



# ACCESSORIES

MORE COMFORT & SAFETY FOR WELDERS

# CATALOGUE 2019







## 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: and our customers satisfaction consisting of:

- Welding torches and expandables
- 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.oerlikon-welding.com











## PERSONAL PROTECTION EQUIPMENT

| LCD welding filter       |          |
|--------------------------|----------|
| Electronic helmets       | 8 to 18  |
| Respiratory protection   |          |
| Helmets and handshields  | 20 to 23 |
| Welding glasses          | 24 to 25 |
| Goggles / spectacles     | 26 to 29 |
| Leather clothes          | 30 to 35 |
| Safety shoes for welding | 36 to 37 |
| ◆ Gloves                 | 38 to 42 |
| Protective clothes       |          |
|                          |          |



## GENERAL ARC WELDING

| Cables and connectors  | 46 to 47 |
|------------------------|----------|
| ◆ Clamps               | 48 to 49 |
| Magnetic ground clamps | 50 to 51 |
| Hammers / brushes      | 52       |
| ◆ Tools                | 53       |
| Accessories / Markers  | 54       |



## MMA WELDING

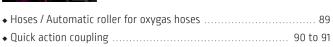
| Respiratory Electrode holders                               | 56 to 59 |
|---|----------|
| ◆ MMA kits (electrode holder with cable + clamp with cable) | 60       |
| ◆ Gouging torches   | 61       |
| ◆ Gouging electrodes  | 62       |
| ◆ Ovens / Quivers   | 63 to 66 |
| Welding accessories   |          |

# 5

## MIG/MAG WELDING

| ◆ MIG/MAG Torches                           | 82 to 83 |
|---|----------|
| • Zirconium contact tip / Maintenance boxes | 84       |
| Ceramic backings                            | 85       |
| Other accessories                           | 86       |







## LIQUIDS & SPRAYS

| • Anti-spatters  |  |
|--|--|
| ◆ Anti-corrosion /   |  |
| Sharpening of tungsten electrodes / Heat protection                              |  |
| Cracks detection   |  |
| Non destructive cracks detection   |  |
| Cooling liquid for torches / Leakage control                                     |  |
| • Stainless steels treatment   |  |
| ${\ensuremath{\bullet}}$ Cleaning, polishing and marking of stainless steels 101 |  |
|  |  |



## CUTTING & GRINDING DISKS

| Cutting and grinding disks | 104 to 106 |
|----------------------------|------------|
| Grinding accessories       | 107        |



## TIG WELDING

| ◆ TIG torches         | 75 |
|-----------------------|----|
| ◆ Tungsten electrodes | 77 |
| Other accessories     | 79 |



PERSONAL PROTECTION EQUIPMENT

# **1 PERSONAL PROTECTION EQUIPMENT**

## PROTECTION

| ◆ LCD welding filter     |          |
|--------------------------|----------|
| Electronic helmets       | 8 to 18  |
| Respiratory protection   |          |
| Helmets and handshields  | 20 to 23 |
| Welding glasses          | 24 to 25 |
| Goggles / spectacles     | 26 to 29 |
| Leather clothes          | 30 to 35 |
| Safety shoes for welding | 36 to 37 |
| ◆ Gloves                 | 38 to 42 |
| Protective clothes       |          |



## **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 imediatly 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 particles which permit to avoid burns.

### WELDING APRON

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

#### **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

Leather shoes or boots wire safety be protection for best foot protection.. Combine the welding shoes with gaiters permit to protect completely the bottom of the leg.



PERSONAL PROTECTION EQUIPMENT

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

# HELMETS

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

## **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<br>FLIP-AIR 4500 LS   |
|---------------------------------|-----------------------|--|--|-----------------------|-----------------------|--|
| To order                        | W000403823            | W000403824                             | W000403668                                   | W000403672            | W000403673            | W000403674<br>W000403675   |
| For welding process             | MMA, MIG MAG          | MMA, MIG MAG, TIG                      | Every welding process,<br>especially for TIG | Every welding process | Every welding process | MMA, MIG MAG   |
| Optical class                   | 1/1/1/2               | 1/1/1/2                                | 1/1/1/2                                      | 1/1/1/2               | 1/1/1/2               | 1/1/1/2  |
| 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   |  |
| Light Shade technology          | No                    | Yes                                    | Yes  | Yes                   | Yes                   | Yes  |
| Viewing area (mm <sup>2</sup> ) | 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<br>a planch of stickers | -  | Xmode & infotrack     | Xmode & infotrack     | Xmode & infotrack<br>Flow rates: 2 - from<br>160l/min to 200l/min<br>Flame retardant material<br>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.



(%T)

60

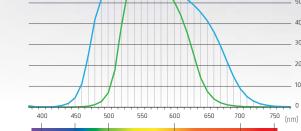


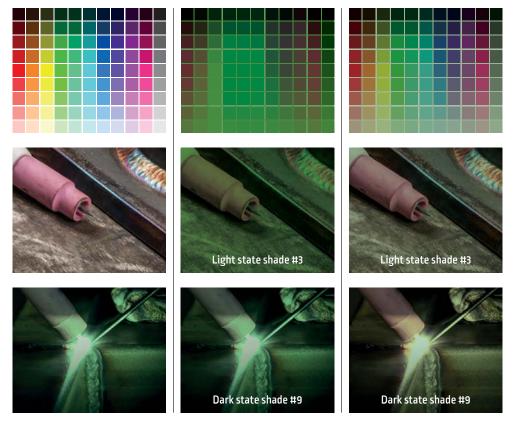
## THE NEW RANGE OF HIGH QUALITY AUTODARKENING HELMETS

## 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.

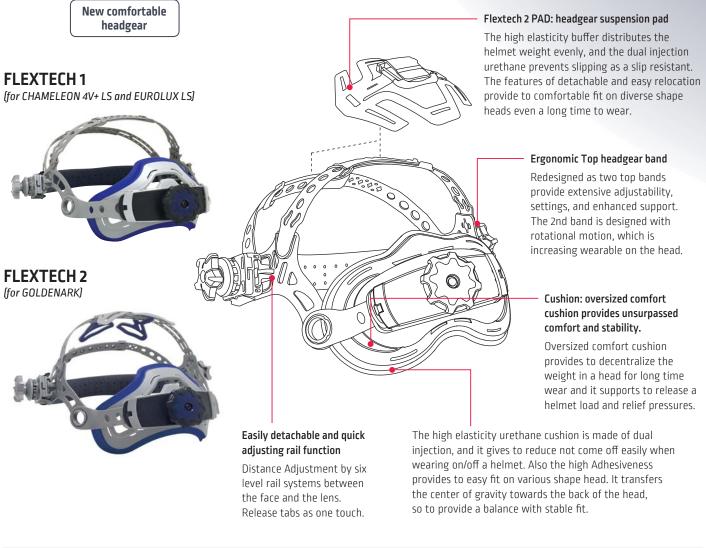
# **ELECTRONIC HELMETS**

## 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.



FLEX ONE [for EUROONE]





FLEX SPEED LS

(for EUROSPEED LS)

Removable sweatband
 Setting on the top
 Rack setting
 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.
- $\blacklozenge$  External grinding mode.
- ♦ 4 312 mm~Filter view.



WARRANTY T YEAR EuroONE

≕ m c € ±





|                                      | EUROONE   |  |
|--------------------------------------|---|--|
| Applications                         | Every welding process.;<br>Not for Laser Welding or<br>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<br>against UV and IR   |  |
| To order                             |   |  |
| Helmet                               | W000403823  |  |
| I CD cell                            | W000404067  |  |

WELDLI

#### Helmet standard **CE EN 175 Cell standard** CE EN 379

# 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 confortable shape.
- Internal grinding mode.
- Soft and confortable 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.



| -18 | WELDL |
|-----|-------|
|     |       |
|     |       |
|     |       |
|     | W     |
|     |       |
|     | 1 mil |

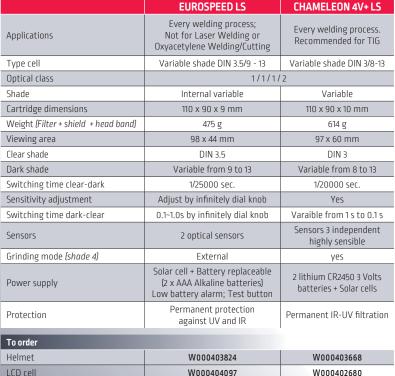
### **CHAMELEON 4V+ LS - Digital setting**

- 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.













WELDLINE





CHAMPERNY

2011-518





List of spare parts : see page 10

# ELECTRONIC HELMETS EUROLUX LS

### LCD autodarkening welding helmets

 ◆ High Tech LCD autodarkening filter. An extra-wide vision: 5820 mm<sup>2</sup>.

### 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.



٧N

|   | 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<br>setting per digital key   |  |
| Sensitivity adjustment  | Setting per digital key (10 positions)  |  |
| Modes Welding<br>Grinding<br>Cutting<br>X mode*<br>Infotrack system** | Yes shade 8 to 13 per digital key<br>Yes shade 3 ( <i>per external button</i> )<br>Yes shade 5 to 9 per digital key<br>Yes<br>Yes |  |
| Sensors   | 4 independent optical sensors<br>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<br>Use<br>Storage                                   | From -5 °C to +55 °C<br>From -30 °C to +70 °C   |  |
| Weight (Filter + shield + head band)                                  | 542 g   |  |
| Standard LCD filter<br>Helmet   | CE EN 379<br>CE EN 175  |  |
| To order  |   |  |

| 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 10

# Grinding mode with external button

### 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).

- WARRANTY **2** YEARS
- 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.



Helmet standard

CE EN 175 Cell standard CE EN 379



## 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.



## 150iw - InfoTrack

### (auto darkening welding lens)





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.



FA

### Timer function

Multi-language support

A time-management function with alarms.

Help menu displays in Korean and English as

default setting (up to 6 languages supportable)



### Alarm function

4 optical sensors

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

WELDLINE



### Help menu

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









13

## **ELECTRONIC HELMETS**

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



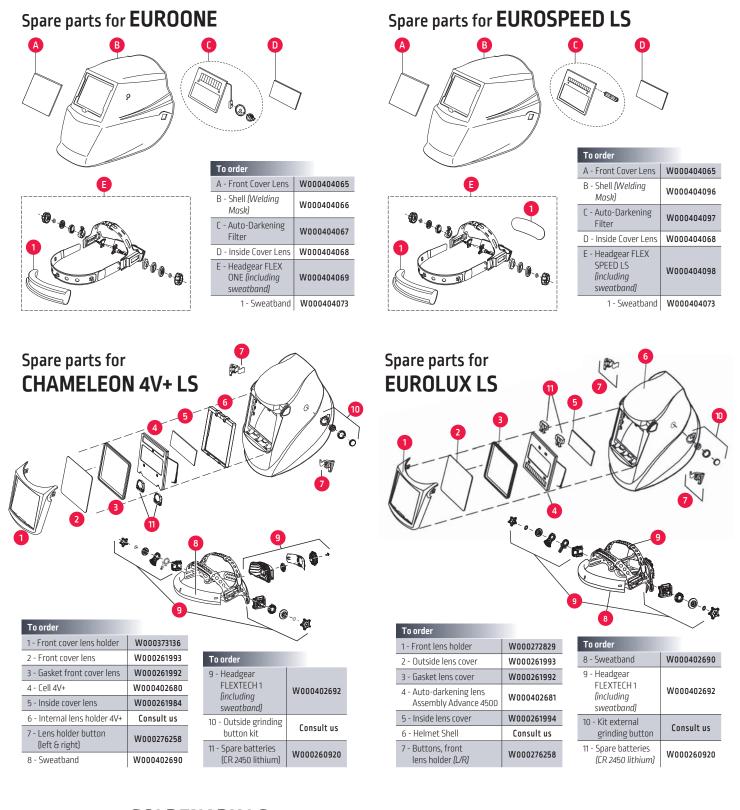


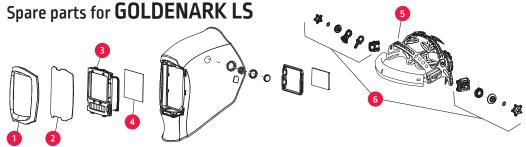


|   | GOLDENARK LS   |
|---|--|
| Optical class   | 1/1/1/2  |
| Viewing area  | 112 x 78 mm  |
| Switching time clear to dark  | 0.00005 sec  |
| Switching time dark to clear  | Between 0.1 and 1.0 sec  |
| Clear shade   | DIN 3  |
| Available shades<br>All shades provide continuous<br>UV and IR protection | - Welding: DIN 8-13<br>- Cutting: DIN 5-8<br>- Grinding: DIN 3<br>- 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                                       | W000402683   |

Electronic welding helmet GOLDENARK
List of spare parts : see page 10

# **ELECTRONIC HELMETS**





| 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<br>(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.



DURE



## 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<sup>™</sup>

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 **CLEANSPACE2™** 



**Contact us** for more information.



### 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).



Helmet standard

### EN 12941 TH2

# 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.
- $\bullet$  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-lon 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.

### 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].

## 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



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.



|  | ZEPHYR LS<br>Advance 4500   | FLIP'AIR LS<br>4500 i            |  |
|--|---|----------------------------------|--|
| Optical class  | 1/1/1/2   |                                  |  |
| Switching time light to dark   | 0.05  | 5 ms                             |  |
| Switching time dark to light   |   | rom 0.1 s to 1 s<br>digital key) |  |
| Delay setting  | 10 positions (setti   | ng per digital key)              |  |
| Mode Welding<br>Grinding<br>Cutting<br>X mode*<br>Infotrack system** | Yes shade 8 to 13 per digital key<br>Yes shade 4 (per external button) -<br>For FLIP'AIR flip-up LCD for grinding<br>Yes shade 5 to 9 per digital key<br>Yes<br>Yes |                                  |  |
| Sensors  | 4 independent optical sensors -<br>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) + 1 760 g (air flow system)  |                                  |  |
| Standard   | LCD filter: CE EN 379   | 9 - 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)

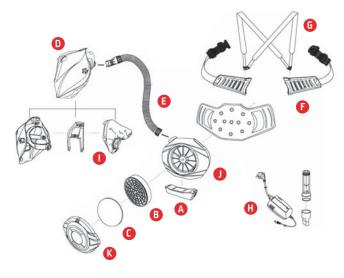
#### To order

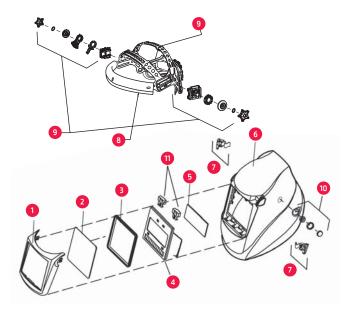
| Package (helmet + airflow<br>system + LCD filter) | W000403674 | W000403675 |
|---|------------|------------|
| LCD filter  | W000402681 | W000402682 |
| l ist of snare narts · see nage 14                |            |            |

List of spare parts : see page 14

## **ELECTRONIC HELMETS**

## Spare parts for **ZEPHYR LS / FLIP'AIR LS**



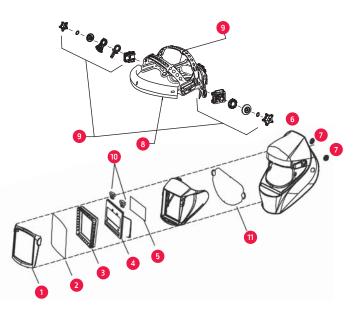


### **ZEPHYR LS 4500**

| To order                                      |            |
|---|------------|
| 1 - Front Lens Holder                         | W000272829 |
| 2 - Outside Lens Cover                        | W000261993 |
| 3 - Gasket, Lens Assembly                     | W000261992 |
| 4 - Auto-darkening Lens Assembly Advance 4500 | W000402681 |
| 5 - Inside Lens Cover                         | W000261994 |
| 6 - Helmet Shell                              | On request |
| 7 - Buttons, Front Lens Holder (L/R)          | W000276258 |
| 8 - Fabric Sweatband                          | W000402690 |
| 9 - Headgear FLEXTECH 1 (including sweatband) | W000402692 |
| 10 - Kit external grinding button             | On request |
| 11 - Spare batteries (CR 2450 lithium)        | W000260920 |
|   |            |

### ZEPHYR LS air flow system

| To order                          |            |
|-----------------------------------|------------|
| A 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 |
| Green protection ZEPHYR           | W000272540 |
| Green protection FLIP'AIR         | W000382676 |
| J Motor                           | W000377929 |
| K Filter cover                    | W000378987 |



## FLIP'AIR LS

| To order                                      |            |
|---|------------|
| 1 - Front Lens Holder                         | W000272829 |
| 2 - Outside Lens Cover                        | W000261993 |
| 3 - Gasket, Lens Assembly                     | W000261992 |
| 4 - Auto-darkening Lens Assembly Advance 4500 | W000402681 |
| 5 - Inside Lens Cover                         | W000261994 |
| 6 - Helmet Shell                              | On request |
| 7 - Buttons, Front Lens Holder (L/R)          | W000276258 |
| 8 - Fabric Sweatband                          | W000402690 |
| 9 - Headgear FLEXTECH 1 (including sweatband) | W000402692 |
| 10 - Kit external grinding button             | On request |
| 11 - Spare batteries (CR 2450 lithium)        | W000260920 |

# 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<sup>™</sup> Endurance Pack).

### **RELIABLE PROTECTION**

• Light silicone mask, ensures a good face seal for long periods.

