

GETIG 312

IDENTIFICATION

Getig 312, ER 312

CLASSIFICATION

AWS/SFA 5.9 ER 312 BS2901-90 312S94

DIN 8556-86 WSGX10CrNi 30.9

DESCRIPTION

Getig 312 is a solid stainless steel wire which deposits a 29 % Cr / 9 % Ni austenitic / ferritic stainless steel weld metal with a ferrite content of about 40 FN. The weld metal exhibits excellent tolerance to dilution from dissimilar and difficult-to-weld base material without hot cracking, together with high strength and very good heat and oxidation resistance. Not recommended for depositing welds to be PWHT.

CHEMICAL ANALYSIS (RANGE) %

| C | Mn | Si | Cr | Cu | Ni | Mo | S | P |
|----------|------------|-------------|-------------|----------|------------|----------|-----------|-----------|
| 0.15 max | 1.0 - 2.50 | 0.30 - 0.65 | 28.0 - 32.0 | 0.50 max | 8.0 - 10.5 | 0.75 max | 0.030 max | 0.030 max |

MECHANICAL PROPERTIES (RANGE)

| TS (N/mm ²) | EL (%) (L=4D) | CVN Impact Value | |
|-------------------------|------------------|------------------|---------|
| | | Temp | Joules |
| 700 - 850 | 22 - 30 | 20°C | 50 - 90 |

TYPICAL APPLICATIONS

- Medium and high carbon hardenable steels. For e.g. tool steels, shafts, gear teeth, free cutting steels.
- Dissimilar joints between stainless and high carbon steels. Buffer layer prior to hardfacing with chromium carbide deposits, surfacing of metal-to-metal wear areas, hot working tools.

SHIELDING GAS : Pure Argon 99.99% 6-12 l/min

WELDING CURRENT : DC (-)

CORROSION RESISTANCE

Good resistance to sulphurous gases at high temperature. Good resistance to wet corrosion upto approximately 300°C.

PACKING PARAMETERS

| Size (mm) | Length (mm) | Packing / Packet (kg) | Packing / Box (kg) |
|-----------|-------------|-----------------------|--------------------|
| 1.6 | 1000 | 5 | 5 x 4 = 20 |

| | | | |
|-------------|------|---|------------|
| 2 | 1000 | 5 | 5 x 4 = 20 |
| 2.40 / 2.50 | 1000 | 5 | 5 x 4 = 20 |
| 3.15 / 3.20 | 1000 | 5 | 5 x 4 = 20 |
| 4 | 1000 | 5 | 5 x 4 = 20 |
