

Classifications

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| EN ISO 17634-A | AWS A5.28 |
| T CrMo2 M M 2 H5 | E90C-B3MH4 |

Characteristics and typical fields of application

Seamless, Chromium-Molybdenum alloyed, metalcored wire for single or multipass welding of similar steels resistant to creep up to 600°C with Ar-CO₂ shielding gas. Features include: high yield, good weldability, excellent bead appearance and no spatter or slag. Wire with very low amount of diffusible hydrogen (<3ml/100g) that reduces the risk of cracks.

Base materials

EN 10028-2: P235GH - P265GH - P295GH - P355GH - 16Mo3 - 18MnMo4-5 - 20MnMoNi4-5 - 13CrMo4-5 - 13CrMoSi4-5 - 10CrMo9-10 - 12CrMo9-10, EN 10028-3: P275NH - P355NH - P460NH, EN 10028-6: P355QH - P460QH - P500QH - P690QH, EN 10213-2: GS-18CrMo9-10 - 10CrSiMoV7 - 12CrSiMo8

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

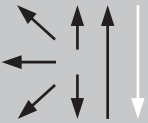
| C | Mn | Si | P | S | Cr | Mo | Gas |
|------|------|------|---------|---------|------|------|-----|
| 0.06 | 1.10 | 0.35 | < 0.025 | < 0.025 | 2.20 | 1.00 | M21 |

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

| Condition | Yield strength R _{p0.2} | Tensile strength R _m | Elongation A (L ₀ =5d ₀) | Impact work ISO-V KV J |
|-----------|-------------------------------------|------------------------------------|--|---------------------------|
| | MPa | MPa | % | 20°C |
| u | 540 | 620 | 17 | 70 |

u: untreated, as welded – shielding gas Ar + 18% CO₂

Operating data

|  | Ø (mm) | Current A | Voltage V |
|---|--------|-----------|-----------|
| | 1.00 | 40 - 270 | 11 - 32 |
| | 1.20 | 50 - 320 | 12 - 35 |
| | 1.40 | 60 - 360 | 14 - 36 |
| | 1.60 | 60 - 390 | 16 - 37 |
| | 2.00 | 100 - 420 | 17 - 39 |
| | 2.40 | 150 - 450 | 18 - 41 |

Approvals

TÜV