



Important Safety Warnings

Read and understand all instructions before using this product

~~Parker Torchology~~ **Aeroarc products** use only by trained ~~welding~~ professionals who fully understand the risks and consequences of improper handling. Always use the **torch** strictly as described in this guide.

If misused, there may be substantial risk of injury, property and material damage, and other serious consequences.

Hazards in Welding Activities

Welding presents a number of hazards that require careful attention to safety. These include, but are not limited to:

Electric Shock

Electric shock can lead to severe injury or death, either from the shock itself or from a fall caused by the reaction to a shock. Inspect equipment and components for any signs of damage prior to operation, ensure all electrical connections are secure and that the welding machine is correctly grounded. Make sure that the work area is clean, uncluttered and dry.

Fumes and Gases

Welding fumes contains potentially harmful metal oxide compounds from consumables, base metal and its coatings.

Always assume metal vapours given off during the welding process are harmful.

~~Welding should not be undertaken without sufficient fume extraction.~~

It's essential to ensure that the extraction in place is suitable for the specific job and welding conditions. In some cases, additional extraction beyond the fume extraction torch and unit may be required to ensure adequate protection.

Refer to the MAC (Maximum Allowable Concentration) values for your country of working. Never weld on workpieces cleaned with chlorinated solvents unless thoroughly washed, as this risks phosgene gas formation. Similarly, avoid welding near degreasing plants containing chlorine.

Fire and Explosion

The extreme temperatures of the welding arc pose a significant fire and explosion hazard. Whilst the welding arc can reach temperatures of over 5000°C, the real danger comes from the intense heat near the arc and the heat, sparks and spatter it creates. This spatter can reach up to 10 metres from the welding position. It is crucial to ensure no flammable materials are close to the welding process and to check for residual risks of fire after the completion of the weld process. **Always have a fire extinguisher nearby.**

Burns

Welding is inherently a hot process. Be aware that previously welded parts may still be hot. Always wear protective clothing suitable for the process.

Additionally, UV radiation from the welding arc can cause burns and damage to the skin.

UV Light Damage

UV radiation from the welding arc can cause Arc-eye, or welder's flash, is an inflammation of the cornea and is a result of ultraviolet (UV) radiation released by a welding arc. UV radiation can also cause burns to the skin.

Noise Damage

Welding can be loud, and because the welder is generally close to the arc, this can cause damage to hearing.

Pacemaker Users

All welding operations produce some magnetic and electrical interference. If you have a pacemaker or some other medical device controlled by an electric current, we strongly recommend you consult your doctor before using any welding or cutting equipment.

General Advice Performance

All products are rated as per the advertised data and duty cycles, established through extensive testing. Adhering to these values and performing regular maintenance will ensure a long and satisfactory service life. Using products outside of these parameters will result in damage.

Personal Protective Equipment

Always wear protective clothing that is appropriate for the welding operation, including but not limited to:

Flame-resistant clothing and gloves:

Essential for protection from burns, sparks, and UV radiation. Clothing should consist of long sleeves and trousers made of non-flammable materials (e.g., leather or heavy cotton treated for flame resistance). Gloves are crucial for protecting hands from heat, sparks, and electrical hazards. Avoid synthetic fabrics that can melt onto the skin.

Welding helmet or goggles: Crucial for protecting eyes and face from intense UV light, infrared radiation, sparks, and spatter. Ensure the filter lens has the correct shade level for the specific welding process.

Hearing protection: Depending on the welding process and noise levels of the job, earplugs or earmuffs should be worn prevent hearing damage from the noise generated by the welding arc.

Safety footwear: Closed-toe, durable, and preferably insulated boots to protect feet from falling objects, heat, and electrical hazards.

Disclaimer

Parker Torchology cannot be held responsible for any accidents, incidents, property damage, environmental harm, or personal injury that occurs as a result of using its welding products. Safe operation and adherence to all safety guidelines are the sole responsibility of the user.