



Inox 2509MoWB

Basic coated Electrode
For Super-duplex Stainless steels

Classification

AWS A 5.4 : E 2595-15
ISO 3581-A : E 25 9 4 N L B 4 2

EN 1600 : E 25 9 4 N L B 4 2

Description & Applications

Basic coated electrode with an austenitic-ferritic microstructure (duplex ~40% ferrite). The weld metal can be applied for operation temperatures up to 250°C and is resistant in chloride containing medias against pitting as well as crevice and stress corrosion. For but welding and cladding of steels and castings with an austenitic - ferritic structure, of the same or similar composition, which are used for pumps, vessels, piping systems etc, attacked by chloride solution. But also for impellers and other components which require high strength combined with corrosion attack. Pitting index: >40.

Main applications: Tanks, pumps, piping systems...

Base materials

| UNS | Aciers | EN 10088 | N° Mat | CLI |
|--------|--------|------------------------|--------|-------------|
| S31803 | | X2CrNiMoN22-5-3 | 1.4462 | URANUS 45 |
| S32304 | 35N | X2CrNi23-4 | 1.4362 | URANUS 35N |
| S32550 | 52N | G-X2CrNiMoCuN26 6 3 | 1.4517 | URANUS 52N |
| | 52N+ | X2CrNiMoCuN25-6-3 | 1.4507 | URANUS 52N+ |
| S32760 | 100 | X2CrNiMoCuW25 7 4 | 1.4501 | URANUS 70N |
| S32900 | 329 | X3CrNiMoN27-5-2 | 1.4460 | |

Typical Weld Metal Composition (%)

| C | Si | Mn | Cr | Ni | Mo | W | Cu | N | Fe |
|-------|-----|-----|------|-----|-----|-----|-----|------|------|
| <0.04 | 0.5 | 1.5 | 25.0 | 9.3 | 3.6 | 0.5 | 0.7 | 0.23 | Base |

All Weld Metal Mechanical Properties

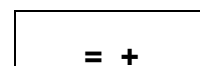
| $R_{p0.2}$ (MPa) | R_m (MPa) | A_5 (%) | KV (J) | |
|------------------|-------------|-----------|--------|----|
| 700 | 900 | 24 | +20°C | 75 |
| | | | -50°C | 50 |

Welding Current & Instructions

| | | | | |
|-----------|------------|---------|---------|---------|
| Electrode | ØxL (mm) | 2,5x300 | 3,2x350 | 4,0x350 |
| Current | (A) | 50-75 | 70-100 | 90-150 |

Redrying 2-3h at 250-300°C, if necessary. Interpass temperature: <130°C. Guide electrodes with a slight declination and weld with a short arc.

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