

# Operation Manual

## Automatic Welding Helmet

62600, 62601, 62602



Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!

Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.

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## Introduction

Thank you for purchasing this quality product. **To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.**

Keep these operation instructions safe.

The solar-powered, self-darkening welding helmet is suitable for most welding applications. The  $\frac{1}{10,000}$  s switching time of this helmet automatically darkens the lens as soon as you start welding. No matter what shade the filter is set to, UV/IR protection is always present.

## Safety instructions



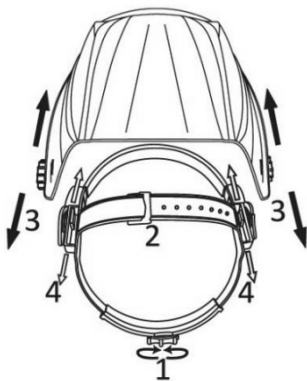
- It is your responsibility to protect yourself and others from the hazards of welding.
- Never weld without eye protection.
- Always work with the correct work protection material.
- Not suitable for laser and oxyacetylene welding!
- The welding helmet does not protect against explosive or corrosive media.
- The welding helmet does not protect against heavy force, including cut-off grinders.
- Never place this helmet on a hot surface, as this may damage the filter.
- This welding helmet meets most safety standards for safe welding. Only trained welders should use this product. Safe use of this product requires proper safety training. Do not use it without protective shields or filters. Do not use if any part of the helmet is cracked or broken. Only use it in normal temperatures.
- **Caution!** Do not weld with this helmet when working in direct sunlight, this may cause the glare control to malfunction.
- **Caution!** When you stop using the welding helmet, put it away so that the field of vision is protected from dust, dirt, moisture, and water. Turn the light/dark adjustment knob to "L."
- You must not carry out laser welding with this welding helmet.
- Do not dismantle or attempt to repair the filter!
- The filter is not protected against impacts, blows, etc.
- Do not use the helmet as "safety goggles" during flexing or cut-off grinding or any work other than welding.
- The welding helmet does not protect against explosive or flammable gases! Do not make any modifications to the helmet, this can lead to serious injuries!
- Do not immerse the filter or complete helmet in water! Do not use aggressive cleaning agents to clean the filter.

## Technical data

<b>Viewing area (mm)</b>		93 × 42
<b>Filter insert size (mm)</b>		110 × 90 × 9
<b>Headband settings (mm)</b>	<b>Depth</b>	approx. 90–120
	<b>Width</b>	approx. 140 × 170–220
<b>Panels (mm)</b>	<b>Inside</b>	97 × 50 × 0.7
	<b>Outside</b>	109 × 90 × 1.0
<b>Material</b>		PP (flame-retardant)
<b>Protection levels (adjustable on helmet)</b>		9/10/11/12/13/grinding level
<b>Reaction time light/dark (s)</b>		1/10,000
<b>Reaction time dark/light (s)</b>		0.1–0.8
<b>Operating temperature (°C)</b>		-10–+65
<b>Optical class</b>		1
<b>Light diffusion</b>		1
<b>Light transmission variation (homogeneity)</b>		1
<b>Angular dependence of light transmission</b>		2
<b>Darkening rate</b>		DIN 9–13 continuously adjustable on the exterior

## Operation








### Adjusting the headband



1. Adjust the diameter of the headband with the knob on the back. The knob is locked until pushed in. After unlocking, turn the knob clockwise to tighten the headgear and anticlockwise to loosen the headgear.
2. Adjust the height by snapping the pin into the hole to secure it in place.
3. To adjust the angle of vision, loosen the knob on each side of the helmet and adjust the angle screw to the desired tilt position (5 steps as standard and positioned in the centre). Once the desired angle is reached, tighten the knobs until they are snug. The helmet should still flip up but not slide down when used for welding.
4. To adjust the distance between the user's face and the ADF, loosen the knobs on both sides of the helmet until the headband moves freely back and forth and position the headband as desired in one of the 3 slots (the headband is positioned in the centre by default). This should be done one after the other and both sides should be in the same position to ensure proper functioning of the self-darkening filter.

## Darkening control

Darkening colours on this model are available from DIN 9 to DIN 13. The user should set the colour condition in suitable welding current levels in different applications.

	Welding process	Arc current (A)																							
		1.5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600			
	SMAW	8						9			10			11			12			13			14		
	MAG	8						9			10			11			12			13			14		
	TIG	8						9			10			11			12			13					
	MIG	9									10			11			12			13			14		
	MIG	10												11			12			13			14		
	PAC	9									10			11			12			13					
	PAW	4		5		6		7		8		9		10		11		12							
<b>Notes</b>	★ SMAW – covered electrodes										★ MIG (light) – MIG with light metals														
	★ MAG – metal arc welding										★ PAC – plasma cutting														
	★ TIG – gas/tungsten arc welding										★ PAW – micro-plasma arc welding														
	★ MIG (heavy) – MIG with heavy metals																								

## Sensitivity control

Sensitivity is fully automatic and cannot be adjusted.

## Delay control

When welding is stopped, the viewing window automatically changes from dark to light, but with a pre-set delay to compensate. The delay time is fully automatic from MIN (0.25 s) to MAX (0.45 s).

## Maintenance

### Replacing the outer screen

Replace the outer screen if it is damaged (cracked, scratched, holed or dirty). Remove the old screen by pressing two locking switches on the bottom of the holding frame and pulling out the frame and filter. Take out the old screen and remove the protective film before fitting the new one.