CE

- ◆ 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

| 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



- ◆ The soft silicone mask seals gently and easily to your face - available in three sizes, to maximise fit.
- ♦ The AirSensit<sup>™</sup> 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   |

## 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

## 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



### **EARPLUG** EN 352 ◆ Box of 500 pieces. • Without strings. To order W000010989

◆ SNR 34 DB.

#### **Technical description**

• Non-irritating and hypoallergenic foam coating.



## Hand FG (sliding window)

◆ Reinforced fibreglass.

Sliding window 110 x 90 mm

• Delivered without glass.

- ◆ Weight: 424 gr.
- To order W000011123









## **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 W000011113

Window 98 x 75 mm To order W000011114

## Flip-up WTP helmet

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

Flip-up window 105 x 50 mm

To order W000372270

Flip-up window 110 x 90 mm

To order W000374762



Helmet standard **EN 175** 

2011-481



## **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.

To order

Window 105 x 50 mm

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
- ♦ Weight:

Flip-up window 105 x 50 mm

- glass.
- 574 gr.

W000372271 To order

## 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.

Flip-up window 105 x 50 mm

To order W000010804

# Weldlux



• Enveloping profile providing excellent throat and neck protection.

2011-477

- Fibreglass reinforced polyester.
- ◆ Heat (170 °C) and humidity resistant.
- ◆ Headgear with rack, rugged and very comfortable.
- Delivered with headgear and glass.
- ◆ Very light weight: 390 gr.

Extra wide window 114 x 133 mm To order W000335131

# PERSONAL PROTECTION EQUIPMENT

# PASSIVE LEATHER HELMETS

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

054-53



## Flip-up leather helmet

- Ideal to work in extremely restricted areas. Adjustable headgear.
- Application: welding pipe
- 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).
    - Flip-up window
      - 105 x 50 mm

To order W000011135

## SPARE PARTS

Window 105 x 50 mm

W000011115

To order

## Adjustable type "A" headgear



Leather protection for the neck

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

W000335139 To order

**Comfort sweat band** 

To order

(2 pieces pack)

Z00820115

Foam band For WELDLUX helmet.

• Fabric band covered with foam.

 Velcro closing. ♦ Fire-retardant.

## Sweat band

Foam band.

To order W000260486

(10 pieces pack)



| Choose t       | WELDGLASSClear glasses<br>EN 166<br>Coloured glasses<br>EN 169Choose the lens shade adapted<br>to your working conditions.EN 169 |                     |                     |        |        |         | l <b>66</b><br>glasses |                   |
|----------------|--|---------------------|---------------------|--------|--------|---------|------------------------|-------------------|
| Current<br>(A) | Coated electrodes  | MIG Heavy<br>metals | MIG Light<br>alloys | MAG    | TIG    | Gouging | PLASMA<br>Cutting      | PLASMA<br>Welding |
| 1              |  |                     |                     |        |        |         |                        |                   |
| 2.5            |  |                     |                     |        | _      |         |                        | 6                 |
| 5              |  |                     |                     |        | 8      |         |                        | 7                 |
| 10             |  |                     |                     |        |        |         |                        | 8                 |
| 20             | 8  |                     |                     |        | 9      |         |                        | 9                 |
| 30             | 9  |                     |                     |        | 10     |         |                        | 10                |
| 40             |  |                     |                     |        | 10     |         |                        | - 11 -            |
| 60             | 10   |                     |                     | 9      | - 11 - |         |                        |                   |
| 80             | 10   |                     |                     | 5      |        |         | 11                     | 12                |
| 100            |  | 10                  |                     | 10     | 12     |         |                        | 12                |
| 150            | 11   | 11                  | 11                  | - 11 - |        | 10      |                        |                   |
| 175            |  |                     |                     |        | 13     | 10      |                        | 13                |
| 200            |  | _                   | 12                  | 12     | 15     | 11      | 12                     |                   |
| 225            | 12   | 12                  |                     |        |        |         |                        |                   |
| 250            |  |                     |                     | 13     |        | 12      |                        | _                 |
| 300            |  |                     | 13                  |        |        |         |                        |                   |
| 350            |  | _                   |                     |        |        | 13      | 13                     | 14                |
| 400            | 13   | 13                  |                     | 14     | 14     | 14      |                        |                   |
| 450            | .5   |                     | 14                  |        |        |         |                        |                   |
| 500            |  |                     |                     |        |        |         |                        |                   |
|                | 14   | 14                  | 15                  | 15     |        | 15      |                        | 15                |

WELDING GLASSES







## WELDING GLASSES WELDGLASS

## Filtering coloured glasses

| 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 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 |

## SILVER protane® glasses

| EN 169 - EN 16 | ľ |
|----------------|---|
|----------------|---|

| Skin pack | Dimensions<br>105 x 50 mm | Shade | Dimensions<br>133 x 114 mm | Skin pack |
|-----------|---------------------------|-------|----------------------------|-----------|
| 5 pieces  | W000335025                | 9     | W000335063                 | 5 pieces  |
| 5 pieces  | W000335026                | 10    | W000335064                 | 5 pieces  |
| 5 pieces  | W000335027                | 11    | W000335065                 | 5 pieces  |
| 5 pieces  | W000335028                | 12    | W000335066                 | 5 pieces  |
| 5 pieces  | W000335029                | 13    | W000335067                 | 5 pieces  |

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,

"Test SILVER PROTANE® and weld cool".

► more comfort and better working conditions.

## Protection glass or plate CR-39®

EN 166

| Dimensions   | Clear glass (EN 166) |                  | Protection plate CR-39® (EN 166) |                  |
|--------------|----------------------|------------------|----------------------------------|------------------|
| Dimensions   | 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       |

| DIMENSIONS 98 x 75 mm |            |       |            |            |  |
|-----------------------|------------|-------|------------|------------|--|
| Skin pack             |            | Shade |            | Box        |  |
| 5 pieces              | W000335089 | 5     | W000010939 | 100 pieces |  |
| 5 pieces              | W000335090 | б     | 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 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    | -          | -          |

## Circular glasses diameter 50 mm

| Shade | Skin pack - 10 pieces | Box - 100 pieces |
|-------|-----------------------|------------------|
| 5     | W000335085            | W000010925       |
| б     | W000335086            | W000010937       |
| 7     | W000335087            | W000010949       |
| 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).

EN 169 - EN 166

# GOGGLES

## **Choice criteria**

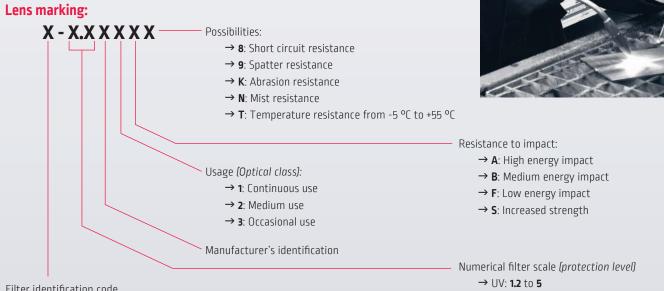
Goggles are mainly used to protect the eyes against the light produced by flame welding or cutting or against mechanical particles (grinding for example).

Our products are classified in 3 categories:

- Welding range
- Protection range
- Grinding masks

#### Marking of the frame:

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



Verify that the product is conform with the EN standards (CE marking confirms conformity)

• EN 175 for personal eye-protection during

Main EN Standards are:

◆ EN 170 for UV filters

◆ EN 171 for IR filters

welding

◆ EN 166 for basic conditions

◆ EN 172 for sunglasses filters

◆ EN 169 for welding filters

#### Filter identification code

- $\rightarrow$  UV: 2 or 3
- → IR: 4
- → Sun: **5** or **6**
- $\rightarrow$  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
- $\rightarrow$  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)

| Round          |
|----------------|
| replacement    |
| lenses for the |
| PILOT range    |
| Round lonsos   |

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.

Shade 5

To order



EN 166 - EN 169

## **PILOT1**

- 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.

Shade 5

W000011047 To order

Shade 6

W000011048 To order

## **PILOT EVEREST**

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





## EN 166 - EN 169 **PILOT 2 METAL** • Double cup metal frame with nose bridge adjustment. Adjustable elastic headband. ♦ Weight: 80 g.



## **PILOT 2 PLASTIC**

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

#### Shade 5

W000011052 To order

## **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.



W000011049 To order

Clear

EN 175

## **GOGGLES / SPECTACLES**

## Welding range

## **CLASSIC OVER WELDING**

- $\blacklozenge$  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.

## **CLASSIC WELDING**

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

Shade 5

To order W000011055

Box of 20 tainted lenses (shade 5)

To order W000376663



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

## **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.



## **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.



## **CLASSIC VISIT CLEAR**

Anti-scratch surface.

EN 166

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

Box of 20 transparent lenses

To order W000376662

# GOGGLES ( SPECTACLES

## Protection range

## **FASHION VISIT**

- ◆ Impact resistant.
- $\blacklozenge$  Polycarbonate single lens.
- Sports and ergonomic design.

Clear

To order

♦ Weight: 22 g.





## **Grinding masks**



## FIRST

• Anti-scratch polycarbonate lens.

Direct ventilation.

- ♦ Adjustable elastic headband.
- ♦ Weight: 75 g.





## STAR

2014-

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





## **OVER**



- ◆ 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

## Reminder:

EEC directive 89/686 is mandatory with the compliance to **EN 13588** and **EN 11611** standards for welder's protective equipment.

About Weldline clothes:

- The best quality leather only is selected by our experts.
- No dangerous substances for skin.

# Gaiters

Gaiters are used to protect the bottom of the trousers and shoes from sparks and heat generated during welding or grinding operations.

### **Technical description**

- Natural split leather tanned with chromium salts (mineral substances).
- 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.

### **Protective limits**

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

### Maintenance and storage

- Recommended storage: a safe dry well ventilated area that is not exposed to direct light.
- $\bullet$  To clean, use soap and water with 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.





EN 13588 - EN 11611

### Standards

- Gaiters are designed and manufactured to meet the basic health and safety requirements prescribed by EEC directive 89/686 of Decree Law 475/92 and to comply with the requirements prescribed by EN 13588 Standards, related to general requirements, and EN 11611 standards related to protective equipment for welders and similar activities.
- When worn correctly, the gaiters do not impede normal welding activities, quality and performance are guaranteed and maintained according to the instructions supplied. Protection category II (in accordance with Decree Law 475/92).



# LEATHER CLOTHES Short and long sleeves

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



### **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.



Length: +/- 650 mm **To order** W000010593

### Standards

- These welder sleeves constitute an EAR category 2.
- These sleeves were designed to comply with the following European standards:
  - EN 13688: Protective clothing General requirements,
  - **EN 11611:** Protective clothing used during welding and related processes.
    - > Mechanical tests:
    - thickness: conform,
    - dimensional variation: conform,
    - breaking strength: conform,
    - tensile strength: conform.
    - > Chemical tests:
    - fat content rate: conform.
    - > Thermal tests:
      - inflammability: conform,
      - withdrawal to heat,
- behavioural contact with small spatter: conform.
   These sleeves have been examined by a competent CE
  - organisation.
- The CE marking confirms they meet the essential requirements of the European Directive 89/686 related to individual protection equipment.



# 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).
- ullet 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 warn 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 enthymeme) tumble driers or sharp and abrasive cleaning products.
- Maximum 30 wash cycles.

#### Standards

- This welding apron is an EAR category 2.
- This apron was designed to comply with the following European standards:
  - EN 13688: Protective clothing General requirements,
  - EN 11611: Protective clothing used during welding
    - and related processes.

#### > Mechanical tests:

- thickness: conform,
- dimensional variation: conform,
- breaking strength: conform,
- tensile strength: conform.
- > Chemical tests:
  - fat content rate: conform.
- > Thermal tests:
  - inflammability: conform,
  - withdrawal to heat,
  - behavioural contact with small spatter: conform.
- These aprons have been examined by a competent CE organisation.
- The CE marking confirms they meet the essential requirements of the European Directive 89/686 related to individual protection equipment.





- 1100 x 800 mm
- ◆ Length: 1 100 mm.
- ◆ Width: 800 mm.

Leather straps





# LEATHER CLOTHES Split leather apron

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



◆ Length: 900 mm.

Width: 600 mm.
 Leather straps,

closing by clips
To order W000010586

Cotton straps

Cotton straps vegetable tanning: without chromium salts

W000010585

To order W000010589

### **Technical description**

- Protective welding apron in premium grade split leather tanned with chromium salts (*mineral substances*), except W000010589.
- 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 warn 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.

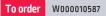
### Maintenance and storage

- Recommended storage: a safe dry well ventilated area that is not exposed to direct light.
- $\bullet$  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.

### Standards

- This welding apron is an EAR category 2.
- This apron was designed to comply with the following European standards:
  - EN 13688: Protective clothing General requirements,

- - 1100 x 800 mm
  - Length: 1100 mm.
  - ♦ Width: 900 mm.
  - Leather straps, closing by clips





• EN 11611: Protective clothing used during welding and related processes.

#### > Mechanical tests:

- thickness: conform,
- dimensional variation: conform,
- breaking strength: conform,
- tensile strength: conform.
- > Chemical tests:
  - fat content rate: conform.
- > Thermal tests:
  - inflammability: conform,
  - withdrawal to heat,
  - behavioural contact with small spatter: conform.
- ${\ensuremath{\bullet}}$  These aprons have been examined by a competent CE organisation.
- The CE marking confirms they meet the essential requirements of the European Directive 89/686 related to individual protection equipment.



# FEATHER CLOTHES Split leather welding jacket

These jackets are designed to protect the upper body of the user from fine welding spatters and grinding particles.



### **Technical description**

- The complete jackets are manufactured in premium grade split leather tanned with chromium salts (mineral substances).
- 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: XL and XXL (other sizes on demand).

#### **Protective limits**

- The jackets are not heat resistant and should not be exposed either to convective or radiated heat sources.
- The jackets are not meant for any other type of protection than that usage describe 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 with 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.

#### Standards

- These welding jackets are an EAR category 2.
- These jackets are designed to comply with the following European standards:
  - EN 13688: Protective clothing General requirements,
  - EN 11611: Protective clothing used during welding and related processes.

#### > Mechanical tests:

- thickness: conform,
- dimensional variation: conform,
- breaking strength: conform,
- tensile strength: conform.
- > Chemical tests:
  - fat content rate: conform.
- > Thermal tests:
  - inflammability: conform,
  - withdrawal to heat,
- behavioural contact with small spatter: conform.
- $\blacklozenge$  These jackets have been examined by a competent CE organisation.
- The CE marking confirms they meet the essential requirements of the European Directive 89/686 related to individual protection equipment.

## LEATHER CLOTHES Welding grain leather jacket

### Half-back flame-retardant cotton

These jackets are designed to protect the upper body of the user from fine welding spatters and grinding particles. The design gives a light, breathable, flexible and comfortable jacket.

