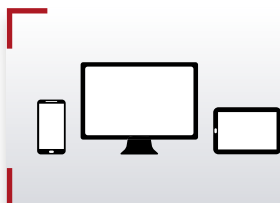


2012-277

5 Inspection of the defects



Cracks are visible at the surface of the plates, thanks to clear vivid red indications easily seen by the naked eye (no UV light required).



See the batch number on the packaging and consult your conformity certificate on our websites



NON DESTRUCTIVE CRACKS DETECTION



1 FLUXO S190 - CLEANER

**Piece degreasing & cleaning
of penetrant excess.**

Pieces degreasing before application
of the penetrant.

Instructions:

Spray FLUXO S190 - CLEANER until
disappearance of red or purple
PENETRANT traces.

- ◆ Propellant: Butane / Propane.
- ◆ Volume : 500 ml [net] -
650 ml [nominal].

To order W000374827



2012-279

2 FLUXO P125 - PENETRANT

**Type II - level 2 - Methode AC
Non destructive testing.**

Localization of the emerging defects.
Water rinse. Without rhodamine.
Use temperature 0°C - 50°C.

Instructions:

Be sure the area is clean. Spray at 20 cm
FLUXO P125 - PENETRANT for a complete recover
of the area. Let it penetrate at least 10 minutes.
Rinse with FLUXO S190 - CLEANER or water.
Control with FLUXO R175 - DEVELOPER.

- ◆ Propellant: Butane / Propane.
- ◆ Volume : 500 ml [net] - 650 ml [nominal].

To order W000374825



2012-278

4 FLUXO R175 - DEVELOPER

Detection of cracks and surface faults.

Defects highlight by coloration of the penetrant.
Daylight review.

Instructions: Be sure that the area is clean and without
penetrant last trace.

Shake the can until hearing clearly the ball bearing.

Spray at 20 cm for an uniform layer without super thickness.

Wait a few minutes until obtaining a dry powdery film before
examining the surface.

- ◆ Propellant: Butane / Propane.
- ◆ Volume : 500 ml [net] - 650 ml [nominal].

To order W000374826



2012-277

CAUTION:
before use, carefully read
and understand the safety
datasheet available
on our websites

Also available: ARDROX

ARDROX 9PR5 CLEANER

Degreasing before application of the
penetrant, elimination of reveler excess.

To order W000374531

ARDROX 9VF2 PENETRANT

Localization of the emerging defects.
400 ml net.

To order W000374818

ARDROX NQ1 DEVELOPER

Drying compositions highlighting the defects
after the reveler action. 400 ml net.

To order W000374532

See the batch number on the packaging
and consult your conformity certificate
on our websites

COOLING LIQUID FOR TORCHES

FREEZCOOL (red) T°-27°C

FREEZCOOL is a highly elaborated cooling liquid. Its thermal stability and dielectric properties make a cooling liquid especially suitable for « high tech » systems.

General use:

- ◆ Cooling of induction furnaces
- ◆ Cooling of tack welding systems, plasma flares
- ◆ Air conditioning
- ◆ Electric generators
- ◆ Motorcar industry: engines cooling systems, engines and gearboxes testing benches.
- ◆ Cooling of radar systems.

Product benefits:

- ◆ Ensures an anti-freezing protection down to -27 °C
- ◆ High electrical resistivity
- ◆ Non volatile (no product losses)
- ◆ Chemically stable, does not polymerize
- ◆ Not corrosive
- ◆ Non toxic
- ◆ Non flammable

For manual equipment

9.6 L

To order W000010167



2004-216

Controls:

- ◆ Freezing point with a refract meter
- ◆ pH control

Physical properties:

- ◆ Physical form: red liquid
- ◆ Base: monopropylene glycol and water
- ◆ Specific gravity: 1.04 at 20 °C
- ◆ pH: 7+/-2
- ◆ Freezing point: -27 °C

Packaging:

FREEZCOOL is delivered in 10 kilos net weight, polyethylene drums. For any other type of packaging, please contact us.

