

# TASETO Welding Materials

Stainless Steel Electrodes

For Shielded Metal Arc Welding

## RNY 3 1 6

### ● Applicable Specification

JIS Z 3221 ES316-16  
AWS A5.4 E316-16

### ● Identification Color

End Face: White  
Side Face: —

### ● Applications and Characteristics

TASETO RNY316 provides weld metal with good corrosion resistibility against acetic acid, sulfurous acid, phosphoric acid, and chlorides.

RNY316 is a lime-titania type electrode suitable for positional welding.

### ● Notes on Usage

\* Dry the electrode at 150°C to 200°C for 60 minutes before use.

\* Use a low current to prevent carbides from precipitating on the heat-affected zone.

### ● Chemical Composition of All Weld Metal (%)

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
Typical	0.056	0.59	1.59	0.024	0.006	12.60	19.50	2.30	0.11

### ● Mechanical Properties of All Weld Metal

	Tensile Strength (MPa)	5D Elongation (%)	Absorbed Energy at 20°C (J)
Typical	582	40.2	93

### ● Typical Tensile Strength of All Weld Metal at High Temperature

Temperature (°C)	Tensile Strength (MPa)
550	407
650	336
725	271
850	191

### ● Typical Creep Rupture Strength of All Weld Metal at High Temperature

650°C × 1,000h: 139 MPa

### ● Other Properties of All Weld Metal

\* Typical Ferrite Content : 5.2% (Schaeffler's Diagram)

\* Copper Sulfate-Sulfuric Acid Test : No defects after bending

\* 5% Sulfuric Acid Test : max. 7 g/m<sup>2</sup>·h

### ● Sizes Available, Recommended Welding Currents (AC or DCEP)

Size (mm)	Length (mm)	Welding Current(A)	
		Flat	Vertical, Overhead
2.6	300	50~90	45~80
3.2	350	80~120	65~110
4.0	350	110~150	85~135
5.0	350	150~200	—