

# WT 312-16 Data Sheet

## **Specifications:**

AWS A5.4 AWS Class E312 (-15/-16) ASME SFA 5.4 UNS W31310

#### **Properties:**

**Tensile Strength:** 95,000 psi min. **Elongation:** 22% min.

### **Description:**

WT 312-16 is ideal for welding dissimilar metals, especially when a base metal is stainless steel high in nickel. The deposit is a two-phase weld deposit with substantial amounts of ferrite in an austenitic matrix. Even with considerable dilution by austenite-forming elements, such as nickel, the microstructure remains two-phase and thus highly resistant to weld metal cracks and fissures. Applications should be limited to service temperature below 800°F to avoid formation of secondary brittle phases. This electrode is work-hardenable and hot-cracking resistant.

Available in multiple sizes and diameters in spool and wire rods. Available in -15 and -16 coating.

## Chemical Composition (Wt%)

Si	Mn	Cu	Mo	S	Ni	Cr	P	С
1.0	0.5- 2.5	0.75	0.75	0.03	8.0- 10.5	28.0- 32.0	0.04	0.15

Note: Single values are maximum unless otherwise noted.

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

**CAUTION:** Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.