### Technical description

- The complete jacket is manufactured in premium grade grain leather tanned with chromium salts (mineral substances).
- ◆ 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: XL and XXL (other sizes on demand).

### **Protective limits**

- The jackets are not heat resistant and should not be exposed either to convective or radiated heat sources.
- The jackets 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.
- $\bullet$  To clean use soap and water with 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.

### Standards

- These welding jackets are an EAR category 2.
- These jackets are designed to comply with the following European standards:
  - EN 13688: Protective clothing General requirements,
  - EN 11611: Protective clothing used during welding and related processes.

### > Mechanical tests:

- thickness: conform,
- dimensional variation: conform,
- breaking strength: conform,
- tensile strength: conform.
- > Chemical tests:
  - fat content rate: conform.
- > Thermal tests:
  - inflammability: conform,
  - withdrawal to heat,
  - behavioural contact with small spatter: conform.
- $\blacklozenge$  These Jackets have been examined by a competent CE organisation.
- The CE marking confirms they meet the essential requirements of the European Directive 89/686 related to individual protection equipment.





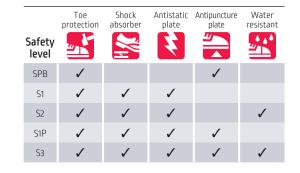
## SAFETY SHOES FOR WELDING

### WELDLINE safety shoes

- Our safety shoes always include a toe protection (in steel or in other material with a resitance > 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.

**SUPER FORJA** 

 $\blacklozenge$  The standard EN ISO 20345 includes several levels.



### The criteria of choice are:

- 1 Levels of protection as indicated above
- 2 High or low shoes
- 3 Upper in:
  - full-grain leather (water resistant),
  - ◆ split leather,
  - fabric (non water resistant),
  - pigmented split leather.
- 4 Outsole:
- PU+PU (dual density polyurethane lightweight),
   PU+TPU (lightness and flexibility + more strength)
- of the thermoplastic polyurethane), • PU + nitrile rubber for extreme temperatures
- (up to 300 °C).
- 5 Antipuncture midsole: ◆ in steel,
  - non metallic for more comfort.
- 6 Toe protection:
  - ◆ steel,
  - aluminium (30% lighter),
  - fiberplast (extra lightweight).
- Safety level Sa

| Safety level | Toe protection | Antipuncture plate | Outsole | Upper              |
|--------------|----------------|--------------------|---------|--------------------|
| S3           | Steel          | Steel              | 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 | To order    |
|------|-------------|
| 36   | W000376225* |
| 37   | W000376226* |
| 38   | W000376229* |
| 39   | W000376230* |
| 40   | W000376231  |
| 41   | W000376232  |
| 42   | W000376233  |
| 43   | W000376234  |
| 44   | W000376235  |
| 45   | W000376236  |
| 46   | W000376237* |
| 47   | W000376238* |
| 48   | W000376239* |
|      | *On demand  |

on aemana

## SUPER FORJA METAL FREE



## SAFETY SHOES FOR WELDING ULYSSE TOTALE



| afety level | Toe protection | Antipuncture plate | Outsole           | Upper              |
|-------------|----------------|--------------------|-------------------|--------------------|
| 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.

◆ Anti-heat sole.

 Very breathable lining, resistant to wear and tear.

| Size | To order    |
|------|-------------|
| 36   | W000376253* |
| 37   | W000376254* |
| 38   | W000376255* |
| 39   | W000376256* |
| 40   | W000376257  |
| 41   | W000376258  |
| 42   | W000376259  |
| 43   | W000376260  |
| 44   | W000376261  |
| 45   | W000376262  |
| 46   | W000376263* |
| 47   | W000376264* |
| 48   | W000376265* |
|      | *On domana  |

\*On demand

## **FUSION TOTALE**



| Safety level | Toe protection             | Antipuncture plate     | Outsole         |          | Upper             |
|--------------|----------------------------|------------------------|-----------------|----------|-------------------|
| S3           | Steel                      | Non metallic           | PU/Nitrile rubb | oer   Fi | ull-grain leather |
|              |                            | xterior flap provides  |                 | Size     | To order          |
|              | protection again<br>metal. | st small splashes of   | molten          | 36       | W000376240*       |
|              |                            |                        |                 | 37       | W000376241*       |
|              |                            | grain leather, extra t | nick,           | 38       | W000376242*       |
|              | waterproof.                |                        |                 | 20       | W000276242*       |

- 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.

| W000376240*<br>W000376241* |
|----------------------------|
|                            |
|                            |
| W000376242*                |
| W000376243*                |
| W000376244                 |
| W000376245                 |
| W000376246                 |
| W000376247                 |
| W000376248                 |
| W000376249                 |
| W000376250*                |
| W000376251*                |
| W000376252*                |
| *On demand                 |
|                            |

## GLOVES

### **Choice criteria**

### Split leather or grain leather?

- ◆ Split leather = heat resistant, comfort & protection for MMA & MIG/MAG applications
- Grain leather = flexibility, dexterity for TIG applications

### **General protection**



LONG BASIC



LONG BASIC +





**STOPCALOR** 



### **STOPCALOR +**





TIG





UNIVERSEL

**STOPCALOR ALU** 

### European standard for gloves and welding gloves

### EN 420

### **General requirements for gloves:** safety, comfort, dexterity

- ◆ All the gloves meet European standards and carry the CE marking that indicates conformity to these standards.
- The pictograms indicate that an approved laboratory has tested the gloves, ensuring they are conform to CE.
- The welding gloves have to be conform to two specific standards added to the EN 420: the EN 388 and the EN 407.

For each criteria, the higher the figure is, the more efficient the glove is deemed. "X" indicates that a particular glove has not been tested within the criteria.



### Mechanical hazards



A: Abrasion (0-4) B: Blade cut (0-5) C: Tear (0-4) D: Puncture (0-4)

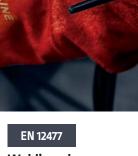


### Heat resistance



A: Flammability (0-4) B: Contact heat (0-4)

- C: Convective heat (0-4)
- D: Radiant heat (0-4)
- E: Small splashes of molten metal (0-4)
- F: Large splashes of molten metal (0-4)



### Welding gloves



A: Abrasion (0-4) B: Blade cut (0-5) C: Tear [0-4] D: Puncture (0-4)



A: Flammability (0-4) B: Contact heat (0-4) C: Convective heat (0-4) E: Vertical electric resistance test (0-4)

# PROTECTION GLOVES

The LONG BASIC welding gloves are designed to protect the hands during normal welding applications in MMA/MIG/MAG processes and infrequent handling of component parts not exceeding 100 °C.

### **Technical description**

- American cut with webbed thumb and return on index.
- Palm and thumb in natural split leather to protect from the heat.
- Reinforcement in split leather of the seams on top of the thumb and the base of the finger backs.
- Cuff in natural split leather, length 150 mm (+/- 5 mm) and a thickness of 1.3 mm.
- Overall length of the glove: approximately 350 mm (size 10) +/- 5 mm.
- Seams in para-aramide wire (flame retardant and projectile resistant).
- Finished in red edge trim.
- ◆ Available size: 10.

### Standards and levels of protection

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



### Limits of protection

WELDLINE

- ◆ Do not use to handle objects over 100 °C.
- $\blacklozenge$  Do not use to handle any chemicals.

### EN 420 - EN 388 - EN 407

014-

Picture not contractual

W000380517

To order

To order

W000382262

EN 420 - EN 388 - EN 407

## LONG BASIC +

The LONG BASIC + welding gloves are designed to protect the hands during normal welding applications in MMA/MIG/MAG processes and infrequent handling of component parts not exceeding 100 °C.

### **Technical description**

- American cut with webbed thumb and return on index.
- Palm and thumb in natural split leather.
- Reinforcement of the blue split leather glove for added protection of the palm thumb and index finger.
- Reinforcement in split leather of the seams on top of the thumb and on the base of the finger backs.
- Cuff in natural split leather, length 150 mm (+/- 5 mm) and a thickness of 1.3 mm.
- ◆ Overall length of the glove: approximately 350 mm (*size 10*) +/- 5 mm.
- Seams in para-aramide wire (flame retardant and projectile resistant).
- Available size: 10.

### Standards and levels of protection

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



### Limits of protection

WELDLINE

- ◆ Do not use to handle objects over 100 °C.
- Do not use to handle any chemicals.

# PROTECTION GLOVES

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

### **Technical description**

- American cut with webbed thumb and return on index.
- Palm index finger and inner of the thumb in natural grain leather for extra sensitivity.
- Reinforcement in grain leather of the seams on top of the thumb and on the base of the finger backs.
- Glove rear and cuff are made of natural split leather, length 150 mm *(+/- 5 mm)* and a thickness of 1.3 mm.
- Artery protection in grain leather.
- Overall length of the glove: approximately 350 mm (size 10) +/- 5 mm.
- Seams in para-aramide wire (flame retardant and projectile resistant).
- Finished in red edge trim.
- ◆ Available size: 10.

### Standards and levels of protection

- These gloves have been examined by a competent CE organisation.
- 2122 41XX2X EN 388 EN 407
- Safety comfort and dexterity level = 5.

## WELDING GLOXES

## UNIVERSEL

The STOPCALOR welding gloves are designed for a high level of protection of the hands during normal welding applications in MMA/MIG/MAG processes and handling of component parts not exceeding 100 °C.

### **Technical description**

- American cut with webbed thumb.
- ◆ In split leather red colour, the glove is flame retardant treated and 1.3 mm thick (+/- 0.2 mm).
- Seams in para-aramide wire (flame retardant and projectile resistant) and reinforced by split leather.
- Back being one complete piece.
- Cuff of 145 mm (+/- 5 mm) with doubled fabric.
- Overall length of the glove: approximately 350 mm (size 10) (+/- 5 mm).
- ◆ Available size: 10.

### Standards and levels of protection

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



To order

### Limits of protection

- ◆ Do not use to handle objects over 100 °C.
- Do not use to handle any chemicals.

5/TIG y. WELDLINE WELDLINE Torder W00380518

### Limits of protection

- $\bullet$  Do not use to handle objects over 50 °C.
- Do not use to handle any chemicals.



## PERSONAL PROTECTION EQUIPMENT

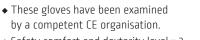
## WELDING GLOXES STOPCALOR +

The STOPCALOR + welding gloves are designed for a high level of protection of the hands during normal welding applications in MMA/MIG/MAG processes and handling of component parts not exceeding 100 °C. The natural grain leather palm gives extra sensitivity.

### **Technical description**

- American cut with webbed thumb.
- Glove back and cuff in blue colour split leather 1.2 mm thick (+/- 0.2 mm) to abration resistance.
- Palm in natural grain leather for extra flexibility.
- Seams in cotton wire.
- Back being one complete piece.
- Cuff of 145 mm (+/- 5 mm) with doubled fabric.
- Overall length of the glove: approximately 350 mm (size 10) +/- 5 mm.
- ◆ Available size: 10.

### Standards and levels of protection



Safety comfort and dexterity level = 3.



### Limits of protection

- ◆ Do not use to handle objects over 100 °C.
- ◆ Do not use to handle any chemicals.

and the

### EN 420 - EN 388 - EN 407 - EN 12477-A

W000382261

To order

EN 420 - EN 388 - EN 407 - EN 12477-A



W000010420

To order

### Limits of protection

- ◆ Do not use to handle objects over 100 °C.
- Do not use to handle any chemicals.

## **STOPCALOR ALU**

The STOPCALOR ALU welding gloves are designed for a high level of protection of the hands during heavy welding applications in MIG/MAG processes and handling of component parts not exceeding 100 °C.

### **Technical description**

- American cut with webbed thumb.
- Palm in red split leather flame retardant treated and double stitched in cotton tanned with chorium salts (*mineral substances*).
- ${\ensuremath{\bullet}}$  Inside cuff in natural split leather and double stitched in cotton.
- Outside cuff and back of hand in one single piece of Kevlar fabric with one scraped face and one aluminised face. Doubled stitched with cotton reinforced with aluminised fabric.
- Seams in para-aramide wire (flame retardant and projectile resistant) and reinforced by split leather.
- Cuff of 145 mm (+/- 5 mm) with doubled fabric.
- Overall length of the glove: approximately 355 mm (size 10) (+/- 5 mm).
- ♦ Finished in red edge trim.
- Available size: 10.

### Standards and levels of protection

- These gloves have been examined by a competent CE organisation.
- Safety comfort and dexterity level = 3.



Prot contractual

## WELDING GLOVES

Size 9

Size 10

To order

To order

W000380519

W000380520

## TIG

### The favorite gloves of TIG welders.

The TIG welding gloves are designed to give a high level of dexterity and flexibility for normal welding applications in TIG/Flame processes.

### **Technical description**

- ◆ Lamb skin glove.
- American cut with webbed thumb and return on index finger.
- Complete hand in natural grain leather to give more control and more movement while working.
- ◆ Cuff in natural cow split leather Cuff 145 mm (+/- 5 mm).
- Seams in para-aramide wire (flame retardant and projectile resistant) and reinforced by split leather.
- Overall length of the glove: approximately 360 mm (size 10) (+/- 5 mm).
- ◆ Very confortable and light weight !
- Excellent movement to get precise welds made with a TIG torch.
- ◆ Available size: 9 and 10.

#### Standards and levels of protection

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

## ROTECTIVE 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.

2111

EN 388

412X4X

Safety comfort and dexterity level = 5.

#### Limits of protection

• For use in a dry environment against mechanical risks.

EN 532

To order

### 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.



ELDUNE







## PROTECTIVE CLOTHES WELDCOT 2

Comfort, lightness and high level of safety. Last technology for heat protection combining lightweight, high functionality and design.



2011-461

| Size | 1 - Trousers | 2 - Jacket | 3 - Overall | 4 - Coat   | 5 - Hood   |
|------|--------------|------------|-------------|------------|------------|
| S    | W000372262   | W000372268 | W000372248  | W000372242 | W000372256 |
| М    | W000372261   | W000372267 | W000372249  | W000372243 | W000372255 |
| L    | W000372260   | W000372266 | W000372253  | W000372244 | W000372254 |
| XL   | W000372259   | W000372265 | W000372252  | W000372245 | -          |
| XXL  | W000372258   | W000372264 | W000372251  | W000372246 | -          |
| XXXL | W000372257   | W000372263 | W000372250  | W000372247 | -          |

### Flame retardant clothes

Composition: 60% Modacrylic, 38% coton, 2% antistatic fiber. Fabric Weight: 250 g/m2

#### Conformity to standards:

- EN ISO 11612: 2008 protective clothing for workers exposed to heat and flames (not including welders and firefighters) with performances (A1-B1-C1)
- ◆ IEC 61482-2: 2009 Class 1 Protective clothing against the thermal hazards of an electric arc
- ◆ EN ISO 11611: 2007 Class 1 A1 protective clothing for use in welding and allied processes
- ◆ EN 1149-5: 2008 protective clothing Electrostatic properties.