Discover also

FREEZCOOL (green) T°-5°C

Coolant for welding and cutting torches. Less viscous, it contains antifreeze but in a less important proportion and is not corrosive for brass and copper circuit. It is less sensible to friction and therefore it has a more important flow rate.

For automation

9.6 L

To order W000404005

LEAKAGE CONTROL

BUBBLE



A high-return product for leak detection suitable for all gases except high pressure oxygen > 150 bars.

- ◆ Volume: 500 ml [net] - 650 ml [nominal]
- ◆ Propellant gas: denaturate hydrocarbure
- ◆ Base: mixture of foam compounds
- ◆ Temperature of application: -10 °C/+130 °C

To order W000010963



2007-794

1000 BULLES

A leakage controller suitable for all gases except high pressure oxygen > 150 bars.

- ◆ Volume: 400 ml [net] - 650 ml [nominal]
- ◆ Propellant gas: nitrogen protoxyde
- ◆ Base: lauryether natrium sulfate

To order W000011090



2000-228

CAUTION:
before use, carefully read and understand the safety datasheet available on our websites



See the batch number on the packaging and consult your conformity certificate on our websites



STAINLESS STEEL TREATMENT

Weldline proposes a complete range of products for stainless steels treatment.

There are three essential phases for a good surface treatment:

- 1 Degreasing
- 2 Pickling
- 3 Passivation

The first two are «intermediate phases», which means that they can be repeated in different working stages. The third, passivation, always represents the final treatment step.

1 CLEANOX (Degreasing- Liquid)

Degreasing is the essential process before any thermal treatment. It avoids incidental remains of oil or dust which interact (*contamination*) with the metal during welding or thermal treatment of stainless steel. It can be repeated in the following phases, in case further thermal processing is required, before the final passivation.

How to use CLEANOX DEGREASER

Dilute the degreaser with 30% to 50% water and allow it to vaporize on the surface to be treated. Leave for a few minutes to allow the product to act and then rinse with clean water. Do not expose the product or treated surface to sunlight or to any atmospheric agents.



CLEANOX L (liquid) 6 kg

To order W000266423

CLEANOX L (liquid) 30 kg

To order W000266425

2 PICKLINOX

(Pickling - Product in gel, paste or liquid)

Pickling is the operation that permits the remove of all oxides after welding, removing the surface layer following a thermal treatment. It is the most important step in the treatment process. A welding bead and generally a heated surface, lose their stainless property ($Cr < 12\%$). For this reason, a pickling operation does not mean only cleaning the welding bead but it restores the stainless steel characteristics.

How to use PICKLINOX GEL or PASTE

Degrease the surface to be treated with the specific CLEANOX product. Then apply a coat of PICKLINOX paste or gel. The exposure time will vary from a few minutes up to 30 minutes depending on the type of steel being welded. At the end of treatment, remove the gel or the paste with clean water. Do not expose the product or treated surface to sunlight or to any atmospheric agents.



PICKLINOX G (gel) 2 kg

To order W000266426

PICKLINOX P (paste) 2 kg

To order W000266428

PICKLINOX G (gel) 10 kg

To order W000266427

PICKLINOX P (paste) 10 kg

To order W000266429

PICKLINOX L (liquid) 30 kg

To order W000266422



3 RESTORINOX

(Passivation - Product in gel)

This is the final phase of the process, and is absolutely necessary for restoring the stainless property. With passivation is created a « desired oxidation ». In fact this working phase restores the chromium layer damaged by heat shortening the spontaneous oxidation time. In this way, the oxide layer which protects the surface from external agents is restored.

How to use RESTORINOX

First degrease and pickle the part to be treated with CLEANOX and PICKLINOX. Then apply the product. The times required for exposure will vary from 20 minutes up to 60 minutes. At the end of the treatment remove the product with clean water. Do not expose the product or treated surface to sunlight or to any atmospheric agents.



