



CEWELD SA 318

TYPE Solid stainless steel welding wire for submerged arc welding stabilized stainless steels with high Mo content

APPLICATIONS The alloy is widely used in the chemical and food-processing industries, as well as in shipbuilding. Suitable for welding stabilized corrosion-resistant Cr-Ni-Mo steels for working temperatures up to 400°C.

PROPERTIES CEWELD® SA 318 is engineered to a very precise analysis to create a weld deposit of high purity, superior hot cracking and corrosion resistance. CVN toughness down to -120 °C, resistant to intergranular corrosion up to 400 °C. Flux CEWELD® FL 838 or fused flux CEWELD® FL 880

CLASSIFICATION

| | |
|--------|-----------------------|
| AWS | A 5.9: ER318 |
| EN ISO | 14343-A: S 19 12 3 Nb |
| W.Nr. | 1.4576 |
| F-nr | 6 |
| FM | 5 |

SUITABLE FOR 1.4301, 1.4306, 1.4401, 1.4404, 1.4408, 1.4420, 1.4435, 1.4436, 1.4541, 1.4550, 1.4571, 1.4573, 1.4580, 1.4581, 1.4583
 X 6 CrNiMoTi 17 12 2, X10 CrNiMoTi 18 12, X 6 CrNiMoNb 17 12 2, G-X 5 CrNiMoNb 18 10, X 10 CrNiMoNb 18 12, X 5 CrNiMo 18 11, X 2 CrNiMo 17 13 2, G-X 2 CrNiMo 18 10, X 2 CrNiMo 18 14 3, X 5 CrNiMo 17 12 2, G-X 6 CrNiMo 18 10, X 5 CrNiMo 17 13 3
 UNS S31600, S31603, S31635, S31640, S31653, AISI 316, 316L, 316Ti, 316Cb

APPROVALS CE

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

| C | Si | Mn | P | S | Cr | Ni | Mo |
|-------|-----|-----|------|------|----|------|------|
| 0.035 | 0.5 | 1.6 | 0.02 | 0.02 | 19 | 12.5 | 2.75 |

MECHANICAL PROPERTIES

| Heat Treatment | R _{P0.2} (MPa) | R _m (MPa) | A ₅ (%) | Impact Energy (J) ISO-V | | Hardness |
|----------------|-------------------------|----------------------|--------------------|-------------------------|--------|----------|
| | | | | RT | -110°C | |
| As Welded | 390 | 590 | 30 | 110 | 47 | HRC |

REDRYING Not required

GAS ACC. EN ISO 14175