

AX-312

AX-4337

Standards

Material no.: 1.4337

| | |
|-----------------|-----------------|
| EN ISO 14343-A: | W 29 9 / G 29 9 |
| EN ISO 14343-B: | SSZ312 |
| AWS A5.9: | ER312 mod. |

Properties

Welding rod/solid wire made of ferritic-austenitic chromium-nickel steel for TIG or MAG welding of dissimilar steels and for build-up welding. Particularly suitable for difficult-to-weld materials due to high ferrite content and high crack resistance.

Important base materials / important applications

For joint welding on difficult-to-weld materials with higher strength, also on weldable tools. Joining of differently alloyed steels, tough intermediate layers with hardfacings. Also suitable for wear-resistant build-up welds on couplings, gear wheels, shafts and tools thanks to its high strength and strain hardening properties.

Typical composition of the welding rod / solid wire in %

| C | Si | Mn | Cr | Ni |
|-----|-----|-----|------|-----|
| 0.1 | 0.4 | 1.7 | 30.4 | 9.0 |

Mechanical properties of the all-weld metal (typical values)

| | |
|-----------------------------------|--------------|
| Yield strength $R_{p0.2}$ [MPa] | 540 |
| Tensile strength R_m [MPa] | 760 |
| Elongation A ($L_0 = 5d_0$) [%] | 25 |
| Impact energy KV [J] | 30 at +20 °C |

Shielding gas: 100% argon, PWHT: untreated

Operating data

TIG:

Shielding gas: I1 (100% Argon)
acc. to ISO 14175



GMAW:

M12 (e.g. Ar+2.5% CO₂)
M13 (e.g. Ar+max.1.0% O₂)



Preheating and PWHT depend on the base material used.

Approvals

For the current scope of approvals, see www.alunox.eu.

Packaging and available sizes

| Spools | Ø mm | 0.8 | 1.0 | 1.2 | 1.6 | | |
|--------|----------------|-----|-----|-----|-----|--|--|
| Rods | Ø mm x 1000 mm | 1.6 | 2.0 | 2.4 | 3.2 | | |

Other dimensions on request.