Notified organisation - Control of production

BTTG - Notified Body - Nº 0339





Picture not contractua

ret

-149\_

Important: choose your size with the hereunder table

|        |    |         | <u> </u> |         |
|--------|----|---------|----------|---------|
| EU siz | e  | A       | B        | C       |
| S      | 46 | 170-176 | 88-92    | 76-80   |
| М      | 48 | 176-182 | 92-96    | 80-84   |
| Μ      | 50 | 176-182 | 96-100   | 84-88   |
| L      | 52 | 176-182 | 100-104  | 88-92   |
| L      | 54 | 182-188 | 104-108  | 92-96   |
| XL     | 56 | 182-188 | 108-112  | 96-100  |
| XL     | 58 | 182-188 | 112-116  | 100-104 |
| XXL    | 60 | 188-194 | 116-120  | 104-108 |
| XXL    | 62 | 188-194 | 120-124  | 108-112 |
| XXXL   | 64 | 188-194 | 124-128  | 112-116 |



### Offering our customers MORE tools, accessories and personal protection

With its strong brand notoriety, **WELDLINE** is the unique and transversal brand for professional welding accessories and protection. Due to its continuous research for the best products, **WELDLINE** is able to offer even MORE to customers: high quality at the right price and compliance with the most rigorous European standards.

www.weldline.eu



## 2 GENERAL ARC WELDING

Multi Angle 1000 m

Part# 8100450

0

magswite

## WELDING TOOLS AND ACCESSORIES

| ◆ Cables and connectors | 46 to 47   |
|-------------------------|------------|
| ◆ Clamps                | . 48 to 49 |
| Magnetic ground clamps  | 50 to 51   |
| ◆ Hammers / brushes     | 52         |
| ◆ Tools                 | 53         |
| Accessories / Markers   | 54         |

2

## CABLES AND CONNECTORS



### 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



### **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



## CABLES AND CONNECTORS



**Cable connectors** 

Ø

10-25 mm<sup>2</sup>

35-50 mm<sup>2</sup>

70-95 mm<sup>2</sup>

10-25 mm<sup>2</sup>

35-50 mm<sup>2</sup>

70-95 mm<sup>2</sup>

35-95 mm<sup>2</sup>

A maxi

200 A

400 A

600 A

200 A

400 A

600 A

600 A

**DINSE type** 

Push and twist design

Description

1 - Male

2 - Female

Male + Female

### **Primary cables**

### H07RN-F

| A maxi * | To order<br>Linear meter                                     |
|----------|--|
| 16 A     | W000010098   |
| 20 A     | W000010099   |
| 20 A     | W000010100   |
| 30 A     | W000010101   |
| 37 A     | W000010102   |
| 52 A     | W000010103   |
| 69 A     | W000010104   |
| 92 A     | W000010105   |
| 114 A    | W000010106   |
|          | 16 A<br>20 A<br>20 A<br>30 A<br>37 A<br>52 A<br>69 A<br>92 A |

 $^{*}$  According EN 50565-1 (2014) - For a 60 °C temperature f the core and an ambient temperature: 30 °C

## Secondary cables

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

| Ø                   |         | A maxi * |        | Extra flexible<br>(H01N2-E) |            | cible<br>V2-D) |
|---------------------|---------|----------|--------|-----------------------------|------------|----------------|
|                     | at 100% | at 60%   | at 35% | Linear meter                | Coil 50 m  | Linear meter   |
| 16 mm <sup>2</sup>  | 135 A   | 139 A    | 150 A  | W000010137                  | W000260274 | W000260272     |
| 25 mm <sup>2</sup>  | 180 A   | 190 A    | 213 A  | W000010138                  | W000260275 | W000260273     |
| 35 mm²              | 225 A   | 243 A    | 279 A  | W000010139                  | W000260276 | W000260271     |
| 50 mm <sup>2</sup>  | 285 A   | 316 A    | 371 A  | W000010140                  | W000260277 | W000260270     |
| 70 mm <sup>2</sup>  | 355 A   | 403 A    | 482 A  | W000010141                  | W000260278 | W000260269     |
| 95 mm <sup>2</sup>  | 430 A   | 498 A    | 606 A  | W000010142                  | W000260279 | W000260268     |
| 120 mm <sup>2</sup> | 500 A   | 587 A    | 721 A  | W000010143                  | -          | -              |

\*According EN 50565-1 (2014) - For an ambient temperature: 25  $^{\rm oC}$ 

#### **Cables lugs** ◆ Screw type ◆ Diameter: 16 mm ◆ Cable: 50-70 mm<sup>2</sup> ◆ Screw type To order W000010640 ◆ Screw type ◆ Diameter: 11 mm Screw type • Diameter: 14 mm ◆ Cable: 0-25 mm<sup>2</sup> Diameter: 14 mm Screw type ◆ Cable: 35-50 mm<sup>2</sup> ◆ Cable: 25-35 mm<sup>2</sup> ◆ Diameter: 16 mm To order W000010094 To order W000010096 ◆ Cable: 70-100 mm<sup>2</sup> W000010095 To order To order W000335165

EN 60974-12

To order

Linear meter

W000010559

W000010560

W000010561

W000010562

W000010563

W000010564

W000010641



### 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**

| -               | I      | I                   |
|-----------------|--------|---------------------|
| Choice criteria | A maxi | Jaw opening<br>(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



Customer's benefit:

• Economical steel clamps.

| HIPPO 200 |            | I | HIPPO 400 |            |  | HIPPO 600 |            |  |
|-----------|------------|---|-----------|------------|--|-----------|------------|--|
| To order  | W000010579 |   | To order  | W000010580 |  | To order  | W000010597 |  |

#### **Technical characteristics:**

|                            | HIPPO 200  | HIPPO 400  | HIPPO 600  |
|----------------------------|------------|------------|------------|
| Amperage                   | 200 at 35% | 400 at 35% | 600 at 35% |
| Cable Ø (mm <sup>2</sup> ) | 25         | 70         | 70         |
| Weight                     | 208 g      | 362 g      | 376 g      |



### **CROCODILE 300 / 600**



- Brass clamps. • Brass jaws.

Customer's benefit CROCODILE 600: Very good contact surface.

#### **Technical characteristics:**

|               | CROCODILE 300 | CROCODILE 600 |
|---------------|---------------|---------------|
| Amperage      | 300 at 35%    | 600 at 35%    |
| Cable Ø (mm²) | 50            | 95            |
| Weight        | 405 g         | 634 g         |

To order W000010577

### **CROCODILE 600**



### 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       |

## CLAMPS

### **MAGNETIC 500 / 600**



To order W000010553

To order W000010554

MAGNETIC 600

#### **Customer's benefit:**

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

### **Technical characteristics:**

|               | MAGNETIC 500 | MAGNETIC 600 |
|---------------|--------------|--------------|
| Amperage      | 500 at 35%   | 600 at 35%   |
| Cable Ø (mm²) | 70           | 95           |
| Weight        | 815 g        | 1722 g       |
|               |              |              |

### Clamp for heavy duty use

| Choice criteria | A maxi | Jaw opening<br>[mm] |
|-----------------|--------|---------------------|
| MUSCLOR 300     | 300    | 38                  |
| MUSCLOR 600     | 500    | 38                  |
| SERRE-JOINT 500 | 500    | 60                  |
| SERRE-JOINT 800 | 800    | 75                  |
| DRAGON 600      | 600    | 38                  |

### **MUSCLOR 300 / 600**



#### Customer's benefit:

 Heavy duty brass clamps, powerful jaws giving excellent grip.

To order W000010583 MUSCLOR 600

### To order W000010584

### **Technical characteristics:**

|               | MUSCLOR 300 | MUSCLOR 600 |
|---------------|-------------|-------------|
| Amperage      | 300 at 35%  | 600 at 35%  |
| Cable Ø (mm²) | 50          | 95          |
| Weight        | 480 g       | 762 g       |

### **Clamp for bulky parts**

| Choice criteria | A maxi | Jaw opening<br>(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.

Amperage

Weight

Cable Ø (mm<sup>2</sup>)

#### W000010555 To order



### **SERRE-JOINT 500 / 800**



### Customer's benefit SERRE-JOINT 500:

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

### **Technical characteristics:**

|               | SERRE-JOINT 500 | SERRE-JOINT 800 |
|---------------|-----------------|-----------------|
| Amperage      | 500 at 35%      | 800 at 35%      |
| Cable Ø (mm²) | 95              | 95              |
| Weight        | 744 g           | 1187 g          |

To order

W000010582

### **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 (mm²) | 95         |
| Weight        | 816 g      |
|               |            |

### SERRE-JOINT 500 To order W000010987 SERRE-JOINT 800

### To order W000010988

### Customer's benefit SERRE-JOINT 800:

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

## MAGNETIC GROUND CLAMPS MAGSWITCH



### Magnetic ground clamps and positioners

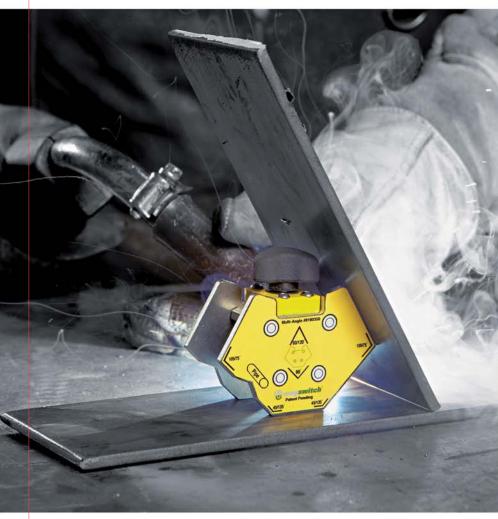
Productivity in time saving with faster set ups, convenience of no hassle use, and safety advantages of using your hands less and less to handle and position steel cannot be ignored.

From the point you receive steel in, to how you move it through your plant, to how you fabricate it, there is a MAGSWITCH tool that will improve safety and productivity. MAGSWITCH is simply a more productive way to do the job.

As you look at the products, consider these core common features of each tool:

- ◆ Complete on/off control.
- Precise placement/no fighting magnets.
- ◆ Super strong does the big work.
- ◆ Holds strong on thin steel.

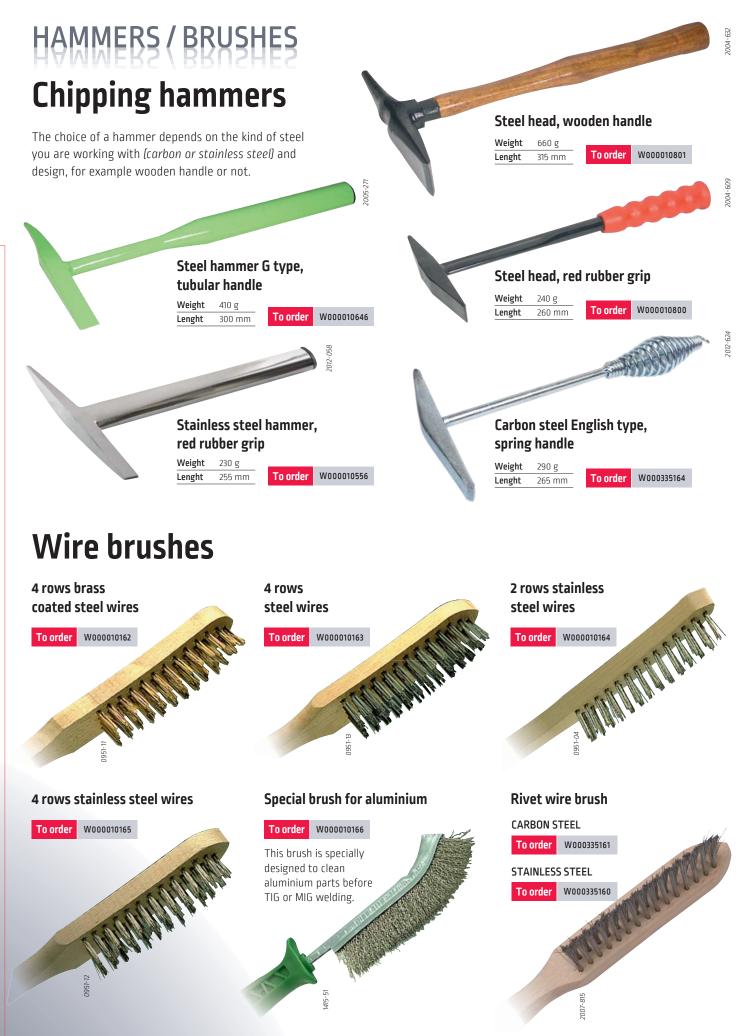
MAGSWITCH is indeed technology that "changes the way things are done".







| Name                                   |     | ension | (mm) | Weight | Hold on<br>thick | Welding<br>current | Feature  | Cat Nr     |
|--|-----|--------|------|--------|------------------|--------------------|--|------------|
| Name                                   | н   | w      | D    | (kg)   | steel (kg)       | (A)                | & benefit  | Cutifi     |
| 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              | increatione scrong                                 | W000373784 |
| Muti Angle 400 Mag-Vise                | 95  | 129    | 65   | 1,13   | 178              | N/A                | Super strong                                       | W000373785 |
| 6 Multi Angle 1000 Mag-Vise            | 146 | 184    | 110  | 4,25   | 446              | N/A                | hold all slides                                    | W000373786 |
| Mag Square 150                         | 65  | 40     | 40   | 0,3    | 67               | N/A                | Positioning  | W000373787 |
| 8 Mag Square 600                       | 106 | 52     | 75   | 1,5    | 268              | N/A                | with incredible strong                             | W000373788 |
| 9 Pivot Angle 200                      | 240 | 240    | 91   | 1,72   | 90               | N/A                | From 22 to 270 degrees                             | W000373789 |
| 🔟 Hand Lifter 60 m Manual              | 140 | 120    | 60   | 0,64   | 27               | N/A                | For sheet dragging or<br>small steel handing works | W000373790 |
| 1 Hand Lifter 60 CE, Cordless electric | 209 | 173    | 75   | 1,45   | 27               | N/A                | For removing parts from cutting tables             | W000373791 |



## TOOLS **MAGLITE**<sup>®</sup> **Blister packed**



| Name           | AA   | 2D         | 3D         | 4D         |
|----------------|--|------------|------------|------------|
| Colour         | Black  |            |            |            |
| Composition    | Torch,<br>black nylon case,<br>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.

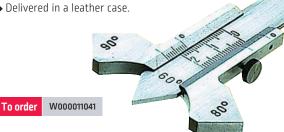
To order W000211929



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

## Welding gauge

- Accurate mesure 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.



## Temperature control stick

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

200

| Designation<br>and temperature | Per pack<br>of 12 pieces |
|--------------------------------|--------------------------|
| 100 (101 °C - 213 °F)          | W000010156               |
| 120 (121 °C - 250 °F)          | W000011042               |
| 150 (149 °C - 300 °F)          | W000010157               |
| 177 (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

## **MIG torch stand**

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

To order



### • 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
- Onoreakable



 To order
 W000010453

 Nozzle Ø 15-18 mm
 To order

 W000010454
 W000010454

Nozzle Ø 12-15 mm

## MARKERS Paint Marker

The Valve Action is a fast-drying liquid paint marker, that provides long-lasting, wearand 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 |



## 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

| toolboxes clean  | with the industry's |
|------------------|---------------------|
| largest twist-up | solid paint marker. |

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



## 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.

W000010802

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



## **Welding Chalk**



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

To order W000383116





# B MMA WELDING

## WELDING TOOLS AND ACCESSORIES

| Electrode holders   | 56 to 59 |
|---|----------|
| MMA kits (electrode holder with cable + clamp with cable) | 60       |
| Gouging torches   | 61       |
| Gouging electrodes  | 62       |
| Ovens / Quivers   | 63 to 66 |
| Welding accessories                                       | 67       |

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.

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.



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.

## ELECTRODE HOLDERS



### Screw type electrode holders

### TWIST 200 / 400



#### Customer's benefit:

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

#### **Technical characteristics:**

|                  | TWIST 200  | TWIST 400  | TWIST 200           |
|------------------|------------|------------|---------------------|
| Amperage         | 200 at 35% | 300 at 35% | To order W000010565 |
| Cable Ø (mm)     | 25 max.    | 50 max.    |                     |
| Electrode Ø (mm) | 3.2 max.   | 5.0 max.   | TWIST 400           |
| Weight           | 335 g      | 480 g      | To order W000010566 |
|                  |            |            |                     |

## **VESTALETTE 250**



#### **Customer's benefit:**

◆ Light and totally insulated, fibre glass head long life duration, left hand thread.

| Technical characteristics: |            |  |
|----------------------------|------------|--|
| Amperage                   | 250 at 35% |  |
| Cable Ø (mm)               | 35 max.    |  |
| Electrode Ø (mm)           | 4.0 max.   |  |

◆ Insulation class: A.

