

Classifications

| EN ISO 17632-A | EN ISO 17632-B | AWS A5.18 | AWS A5.18M |
|----------------|----------------|-----------|------------|
| T46 6 M M 1 H5 | T556T15-1MA-H5 | E70C-6MH4 | E48C-6MH4 |
| T42 5 M C 1 H5 | T495T15-1CA-H5 | E70C-6CH4 | E48C-6CH4 |

Characteristics and typical fields of application

Seamless metalcored wire for single or multipass welding of Carbon, Carbon-Manganese and similar types of steels, including fine grain ones, with Argon-CO₂ or pure CO₂ shielding gas. Features include: high yield, good weldability, excellent bead appearance, no spatter or slag and exceptional mechanical properties at low temperatures (-60°C). This wire is especially suitable for automated - robotized applications and for rootpass welding for piping and butt-joint's. CTOD tested at -10°C.

Base materials

EN 10207: P253S - P265S - P275SL ÷ EN 10025-2: S235JR-J0-J2 - S275JR-J0-J2 - S355JR-J0-J2-K2 - S450J0 ÷ EN 10025-3: S275N - S275NL - S355N - S355NL - S420N - S420NL - S460N - S460NL ÷ EN 10025-4: S275M - S275ML - S355M - S355ML - S420M - S420ML - S460M - S460ML ÷ EN 10028-2: P235GH - P265GH - P295GH - P355GH ÷ EN 10028-3: P275NH - P355NH - P460NH - P275NL1 - P355N - P355NL1 - P460NL1 ÷ EN 10028-6: P355QH - P460QH - P355Q - P460Q - P355QL1 - P460QH1 ÷ EN 10025-6: S460Q - S460QL ÷ EN 10028-5: P355M - P420M - P460M - P355ML1 - P420ML1 - P460ML1 ÷ EN 10028-6: P355Q - P460Q - P500Q - P355QL1 - P460QL1 - P500QL1 - P355QL2 - P460QL2 - P500QL2 ÷ EN 10208-1: L210GA - L235GA - L245GA - L290GA - (X42) - L360GA - (X52) ÷ EN 10208-2: L245NB - L245MB - L290NB - L290MB - (X42) - L360NB - L360QB - L360MB - (X52) - L415NB - L415QB - L415MB - (X60) - L450QB - L450MB - (X65) - L485QB - L485MB - (X70)

Typical analysis of all-weld metal (wt.-%)

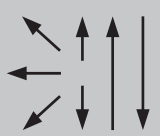
| C | Mn | Si | P | S | GAS |
|------|------|------|---------|---------|-----|
| 0.06 | 1.60 | 0.80 | < 0.025 | < 0.025 | M21 |
| 0.05 | 1.50 | 0.60 | < 0.025 | < 0.025 | C1 |

Mechanical properties of all-weld metal – typical values (minimum values)

| Shielding Gas | Heat-treatment | Yield strength R _{p0.2} | Tensile strength R _m | Elongation A (L ₀ =5d ₀) | Impact work in J CVN | | | | |
|---------------|----------------|----------------------------------|---------------------------------|---|----------------------|-----|-------|-------|-------|
| | | | | | 20°C | 0°C | -40°C | -50°C | -60°C |
| M21 | AW | 460 | 560 | 28 | 140 | 130 | 90 | - | 60 |
| C1 | AW | 420 | 540 | 26 | 100 | 90 | 80 | 60 | - |
| M21 | S=620° Cx2h | 420 | 510 | 24 | - | - | 90 | - | - |

Untreated, as welded – shielding gas Ar + 18% CO₂

Operating data

|  | Ø (mm) | Spool | Weight (Kg) | Current A | Voltage V |
|---|--------|-------|-------------|-----------|-----------|
| | 1.00 | B300 | 16 | 90 - 280 | 16 - 30 |
| | 1.20 | B300 | 16 | 120 - 350 | 17 - 32 |
| | 1.40 | B300 | 16 | 150 - 400 | 18 - 33 |
| | 1.60 | B300 | 16 | 200 - 450 | 20 - 34 |

Other spool types on request

Approvals

RINA • TÜV (06226) • LR • ABS • DNV • BV • GL • DB (42.052.02) • CWB