

TYPE : Metal-Cored

Applications

SW-307NS Cored is designed for welding dissimilar steels, 13Mn steels with reduced weldability and for cladding carbon steels.

Characteristics on Usage

SW-307NS Cored is a metal cored wire with a hot cracking resistant austenitic weld metal.

The tough weld metal has an excellent crack resistance, even when welding steels with very poor weldability.

This wire is designed for welding dissimilar steels, 13Mn steels with reduced weldability and for cladding carbon steels. Can also be used as a buffer layer prior to hard surfacing.

Designed for high deposition welding of multi-layer standing fillet welds.

Notes on Usage

- ① Use with 100%Ar or Ar+2~5%O₂ gas.
- ② Welders for solid wire can be used but as wire is softer than solid wire, pay full attention to adjust feeding roller and do not tighten them excessively.
- ③ Use the wind-screen against wind.
- ④ Where possible, preferred storage conditions of opened packs are 60% RH maximum, 18°C minimum.

Welding Position

Current

Shielding Gas



1G (PA) 2F (PB)

DC +

Ar/Ar+2~5% O₂

Typical Chemical Composition of All-Weld Metal (%) (Shielding Gas: 100% Ar)

| C | Si | Mn | P | S | Cr | Ni | Mo |
|------|------|------|-------|-------|-------|------|------|
| 0.08 | 0.83 | 6.15 | 0.022 | 0.008 | 17.78 | 8.25 | 0.15 |

Typical Mechanical Properties of All-Weld Metal (Shielding Gas: 100% Ar)

| YS MPa(lbs/in ²) | EL (%) | Temp. °C (°F) | CVN-Impact Value J (ft · lbs) |
|---------------------------------|-----------|-----------------------|----------------------------------|
| 627 (91,000) | 40.8 | -20 (-4) -60 (-76) | 106 (78) 71 (52) |

Approval

I Packing(Including Ball Pac)

| Dia. (mm) | 1.2 | 1.6 | Spool(kg) | 5 | 12.5 | 15 |
|-----------|------|------|-----------|----|------|----|
| (in) | .045 | 1/16 | (lbs) | 11 | 28 | 33 |

Sizes Available and Recommended Currents (Amp.)

| Size mm(in) | 1.2 (.045) | 1.6 (1/16) |
|-------------|------------|------------|
| F & HF | 170~270 | 200~350 |