### SECTION 1 – SAFETY PRECAUTIONS – READ BEFORE USING

Protect yourself and others from injury—read, follow, and save these important safety precautions and operating instructions.

#### 1-1. Symbol Usage



DANGER! - Indicates a hazardous situation which, if not avoided, will result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.



Indicates a hazardous situation which, if not avoided, could result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.

NOTICE - Indicates statements not related to personal injury.

Indicates special instructions.







This group of symbols means Warning! Watch Out! ELECTRIC SHOCK, MOVING PARTS, and HOT PARTS hazards. Consult symbols and related instructions below for necessary actions to avoid these hazards.

#### 1-2. **Hazards**



The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in the Principal Safety Standards. Read and follow all Safety Standards.



Only qualified persons should install, operate, maintain, and repair this equipment. A qualified person is defined as one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project and has received safety training to recognize and avoid the hazards involved.



During operation, keep everybody, especially children,



#### NOISE can damage hearing.

Noise from some processes or equipment can damage hearing.

Wear approved ear protection if noise level is high.



#### READ INSTRUCTIONS.

- Read and follow all labels and the Owner's Manual carefully before installing, operating, or servicing unit. Read the safety information at the beginning of the manual and in each section.
- Use only genuine replacement parts from the manufacturer.
- Perform installation, maintenance, and service according to the Owner's Manuals, industry standards, and national, state, and local codes.



### **FACE SHIELDS** do not provide unlimited eye, ear, and face protection.

Use face shield only for protection from specific welding/cutting hazards listed in Section 1-4, and

for protection from low impact hazards associated with chipping, grinding, wire-brushing, and similar activities.

- This face shield meets the requirements of ANSI Z87.1+ and CSA Z94.3 The polycarbonate lenses are not unbreakable and do not provide unlimited protection.
- Use the correct lens for the application.

- Use impact resistant safety spectacles or goggles and ear protection at all times when using this face shield.
- Always keep lens in down position when using face shield.
- Do not use this face shield while working with or around explosives or corrosive liquids.
- Inspect the face shield frequently. Clean lens if dirty. Immediately replace scratched, cracked, or pitted lenses.
- Lens and retention components must be installed as instructed in this manual to ensure compliance with ANSI Z87.1+ protection
- Do not use the face shield until you have been trained in its proper operation by a qualified person.
- Do not enter a hazardous area until you are sure the face shield is assembled correctly, working properly, and worn properly.
- Before each use, inspect the face shield for damage and verify it operates properly. Clean and maintain face shield according to the manufacturer's instructions.
- Do not use face shield with parts or accessories not supplied by the manufacturer.
- Face shield is not to be used as sole protection from hazardous liquids and gases, explosions, lasers, welding, brazing, cutting, grinding, and similar activities. These operations can require additional safety equipment.
- Be sure face shield is compatible with respirators and other personal protective equipment.
- Do not use tinted lenses where color perception is important, such as near traffic signals, visual displays, when making electrical connections, etc.
- Do not use face shield for protection during athletic and recreation-
- Wear body protection made from leather or flame-resistant clothing (FRC). Body protection includes oil-free clothing such as leather gloves, heavy shirt, cuffless trousers, high shoes, and a cap.
- Before selecting and using face shield, have your safety director or an industrial hygienist assess the work area to determine if this product complies with applicable health and safety standards.



# **FLYING METAL OR DIRT can injure**

- Welding, chipping, wire brushing, and grinding cause sparks and flying metal. As welds cool, they can throw off slag.
- Wear approved safety glasses with side shields even under your face shield.

#### 1-3. **California Proposition 65 Warnings**



WARNING - Cancer and Reproductive Harm - www. P65Warnings.ca.gov.

### 1-4. Lens Shade Selection Table

Process	Plate Thickness in.	Plate Thickness mm	Arc Current Amperes	Minimum Protective Shade No.	Suggested Shade No. Comfort
Plasma Arc Cutting (PAC)			Less than 20	4	4
			20 to 40	5	5
Oxyfuel Gas Welding (OFW)					
Light	Under 1/8	Under 3			4 or 5
Oxygen Cutting (OC)					
Light	Under 1	Under 25			3 or 4
Medium	1 to 6	25 to 150			4 or 5
Torch Brazing (TB)					3 or 4
Torch Soldering (TS)					2

Reference: ANSI Z49.1:2021

## 1-5. Principal Safety Standards

Safety in Welding, Cutting, and Allied Processes, American Welding Society standard ANSI Standard Z49.1. Website: www.aws.org.

Safe Practice For Occupational And Educational Eye And Face Protection, ANSI Standard Z87.1, from American National Standards Institute. Website: safetyequipment.org.

Safety in Welding, Cutting, and Allied Processes, CSA Standard W117.2 from Canadian Standards Association. Website: www.csagroup.org.

Eye and Face Protectors, CSA Standard Z94.3 from Canadian Standards Association. Website: www.csagroup.org.

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