### Weight 295 g

#### To order W000010035 W000010883\*

### **STUBBY 400**



### Customer's benefit:

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

| Cable Ø (mm)     | 70 max.   |
|------------------|-----------|
| Electrode Ø (mm) | 6.3 max . |
| Weight           | 450 g     |
|                  |           |

Amperage

**Technical characteristics:** 

400 at 35%

#### 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 crit   | eria           | <u>≻l mm</u> ∑<br>Zi mm∑<br>Maximum | Ø Denne<br>Maximum |
|---------------|----------------|-------------------------------------|--------------------|
|               | TWIST 200      | 3.2                                 | 25                 |
| Screw         | TWIST 400      | 5.0                                 | 50                 |
|               | VESTALETTE 250 | 4.0                                 | 35                 |
| type straight | STUBBY 400     | 6.3                                 | 50                 |
|               | MASTER 400     | 8.0                                 | 95                 |
|               | VESTALE 500    | 8.0                                 | 95                 |
| Screw         | CURVA 400      | 5.0                                 | 50                 |
| type curve    | CURVA 600      | б.З                                 | 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 Ø (mm)     | 95 max.    |
| Electrode Ø (mm) | 8.0 max.   |
| Weight           | 530 g      |
|                  |            |

### **VESTALE 500**

To order W000010037 W000010882\*



#### **Customer's benefit:**

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

#### Technical characteristics:

| recinital characteristics. |  |  |
|----------------------------|--|--|
| 500 at 35%                 |  |  |
| 95 max.                    |  |  |
| 8.0 max.                   |  |  |
| 470 g                      |  |  |
|                            |  |  |

| o order | W000010038 | W000010880* |
|---------|------------|-------------|
|         |            |             |

## CURVA 400 / 600



#### **Customer's benefit:**

- Curved electrode holders.
- Insulation class: B.

### **Technical characteristics:**

|            |                     | CURVA 40  |
|------------|---------------------|---|
| 400 at 35% | 600 at 35%          | To order  |
| 50 max.    | 70 max.             |   |
| 5.0 max.   | 6.3 max.            | CURVA 60  |
| 540 g      | 720 g               | To order  |
|            | 50 max.<br>5.0 max. | 400 at 35%         600 at 35%           50 max.         70 max.           5.0 max.         6.3 max. |

CURVA 400 W000010573

| CURVA 600 |  |
|-----------|--|
|-----------|--|

W000010574

\* Cat. number for display





### SEGURA 300 / 400 / 600



SEGURA 300

| Choice criteria | <u>≻l</u><br>✓l mm △<br>Maximum | Ø<br>Maximum |
|-----------------|---------------------------------|--------------|
| SAGURA 300      | 4.0                             | 35           |
| SAGURA 400      | 5.0                             | 50           |
| SAGURA 600      | 6.3                             | 70           |
| COBRA 300       | 6.3                             | 50           |
| OPTIMUS 300     | б.3                             | 70           |
| OPTIMUS 400     | 8.0                             | 95           |
| OPTIMUS 500     | 8.0                             | 95           |
| TONG GRIP 400   | б.3                             | 70           |

#### Customer's benefit:

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

 To order
 W000010570
 To order
 W000010571

 SEGURA 600



SEGURA 400

### **Technical characteristics:**

|                   | SEGURA 300 | SEGURA 400 | SEGURA 600 |
|-------------------|------------|------------|------------|
| Amperage          | 300 at 35% | 400 at 35% | 600 at 35% |
| Cable Ø (mm²)     | 35 max.    | 50 max.    | 70 max.    |
| Electrode Ø (mm²) | 4.0 max.   | 5.0 max.   | 6.3 max.   |
| Weight            | 415 g      | 570 g      | 590 g      |

### **COBRA 300**



#### Customer's benefit:

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

| Technical characteristics: |            |  |
|----------------------------|------------|--|
| Amperage                   | 300 at 35% |  |
| Cable Ø (mm²)              | 50 max.    |  |
| Electrode Ø (mm²)          | 6.3 max.   |  |
| Weight                     | 420 g      |  |

To order W000010039 W000010881\*

### **TONG GRIP 400**



### OPTIMUS 300 / 400 / 500



#### 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.

### Technical characteristics:

|                   | OPTIMUS 300 | OPTIMUS 400 | OPTIMUS 500 |
|-------------------|-------------|-------------|-------------|
| Amperage          | 300 at 35%  | 400 at 35%  | 500 at 35%  |
| Cable Ø (mm²)     | 35 max.     | 50 max.     | 70 max.     |
| Electrode Ø (mm²) | 4.0 max.    | 5.0 max.    | 6.3 max.    |
| Weight            | 415 g       | 570 g       | 590 g       |

#### Customer's benefit:

◆ High duty electrode holder.

To order W000010622

#### **Technical characteristics:**

| Amperage          | 400 at 35% |
|-------------------|------------|
| Cable Ø (mm²)     | 70 max.    |
| Electrode Ø (mm²) | 6.3 max.   |
| Weight            | 500 g      |

**OPTIMUS 300** 

**OPTIMUS 400** 

**OPTIMUS 500** 

To order W000010410

To order W000010411

To order W000010412

ELECTRODE HOLDERS



### Lever type opened head electrode holders

## CAÏMAN 200 / 400 / 600



CAÏMAN 200

CAÏMAN 400

CAÏMAN 600

CAÏMAN 400

400 at 35%

50 max.

5.0 max.

425 g

To order W000010567

To order W000010568

To order W000010569

CAÏMAN 600

600 at 35%

70 max.

6.3 max.

500 g

| Choice criteria | Maximum | Ø mm²<br>Maximum |
|-----------------|---------|------------------|
| CAÏMAN 200      | 3.2     | 25               |
| CAÏMAN 400      | 5.0     | 50               |
| CAÏMAN 600      | 6.3     | 70               |
| SAMSON ECO 300  | 6.3     | 70               |

### **SAMSON ECO 300**



#### Customer's benefit:

 Light version, well known SAMSON electrode grip.

Insulation class: A.

#### Technical characteristics:

| Amperage          | 300 at 35%        |  |  |
|-------------------|-------------------|--|--|
| Cable Ø (mm²)     | 70 max.           |  |  |
| Electrode Ø (mm²) | 6.3 max.<br>450 g |  |  |
| Weight            |                   |  |  |
|                   |                   |  |  |

## Hobby and light duty electrode holders



#### Customer's benefit:

**Customer's benefit:** 

reinforced.

Insulation class: B.

**Technical characteristics:** 

• Brass jaws.

Amperage

Weight

Cable Ø (mm<sup>2</sup>)

Electrode Ø (mm<sup>2</sup>)

Economical electrode holders.

Polyamide handle, fibre glass

CAÏMAN 200

200 at 35%

25 max.

3.2 max.

370 g

 An industrial design for light works.

| Amperage          | 200 at 35%<br>25 max. |  |  |
|-------------------|-----------------------|--|--|
| Cable Ø (mm²)     |                       |  |  |
| Electrode Ø (mm²) | 4.0 max.              |  |  |
| Weight            | 135 g                 |  |  |



#### **Customer's benefit:**

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

#### Technical characteristics:

| Amperage          | 200 at 35% |
|-------------------|------------|
| Cable Ø (mm²)     | 25 max.    |
| Electrode Ø (mm²) | 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 mm<sup>2</sup> and 25 mm<sup>2</sup>.
- Plugs of 13 mm diameter correspond to a cable cross-section between 35 mm<sup>2</sup> and 50 mm<sup>2</sup> (max 90 mm<sup>2</sup>).
- ◆ Application & intensity

### The range:

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

### **KIT 25C25**

#### MMA power sources' types and applications:

 Small intensity power sources for semi professional welding.

To order W000011138

### KIT 25C25+

#### MMA power sources' types and applications:

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

To order W000260683

## **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:

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

#### Technical characteristics:

| reemical characteristics. |            |  |  |  |
|---------------------------|------------|--|--|--|
| l max                     | 300 at 35% |  |  |  |
| Electrode holder          | SEGURA 300 |  |  |  |
| Cable length              | 3 m        |  |  |  |
| Earth clamp               | HIPPO 400  |  |  |  |
| Cable length              | 2 m        |  |  |  |
| Plug diameter             | 9 mm       |  |  |  |
|                           |            |  |  |  |

### **Technical characteristics:**

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

| Choice criteria | l max<br>at 35% | Plug<br>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       | 300 A           | 13 mm            |
| KIT 50C50+      | 400 A           | 13 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

### **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

### KIT 50C50+

MMA power sources' types and applications:

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

#### W000260682 To order

#### Technical characteristics:

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

#### **Technical characteristics:**

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

### **Technical characteristics:**

| 400 at 35% |  |  |
|------------|--|--|
| SEGURA 600 |  |  |
| 4 m        |  |  |
| HIPPO 600  |  |  |
| 4 m        |  |  |
| 13 mm      |  |  |
|            |  |  |



## GOUGING TORCHES FLAIR® 600 / 1600

The FLAIR<sup>®</sup> gouging torch is a high quality torch.
The airflow can be regulated on the torch.
The recommended air pressure is 7 bar.

FLAIR<sup>®</sup> 600

10 mm - 3/8'

600 A

**Technical characteristics:** 

Current

Electrode Ø max.

FLAIR<sup>®</sup> 600 To order W000010136

## -

Picture not contractual

2007-804

MMA WELDING

m

805

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

FLAIR<sup>®</sup> 1600

19 mm - 3/4"

1600 A





## **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<br>diameter x lenght (mm) | Quantity per box<br>(thousand) | Gross weight<br>per box (kg) | l<br>mini (A) | l<br>maxi (A) | Air pressure<br>(bars) | Airflow<br>(m³/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 0 0 0       | 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<br>diameter x lenght (mm) | Quantity per box<br>(thousand) | Gross weight<br>per box (kg) | l<br>mini (A) | l<br>maxi (A) | Air pressure<br>(bars) | Airflow<br>(m³/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         | 1400          | 6.9                    | 60                | W000010452 |

### **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



On request: other models

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





All WELDRY ovens are supplied with 2 m long cable

| 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                      | <u>c</u>                 | 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                                 |  |
|                                   | •                        |                                    | · //////////////////////////////////// |  |

## 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.









| 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                           | б                                |  |
| Heating elements                 | 1  | 1                           | 3                                |  |
| Max. Temperature                 | K. Temperature Adjustable up to 150 °C - air<br>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                           |  |

2008-616

All WELDRY ovens are supplied with 2 m long cable

\* Quantity of pieces having Ø 3.25 mm

our websites

# 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.





| 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<br>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                 |  |  |  |

WELDRY CW3

\* Quantity of pieces having Ø 3.25 mm

**Technical data** 

All WELDRY ovens are supplied with 2 m long cable

### 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.





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]

WELDRY FW400
To order W000120471

| Technical data                           | WELDRY FW100         | WELDRY FW200   | WELDRY FW400                     |  |
|--|----------------------|--|----------------------------------|--|
| Load Capacity                            | 60 kg                | 160 kg   | 320 kg                           |  |
| Max. Temperature                         | Ac                   | Adjustable up to 350 °C - air<br>ustable up to 500 °C - heating elements |                                  |  |
| Power                                    | 4 kW                 | 6.6 kW   | 7.9 kW                           |  |
| Rating                                   |                      | io 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 (each hopper) |  |
| 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 | <b>a</b> = 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

2008-574

66

## WELDING ACCESSORIES



## Steel head, wooden handle



4 rows

steel wires

# steel wires To order W000010165

4 rows stainless









## 4 TIG WELDING

## WELDING TOOLS AND ACCESSORIES

| • | TIG torches         | 70 to   | 75 |
|---|---------------------|---------|----|
| • | Tungsten electrodes | 76 to   | 77 |
| ٠ | Other accessories   | 78 to 1 | 79 |



### Air cooling

| MODEL               |             |            | WTT2 9             |            | WTT2 17           |              | WTT2 26    |            |            |  |
|---------------------|-------------|------------|--------------------|------------|-------------------|--------------|------------|------------|------------|--|
| Duty cycle at 40 °C |             | 60%        | 80 A               |            | 100 A             |              | 130 A      |            |            |  |
| Duty tyt            | 18 at 40 °C |            | 35%                | 110 A      |                   | 135 A        |            | 180 A      |            |  |
| back cap            |             |            |                    |            | Long              |              |            |            |            |  |
| Original            | equipment   |            | nozzle             |            | Ø 10              | ) mm         |            | Ø 12       | mm         |  |
|                     |             |            | electrode          | Ø 1.6      | 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        |            |  |
|                     | RL          |            | 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 |  |
| Handle              | V           | Connection | V (Conn.<br>9 mm)  | W000278876 | -                 | W000278880   | -          | -          | -          |  |
|                     |             |            | V (Conn.<br>13 mm) | -          | -                 | W10529-17-4V | -          | W000278885 | -          |  |
|                     | EB-FLEX     |            | S / C5B            | W000382781 | -                 | W000382782   | W000382783 | W000382784 | W000382785 |  |



**Connector :** Shaped cable output for a better robustness.



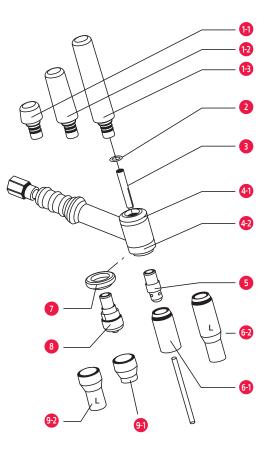
### Water cooling

| MODEL               |                     |            | WTT2      | 2 20 W     | WTT2 18 W   |            |            |  |
|---------------------|---------------------|------------|-----------|------------|-------------|------------|------------|--|
| Duty cycle at 40.90 |                     |            | 100%      | 201        | 0 A         | 320 A      |            |  |
| Duty tytie          | Duty cycle at 40 °C |            | 60%       | 250        | 250 A 350 A |            |            |  |
|                     |                     |            | back cap  | Long       |             |            |            |  |
| Original eq         | Original equipment  |            | nozzle    |            | Ø 12        | mm         |            |  |
|                     |                     |            | electrode | e Ø 2.4 mm |             |            |            |  |
| Length              | Length              |            |           | 4 m        | 8 m         | 4 m        | 8 m        |  |
|                     | RI                  |            | S         | W000278893 | W000278906  | W000278897 | W000278900 |  |
|                     | NL.                 |            | C5B       | W000278894 | W000278905  | W000278898 | W000278899 |  |
| Handle              | EB                  | Connection | 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<br>WTT2 20W | WTT2 17 / 17V<br>WTT2 26 / 26V<br>WTT2 18W |
|-------------------------------|--------|-------------------------|--|
| 11 Back cap short             |        | W000306398              | W000306399                                 |
| 12 Back cap medium            |        | W000306400              | -  |
| 13 Back cap long              |        | W000306402              | W000306403                                 |
| 2 Back cap O-ring             |        | W000306404              | W000306405                                 |
| 42 Sealing ring               |        | W000306396              | W000306397                                 |
| 41 Insulating ring            |        | W000270780              | W000306395                                 |
|                               | Ø 1.0  | W000306406              | W000306411                                 |
|                               | Ø 1.6  | W000306407              | W000306412                                 |
| 3 Collet                      | Ø 2.0  | W000306408              | W000306413                                 |
| Conce                         | Ø 2.4  | W000306409              | W000306414                                 |
|                               | Ø 3.2  | W000306410              | W000306415                                 |
|                               | Ø 4.0  | -                       | W000306416                                 |
|                               | Ø 1.0  | W000306376              | W000306380                                 |
|                               | Ø 1.6  | W000306377              | W000306381                                 |
| 5 Collet body                 | Ø 2.0  | W000306378              | W000270781                                 |
| Conce obdy                    | Ø 2.4  | W000306455              | W000306382                                 |
|                               | Ø 3.2  | W000306379              | W000306383                                 |
|                               | Ø 4.0  | -                       | W000306384                                 |
|                               | Ø 6.4  | W000306417              | W000306423                                 |
|                               | Ø 8.0  | W000306418              | W000306424                                 |
|                               | Ø 9.6  | W000306419              | W000306425                                 |
| 6-1 Nozzle                    | Ø 11.2 | W000306420              | W000306426                                 |
|                               | Ø 12.8 | W000306421              | W000306427                                 |
|                               | Ø 16.0 | W000306422              | W000306428                                 |
|                               | Ø 19.2 | -                       | W000306461                                 |
|                               | Ø 4.8  | W000306456              | -  |
| - Long                        | Ø 6.4  | W000306457              | W000306462                                 |
| 62 Long<br>nozzle             | Ø 8.0  | W000306458              | W000306463                                 |
|                               | Ø 9.6  | W000306459              | W000306464                                 |
|                               | Ø 11.2 | -                       | W000306465                                 |
| <b>7</b> Gas Lens sealing rin | g      | -                       | W000306466                                 |
|                               | Ø 1.0  | W000306385              | W000306389                                 |
|                               | Ø 1.6  | W000306386              | W000306390                                 |
| Gas Lens                      | Ø 2.0  | W000306460              | -  |
| collet body                   | Ø 2.4  | W000306387              | W000306391                                 |
|                               | Ø 3.2  | W000306388              | W000306392                                 |
|                               | Ø 4.0  | -                       | W000306393                                 |
|                               | Ø 6.4  | W000306429              | W000306434                                 |
|                               | Ø 8.0  | -                       | W000306435                                 |
| 9-1 Gas Lens                  | Ø 9.6  | W000306431              | W000306436                                 |
| nozzle                        | Ø 11.2 | W000306432              | W000306437                                 |
|                               | Ø 12.8 | W000306433              | W000306438                                 |
|                               | Ø 16.0 | -                       | W000306439                                 |
|                               | Ø 8.0  | -                       | W000306467                                 |
| Long<br>9-2 Gas Lens          | Ø 9.6  | -                       | W000306468                                 |
| nozzle                        | Ø 11.2 | -                       | W000306469                                 |
|                               | Ø 12.8 | -                       | W000306470                                 |



#### Wear parts box

2011-201

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



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 are the same for the whole PROTIG range.
- 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 is fitted as standard. It comes with banana plugs.

