

TASETO Welding Materials

Stainless Steel Electrodes

For Flux Cored Arc Welding

GFW309

Applicable Specification

JIS Z 3323 TS309-FB0

AWS A5.22 E309T0-1/4

● Applications and Characteristics

TASETO GFW309 is designed higher Ni, Cr and ferrite content than those of Type 308 weld metal. So, GFW309 is used for welding of dissimilar metals such as stainless steel to carbon steel or to low alloy steel, welding first layer of stainless steel side in joining clad steel, and welding first layer of overlay welding on carbon steel or low alloy steel.

● Notes on Usage

* Please refer "Guideline for Welding Stainless Steel with GFW Wires".

● Chemical Composition of All Weld Metal (%)

| | C | Si | Mn | P | S | Ni | Cr | Mo | Cu |
|---------|-------|------|------|-------|-------|-------|-------|------|------|
| Typical | 0.034 | 0.63 | 1.41 | 0.018 | 0.003 | 12.62 | 24.28 | 0.02 | 0.03 |

● Ferrite Content of All Weld Metal

* Typical Ferrite Content: 13.4% (Schaeffler's Diagram)
>18FN (DeLong's Diagram)
20% (Ferrite Scope)

● Mechanical Properties of All Weld Metal

| | 0.2% Proof Stress (MPa) | Tensile Strength (MPa) | 5D Elongation (%) |
|---------|----------------------------|---------------------------|----------------------|
| Typical | 452 | 603 | 33.0 |

● Sizes Available, Shielding Gas and Approvals

| Size (mm) | Shielding Gas |
|--------------|--|
| 1.2 | CO ₂ or Ar+20%CO ₂ , 20L/min |
| 1.6 | CO ₂ or Ar+20%CO ₂ , 20L/min |