RESTORINOX G (gel) 2 kg

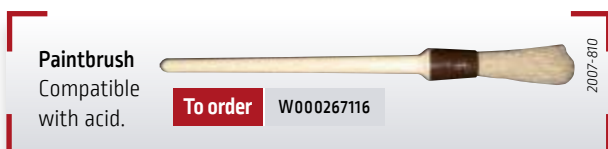
To order W000266430

RESTORINOX G (gel) 10 kg

To order W000266431

RESTORINOX L (liquid) 30 kg

To order W000266424



Paintbrush
Compatible
with acid.

To order W000267116

CLEANING, POLISHING AND MARKING OF STAINLESS STEELS

OPTICLEAN II

Inverter-technology installation for cleaning, polishing and marking of stainless steels. Use on TIG welds.

Your benefits:

- ◆ **AESTHETIC:** no stains on the steel after cleaning.
 - ◆ **ECOLOGICAL:** no need to wear gloves or protective masks with the neutral solution. Large outdoor areas are not required: no toxic vapor emissions, no need for water treatment plant.
 - ◆ **ECONOMIC:** no passivation after cleaning
 - ◆ **GAIN OF PRODUCTIVITY:** no need to dip the pump into the liquid and to interrupt the operation several times.
- Improvement of the quickness while increasing current. Efficiency increased with the carbon blush.



INVERTER TECHNOLOGY

OPTICLEAN II	To order
Machine OPTICLEAN II including :	W000382322
Torch	W000275260
Torch support	W000382323
Torch support extension	W000382325
Ground cable	W000375139
Torch power cable	W000375141
2,5 mm Allen key	W000382326
Brush	W000382329
Standard graphite insert 90°	W000382571
Narrow graphite insert 90°	W000382572
Standard TIG Bond pad 90° (by 10)	W000272348
Narrow Tig Bond pad 90° (by 10)	W000272351
Brill Bomar solution (100 ml)	W000272347
Brill Bomar solution (1,5 l)	W000387219
Neutral Bomar solution (100 ml)	W000272038
Neutral Bomar solution (1.5 l)	W000387218
Neutralizing solution Inox Fit 500 ml	W000274842

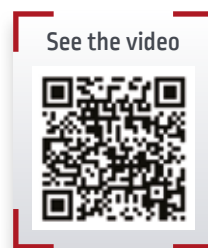
Optional	To order
Marking Kit INCLUDING :	W000271936
Black marking electrolyte 100 ml	W000272041
Erosion white marking electrolyte 100 ml	W000382573
Graphite marking insert 35 mm	W000272039
Marking felts insert	W000272040

Marking stencils dimensions	To order
25 x 15 mm	W000386781
54 x 16 mm	W000386780
54 x 32 mm	W000386779
85 x 27 mm	W000386785
85 x 54 mm	W000386786
128 x 42,5 mm	W000386787
128 x 85 mm	W000386782
170 x 54 mm	W000386783
170 x 108 mm	W000386784

Available sizes for the marking : 54 x 32 mm / 85 x 54 mm / 128 x 42,5 mm / 170 x 54 mm.
You just have to send your logo with the chosen dimensions.

You can simply order the marking kit and a cliché, providing us with your logo or any other writing: you can mark the product at least 500 times !

Technical data	OPTICLEAN II
Supply Voltage	230 V / 1Ph
Frequency	50/60 Hz
Capacity	450 W
Electrode Voltage	10/30 V AC/D
Isolation Class	IP 23
Noise level	< 10 dB [A]
Machine weight (empty)	7 kg
Machine dimensions	3 300 x 230 x 240 mm



1 - Cleaning

Place the cleaning solution onto the torch and choose whether you want to use the pad or the brush, which gives better access to angles that are difficult to reach. Rub the weld till its colour becomes clean.



2 - Polishing

Place the polishing solution onto the torch and choose whether you want to use the pad or the brush. Rapidly, as you rub the weld, it will start to shine. Wipe your steel with a cloth rag in order to avoid stains.



3 - Marking

Take the appropriate suitcase containing both marking and eroding electrolytes. Rub the marking felt moistened with the electrolytic solution on the screen printing frame. Your logo is printed on the metal.