#### Air cooled

|                       |            |       |              |                |              |              |              |              |              | the second s |
|-----------------------|------------|-------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--|
| 1                     | MODEL      |       | PROT         | TIG 10         | PROTIG 20 F  |              | PROT         | TIG 30       | PROTIG 40    |  |
| Duty cycle 35%        |            |       | 125          | 25 A 150 A 200 |              | 200 A        |              | ) A          |              |  |
| Duty cycle 60%        | )          |       | 80           | A              | 10           | D A          | 130 A        |              | 200 A        |  |
|                       | back cap   |       |              |                |              | Lo           | Long         |              |              |  |
| Fitted as<br>standard | nozzle     |       |              | Ø 10           | mm           |              | Ø 12 mm      |              |              |  |
| Standard              | electrode  |       | Ø 1.6 mm     |                | Ø 2.0 mm     |              | Ø 2.4        |              | 1 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           | CONNECTION | C2D/2 | 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. 2015-278



#### **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

|                       |                  |        |              |              |              | and the second |              |              |  |
|-----------------------|------------------|--------|--------------|--------------|--------------|--|--------------|--------------|--|
|                       | MODEL PROTIG 10W |        | G 10W        | PROTI        | G 35W        | PROTIG 40W   |              |              |  |
| Duty cycle 100%       |                  |        | 220          | ) A          | 35           | 0 A  | 450 A        |              |  |
|                       | back cap         |        |              |              | lo           | ng   |              |              |  |
| Fitted as<br>standard | nozzle           |        | Ø 12 mm      |              | Ø 15 mm      |  | Ø 14 mm      |              |  |
| Standard              | electrode        |        | Ø 2.4        | Ø 2.4 mm     |              | Ø 4.0 mm   |              | Ø 4.8 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           |                  | (100/5 | W000278402-2 | W000278403-2 | W000278404-2 | W000278405-2   | W000278406-2 | W000278407-2 |  |

A Some machines require the use of the plug module p/n WP10529-5, see the section "Plug kits and button modules" at page 71.

#### **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**.



Water cooled

Dinse 9 to 13 mm - W000306139



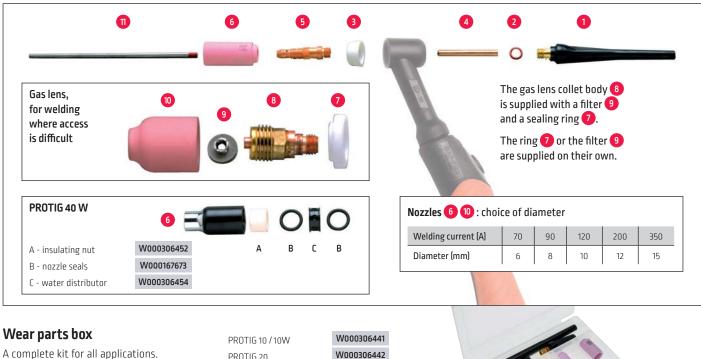
Dinse 13 to 9 mm - **038055011** 



### TIG TORCHES PROTIG NG S & III S

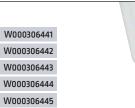
#### Wear parts

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



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

PROTIG 20 PROTIG 30 PROTIG 40 / 35W PROTIG 40W





#### Modular system:

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



 ${
m 
m 
m \Lambda}$  Refer to the instruction manual to see the different connections for the modules. For potmeter adapt the wiring to the welding machine.

#### 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) |
|---------------------------|
| • Water cooled body (10W) |
| • Head PROTIG NG 10/10W   |
| · Head PROTIG NG 20       |

| W000279381 |
|------------|
| W000279382 |
| W000279383 |
| W000279384 |

### TIG TORCHES

#### Wear parts are common for both RL or EB handles.

|                               |        | PROTIG 10 / 10W | PROTIG 20  | PROTIG 30  | PROTIG 35W / 40 | PROTIG 40W |
|-------------------------------|--------|-----------------|------------|------------|-----------------|------------|
|                               | short  | W000306220      | W000306223 | W000306223 | W000306225      | W000306227 |
| I - Back cap                  | 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      | -          |
|                               | 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 |
| 4 - Electrode collet          | 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    | -          |
|                               | Ø 6.4  | W000306269      | W000306273 | W000306277 | W000306277      | -          |
|                               | Ø8     | W000306270      | W000306274 | W000306278 | W000306278      | -          |
| 6 - Nozzle                    | 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      | -          |
|                               | Ø 4.8  | W000306456      | -          | -          | -               | -          |
|                               | Ø 6.4  | W000306457      | -          | W000306462 | W000306462      | -          |
|                               | Ø 8    | W000306458      | -          | W000306463 | W000306463      | -          |
|                               | Ø 9.6  | W000306459      | -          | W000306464 | W000306464      | -          |
| 6L - Long nozzle              | Ø 11.2 | -               | -          | W000306465 | W000306465      | -          |
|                               | Ø 12.8 | -               | -          | -          | -               | -          |
|                               | Ø 14   | -               | -          | -          | -               | -          |
|                               | Ø 15.7 | -               | -          | -          | -               | -          |
| 7 - Gas lens sealing ring     | 0.00   | W000306210      | W000306216 | W000306216 | W000306217      | -          |
| 8 - Gas lens collet body      |        | W000306213      | W000306214 | W000306214 | W000306215      | -          |
| 9 - Gas lens filter           |        | W000306218      | W000306219 | W000306219 | W000306219      | -          |
|                               | Ø 8    | W000306284      | W000306287 | W000306287 | W000306287      | -          |
|                               | Ø 9.6  | W000306285      | W000306288 | W000306288 | W000306288      | -          |
| 10 - Gas lens nozzle          | Ø 11.2 | W000306286      | -          | -          | -               | -          |
| 10 - Gas iens nozzie          | Ø 12.8 | -               | W000306289 | W000306289 | W000306289      | -          |
|                               | Ø 15.7 | -               | W000306290 | W000306290 | W000306290      | -          |
|                               | Ø 8    | -               | W000306290 | W000306250 | W000306467      | -          |
|                               | Ø 9.6  |                 | W000306468 | W000306468 | W000306468      | -          |
| 10L - Long gas lens nozzle    | Ø 9.8  | -               | W000306469 | W000306469 | W000306469      | -          |
|                               | 11.Z   | _               | W000300409 | 1000500409 | W000500409      | -          |

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

#### Table of compatibility: plug kits & button modules

| Button modu | loc                              | Plug kits | and the second s |           |           | of a co   |           |
|-------------|----------------------------------|-----------|--|-----------|-----------|-----------|-----------|
| Bucconmou   |                                  |           | WP10529-5  | WP10529-6 | WP10529-7 | WP10529-8 | WP10529-9 |
| W000279241  | 1 button                         | 0         | ATTENTION<br>WP10529-5 is compulsory   |           |           |           |           |
| W000279245  | 1 button<br>(French lever style) |           | in some cases: please<br>read remark <sup>(1)</sup>  |           |           |           |           |
| WP10529-2   | 3 buttons 🛛                      |           |  |           |           |           |           |
| W000279246  | 1 button<br>4.7 KOhm Vert Poti   |           |  | X (3)     | X [4]     | X (5)     |           |
| W000279370  | 1 button<br>4.7 KOhm Horiz Poti  |           |  | X (3)     | X [4]     | X (5)     |           |
| WP10529-3   | 1 button<br>10 KOhm Horiz Poti   |           |  |           |           |           |           |
| WP10529-4   | 1 button<br>10 KOhm Vert Poti    |           |  |           |           |           |           |

(1) Plug kit WP10529-5 is compulsory to use a water cooled Protig torch with: Citotig II DC range, Prestotig II DC range, Prestotig/Citotig 240-310 AC/DC range, Prestotig/Citotig 350W; not needed with other machines. (2) Compatible with: Invertec 300TPX/400TPX, Aspect 300, Prestotig/Citotig 315/415/315AC/DC (no plug kit needed). (3) Compatible with: Prestotig 210 DC, Prestotig 310 DC, Prestotig 410 DC, Prestotig 240 ACDC, Prestotig 310 ACDC. (4) Compatible with: Prestotig 210 ACDC, Prestotig 250 ACDC, Prestotig 350 ACDC. (5) Compatible with: Saxotech 170/220, Saxotig 160 ACDC, Prestotig 180/220 Pro. (6) Compatible with: All Lincoln machines with pedal control, Prestotig/Citotig 315/415/315AC/DC.

#### ISO 6848 - EN 26848

### TUNGSTEN ELECTROPES

#### A complete range of tungsten electrodes:

- Pure tungsten,
- Tungsten + cerium,
- Tungsten + lanthanum,
- Tungsten + rare earths<sup>(1)</sup>.
- 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

|                                      | N         | letal                      | A                |          |         | -                  |  |
|--------------------------------------|-----------|----------------------------|------------------|----------|---------|--------------------|--|
| Туре                                 | Aluminium | Steel &<br>Stainless steel | Arc<br>stability | Striking | Lasting | Thermal resistance |  |
| WP - Pure tungsten                   | *         |                            | **               | *        | *       | *                  |  |
| WCe 20 - Cerium 2%                   |           | *                          | **               | *        | **      | **                 |  |
| WLa 15 - Lanthanum 1,5%              | **        | ***                        | **               | ***      | ***     | ***                |  |
| WLa 20 - Lanthanum 2%                | *         | ***                        | **               | ***      | ***     | ***                |  |
| WS 2 - Rare earths <sup>(1)</sup> 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.





### GSTEN ELECTRODES

Ī

| Nertal V | VP RANGE      |
|----------|---------------|
| Ømm      | 150 mm length |
| mm بو    | 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 Ce 20 |               |  |  |  |  |
|--------------|---------------|--|--|--|--|
| Ømm          | 150 mm length |  |  |  |  |
| mm هر        | To order      |  |  |  |  |
| 1.0          | S03710530     |  |  |  |  |
| 1.6          | S03710531     |  |  |  |  |
| 2.0          | S03710533     |  |  |  |  |
| 2.4          | S03710534     |  |  |  |  |
| 3.2          | S03710537     |  |  |  |  |
| 4.0          | S03710538     |  |  |  |  |
| 4.8          | S03710539     |  |  |  |  |

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

#### WP - Pure tungsten

| Light alloy | (green tip) |
|-------------|-------------|
|             |             |

| Ø   | 150 mm length | 175 mm length |  |  |  |  |  |
|-----|---------------|---------------|--|--|--|--|--|
| Ømm | 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    |  |  |  |  |  |

#### WCe 20 - Cerium 2% Steel and stainless steel (grey tip)

| đ mm | 150 mm length | 175 mm length |  |  |  |  |  |  |
|------|---------------|---------------|--|--|--|--|--|--|
| Ømm  | 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    |  |  |  |  |  |  |
|      |               |               |  |  |  |  |  |  |

#### WLa 20 - Lanthanum 2% Light alloy (using AC current), steel and stainless steel (using DC current) (blue tip)

|     | 75 mm length   | 150 mm length  | 175 mm length |
|-----|----------------|----------------|---------------|
| Ømm | / S min rengen | 175 min rengen |               |
|     |                | 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    |

#### WLa 15 - Lanthanum 1.5%

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

| Ømm  | 150 mm length |
|------|---------------|
| mm ط | To order      |
| 1.0  | W000402632    |
| 1.6  | W000402663    |
| 2.0  | W000402664    |
| 2.4  | W000402665    |
| 3.0  | W000402666    |
| 3.2  | W000402667    |
| 4.0  | W000402668    |

#### WS 2 - Rare earths 2%

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

| Ømm    | 175 mm length |
|--------|---------------|
| וווווש | To order      |
| 1.0    | W000335166    |
| 1.6    | W000335167    |
| 2.0    | W000335168    |
| 2.4    | W000335169    |
| 3.0    | W000335170    |
| 3.2    | W000335171    |
| 4.0    | W000335172    |
|        |               |





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

#### **Recommended welding intensities**

| Electrode | Direct current               | Alternating current |                              |  |  |  |
|-----------|------------------------------|---------------------|------------------------------|--|--|--|
| diameter  | 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**



### **OPTICLEAN II**

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

See page 93

OPTICLEAN II



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

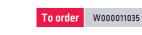
#### • An incredible result:

- 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



#### 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

014-157



#### 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 38

### **Cooling liquid** FREEZCOOL







# READY FOR TOMORROW

# POWERTEC<sup>®</sup> i 250C/i 320C

PREMIUM ARC • IMPROVED ERGONOMICS MORE FUNCTIONS & FEATURES • ROBUST & RELIABLE 3 YR WARRANTY



www.lincolnelectric.eu



# 5 MIG/MAG WELDING

### WELDING TOOLS AND ACCESSORIES

| ◆ MIG/MAG Torches                         | 82 to | 83 |
|---|-------|----|
| Zirconium contact tip / Maintenance boxes |       | 84 |
| Ceramic backings                          |       | 85 |
| Other accessories                         |       | 86 |

### **MIG/MAG TORCHES STANDARD RANGE** LGS2 Simple and reliable, this range is adapted to the most common applications. Easy pivoting Wear parts compatible handle. with the most common standard in Europe. Extra length rear cable support ensure smooth and consistent wire feeding. Extra-flexible cable.

| Duty cycle [CO2 shielding gas]180 A @ 60%230 A @ 60%250 A @ 60%330 A @ 60%500 A @ 100ApplicationsThin plates,<br>automotive industryThin plates,<br>light<br>fabricationThin plates,<br>light<br>fabricationVessel<br>manufacture, steel<br>structuresHeavy duty<br>high production   | M                        |                   |              | AIR CO       | OLING        |                    | WATER COOLING                  |
|---|--------------------------|-------------------|--------------|--------------|--------------|--------------------|--------------------------------|
| Applications     Thin plates,<br>automotive industry     Thin plates,<br>light<br>fabrication     Thin plates,<br>light<br>fabrication     Thin plates,<br>light<br>fabrication     Vessel<br>manufacture, steel<br>structures     Heavy duty<br>high production       Wire diameter     Up to 1.0 mm     Up to 1.2 mm     Up to 1.2 mm     Up to 2.4 mm       Original<br>equipment     Contact tip     0.8 mm     1.0 mm     1.0 mm     1.2 mm       Original<br>equipment     Contact tip     0.8 mm     15 mm     12.5 mm     16 mm     16 mm | MI                       | JUEL              | LGS2-150G    | LGS2-250G    | LGS2-240G    | LGS2-360G          | LGS2-505W                      |
| Applications     Inin plates,<br>automotive industry     light<br>fabrication     light<br>fabrication     light<br>fabrication     light<br>fabrication     Heavy duty<br>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<br>equipment     Contact tip     0.8 mm     1.0 mm     1.0 mm     1.2 mm     1.2 mm       Conical nozzle     12 mm     15 mm     12.5 mm     16 mm     16 mm   | Duty cycle (CC           | )₂ shielding gas) | 180 A @ 60%  | 230 A @ 60%  | 250 A @ 60%  | 330 A @ 60%        | 500 A @ 100%                   |
| Original<br>equipmentContact tip0.8 mm1.0 mm1.0 mm1.2 mm1.2 mmConical nozzle12 mm15 mm12.5 mm16 mm16 mm   | Applications             |                   |              | light        | light        | manufacture, steel | Heavy duty,<br>high production |
| equipment Conical nozzle 12 mm 15 mm 12.5 mm 16 mm 16 mm  | Wire diamete             | r                 | 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                 | Contact tip       | 0.8 mm       | 1.0 mm       | 1.0 mm       | 1.2 mm             | 1.2 mm                         |
| To order  | equipment Conical nozzle |                   | 12 mm        | 15 mm        | 12.5 mm      | 16 mm              | 16 mm                          |
| To order  |                          | -                 |              |              |              |                    | •                              |
|   | 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 |

