

MG 382



**Low-heat TIG brazing rod
for welding most metals**

GENERAL CHARACTERISTICS:

MG 382 is an alloy that will join and build up on many types of parent metals. It does this without having to melt the base metals which cause excessive heat and distortion. No fumes are given off and deposits are dense and porosity-free. It is generally used with the TIG process but can also be used with oxy-acetylene (flux required). Usually, pre or postheating is not required. It works well in all positions.

APPLICATIONS:

MG 382 is excellent for joining or building upon copper base alloys such as brass, bronze or copper and to steels or any combination of these. Ideal for light gauge sheet metals, including galvanized steel or terne plated steel. MG 382 is also good for repairing cast iron or joining it to other metals. Ideal for truck bodywork, machine guards, valve seats and brass or bronze sections. Excellent color match to phosphor bronze, red brasses and silicon bronze.

TECHNICAL DATA:

| | |
|-------------------------------|--|
| Typical Tensile Strength | 50,000 psi (345 N/mm ²) |
| Bonding Temperature | 1850°F-1900°F |
| Hardness | BHN 80-100 |
| Current | TIG DC straight polarity (electrode -) |
| Inert Gas | Argon or Helium |
| Oxy-Acetylene Flame Setting | Slightly oxidizing |
| Flux When Using Oxy-Acetylene | MG 130F |

| Diameter | Amperage |
|---------------|----------|
| 1/16" (1.6mm) | 30-60 |
| 3/32" (2.4mm) | 50-75 |
| 1/8" (3.2mm) | 80-110 |

PROCEDURE:

For the TIG process, use DC Straight Polarity (Electrode -) with a shielding gas of Argon or Helium. The parts should be clean and free of contaminants. No preheat is necessary. On joining thin sections, the joint should be square groove (a space between edges). On thicknesses between 3/16" and 3/4", use a single V joint. On thicker sections, use a double V joint. It is advisable to keep the weld puddle as small as possible to assure rapid solidification of deposit. When using MG 382 with oxy-acetylene, use a slightly oxidizing flame. It is essential that MG 130 flux be used with the oxy-acetylene process. Welding can be done in all positions, but flat is preferred.