CAUTION:
before use, carefully read and understand the safety datasheet available on our websites





9 CUTTING & GRINDING DISKS

WELDING TOOLS AND ACCESSORIES

- ◆ Cutting and grinding disks 106 – 108
- ◆ Grinding accessories 109

CUTTING AND GRINDING DISKS

Weldline is offering a range of cutting and grinding disks designed for the main applications of industrial customers.

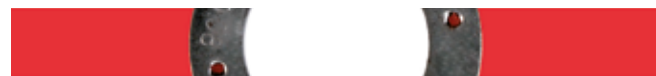
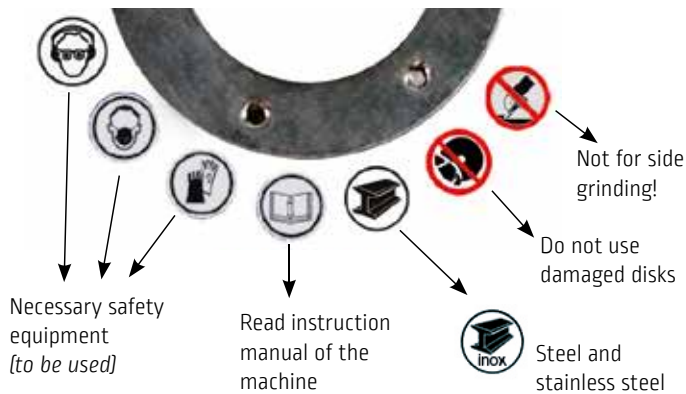
EN 12413 - EN 13743

- ◆ Two extra thin cutting disks of 1 mm for steel and stainless steel.
- ◆ Flat and depressed center, hard cutting disk range for structural steel.
- ◆ A range of hard grinding disks for structural steel.
- ◆ A range of abrasive flap disks for grinding, finishing and cleaning applications.



When buying such products, always ask for OSA certification, a warranty that the product complies with the safety standard and the additional requirements of the Organisation for the Safety of Abrasives

Pictograms description



Red line means maximum speed 80 m/s

Wheel diameter	Maximum revolution at 80 m/s
115 mm	13 300 rpm
125 mm	12 250 rpm
180 mm	8 500 rpm
230 mm	6 650 rpm



CUTTING AND GRINDING DISKS

DUCTIFLEX PRO

Top quality cutting disks for professional use.

A range of high quality products providing an ideal balance between performance and life duration.

Characteristics:

- ◆ Maximum speed 80 m/s.
- ◆ Diameter 115 to 230 mm.
- ◆ Thickness 1.0 to 3.2 mm.
- ◆ Should be used within 3 years from the production date.
- ◆ Design for steel, except the extra thin disks designed for steel and stainless steel.



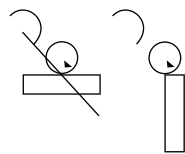
Dimensions	Shape	Use	Specification*	Unit / box	To order
115 x 1 x 22 mm	flat	steel/stainless steel	61A 60 S7 BF	50	W000261930
125 x 1 x 22 mm	flat	steel/stainless steel	61A 60 S7 BF	50	W000261931
115 x 1.6 x 22 mm	flat	steel/stainless steel	61A 60 S7 BF	50	W000335001
125 x 1.6 x 22 mm	flat	steel/stainless steel	61A 60 S7 BF	50	W000335002
115 x 2 x 22 mm	flat	steel	A 36 S7 BF	25	W000261932
125 x 2 x 22 mm	flat	steel	A 36 S7 BF	25	W000261933
180 x 2 x 22 mm	flat	steel	A 36 S7 BF	25	W000261934
125 x 1 x 22 mm	flat	alu	AC 46 S7 BF	50	W000401338 NEW
230 x 2 x 22 mm	flat	steel	A 36 S7 BF	25	W000261935
180 x 2.5 x 22 mm	flat	steel	A 36 S7 BF	25	W000261936
230 x 2.5 x 22 mm	flat	steel	A 36 S7 BF	25	W000261937
115 x 3.2 x 22 mm	flat	steel	A 36 S7 BF	25	W000261938
180 x 3.2 x 22 mm	flat	steel	A 36 S7 BF	25	W000261939
230 x 3.2 x 22 mm	flat	steel	A 36 S7 BF	25	W000261940
125 x 3 x 22 mm	depressed	alu	AC 36 S7 BF	25	W000401348 NEW
115 x 2.5 x 22 mm	depressed	steel	A 36 S7 BF	25	W000261941
115 x 3.2 x 22 mm	depressed	steel	A 36 S7 BF	25	W000335005
125 x 2.5 x 22 mm	depressed	steel	A 36 S7 BF	25	W000261942
125 x 3.2 x 22 mm	depressed	steel	A 36 S7 BF	25	W000335006
180 x 2.5 x 22 mm	depressed	steel	A 36 S7 BF	25	W000261943
230 x 2 x 22 mm	depressed	steel	A 36 S7 BF	25	W000335003
230 x 2.5 x 22 mm	depressed	steel	A 36 S7 BF	25	W000261944
230 x 3.2 x 22 mm	depressed	steel	A 36 S7 BF	25	W000335004

