

AS6000F

Professional Automatic Welding Helmet





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Please read and understand all instructions before using.

- Be sure that the dark shade of the lens in the welding helmet is on the correct shade number for your application.
- The helmet and lenses are not suitable for “overhead” welding application, laser welding, or laser cutting applications.
- Welding helmets are designed to protect the eyes and face from sparks, spatter, and harmful radiation under normal welding conditions.
- This helmet will not protect against explosive devices or corrosive liquids. Machine guards or eye splash protection must be used when these hazards are present.
- Impact resistant, primary eye protection, spectacles or goggles that meet current ANSI specifications, must be worn at all times when using this welding helmet.
- Avoid work positions that could expose unprotected areas of the body to sparks, spatter, direct and/or reflected radiation. Use appropriate protection if exposure cannot be avoided.
- Before each use, check that the protection plates are clean and that no dirt is covering the sensors on the front of the lens.
- Inspect all operating parts before each use for signs of wear or damage. Any scratched, cracked, or pitted parts should be replaced immediately.
- Do not make any modifications to either the welding lens or helmet, other than those specified in this manual. Do not use any replacement parts other than those specified in this manual. Unauthorised modifications and replacement parts will void the warranty and expose the user to the risk of personal injury.
- If this lens does not darken when striking arc, stop welding immediately and check the helmet is in Weld Mode and not Grind Mode. If the issue persists, contact your local Xcel-Arc Service Department.
- Do not immerse this lens in water.
- Do not use any solvents on any lens or helmet components.
- The recommended operating temperature range for this welding lens is -10°C to 65°C (14°F-149°F). Do not use this device beyond these temperature limits.
- Failure to follow these warnings and/or failure to follow all of the operating instructions could result in severe personal injury.



FEATURES



The AS6000F Welding Helmet is equipped with an automatic darkening filter. The filter is transparent before welding so that the operator may observe the work surface clearly. When striking the arc, the filter darkens automatically immediately. When the arc goes out, the filter will become transparent again. The switching time from light to dark is 0.0001 second. The switching time from dark to light may be set up within 0.1-0.9 second.

The helmet is equipped with a continuous darkness-adjusting unit so that the operator may select an arbitrary dark shade number ranging from 9-13. The helmet also features 3 memory states to save desired settings.

The AS6000F Welding Helmet gives the operator permanent complete protection against UV/IR, even in the transparent state. The UV/IR protection level is up to DIN15. The power is provided by solar cells and a replaceable battery.

The helmet is equipped with four photosensors to sense arc light. In addition, the helmet contains an outer protection shell made of high polymer materials. The plate is wear-resistant, thermostable, and has no dregs-sticking, giving a very long service life.



