

Solid wire high-alloyed, stainless

| Classifications | | | | |
|-----------------|----------------|----------|--|--|
| EN ISO 14343-A | EN ISO 14343-B | AWS A5.9 | | |
| G 19 12 3 L Si | SS316LSi | ER316LSi | | |

Characteristics and typical fields of application

GMAW solid wire designed for first class welding, good wetting and feeding characteristics as well as reliable corrosion resistance up to +400 °C.

Low temperature service down to -196 °C.

Base materials

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-13-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4583 X10CrNiMoNb18-12, 1.4409 GX2CrNiMo19-11-2

UNS S31603, S31653; AISI 316L, 316Ti, 316Cb

| Typical analysis of solid wire | | | | | | |
|--------------------------------|------|-----|-----|------|------|-----|
| | С | Si | Mn | Cr | Ni | Мо |
| wt% | 0.02 | 0.8 | 1.7 | 18.4 | 12.4 | 2.8 |

Mechanical properties of all-weld metal

| Condition | Yield strength R _{p0,2} | Tensile strength R _m | Elongation (L ₀ =5d ₀) | Impact work ISO-V KV J | |
|-----------|----------------------------------|---------------------------------|---|---------------------------|---------|
| | MPa | MPa | % | +20 °C | –196 °C |
| u | 420 (≥ 320) | 560 (≥ 510) | 35 (≥ 25) | 70 | ≥ 32 |

untreated, as welded - shielding gas Ar + 2.5 % CO₂

Operating data

| * * * 1 | Polarity: | Shielding gases: | ø (mm) BS300, S300 |
|----------------|-----------|------------------------------------|--------------------|
| T T | DC (+) | Argon + max. 2.5 % CO ₂ | 0.8 |
| <u>←</u> , | | | 0.9 |
| ✓ ♦ ♦ | | | 1.0 |
| | | | 1.2 |
| | | | 1,6 |

Approvals

TÜV (12937.), DB (43.132.39), CE