- ◆ Extra thin wheels providing a fast and economical cutting performance on steel and stainless steel.
- ◆ Extra long product life
- ◆ High cutting speed
- ◆ Specially efficient on steel bars, pipes, sheets or shaped sections
- ◆ No need to eliminate burr after cutting
- ◆ Less material waste

Same quality with depressed center

- ◆ Hard cutting disks for structural steel.
- ◆ Long life duration
- ◆ Iron and structural steel cutting

Recommendations:



Cutting will be faster by using a smaller contact surface between the disk and the work piece

* Explanation of the specification: See next page

CUTTING AND GRINDING DISKS

DUCTIFLEX

A grinding range for standard structural steel.

Characteristics:

- ♦ Steel surface cleaning, deburring, angle and corner dressing.
- ♦ Very good balance between performance and price, long life product.

Dimensions	Shape	Use	Specification	Unit / box	To order
115 x 6 x 22 mm	Depressed	Standard steel	A 30 S7 BF	10	W000261945
125 x 6 x 22 mm	Depressed	Standard steel	A 30 S7 BF	10	W000261946
180 x 6 x 22 mm	Depressed	Standard steel	A 30 S7 BF	10	W000261947
230 x 6 x 22 mm	Depressed	Standard steel	A 30 S7 BF	10	W000261948



2007-108

Explanation of the specifications

XXX	XX	X	XX	XX
Abrasive type	Grit size	Hardness	Structure	Bond

Abrasive type

A: Regular Aluminium oxide. For plain and low alloyed steel, cast steel and chilled cast iron
 61A: Mixed Aluminium oxide. For grinding stainless steel and acid resisting steel

Grit size

16	20	22	24	30	36	40	46	54	60	70	80	90	100	120	150
Coarse				Medium						Fine					

Coarse for works without special precision, to fine for smoother surface

Hardness grade

E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Very soft			Soft			Medium					Hard			

Soft grade are dedicated to hard materials, hard grade to softer materials

Structure

3	4	5	6	7	8	9	10	11	12	13
Closed		Medium				Open		Very open		

Ratio between grain, bond and pore. The softer the material is the more open structure is recommended

Bond

V	B	BF
Vitrified bonded	Resinoid bonded	Glass fibre

Resinoid bond are more flexible, for dynamic and forceful use than vitrified bond Glass fibre increase the resistance specialty for heavy usage

DUCTIFLAP

Abrasive flap disks.

These disks are made by cutting abrasive fabrics, then cutting as flaps and bonding them on a fiberglass or nylon backing plate by an adhesive.

Our DUCTIFLAP disks are based on Zirconia Alumina, specially designed for steel, alloyed steel, non ferrous material; cast iron, wood and plastic. We use conical disks because it is possible to use them for curve surfaces, for edge grinding as well as lubricious or primed surfaces.

The grits are either 40, 60 or 80.

The higher the grit is, the more precise the result is.

The types are 115 x 22 mm and 125 x 22 mm.

Bonding material: synthetic resin bonding phenolic resins.

Backing plate: fiberglass or nylon (plastic).