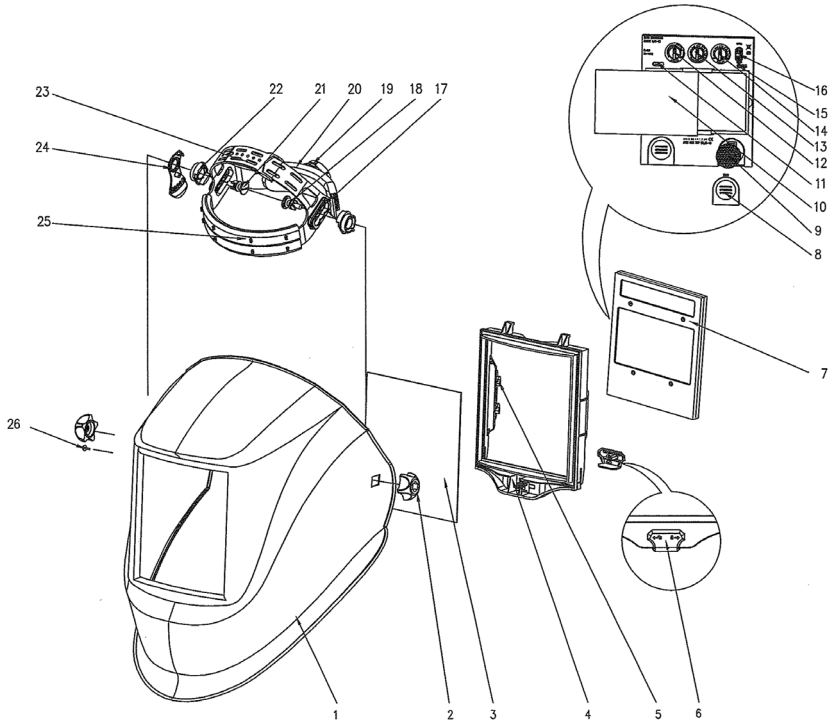
ELITEVISION™
LENS TECHNOLOGY

The AS6000F Welding Helmet is a ELITEVISION™ welding helmet. With advanced ELITEVISION™ technology, the users can weld with improved clarity due to new Blue Optical Coating technology, grind with precision while in grind mode and finally see the job performance in the light state in the full spectrum of colours. There is now no need to remove the helmet to see clearly!

TECHNICAL DATA		TECHNICAL DATA	
SKU	AS6000F	ADF Model	XA-5001
Filter Dimensions	114 x 133 x 9.5 mm	Sensitivity Delay	Adjustable stepless
View Size	100 x 60 mm	Power Supply	Solar Cells & CR2450 Replaceable Battery
Classification	1/1/1/2	Warranty	2 Years
Light State	4	Operating Temperature	-10°C to 65°C
Dark State	9-13	Storage Temperature	-20°C to 85°C
UV/IR Protection	upDIN15	Shade Control	Yes
Time from Light to Dark	1/10000 s	Grind Mode	Yes
Time from Dark to Light	0.1-0.9s	Standards	ANSI Z87.1 / DIN / CE / TUV

HELMET BREAKDOWN

AS6000F



#	Description	#	Description
1	Helmet shell	14	Delay button
2	Block nut	15	Grinding flashing light
3	Outer protection lens plate	16	Welding/grinding selecting knob
4	Lens retainer	17	Headgear slider (with 3 slots)
5	Magnifying lens holder	18	Headgear screw (Short, on left)
6	Retainer lock	19	Headband tightness adjusting knob
7	Auto filter	20	Headgear connector
8	Battery cover plate	21	Headgear screw (Long, on right)
9	Battery	22	Block washer (on right)
10	Inner protection plate	23	Headband adjusting buttons
11	Low battery flashing light	24	Segmental positioning plate (on right)
12	Shade knob	25	Sweatband
13	Sensitivity knob	26	Positioning point for the segmental plate

PACKING LIST

Mask Body (including control cassette)	1 piece
Headband	1 piece
Operation manual	1 piece

METHOD OF OPERATION

1. Assemble the mask as shown in the construction and assembly figure (see page 5)

2. The power supply - The power of AS-6000F helmet is provided by solar cells. with two lithium batteries . Turning on or off is automatic controlled by circuit. You can use this helmet at any time you need and take it away after working without operating any key. Using this helmet is fully free like glass filter helmet.

3. Darkness selection. - Striking the arc, the observing window darkens immediately. At this moment, according to the technical requirement, the operator adjusts the darkness knob 12 in the direction as shown by the arrow to select the optimum darkness.

4. Delay time selection. - By moving the DELAY selector knob 14 on the rear of the cartridge, the time taken for the lens to lighten after welding can be altered from 0.1 ~0.9 second.

Turn to MIN: The time the lens lighten after welding changes to be shorter. The shortest time is about 0.1 second depending upon welding point temperature and shade set. This setting is ideal for track welding or production welding with short welds.

Turn to MAX: The time the lens lighten after welding changes to be longer. The longest time is about 0.9 second depending upon welding point temperature and shade set. This setting is ideal for welding at high amperage where there is an after glow from the weld.

5. Sensitivity selection. - By moving the SENSITIVITY selector knob 13 on the rear of the cartridge, the sensitivity to ambient light changes can be altered.

Turn to LO: The photosensitivity changes to be lower. Suitable for high amperage welding and welding in bright light conditions (lamp light or sun light).

Turn to HI: The photosensitivity changes to be higher. Suitable for low amperage welding and using in pool light conditions.

