

Classifications

| EN ISO 18276-A | EN ISO 18276-B | AWS A5.29 / SFA-5.29 |
|---------------------------|--------------------------|----------------------|
| T 55 5 Mn1.5Ni P M21 1 H5 | T 62 5 T1-1M21A-N3M1-UH5 | E91T1-K2M-JH4 |

Characteristics and typical fields of application

Seamless rutile, Nickel-manganese alloyed, flux-cored wire for single or multilayer welding of carbon, carbon-manganese steels and high strength steels with Ar-CO₂ shielding gas. Main features: excellent weldability in all positions, excellent bead appearance, very low spatter losses, fast freezing and easy to remove slag. The exceptional mechanical properties of this wire even at low temperatures as well as the low content of diffusible hydrogen make it especially suitable for pipeline applications.

Base materials

API 5L: X70, X80
EN 3183: L485, L555

Typical analysis


| | Gas | C | Si | Mn | Ni |
|-------|-----|------|------|------|------|
| wt.-% | M21 | 0.06 | 0.40 | 1.45 | 1.45 |

Mechanical properties of all-weld metal - typical values (min. values)

| Condition | Yield strength R _e | Tensile strength R _m | Elongation A (L ₀ =5d ₀) | Impact energy ISO-V KV J | |
|-----------|-------------------------------|---------------------------------|---|--------------------------|-----------|
| | MPa | MPa | % | -40°C | -50°C |
| u | 630 (≥ 550) | 700 (640–760) | 22 (≥ 18) | 70 | 60 (≥ 47) |

u untreated, as welded - shielding gas M21 (Ar + 15 – 25 % CO₂)

Operating data

| | | | |
|--|-------------------------------------|-------------------------------------|---------------------|
|  | Polarity | DC + | Dimension mm |
| | Shielding gas (EN ISO 14175) | M21: Ar + 15 – 25 % CO ₂ | |

Welding with standard GMAW-facilities possible

Approvals

TÜV (19765), DB (42.052.27), CE