### **MIG/MAG TORCHES**



|           |  | Ø                 |             | 1                                      | 2<br>Contact            | 3                                      | Nozzle               | St                       | eel or PTFE li           | ner                                |                     | Aluminum ki<br>'FE/bronze) li |                     | 4<br>Insulating diffuser |                     |            |
|-----------|--|-------------------|-------------|--|-------------------------|--|----------------------|--------------------------|--------------------------|------------------------------------|---------------------|-------------------------------|---------------------|--------------------------|---------------------|------------|
|           |  | mn                |             | Contact tip                            | tip holder              | Nozzle                                 | spring               | 3 m                      | 4 m                      | 5 m                                |                     |                               |                     | Standard                 | High<br>temperature | Ceramic    |
|           | Steel<br>steel liner)                    | 0.0<br>8.0        | _           | W000010820<br>W000010821               |                         | W000010787<br>(Con. D10)               |                      | W000010730<br>(blue)     | W000010731<br>(blue)     | W000010732<br>(blue)               |                     |                               |                     |                          |                     |            |
| 150G      | S2 150G<br>[with<br>01 [vith<br>07 [vith |                   |             | WP10440-09<br>W000010822               | W000277903              | W000010786<br>(Con. D12.5)             | W000277448           | W000010733<br>(red)      | W000010734<br>(red)      | W000010735<br>(red)                | -                   | -                             | -                   | _                        | _                   | _          |
| LGS2      |  | WP10440-08A       | 110002//303 | W000010788<br>(Cyl. D16)<br>WP10468    | 110002/7440             | WP10422-3M<br>(blue)                   | WP10422-4M<br>(blue) | WP10422-5M<br>(blue)     |                          |                                    |                     |                               |                     |                          |                     |            |
|           |  |                   |             | WP10440-10A                            |                         | (Innershield)                          |                      | W000010736<br>(red)      | (red)                    | W000010738<br>(red)                | WP10419-3M<br>(red) | WP10419-4M<br>(red)           | WP10419-5M<br>(red) |                          |                     |            |
|           | eel<br>eel liner)                        | 8.0               |             | W000010826                             |                         | W000010791                             |                      | W000010730<br>(blue)     | W000010731<br>(blue)     | W000010732<br>(blue)               |                     |                               |                     |                          |                     |            |
| LGS2 250G | Steel<br>[with steel liner]              | 0.9<br>1.0<br>1.2 |             | WP10441-09<br>W000010827<br>W000010828 | W000010720              | (Con. D11)<br>W000010790               | W000277477           | W000010733<br>(red)      | W000010734<br>(red)      | W000010735<br>(red)                | -                   | -                             | -                   | _                        | -                   | _          |
| LGS2      | Aluminum<br>(with PTFF liner)            | 8.0               |             | WP10441-08A                            |                         | (Con. D15)<br>W000010792<br>(Cyl. D20) |                      | WP10422-3M<br>(blue)     | WP10422-4M<br>(blue)     | WP10422-5M<br>(blue)               |                     |                               |                     |                          |                     |            |
|           | Alum<br>fwith PT                         | 1.0<br>1.2        |             | W000010850<br>W000010851               |                         | (Cyl. 020)                             |                      | W000010736<br>(red)      | W000010737<br>(red)      | W000010738<br>(red)                | WP10419-3M<br>(red) | WP10419-4M<br>(red)           | WP10419-5M<br>(red) |                          |                     |            |
|           | el<br>el liner)                          | 0.0<br>8.0        |             | W000010820<br>W000010821               |                         |  |                      | W000010730<br>(blue)     | W000010731<br>(blue)     | W000010732<br>(blue)               |                     |                               |                     |                          |                     |            |
| 240G      | S2 240G<br>er) [with s<br>r]             | 0.9<br>1.0<br>1.2 | ],,         | WP10440-09<br>W000010822<br>WP10440-12 | WP10455-1               | WP10461-9<br>(Con. D10)                |                      | W000010733<br>(red)      | W000010734<br>(red)      | W000010735<br>(red)                | -                   | -                             | -                   | WP10404-STD              | WD10404 HT          | WD10404 CD |
| LGS2      |  | 0.8               |             | WP10440-08A                            | VVF10455-1              | WP10461-4<br>(Con. D12.5)              |                      | WP10422-3M<br>(blue)     | WP10422-4M<br>(blue)     | WP10422-5M<br>(blue)               |                     |                               |                     | _                        |                     |            |
|           | Aluminum<br>fwith PTEF lin               | 1.0<br>1.2        |             | WP10440-10A<br>WP10440-12A             |                         |  |                      | W000010736<br>(red)      | W000010737<br>(red)      | W000010738<br>(red)                | WP10419-3M<br>(red) | WP10419-4M<br>(red)           | WP10419-5M<br>(red) |                          |                     |            |
|           | her                                      | 0.8               |             | W000010834                             |                         |  |                      | W000010730<br>(blue)     | W000010731<br>(blue)     | W000010732<br>(blue)               |                     |                               |                     |                          |                     |            |
|           | Steel<br>fwith steel liner)              | 1.0               |             | W000010835                             |                         | W000010795                             |                      | W000010733<br>(red)      | W000010734<br>(red)      | W000010735<br>(red)                |                     |                               |                     | W000010780               | ) W000010781        | W000010782 |
| LGS2 360G | [with                                    | 1.2<br>1.4<br>1.6 | 8 X 30      | W000010836<br>W000262703<br>W000010837 | W000010722<br>(M8)      | (Con. D12)<br>W000010794<br>(Con. D16) | -                    | W000010867<br>(yellow)   | (yellow)                 | (yellow)                           | -                   |                               |                     |                          |                     |            |
| 9         | liner)                                   | 0.8               |             | WP10445-08A                            |                         | W000010796<br>(Cyl. D20)               |                      | (blue)                   | WP10422-4M<br>(blue)     | (blue)                             |                     |                               |                     |                          |                     |            |
|           | Aluminum<br>with PTFF liner              | 1.0<br>1.2        |             | W000010853<br>W000010854               |                         |  |                      | W000010736<br>(red)      | (red)                    | (red)                              | WP10419-3M<br>(red) | (red)                         | WP10419-5M<br>(red) |                          |                     |            |
|           | 2  | 1.6               |             | W000010855                             |                         |  |                      | W000010745<br>(yellow)   | (yellow)                 | (yellow)                           | -                   | -                             | -                   |                          |                     |            |
|           | iner                                     | 8.0               |             | W000010834                             |                         |  |                      | W000010730<br>(blue)     | (blue)                   | W000010732<br>(blue)<br>WP10410-5M |                     |                               |                     |                          |                     |            |
|           | Steel<br>steel liner                     | 1.0               |             | W000010835                             |                         | W000010798                             |                      | WP10410-3M<br>(uncoated) | WP10410-4M<br>(uncoated) | (uncoated)                         |                     |                               |                     |                          |                     |            |
| LGS2 505W | fwith                                    | 1.2<br>1.4<br>1.6 | 8×          | W000010836<br>W000262703<br>W000010837 | W000010724<br>WP10456-6 | (Con. D14)<br>W000010797<br>(Con. D16) | -                    | WP10411-3M<br>(uncoated) | (uncoated)               | W000010741<br>(uncoated)           | -                   | -                             | -                   | W000010783               | W000010784          | W000010785 |
| LGS       | m<br>iner)                               | 0.8               |             | WP10445-08A                            | (Heavy duty)            | y) W000010799<br>(Cyl. D20)            |                      | (blue)                   | WP10422-4M<br>(blue)     | (blue)                             |                     |                               |                     |                          |                     |            |
|           | Aluminum<br>(with PTEF liner)            | <u>1.0</u><br>1.2 |             | W000010853<br>W000010854               | -                       |  |                      | W000010736<br>(red)      | (red)                    | (red)                              | WP10419-3M<br>(red) | WP10419-4M<br>(red)           | WP10419-5M<br>(red) |                          |                     |            |
|           | , is                                     | 1.6               |             | W000010855                             |                         |  |                      | W000010745<br>(yellow)   | W000010746<br>(yellow)   | W000010747<br>(yellow)             | -                   | -                             | -                   | _                        |                     |            |

MIG/MAG WELDING

IJ

### 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*).

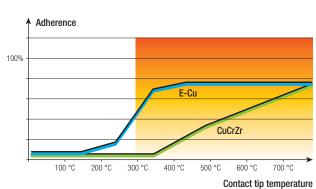
#### The wear:

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<br>thread | Wire<br>diameter<br><i>(mm</i> ) | To order     |
|-----------------------------|-----------------|----------------------------------|--------------|
|                             |                 | 0.8                              | WP10440-08C  |
| LGS2 150 G /<br>I GS2 240 G | M6 x 25         | 1.0                              | W000010825   |
| 200221000                   |                 | 1.2                              | WP10440-12C  |
|                             |                 | 0.8                              | W000010830   |
| LGS2 250 G                  | M6 x 28         | 1.0                              | W000010831   |
|                             |                 | 1.2                              | W000010832   |
|                             |                 | 0.8                              | W000010840   |
|                             |                 | 1.0                              | W000010841   |
| LGS2 360 G /<br>LGS2 505 W  | M8 x 30         | 1.2                              | W000010842   |
| 2002 000 11                 |                 | 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.
- Untill 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.



| М   | IG-BOX L | .GS2 150G  | MIG-BO | XL | GS2 240G        |
|-----|----------|------------|--------|----|-----------------|
| 1   | To order | W000387234 | To ord | er | WP10429-K24     |
|     |          | 662.2506   |        |    | <b>662 2605</b> |
| IVI | IG-BUX L | .GS2 250G  | MIG-BU |    | .GS2 360G       |
|     | To order | W000387235 | To ord | er | W00038723       |
| М   | IG-BOX L | .GS2 505W  |        |    |                 |
| 1   | Fo order | W000387237 |        |    |                 |

40

б

### **CERAMIC BACKINGS**

#### Choice of KERALINE slat type depending on the welding process

|               | MMA | TIG | MIG/MAG               | SAW |
|---------------|-----|-----|-----------------------|-----|
| KERALINE TA 1 | -   | V   | ~                     | -   |
| KERALINE TA 2 | -   | ~   | ~                     | -   |
| KERALINE TA 3 | ~   | -   | ~                     | -   |
| KERALINE TF 1 | -   | ~   | ~                     | -   |
| KERALINE TF 2 | -   | ~   | V                     | -   |
| KERALINE TF 3 | ~   | -   | ~                     | -   |
| KERALINE TR 1 | ~   | -   | <ul> <li>✓</li> </ul> | -   |

|               | MMA | TIG | MIG/MAG               | SAW |
|---------------|-----|-----|-----------------------|-----|
| KERALINE TR 2 | ~   | -   | ~                     | -   |
| KERALINE TR 3 | ~   | -   | ~                     | -   |
| KERALINE TR 4 | ~   | -   | <ul> <li>✓</li> </ul> | -   |
| KERALINE TR 5 | ~   | -   | ~                     | -   |
| KERALINE TR 6 | ~   | -   | <ul> <li>✓</li> </ul> | -   |
| KERALINE TM 1 | ~   | ~   | ~                     | ~   |
| KERALINE TM 2 | ~   | V   | ~                     | ~   |



#### Ceramic on aluminium-tape

| Туре                 | To order   | Dimensions (mm) | 3D diagram   | Application | Packing  |
|----------------------|------------|-----------------|--------------|-------------|--|
| KERALINE TA1 - 6 mm  | W000010391 |                 |              |             |  |
| KERALINE TA2 - 9 mm  | W000010392 |                 |              |             | 600 mm / piece<br>10 pieces per bag (6 meters)                               |
| KERALINE TA3 - 13 mm | W000010393 |                 | $\checkmark$ |             | 6 bags/carton (36 meters)  |
| KERALINE TF1 - 6 mm  | W000010394 |                 |              |             |  |
| KERALINE TF2 - 9 mm  | W000010395 |                 | In           |             | 600 mm / piece<br>10 pieces per bag (6 meters)                               |
| KERALINE TF3 - 13 mm | W000010396 |                 |              |             | 6 bags/carton (36 meters)  |
| KERALINE TR1 - 6 mm  | W000010397 | Ø 6             |              |             | 600 mm / piece   |
| KERALINE TR2 - 7 mm  | W000010398 | Ø 7             |              |             | 50 pieces per bag (30 meters)<br>5 bags/carton (150 meters)                  |
| KERALINE TR3 - 8 mm  | W000010399 | Ø 8             |              |             | 600mm / piece<br>20 pieces per bag (12 meters)<br>8 bags/carton (96 meters)  |
| KERALINE TR4 - 9 mm  | W000010400 | e Ø             |              |             | 600mm / piece<br>20 pieces per bag (12 meters)<br>7 bags/carton (84 meters)  |
| KERALINE TR5 - 12 mm | W000010401 | Ø 12            |              |             | 600 mm / piece<br>20 pieces per bag (12 meters)<br>5 bags/carton (60 meters) |
| KERALINE TR6 - 15 mm | W000010402 | Ø 15            |              |             | 600 mm / piece<br>15 pieces per bag (9 meters)<br>5 bags/carton (45 meters)  |

#### Ceramic on metallic support

| Туре                 | To order   | Dimensions (mm) | 3D diagram | Application | Packing  |
|----------------------|------------|-----------------|------------|-------------|--|
| KERALINE TM1 - 13 mm | W000010403 |                 |            |             | 600 mm / piece<br>10 pieces per bag (6 meters)<br>7 bags/carton (42 meters)  |
| KERALINE TM2 - 18 mm | W000010404 |                 |            |             | 600 mm / piece<br>9 pieces per bag (5.4 meters)<br>5 bags/carton (27 meters) |

### OTHER ACCESSORIES







10

# FLAME

### WELDING TOOLS AND ACCESSORIES

| Hoses / Automatic roller for oxygas hoses | 89    |
|---|-------|
| Quick action coupling                     | to 91 |
| Cutting nozzles and other flame           | 92    |



### HOSES

| Gas            | Ø<br>(mm) | Maximum<br>pressure (bar) | Coil length<br>(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) W000010077 6.3 x 12 10 20 W000010063 TWIN (Oxygen - Acetylene) 6.3 x 12 10 40 TWIN (Oxygen - Acetylene) W000010078 8 x 14 50 20 TWIN (Oxygen - Acetylene) W000010054 10 x 16 20 20 TWIN (Oxygen - LPG)\* 10 x 16 20 40 W000010076

\* Propylene excluded

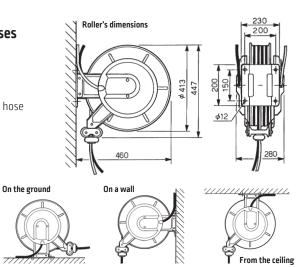
### ANTOMATIC BOLLER FOR OXYGAS HOSES TUBEREEL



### 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

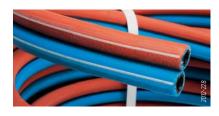
To order W000260575







- 2 MPa(20 bar) - 10 - WELDLINE - 20





5 FLAN

Tested and approuved by

# OUICK 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 avalable 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

#### Perfomances

- 4 levels of tightness
- Compatible with any welding or cutting blowpipe thanks to limited pressure looses

