# BÖHLER NiCu1 T-MC

Metal cored wire, seamless, weather resistant

## Classifications

| EN ISO 17632-A | EN ISO 17632-B | AWS A5.36 | AWS A5.36M |
|---|---|---|---|
| T46 6 Z M M21 1 H5 | T556T15-1MA-G-H5 | E80T15-M21A8-GH4 | E550T15-M21A6-GH4 |

## Characteristics and typical fields of application

Seamless, Nickel-Copper alloyed, metalcored wire for single- or multilayer welding of weathering resistant constructional steels with Ar-$CO_2$ shielding gas.
Features include: high yield, good weldability, excellent bead appearance, low spatter losses and exceptional mechanical properties at low temperatures. This wire is especially suitable for bridge constructions and chimney.

## Base materials

S235JRG2Cu, S235J2G4Cu, S235J0Cu, S235JRW, S355J0Cu, S355J2G3Cu, S355J0W, 235J2W-S355J2W, S355K2W
ASTM A 588 Gr. A, B, C, K; A 618 Gr. II; 709 Gr. C

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

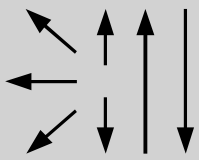
| | Gas | C | Si | Mn | Ni | Cu |
|---|---|---|---|---|---|---|
| wt-% | M21 | 0.06 | 0.45 | 1.20 | 0.50 | 0.50 |

## Mechanical properties of all-weld metal

| Condition | Yield strength $R_e$ | Tensile strength $R_m$ | Elongation A ($L_0$=5$d_0$) | Impact work ISO-V KV J | |
|---|---|---|---|---|---|
| | MPa | MPa | % | -40°C | -60°C |
| u | **490** (≥470) | **590** (550–680) | **27** (≥20) | **100** | **70** (≥47) |

u untreated, as welded – shielding gas M21

## Operating data



| Polarity: | Shielding gas: | ø (mm) |
|---|---|---|
| DC ( + ) | (EN ISO 14175) M21 | 1.0<br>1.2<br>1.4<br>1.6 |

Welding with standard GMAW power source possible

## Approvals

CE