

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



## PURE STREAM FUME MANAGEMENT IN 3 STEPS

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

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



## GLOBAL SOLUTION TO REDUCE THE EXPOSURE TO WELDING FUMES

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

### ZEPHYR LS CLEANSPACE 2™

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



Contact us for more information.

Helmet standard  
CE EN 175  
Cell standard  
CE EN 379



# ELECTRONIC HELMETS

## ZEPHYR LS / FLIP'AIR LS



**The ultimate welder protection.**  
**Discover a complete solution designed to protect welders in the most effective way.**

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

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

Helmet with powered and filtered airflow



Flip-up LCD filter for grinding



Grinding mode with external button



### Autodarkening LCD filters with wide vision field.

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

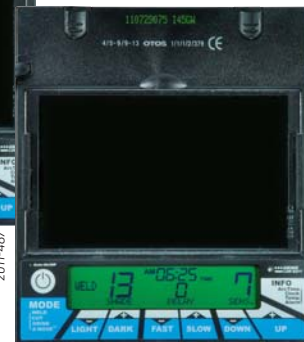
The top-of-the-range solution for any application:

4 adjustment modes from an LCD screen with digital keys:

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

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

WARRANTY  
**2**  
YEARS



# ELECTRONIC HELMETS

## The ZEPHYR LS / FLIP'AIR LS air flow system

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

Inside, 3 kinds of filters can be included.

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

**The whole system is water proofed.**



### Hose connection and hose cap.

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



### Flow circulation

You can choose between:

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



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

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

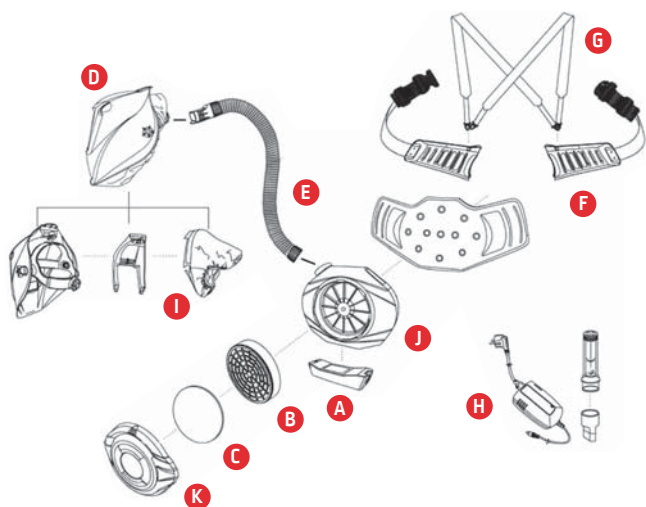
\*\* Infotrack system: provides useful information (current time - total welding time - alarm - temperature)

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

List of spare parts : see page 14

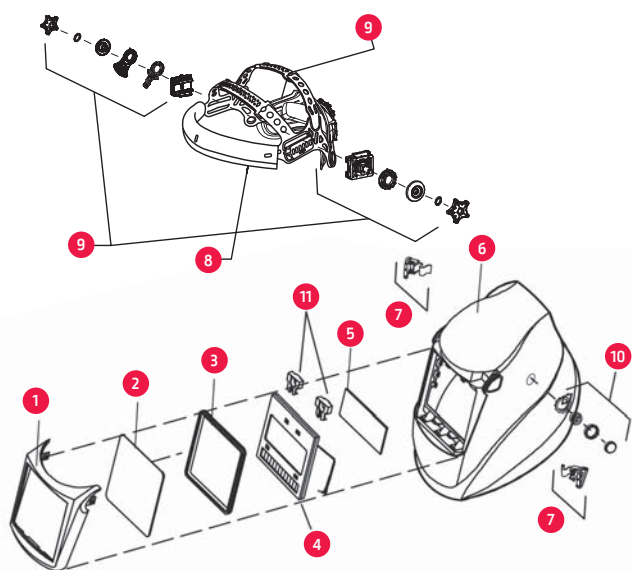
# ELECTRONIC HELMETS

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



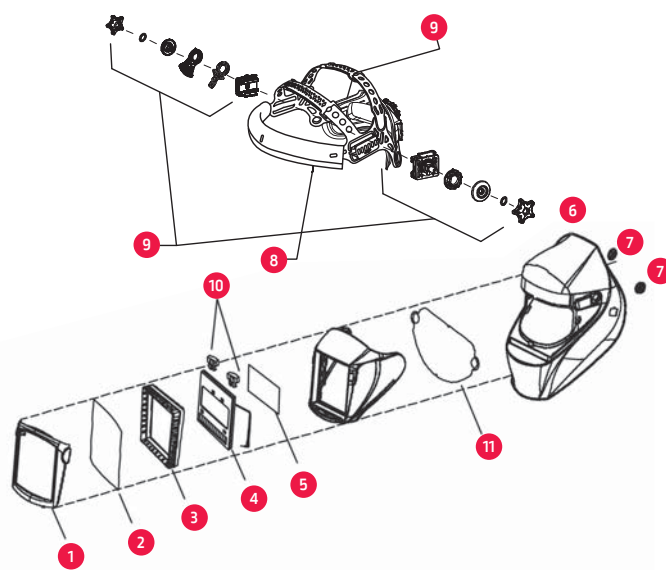
### ZEPHYR LS air flow system

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



### ZEPHYR LS 4500

To order		
1	Front Lens Holder	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



### 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