

TASETO Welding Materials

Stainless Steel Electrodes

For Shielded Metal Arc Welding

RNY 3 1 2

● Applicable Specification

JIS Z 3221 ES312-16
AWS A5.4 E312-16

● Identification Color

End Face: Green
Side Face: Dark Blue

● Applications and Characteristics

Since TASETO RNY312 contains a large amount of ferrite, its crack sensitivity is very low at the case of dissimilar welding. This electrode is used for welding stainless steel to carbon steel or to low alloy steel with high carbon content, also welding the first layer of overlay welding on carbon steel or to low alloy steel with high carbon content.

RNY312 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.

* As all weld metal contains a large amount of ferrite, weld metal is embrittled by severe PWHT.

● Chemical Composition of All Weld Metal (%)

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
Typical	0.065	0.54	1.45	0.018	0.006	9.12	28.39	0.11	0.12

● Mechanical Properties of All Weld Metal

	Tensile Strength (MPa)	5D Elongation (%)
Typical	704	19.4

● Typical Mechanical Properties of All Weld Metal in Elevated Temperatures

Temperature (°C)	Tensile Strength (MPa)
550	492
650	405
725	283
800	145

● Other Properties of All Weld Metal

* Typical Ferrite Content : 20.9% (Schaeffler's Diagram)

● Sizes Available, Recommended Currents (AC or DCEP)

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