



T H E H A R R I S P R O D U C T S G R O U P
A L I N C O L N E L E C T R I C C O M P A N Y
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TECHNICAL SPECIFICATION SHEET

ISO 9001
 Cert. No. 31598

14, 17, 170 BRAZING FILLER METAL (NICKEL SILVER)

STATEMENT OF LIABILITY- DISCLAIMER

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NOMINAL CHEMICAL COMPOSITION:

Copper	46 %-50 %	Silicon	3.5 % max
Nickel	9 %-11 %	Silver	.07 %
Manganese	1.5 max	Zinc	Remainder
Iron	1.5% max	Tin	3 % max

PHYSICAL PROPERTIES:

Melting Point	1680°F	Brinell Hardness	90-100
Working Temperature	1700°-1800° F		
Tensile Strength	85,000-95,000 psi		

BRAZING PROPERTIES:

Designed for overlays and build-up of gear teeth shafts, bearings, valve seats, pistons and other surfaces subject to wear. Also used for joining both ferrous and non-ferrous metals.

RECOMMENDED PROCEDURE:

Clean all areas to be joined or built-up thoroughly. Paint weld are with Nickel Silver brazing flux. Using a neutral flame, heat the part until the flux liquefies. The flux can also be applied directly to the rod, by heating the rod and dipping into the powdered flux. Add a drop of the alloy and flow it out using the torch flame. If a large area is to be surfaced or a number of passes are required to restore the part to the original size, 15 or Nickel Silver flux coated rods should be used. There is no need to remove the flux between passes. The torch should be held at a low angle to prevent excessive heat build-up in the part. When working on cast iron, bonding qualities can be improved by first searing the surface with a strong oxidizing flame.

AVAILABLE FORMS:

Standard wire diameters, Preformed rings, Flux Coated Rods

SPECIFICATION COMPLIANCE:

AWS 5.28 RBCuZn-D

RECOMMENDED FLUX:

Welco 17, Nickel Silver

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WARNING: PROTECT yourself and others. Read and understand this information.

FUMES AND GASES can be hazardous to your health.

ARC RAYS can injure eyes and burn skin.

ELECTRIC SHOCK can KILL.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDS), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402.

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