

Muffler Guide

Welding Aluminized Steel

Aluminized steel can be welded using appropriate techniques which are described below.

Oxyacetylene Welding Filler Metal

Use a mild steel filler metal, 3/32" diameter, free of rust (American Welding Society classification A5.2). Do **not** use copper coated filler material.

Welding Equipment: Use a number 3 or 4 tip. Observe instructions of the equipment manufacturer when adjusting the operating pressures at the gas regulators.

Procedure: Clean the parts to be welded thoroughly. Incline the torch at a 45° angle from the direction of travel. Use the forehand welding technique. Keep the torch flame on the tip of the filler rod, not in the center of the puddle.

Shielded Metal-Arc (Stick Electrode)

Any one of the following rods are recommended:

- E-6011
- Low Hydrogen: E-7108.
- Stainless: 309 or 310

Gas Metal-Arc (MIG)

- Wire: ER70S-3 or ER70S-6
- Shield gas: Carbon Dioxide or 75% Argon/25% CO₂

Flexible Metal Tubing (Flex) Measurement and Cutting

Strip-wound flexible metal hose is a typically round conduit, three to six inches inner diameter, and is flexible in nature due to the design of the strip. It is commonly used to absorb relative motion and vibration, typically between a vehicle's engine and frame or between the frame and cab. Often strip-wound flexible metal hose is used as a means to account for dimensional differences and tolerance stack-up in the exhaust system. Using strip-wound flexible metal hose to account for misalignments in the exhaust piping can compromise the flexibility to the extent that early failures occur. It is necessary that the hose is installed so that its maximum flexibility is preserved. This document provides detailed information to install flex hose properly so as to minimize failures.

