

KST-2209

For duplex stainless steel (22%Cr-9% Ni-Mo)

Classifications

| | |
|--------------------|---------------------|
| EN ISO 3581-A:2012 | : E 22 9 3 N L R 12 |
| EN ISO 3581-B:2012 | : ES2209-16 |
| AWS A5.4-06 | : E2209-16 |
| JIS Z 3221 | : ES2209-16 |

Approvals

CE

Description

- Covering is lime titania type for welding of 22%Cr-9%Ni-3%Mo duplex stainless steel, the principal applications are chemical plant and shipbuilding as well as nuclear plant industries. (UNS S31803)
- Excellent pitting corrosion resistance and stress corrosion cracking resistance
- Please perform welding with selecting proper heat input according to the required mechanical properties
- Redry the electrode at 250 - 350 °C for 30 – 60 minutes prior to use

Welding positions



Typical chemical composition of all-weld metal (%)

| C | Si | Mn | P | S | Ni | Cr | Mo | N | PREN |
|------|------|------|-------|-------|------|-------|------|------|------|
| 0.02 | 0.62 | 0.80 | 0.025 | 0.011 | 8.73 | 22.63 | 3.19 | 0.18 | 35.0 |

Typical mechanical properties of all-weld metal

| | Yield Strength (0.2%OS) | Tensile Strength | Elongation | Remarks |
|---------------|-------------------------|------------------|------------|---------|
| | (MPa) | (MPa) | (%) | |
| AWS A5.4 | | Min. 690 | Min. 20 | |
| EN ISO 3581-A | Min. 450 | Min. 550 | Min. 20 | |
| Example | 550 | 780 | 24 | AW |

*AW: As-welded

Sizes available and recommended currents (AC or DC +)

| Diameter | (mm) | 2.6 | 3.2 | 4.0 | 5.0 |
|----------|--------|-------|--------|---------|---------|
| Length | (mm) | 300 | 350 | 350 | 350 |
| Amperage | F | 50-80 | 80-110 | 110-150 | 140-180 |
| | V . OH | 40-60 | 70-100 | 90-130 | - |