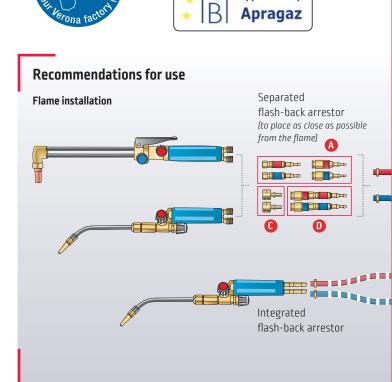
#### To order

#### Connection between hoses 🗛

| <b>QUICKMATIC II</b>   | Ø hoses    | To or            | ler            |  |  |  |
|------------------------|------------|------------------|----------------|--|--|--|
| QUICKMATICII           | (mm)       | Female connector | Male connector |  |  |  |
| <b>1</b> Fuel Gas      | 6.3 and 10 | W000011002       | W000011005     |  |  |  |
| ruel das               | 6.3 and 8  | W000386369       |                |  |  |  |
| 2 Oxygen               | 6.3 and 10 | W000011001       | W000011004     |  |  |  |
| Uxygen                 | 6.3 and 8  | W000386370       |                |  |  |  |
| 3 Neutral gas (Argon,) | 4 and 6.3  | W000011003       | W000011006     |  |  |  |
|                        |            |                  |                |  |  |  |
| Õ                      | Ô 0 Ô      |                  |                |  |  |  |

#### Regulator connection B

| QUICKMATIC II             | Thread          | Ø hoses  | To or            | der            |  |
|---------------------------|-----------------|----------|------------------|----------------|--|
| QUICKMATICI               | Inredu          | (mm)     | Female connector | Male connector |  |
| Eucl.gas                  | M16 x 150 Left  | 6 and 10 | W000011008       | W000011005     |  |
| 4 Fuel gas                | 3/8" Left       |          | W000011011       | WUUUUIIUUS     |  |
|                           | M16 x 150 Right |          | W000011007       |                |  |
| 5 Oxygen                  | 3/8" Right      | 6 and 10 | W000011010       | W000011004     |  |
|                           | 1/4" Right      |          | W000011009       |                |  |
|                           | 12 x 100 Right  |          | W000011012       |                |  |
| 6 Neutral gas<br>(Argon,) | 3/8" Right      | 4        | W000386358       | W000011006     |  |
| 0 gori,                   | 1/4" Right      |          | W000386359       |                |  |
|                           |                 |          |                  |                |  |



#### Also available in kits :



#### Blowpipes'entry connection **G**

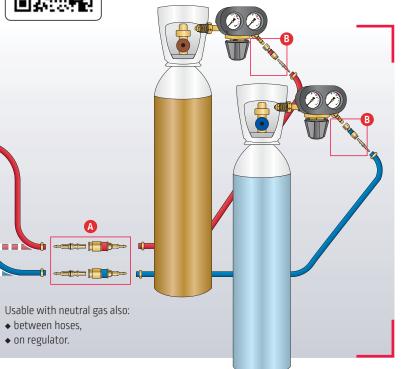
|     | • •        |                   |            |                   | <b></b> |
|-----|------------|-------------------|------------|-------------------|---------|
| QUI | CKMATIC II | Thread            | To order   |                   |         |
| 6   | Fuel gas   | 16 x 150<br>Left  | W000011014 | Male<br>connector | 04-820  |
| •   | Oxygen     | 16 x 150<br>Right | W000011013 |                   |         |
|     | Oxygen     |                   | W000011013 | connector         |         |

#### QUICKMATIC II with integrated FBA D

| SECURTOP 662          | Inlet hoses (mm) | Outlet        | To order   |  |  |  |  |
|-----------------------|------------------|---------------|------------|--|--|--|--|
| Overgan               | Ø 6.3 and 10     |               | W000386367 |  |  |  |  |
| Oxygen                | Ø 6,3 and 8      |               | W000386368 |  |  |  |  |
| Fuel Gas              | Ø 6.3 and 10     | QUICKMATIC II | W000386365 |  |  |  |  |
| ruel uds              | Ø 6.3 and 8      | female        | W000386366 |  |  |  |  |
| Kit Owigon i Fuel gas | Ø 6.3 and 10     | -             | W000400169 |  |  |  |  |
| Kit Oxygen + Fuel gas | Ø 6.3 and 8      |               | W000400170 |  |  |  |  |
|                       |                  |               |            |  |  |  |  |

Visit our factory





#### Mounting on thread

| QU | ICKMATIC II | Thread       | To order   |          |
|----|-------------|--------------|------------|----------|
| 8  | Eucl.gos    | 16x150 Left  | W000386360 |          |
| •  | Fuel gas    | 3/8 Left     | W000386362 | Female   |
|    |             | 16x150 Right | W000386361 | coupling |
| 9  | Oxygen      | 3/8 Right    | W000386363 |          |
|    |             | 1/4 Right    | W000386364 |          |
| 8  |             | 2016-295     |            | 2016-296 |

#### Technical characteristics and usable gases:

| La     | ibel          | Gas                   |        | Pressure   | Max Flowrate |  |
|--------|---------------|-----------------------|--------|------------|--------------|--|
| Letter | Color         | Name                  | Letter | max. (bar) | [m³/h]*      |  |
|        | Acetylen A 1, | 1,5                   | 14     |            |              |  |
|        |               | Propane               | Р      | 5          | 22           |  |
| F      | Red           | Hydrogen              | Н      | 10         | 215          |  |
| E E    | Reu           | Methane               | М      | 5          | 40           |  |
|        |               | MPS                   | Y      | 5          | 24           |  |
|        |               | Propylene             | L      | 5          | 22           |  |
| 0      | Blue          | Oxygen                | 0      | 20         | 65           |  |
|        |               | Air                   | D      |            | 90           |  |
| N      | Black         | CO <sub>2</sub>       | В      | 20         | 73           |  |
|        |               | Nitrogen, neutral gas | Ν      |            | 92           |  |

\* Maximal flowrate without flash-back arrestor



### **CUTTING NOZZLES AND ACCESSORIES**

#### **G1 cutting nozzles** and IC cutting nozzles

| G1 profile<br>Acetylene | Gauge<br>(mm) | Cutting<br>thickness<br>(mm) | IC profile<br>Acetylene |  |
|-------------------------|---------------|------------------------------|-------------------------|--|
| (                       | )             | -                            | EEO-72EO                |  |
| 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              |  |

#### **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. 

#### THERMISHIELD



0327-031

2006-

| 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 |

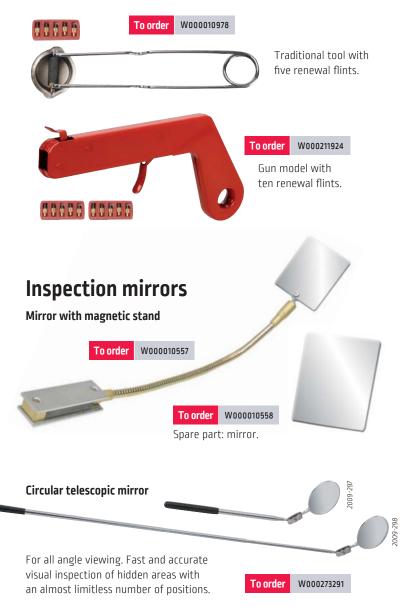
WELDLINE

#### PROTECFLAM

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



#### **Spark lighter**





GALVASO PROVING

### 7 LIQUIDS & SPRAYS

### WELDING TOOLS AND ACCESSORIES

| Anti-spatters                                       | 95 to 96 |
|---|----------|
| Anti-corrosion / Heat protection                    |          |
| Cracks detection                                    |          |
| Non destructive cracks detection                    |          |
| Cooling liquid for torches / Leakage control        |          |
| Stainless steels treatment                          | 100      |
| Cleaning, polishing and marking of stainless steels | 101      |



### **ANTI-SPATTERS**

### CERASKIN

#### Welding anti-spatters spray with ceramic coating

CERASKIN is a rapid drving 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).

# To order

### **SPRAYMIG H20**

#### 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 H<sub>2</sub>O 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.

#### Sprav (400 ml)

#### To order W000010001

#### Drum (20 liters)

#### 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.

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.

### 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.

250

2009

LIQUIDS AND SPRAYS

WELDLIN

To order

AVMIC SVE

W000271574

394

-200







394

2007-

WELDLINE

CERASKIN

W000277679

-382

2010-







**CAUTION:** 

before use, carefully read

and understand the safety

datasheet available

on our websites

### **ANTI-SPATTERS**



W000011071

To order

### **NETMIG**

#### Anti-spatters dip

- 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.



### HEAT PROTECTION

#### 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.





-395

### CRACKS DETECTION



#### EN 3552-2, ASME, RCCM (nuclear)

### **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  $\mu$ m).

### Surface Defect

#### A wide range of materials:

Steel, ceramic, plastic, glass...

#### Many industries:

Cleaning

◆ Boilers maker ◆ Founders ◆ Petrochemical

Product: FLUXO S190 - CLEANER

◆ Railway ◆ Nuclear ◆ Shipyard ◆ Automotive...



WELDLIN

FLUXO P12

#### + Product:

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

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

Necessity for protection (petroleum based) solvant.

#### **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.
- Spray, works in an positions.
   Very good identification of cracks under white light.
- Easy to remove with water. No "ground" noise.

Butane/propane spraying (extremely flammable).







3 Cleaning Product: water



#### Oeveloper

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.

#### 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 DETEC



### 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).



### 9 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

**4 FLUXO R175 -DEVELOPER** 



To order

#### 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.

To order

◆ Propellant: Butane / Propane.

◆ Volume : 500 ml (net) - 650 ml (nominal).



279

2012-

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

| Also | availahle | : ARDROX  |
|------|-----------|-----------|
|      | available | . ANDINOA |

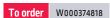
#### **ARDROX 9PR5 CLEANER**

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

W000374531 To order

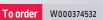
#### **ARDROX 9VF2** PENETRANT

Localization of the emerging defects. 400 ml net.



#### **ARDROX NQ1** DEVELOPER

Drying compositions highlighting the defects after the revealer action, 400 ml net.





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.

It is formulated with multi metal corrosion inhibitors for a safe use into all types of circuits. 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
- Anti-corrosion: contains multi metallic corrosion inhibitors.
- Anti-algae growth
- Non toxic
- Non flammable

#### **Discover also**

EAKAGE C

A high-return product for leak

high pressure oxygen > 150 bars.

• Base: mixture of foam compounds ◆ Temperature of application: -10 °C/+130 °C

detection suitable for all gases except

• Volume: 500 ml (net) - 650 ml (nominal)

Propellant gas: denaturate hydrocarbure

BUBBLE

### FREEZCOOL (green) T°-5°C

Coolant for welding and cutting torches. Less viscous, it contains antifreeze but in a less important proportion and anti-corrosion for brass and copper circuit. It is less sensible to friction and therefore it has a more important flow rate.

W000010963

To order

WELDLINE

BUBBLE



W000404005

For manual equipment

W000010167

9.6 L

To order

Controls:

pH control

◆ pH: 7+/-2

Iron and copper contents

Physical form: red liquid

◆ Specific gravity: 1.04 at 20 °C

Base: monopropylen glycol and water

**Physical properties:** 

◆ Freezing point: -27 °C Resistivity: 105 ohm.cm-1

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

### 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

W000011090 To order





See the batch number on the packaging and consult your



Packaging:

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

LIQUIDS AND SPRAYS

000-228

99

### **STAINLESS STEEL TREATMENT**

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

There are three essential phases for a good surface treatment:



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.

### 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



# 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

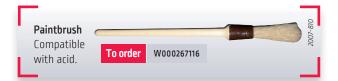
Degrease the surface to be treated with the specific CLEANOX product. Then apply a coat of PICKLINOX paste or gel. The exposure time will vary from a few minutes up to 30 minutes depending on the type of steel being welded. At the end of treatment, remove the gel or the paste with clean water. Do not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



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.



ninutes an water. heric agents. RESTORINOX G (gel) 2 kg RESTORINOX

W000266430

PICKLINOX G (gel) 2 kg

PICKLINOX G (gel) 10 kg

W000266426

W000266427

To order

To order

W000266428

W000266429

PICKLINOX P (paste) 10 kg

To order

To order

To order

RESTORINOX G (gel) 10 kg



PICKLINOX L (liquid) 30 kg To order W000266422





5431 **To order** W000266424

### **CLEANING, POLISHING** ND MARKING OF STAINLESS S

### **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.

| 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<br>stencils<br>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 an 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 |  |

OPTICLEAN



INVERTER

TECHNOLOGY

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













# **B CUTTING B G RIND ING D ISKS**

### WELDING TOOLS AND ACCESSORIES

| ٠ | Cutting and grinding disks | 104 to | 106 |
|---|----------------------------|--------|-----|
| ٠ | Grinding accessories       |        | 107 |

00

### CUTTING AND GRINDING DISKS

EN 12413 - EN 13743

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

- 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

| Maximum revolution at 80 m/s |
|------------------------------|
| 13 300 rpm                   |
| 12 250 rpm                   |
| 8 500 rpm                    |
| 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.

180 x 3;23:22 23 7 x #/8"x 7/6"

DUCTIFLEX PR

CIREDUM ELECTRIC EUROPE'S L

California a secondarren, 59 - Brier Capita Barrelona, SPANA da secondar

www.weldline.au

- 2 2

B.P.M.

|                   |           |                       |                |            | 1000       |
|-------------------|-----------|-----------------------|----------------|------------|------------|
| 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 |
| 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 |
| 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
- $\blacklozenge$  High cutting speed
- Specially efficient on steel bars, pipes, sheets or shaped sections
- $\blacklozenge$  No need to eliminate burr after cutting
- Less material waste

Same quality with depressed center

\* Explanation of the specification: See next page

- Long life durationIron and structural steel cutting

• Hard cutting disks for structural steel.

#### **Recommendations:**



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

### CUTTING AND GRINDING DISKS DUCTIFLEX

#### A grinding range for standard structural steel.

#### **Characteristics:**

A 61 G

Co H

- 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 |



FLAP DISC

ELDLIN

Z 80

0

DUCTIFLAP

FLAP DIS

Z 40

| _  |   |                 |   |                          | _               |
|--|---|-----------------|---|--------------------------|-----------------|
|  | Explanati   | ion of the spec | ifications  |                          | -               |
|  | XXX XX  | (   X           | XX XX   |                          |                 |
|  | Abrasive Grit   |                 | Structure Bond  |                          |                 |
| Abrasive type  | type size   | 2               | Structure   |                          |                 |
| A: Regular Aluminium oxide. For plain and low alloyed s                  | ,   |                 | 3 4 5 6   | 7 8 9                    | 10 11 12 13     |
| <b>MA.</b> Mixed Aldininiani Oxide. For grinning stanless stee           | i ana acia resisting ste                                    |                 | Closed M  | edium Ope                | n Very open     |
| Grit size  | Ratio between grain, bond and pore. The softer the material |                 |   |                          |                 |
| <b>16 20 22 24 30 36 40 46 54</b>  | 60 70 80 90   | 100 120 150     | is the more open structur                             | re is recommended        |                 |
| Coarse Medium  | Fir   | ne              | Bond  |                          |                 |
| Coarse for works without special precision, to fine for smoother surface |   |                 | V   | В                        | BF              |
| Hardness grade   |   |                 | Vitrified bonded                                      | Resinoid bonded          | Glass fibre     |
| E F G H I J K L M  | N O P   | Q R S           | Resinoid bond are more f<br>bond Glass fibre increase | , ,                      |                 |
| Very soft Soft M   | edium   | Hard            |   | the resistance specialty | ion neuvy usuge |
| oft grade are dedicated to hard materials, hard grade                    | to softer materials   |                 |   |                          |                 |

### 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%.

|             | Grit | Unit/box | Shape                                  |                           |  |
|-------------|------|----------|--|---------------------------|--|
| Dimensions  |      |          | 15 % conical for<br>fiberglass backing | Flat for nylon<br>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                |  |

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 CIP. 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. he 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  $40 \in$  will be borne by the customer for recovery costs. If these charges should be superiors, 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.

#### 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=UGFyZW50SUQ9MTk1M TE1fENoaWxkSUQ9LTF8VHIwZT0z&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 Svria, 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, re(export), 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, re(exported), 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

Discover our full offer of Air Treatment and other collective protection equipment for your workshop safety

Contact us for more information.

#### **BEING PRESENT LOCALLY** MAKES US MORE AWARE GLOBALLY



#### 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.

Subject to Change - This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.





www.lincolnelectriceurope.com