



AWS A5.9: ER347
BS EN ISO 14343: 19 9 Nb

Stainless Steel Solid Wire

MIG/TIG Welding

SW-347(H)

DESCRIPTION & APPLICATION

Solid MIG/TIG Filler wire for the joining and overlay of Stabilized Stainless Steels of similar composition, Essentially Austenitic, with up to 12% Ferrite, making the deposit slightly magnetic. Stabilised with Niobium to overcome Titanium transfer problems in 321. Operating temperature range -196°C – 815°C.

BASE MATERIALS

All 300 series Austenitic Stainless Steel, particularly 321 and 347 (stabilized), Railway and Crane Tracking, Wear Plates, Buffer layer on Austenitic Manganese or high carbon/high manganese steel prior to hard facing.

MECHANICAL PROPERTIES

| | | | |
|------------------|--------------------|------------------|--------------------------|
| ~660 UTS n/mm | ~450 YIELD 0.2% | ~35 ELONG A5% | 150J IMPACT (J) -50°C |
|------------------|--------------------|------------------|--------------------------|

METAL WELD COMPOSITION %

| C | Si | Mn | Cr | Ni | Mo | S | P | Fe | Nb |
|------|------|------|----|-----|-----|------|-------|-----|-----|
| 0.04 | 0.45 | 1.38 | 20 | 9.5 | 0.2 | 0.01 | 0.015 | BAL | 0.6 |

PACKAGING

15kg Spools (MIG)
5kg Tubes (TIG)

DIAMETERS

0.8, 1.0, 1.2, 1.6mm (MIG)
1.6, 2.4, 3.2mm (TIG)

WELDING INSTRUCTIONS

Shielding gas MIG 5% or 20% CO₂ in Argon, or 2% Argon-Ox TIG. Pure Argon or Argon/ Helium mix. Do not allow the base material to overheat, particularly when welding 14% Manganese Steel.

For more details on welding of Stainless steel, please see our Information Sheets.
Visit: www.westbrookwelding.co.uk/downloads