JAMESTOWN, NY 1-800-356-WELD

# SUPERBRAZE SPECIAL MULTI-TEMPERATURE NICKEL SILVER ALLOY FOR HIGH STRENGTH JOINING & WEAR RESISTANT BUILD-UP

### TORCH OR INDUCTION

## **GENERAL CHARACTERISTICS:**

Premium alloy available both bare and flux-coated for general maintenance repair with the torch. At 1400°-1600°F the deposit has controlled fluidity which makes it ideal for surfacing and build-up of parts subjected to frictional wear. When the temperature is increased to 1650°-1750°F the alloy becomes very thin flowing and will produce high strength joints with only .001" to .003" clearance.

### **APPLICATIONS:**

- **1. Low temperature-**overlaying and build-up of gear teeth, bearings, shafts, valve seats, wedge bars and steering knuckles.
- **2. High temperature**-for close fitting joints on broken drills, mill cutters, furniture and bicycle assemblies, attaching carbide cutting tips and many other applications requiring high strengths. This alloy is designed to build-up and join carbon steels, alloy steels, cast iron, and many non-ferrous materials to themselves or multiple combinations.

# TECHNICAL DATA:

Tensile Strength	up to 110,000 psi (483 N/mm²)
Hardness (HB)	
	1400°-1750°F (760°-955°C)
Remelt Temperature	approx. 1800°F (980°C)
Diameter (in)	1/16" 3/32" 1/8" 3/16"
(mm)	.1.6 2.5 3.25 5.0

# PROCEDURE:

Rough grind surfaces to be joined or built-up. Paint surfaces to be joined and protected from oxidation with 8040 flux. When using flux coated rods it is not necessary to use the paint-on flux unless additional protection is required. Always use a neutral flame concentrated on the base metal, not on the molten alloy. Keep torch in constant motion to prevent overheating of local areas. When used as a joining alloy small rods are recommended but for surfacing and build-up the larger diameter rods should be used. Additional passes can be applied without the need of removing flux residue from previous passes. Allow part to cool slowly. Remove flux by chipping and wire brushing.

STRENGTH SUPERBRAZ