Suitable for using with steady arc process such as TIG welding.

If the helmet can be used normally, we suggest using this helmet with a bit high sensitivity.

6. Because the shapes of man's heads vary from person to person. The work position and the observing angle is different, operator may adjust the headband adjusting button 23 and the segmental positioning plate 24 to select an appropriate observing angle.

By pushing and turning the adjustment screw 19, the perimeter of the head band can be adjusted.

7. Welding/grinding function

Welding/grinding function can be selected by moving the adjusting knob 16.

8. Low battery warning light - The light 11 will flash when the battery is low.

9. Grind flash - The light 15 will flash when using grind function

OPERATING INSTRUCTIONS AS6000F

POWER SUPPLY AND REPLACING THE BATTERY

The power of the auto-darkening helmet is provided by solar cells and a CR2450 lithium battery. To change the battery, open the Battery cover plate (8) at the side of the ADF and replace the battery (9).

ADDITIONAL INSTRUCTIONS

- Be sure that the helmet is used in the correct condition and according to the SAFETY content.
- There is a liquid crystal-valve in the filter, although it has inner and outer protection plate, it is important to avoid heavy knocks to the helmet.
- The outer protective shell of the helmet should be periodically inspected and cleaned. In the case of a break, crack, pitting or other damage, the helmet shell must be replaced.
- To operate more efficiently and safely, please select the correct dark shade number.
- The arc light must be visible completely by the sensor. If not, the filter will be transparent or unstable in darkness.
- Please use the automatic filter at a temperature between -10°C-65°C (14°F-149°F)
- Do not disassemble the filter. If any problems arise, please contact your local Xcel-Arc service department.

REPLACEABLE PARTS

- XA-AS4-1-FCL Front Cover Lens 133x114mm
- XA-AS4-1-ICL Inside Cover Lens 105x65mm
- XA-AS-1-HB Head Band Assembly
- XA-AS-1-SWB Sweat Band
- XA-AS4-1-BAT CR2450 Battery
- MWL4215 Magnifying Welding Lens 1.5 - 108x51mm
- MWL4220 Magnifying Welding Lens 2.0 - 108x51mm

XA-AS4-1-FCL
Front Cover Lens
133x114mm

XA-AS4-1-ICL
Inside Filter Lens Cover
105x65mm

MWL42--
Magnifying Lens
108x50mm

WARRANTY

Xcel-Arc auto-darkening welding helmets are covered for warranty for up to two years from the date of purchase. The duration of use depends on various factors such as use, cleaning storage and maintenance. Frequent inspections are recommended.

RECOMMENDED SHADE SETTINGS



		Current Amperes																							
		0.5	1	2.5	5	10	15	20	30	40	50	60	100	125	150	175	200	225	250	275	300	350	400	450	500
Covered Electrode	Shade 9	Shade 10										Shade 11													
		Shade 10										Shade 12													
MIG Plate Welding	Shade 10	Shade 10										Shade 11													
		Shade 10										Shade 12													
MIG Sheet Metal	Shade 9	Shade 10										Shade 11													
		Shade 10										Shade 12													
TIG	Shade 10	Shade 10										Shade 11													
		Shade 10										Shade 12													
MAG	Shade 10	Shade 10										Shade 11													
		Shade 10										Shade 12													
Arc Gouging	Shade 10	Shade 10										Shade 11													
		Shade 10										Shade 12													
Plasma Cutting	Shade 11	Shade 11										Shade 12													
		Shade 11										Shade 13													
Plasma Welding	Shade 11	Shade 11										Shade 12													
		Shade 11										Shade 13													
4	Shade 10	Shade 10										Shade 11													
		Shade 10										Shade 12													
5	Shade 11	Shade 11										Shade 12													
		Shade 11										Shade 13													
6	Shade 12	Shade 12										Shade 13													
		Shade 12										Shade 14													
7	Shade 13	Shade 13										Shade 14													
		Shade 13										Shade 15													
8	Shade 14	Shade 14										Shade 15													
		Shade 14										Shade 16													
9	Shade 15	Shade 15										Shade 16													
		Shade 15										Shade 17													