Filler: kryolits, calcide.

Shape: flat or conical 15%.

Dimensions	Grit	Unit/box	Shape	
			15 % conical for fiberglass backing	Flat for nylon backing
115 x 22 mm	40	10	W000264532	W000273754
	60	10	W000264533	W000273759
	80	10	W000335007	W000273758
125 x 22 mm	40	10	W000264535	W000273757
	60	10	W000264534	W000273756
	80	10	W000335008	W000273755



2009-010

2009-011

Personal protection: protect your eyes and ears, wear a dust mask, safety gloves, (safety shoes & leather apron are recommended).

Storage: in dry and well ventilated areas.

Temperature between 18 and 22 °C, relative humidity between 45 and 60%.

The speed of the machine must never exceed the maximum operating speed of the disk: 80 m/s.

THE LINCOLN ELECTRIC COMPANY FRANCE (TLECF) GENERAL TERMS AND CONDITIONS OF SALE

Article 1: Overview

The General Terms and Conditions of Sale (GTC) described hereinafter set forth the rights and obligations of TLECF and its customer in connection with the sale of products, processes, systems, solutions and related services for welding and cutting equipment. All the services offered by TLECF are directed at business customers. GCS may be negotiated by any client who request it expressly. Negotiation of any clause shall be state in writing in Particular Conditions of Sale previously to any order. In the absence of customer's reserve, by any means, before the reception of the TLECF confirmation of order, GCS shall apply. Pursuant to article L441-6 Of french commercial code, GCS form the only basis of all commercial negotiation and shall prevail on Customer General Conditions of Purchase. The offers, research, documents and any kind of information provided by TLECF, other than publicity leaflets and user instructions, shall remain the property of TLECF and they shall be deemed to be confidential. They shall not be forwarded to third parties or used by the customer for purposes other than the use of the relevant product supplied, without TLECF's written authorization.

Article 2: Order

Orders shall be final once received in writing by TLECF and when GCS are negotiated or expressly accepted. Any order cancellation on the part of the customer shall be subject to a cancellation fee, which may vary depending on the type, size and progress status of Order. Orders shall not be amended without TLECF's prior consent.

Article 3: Price

Except for spare parts orders, orders with a minimum amount of 100 euros excl. taxes shall not be fulfilled by TLECF. A standard order processing fee of 30 euros excl. taxes shall be charged to the Customer for orders with a total amount between 100 euros excl. taxes and 500 euros excl. taxes. The prices of the products sold shall be those in force on the date of ordering. For catalogue items that are deliverable when available or within a short time, the prices that apply shall be those at TLECF's current rates, excluding packaging. They shall be expressed in euros and calculated net of VAT. For other items, the prices shall be set in accordance with the Parties' written agreement. For export, unless otherwise stipulated, prices shall be deemed to be CIF. TLECF grants itself the right to amend its rates at any time. However, it undertakes to invoice the items ordered at the prices stated when the order is logged. Recycling costs (collection): In accordance with Article R 543-172 and following ones of French Environmental Code, TLECF shall invoice the cost of collecting waste and shall show the relevant cost on the invoice. The customer shall be responsible for taking the equipment or used material to the collection points.

Article 4: Delivery

Delivery shall be effected by providing the products directly to the customer or by delivery to the place stated by the customer on the purchase order. The delivery deadline stated at the order confirmation shall be intended for guidance purposes alone, and shall not be guaranteed in any manner whatsoever. Accordingly, any delay in delivering the products shall not entitle the customer to damages nor shall it entitle it to cancel the order. Any request to extend the delivery deadline stated by the customer shall be subject to TLECF's prior consent and to invoicing for the costs arising therefrom, on the same basis as late-payment interest to be applied to the value of the order, excluding taxes. The carriage risks shall be bear in full until delivery by the party who assumes responsibility for carriage. For export sales, transfer of risk shall be linked to Incoterms chosen. In the event that products go missing or are damaged in transit, the customer shall express all the necessary reservations on the delivery note when it receives said products. Said reservations shall also be confirmed in writing by registered letter with acknowledgement of receipt send to the carrier, within three days of the delivery. A claim for a delivery that does not comply with the order must be made immediately to TLECF and confirmed in writing within eight days of receipt of the goods. If no claim is made, TLECF shall be released from any obligation towards its customer. Except customer express refusal, TLECF may, at its option, carry out partial deliveries.