### Replacing the inner screen

Replace the inner screen if it is damaged (cracked, scratched, perforated or dirty). Place your thumb in the recess and bend the inner cover screen upwards until it comes off one edge. Then remove the protective film before fitting the new screen.

### Cleaning and maintenance

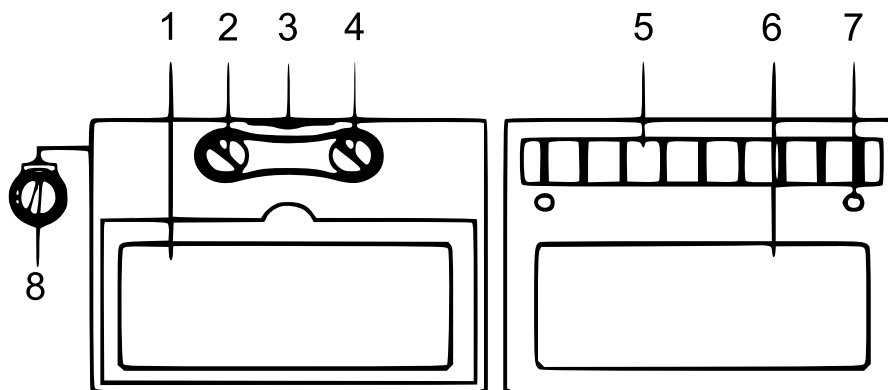
Keep the sensors, solar cell, and filter lens clean. Clean the filter cartridge and helmet shell with soapy water and a soft cloth. Do not use solvents, abrasive cleaners, or alcohol. Switch the product to grinding mode and store it in a clean, dry place.

### Storage

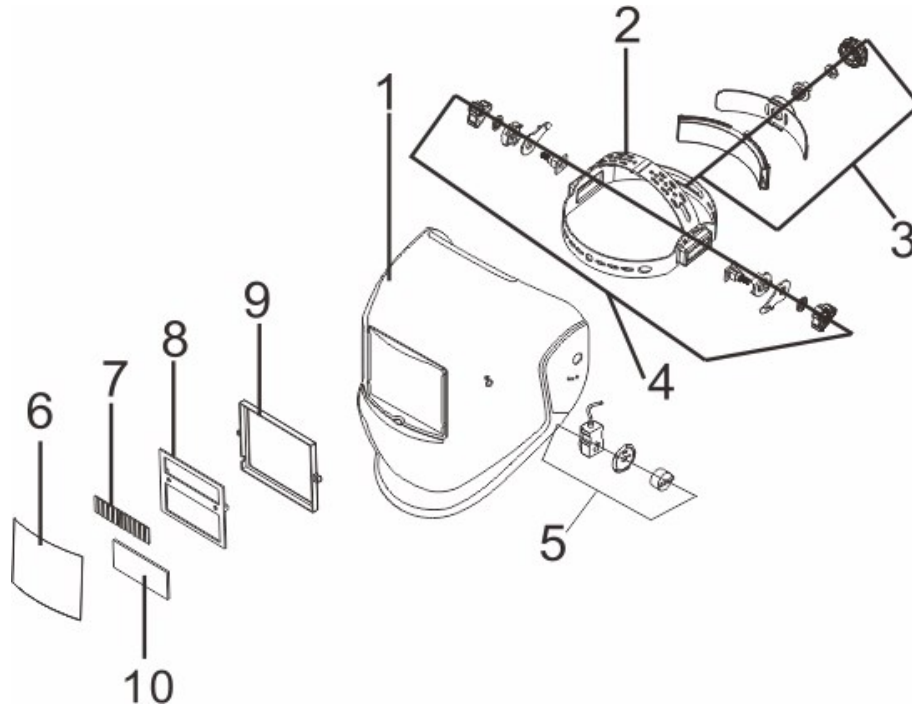
The welding helmet may only be stored in well-ventilated, dry rooms. Here, the filter unit should be protected from direct sunlight and dirt, moisture, and water. The helmet must also not be compressed or squashed.

## Troubleshooting

Problem	Possible cause	Suggested solution
Difficulty seeing through the visual protection.	1. Visual protection dirty.	1. Clean or replace the safety guard.
	2. Filter lens dirty.	2. Clean the filter lens.
The filter does not darken when the arc is hit.	1. Grinding or cutting mode selected	1. Set colour tone from 9 to 13.
	2. Sensors or solar panel blocked	2. Make sure that sensors or solar panel are exposed to the welding arc without blocking.
	3. Sensitivity set to "low"	3. Adjust the sensitivity to the desired level.
	4. Low voltage lithium battery	4. Replace with a new lithium battery when the indicator turns red.
The filter darkens without arcing.	Sensitivity set to "high"	Adjust the sensitivity to the desired level.
The filter remains dark after welding.	Delay to "max"	Set the delay to the desired level.



1	LCD
2	Sensitivity controller
3	Lithium battery
4	Delay time rotary knob
5	Solar cells
6	UV/IR-Filter
7	Arc sensor
8	Darkening control knob



1	Helmet body
2	Headband height adjustable strap
3	Control for setting the Headband distance
4	Control for setting the Headgear angle
5	Setting the darkening
6	External protective screen
7	Solar module
8	Filter element
9	Insert holder
10	LCD

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