SSQ-6 Silver Solder Instructions

Metal Preparation

Thoroughly clean the parent metal prior to brazing. Suitable methods include sand paper, emery cloth, stainless wire brush, Dremel tool, steel wool, a sander, or a wire wheel. Proper cleaning ensures optimal bonding and prevents contamination.

Oxidation

Oxidation is the most common cause of failure. Prepare and solder the part immediately after cleaning to avoid re-oxidation.

Bonding Issues

Bonding failures may result from insufficient cleaning, oxidation, or overheating.

Ensure the base metal is properly prepared and heated evenly before applying the SSQ-6 silver solder paste.

Torch Selection

- SSQ-6 can be used with propane, MAPP gas, natural gas and air, straight acetylene, or oxy-acetylene
- Propane or MAPP gas is suitable for thin metal or small parts
- Oxy-acetylene for heavier gauge metals
- Avoid cheap brass tips, as they do not provide consistent performance

Flame Adjustment

Use a soft, broad flame to heat the joint area and surrounding metal evenly. Do not direct the flame at the rod itself, and avoid heating the metal to bright red, as this impedes SSQ-6 flow.

Torch Distance

Maintain a distance of 4–6 inches from the workpiece, adjusting as needed to control heat. Move the torch continuously to distribute heat evenly and prevent overheating.

Flame Consistency

Use broad, continuous motion to avoid overheating. Excess heat will cause the rod to flow thin and may fall through.

Heat Requirement

Parent metal must reach 1050°F (565°C) for proper results.

Preheating Strategy

Preheat generally to 350°F (177°C). Heat the joint area to approximately 800°F (427°C). Evenly preheating the nearby work area reduces how much the surrounding metal draws heat away from the main heating zone, helping maintain consistent temperatures and ensuring a better overall result.

For thicker metals, preheat the work area before applying the SSQ-6 paste.

Applying the Paste

Spread an even layer of SSQ-6 onto the joint area. Use gentle pressure on the plunger (excessive pressure will cause the applicator to break).

Cooling

After brazing, allow the part to air cool naturally to achieve the highest strength. Do not quench with water.

Flux Removal

Remove any remaining flux using warm water and a wire brush once the part has cooled.

SPECIAL CONSIDERATIONS

Technique Practice

Practice on scrap of similar alloy and thickness before critical repairs; allow the flux to activate before introducing filler.

Building Up

To build up or bridge small gaps, apply rod around the hole, then use less heat to bridge the area.

SAFETY GUIDELINES

Respiratory Protection

Use an air purifying dust respirator when welding or brazing in a confined space, or when local exhaust or ventilation is not sufficient to keep exposure values within safe limits.

Hands Protection

Wear appropriate gloves to prevent skin contact.

EN 12477: Protection gloves for welders

Type B gloves are recommended when high dexterity is required as for TIG welding, while type A gloves are recommended for other welding processes. The contact temp (°C) is 100 and the threshold time (seconds) >15.

Eyes Protection

Welder's helmet or face shield with color absorbing lenses. Shield and filter to provide protection from harmful UV radiation, infra red and molten metal approved to standard EN379. Filter shade to be a minimum of shade 9.

Skin Protection

Heat-resistant protective clothing. Wear safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry. Clothing should be selected to suit the level, duration and purpose of the welding activity.

Ventilation

Work in ventilated spaces to disperse flux fumes. Avoid confined areas without extraction.

Fire Safety

Keep a fire extinguisher nearby when working around flammable surroundings.

Liability

Follow AWS-compliant brazing safety standards.

Muggy Weld LLC shall not be liable for any loss, injury, claim, liability, or damage of any kind resulting in any way from (a) your use of Muggy Weld products, (b) any errors in or omissions from these instructions.

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FIRST AID MEASURES

Inhalation

Remove to fresh air immediately or administer oxygen. Get medical attention immediately.

Skin
Flush skin with large amounts of water and soap. If irritation develops and persists, get medical attention.

Eyes
Flush eyes with water for at least 15 minutes. Get medical attention.

Ingestion
Obtain medical attention immediately if ingested. Rinse mouth.

FIREFIGHTING MEASURES

Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning material and fire situation.

Unsuitable Extinguishing Media
Do not use water on molten metal. Large fires may be flooded with water from a distance.

Specific Hazards Arising From Chemical
Cadmium oxides, tin oxides, carbon oxides, zinc oxides.

Protective Equipment
Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

ACCIDENTAL RELEASE MEASURES

Cleaning Measures

Solid objects may be picked up and placed into a container. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse.

HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents, acids, alkalis. Dispose of according to Federal, State, Local and OSHA regulations.

Conditions for Safe Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls

The usual precautionary measures for handling chemicals should be followed. Keep away from food, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before break and at the end of the work. Store all protective clothing separately. Maintain an ergonomically appropriate working environment. Wear protective equipment. Keep unprotected persons away. Avoid causing dust.

Exposure Limits

Use industrial hygiene equipment to ensure that exposure does not exceed applicable national exposure limits. Unless noted, all values are for 8 hour time weighted average.

Biological Limits

No available data