Article 5: Force majeure

No party shall not be held liable from a case of force majeure. In that respect, force majeure shall mean any unforeseeable and irresistible event. In such case, contractual obligations shall be suspended until event termination unless the delay or the definitive characters of the event justified the order resolution.

Article 6: Terms and conditions of payment

For export customers, unless otherwise stipulated, invoices for catalogue items shall be payable in cash on delivery, net and without any discount as stipulated in the order or by bank transfer, or by irrevocable, confirmed letter of credit, under the terms and conditions stipulated in the order or by documentary remittance. The delay to pay any invoice shall not exceed 45 days from the date of issuance of such invoice. Deferment of the payment date, failure to return the bill on the due date, failure to pay a single bill or invoice shall result in an event of default which shall render any monies owed to TLECF, even those that are not yet payable, immediately payable. In the event of failure to pay on the due date, the customer will be automatically subject to a penalty equivalent to the applicable legal interest rate plus 3 points, on the monies owed, without prejudice to the payability of the debt and TLECF's rights of recourse. Besides, a fixed compensation of 40 € will be borne by the customer for recovery costs. If these charges should be superior, TLECF could charge a superior compensation for the real amount of recovery costs, on justification. Customer is not allowed to offset without the prior consent of TLECF. All payment should be received from the customer legal entity which passed the order.

Article 7: Retention of title clause

TLECF shall retain title to the products being sold until the price - principal and ancillary costs - has been paid in full. In that respect, if the customer is placed subject to court-ordered administration or liquidation proceedings, TLECF reserves the right to claim the products it has sold and for which it has not received payment in the context of the insolvency proceedings.

Article 8: Warranty

The warranty given by TLECF shall apply to all part of manual or automatic equipment. Said warranty shall apply to all parts that are acknowledged to be faulty as a result of a defect in manufacturing, assembling or raw material. Transport cost for the return of products are bear by the customer. The warranty shall cover the repair or replacement of defective parts by TLECF, at its expense. The defective parts that are replaced shall be the property of TLECF. The warranty shall not apply to improper use, failure to maintain or supervise, negligence, modifications or repair using parts that are not intended for the model, nor to parts that are not manufactured by TLECF not wearing parts. Duration of this contractual warranty is as stated in commercial documentation or on company's web site, and depends on type of product; the warranty period start from the invoice issued by TLECF. TLECF shall not be committed to any other warranty than those stated in this article. No specific customer's requirement shall entail any liability on the part of TLECF. In the absence of specific written stipulations, TLECF no guarantee any result or product's performance..

Article 9: TLECF's liability. Damages

TLECF's liability shall be strictly limited to the obligations set forth above. In the event that TLECF is held liable, only material and direct damage, in the limit of amounts paid by customer, could be compensate. In no case immaterial and/or indirect damage, as loss of profit, loss of production, loss of image, will not be supported.

Article 10: Proprietary Rights

All right, title and interest in the intellectual property (including all copyrights, patents, trademarks, trade secrets..) embodied in the products, packaging and documentation, shall belong solely and exclusively to TLECF, and the customer shall have no rights whatsoever in any of the above. Nothing in these Conditions of sale may be construed as a grant of any license or any other right to use any of the Intellectual Property of TLECF for any purpose whatsoever.

