



# CEWELD AA 309 LNb

**TYPE** Rutile flux cored stainless steel welding wire with exceptional Weldability for use with M21 and Co2. (Type 23 12 Nb, 1.4556)

**APPLICATIONS** Cladding mild and low alloyed steels in offshore and or chemical plants in case AISI 347 or AISI 321 are required as clad layer

**PROPERTIES** Smooth drop transfer and stable arc with no spatter losses. Excellent productivity and weldability, better wetting properties compared to solid wires. Excellent weld metal quality and X-ray soundness and excellent slag removal. Excellent for use in position and down hand as well. High resistance against moisture pick up

**CLASSIFICATION**

|        |                                |
|--------|--------------------------------|
| AWS    | A 5.22: E309LNbT0-1            |
| AWS    | A 5.22: E309LNbT1-4            |
| EN ISO | 17633-A: TZ 23 12 L Nb R M21 1 |
| F-nr   | 6                              |
| FM     | 5                              |
| W.Nr.  | 1.4556                         |

**SUITABLE FOR** **Type 23 12 Nb, E309LNb TÜV Groupe 29 (+22+21)**  
1.4878, 1.4825, 1.4541, 1.4550, 1.4552 1.4319, 1.4306, 1.4306, 1.4301, 1.4303, 1.4308, 1.4310, 1.4312  
X 12 CrNiTi 18 9, G-X 25 CrNiSi 27 4, X 6 NiTi 18 10, X 6CrNiNb 18 10, G-X 5CrNiNb 18 9, X 5CrNi 18 7, X 2CrNi 19 11, G-X 2CrNi 18 9, X 5CrNi 18 10, X 5CrNi 18 12 G-X, 6CrNi 18 9, X 12CrNi 17 7, G-X 10CrNi 18 8  
Cr - CrNi(Mo)- S355

**APPROVALS** CE

**WELDING POSITIONS**



**TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)**

| C    | Si  | Mn  | P    | Cr | Ni   | Nb+Ta | S    | FN | FS | FNW |
|------|-----|-----|------|----|------|-------|------|----|----|-----|
| 0.03 | 0.7 | 1.4 | 0.02 | 23 | 12.5 | 0.8   | 0.08 | 18 | 16 | 25  |

**ALL WELD MECHANICAL PROPERTIES**

| Heat Treatment | R <sub>P0,2</sub><br>MPa | R <sub>m</sub><br>MPa | A <sub>5</sub><br>(%) | Impact Energy (J) ISO-V |     |
|----------------|--------------------------|-----------------------|-----------------------|-------------------------|-----|
|                |                          |                       |                       | RT                      | 0°C |
| As Welded /    | 480                      | 650                   | 35                    | 80                      | 70  |

**REDRYING TEMPERATURE** 140°C / 24 hr

**GAS ACCORDING EN 14175** M21, C1