Article 11: Code of conduct/ restrictive sales:

Customer undertakes to respect the Lincoln Electric Group (to which TLECF belongs) Code of Conduct available on the following link: <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MTk1MTEifENoaWxkSUQ9LTF8VHlwZT0z&t=1>

Dual Use: Customer undertakes to respect the European Trade Policy and Dual-Use Export Regulations (http://ec.europa.eu/trade/import-and-export-rules/export-from-eu/dual-use-controls/index_en.html).
Prohibited parties: Direct or indirect sales are strictly forbidden to the following countries: Iran, North Korea, Cuba, Sudan and Syria. **Restrictive measures:** (a) The Customer shall perform its obligations under the General Conditions of Sale in full compliance with all Sanctions Regime, the (re-)export and other trade controls and regulations, including the laws of the European Union and of the United States of America. The Customer shall not sell, export, re-export or transmit, directly or indirectly, any goods, [software or technology] obtained by TLECF under the General Conditions of Sale to any destination or person if such sale, export, reexport, transfer is prohibited or restricted by the Sanctions Regime, the (re-)export and other trade controls and regulations, including the laws of the European Union and of the United States of America. (b) The Customer represents and warrants that at the effective date no export and other foreign trade control or other Sanctions Regime controls hinder or prevent the Customer from performing its obligations under the General Conditions of Sale. The Customer must as soon as possible notify the TLECF of any change in these export and other foreign trade controls which may hinder or prevent the Customer from performing its obligations under the General Conditions of Sale and keep TLECF informed of subsequent developments concerning this change. (c) Any violation of this clause shall be a material breach of the General Conditions of Sale and of the contractual relationship with the TLECF. (d) The Customer shall cause these obligations to be imposed on any party to which products under the General Conditions of Sale are sold, exported, reexported, transmitted for the purposes of complying with its obligations under these General Conditions of Sale, and to obtain from such party end-user statement certificates. (e) Upon request of the TLECF, the Customer shall provide TLECF with the end user certificates in order for TLECF to perform ex post control of the end users. For the purposes of this clause, Sanctions Regime shall mean any law or regulation of any applicable jurisdiction which relates to any economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by a sanctioning authority, including a national government, the United Nations Security Council or the European Union or the United States of America (or any of its member states). **Anti-corruption:** The customer undertakes to respect the applicable laws and regulations in performing its obligations particularly regarding anti-corruption laws.

Article 12: Termination or Suspension Clause

TLECF shall be exempted from the performance of any of its obligations under or in connection with the purchase order and the General Conditions of Sale, if and to the extent that such performance is in violation of or otherwise inconsistent with (a) any legislative or regulatory provision affecting the TLECF's ability to perform or (b) any contractual obligation of TLECF or any of its affiliates having a negative effect on the TLECF's or any of its affiliates' funding agreements or ability to raise funding in the EU, the US or the UK, or the Group's ability to preserve US-based shareholders or causing the Group's entities to be barred from contracting with state or local government in the United States of America. The obligations of the purchase order and the General Conditions of Sale shall be suspended or terminated, as notified by the TLECF and to the extent required by the provisions and the obligations mentioned above under (a) and (b), notwithstanding any other provision in these General Conditions of Sale. TLECF shall provide the Customer with reasonable evidence, such as an official notice or a legal opinion, of the legal impediments occurrence or continuation upon receipt of the Customer's written request and shall notify the Customer in a timely manner after the conditions to resume performance are met in accordance with this provision.

Article 13: Disputes

Any dispute relating to the interpretation and performance hereof shall be governed by French laws. If the dispute cannot be resolved out of court, it will be referred to the Commercial Court (Tribunal de commerce) of Paris.

THE LINCOLN ELECTRIC COMPANY FRANCE

French limited company with share capital of 20 709 786 € - 25 Boulevard de la Paix, CS 30003 Cergy, 95895 Cergy Saint Christophe - Registered under number B 552 033 821 on the Trade and Companies Register of Pontoise

Reference FEBRUARY 2018 - These General Terms and Conditions of Sale (hereinafter referred to as the "General Terms and Conditions") cancel and supersede the previous general terms and conditions of sale and may, in turn, also be updated

BEING PRESENT LOCALLY MAKES US MORE AWARE GLOBALLY

125
YEARS OF EXPERIENCE


325+
GLOBAL R&D TEAM



3.0
BILLION USD REVENUE

38
SOLUTION CENTERS

11 000
EMPLOYEES WORLDWIDE

-  Global Headquarters
-  Solution Centers

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company® is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

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