BÖHLER Ti 2 Ni T-FD

Flux cored wire, seamless, high strength, rutile type

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.36	AWS A5.36M
T50 6 2Ni P M21 1 H5	T576T1-1M21A-N5-H5	E81T1-M21A8-Ni2-H4	E551T1-M21A6-Ni2-H4

Characteristics and typical fields of application

Seamless rutile nickel alloyed flux cored wire for single- or multilayer welding of carbon, carbon-manganese steels and fine grain steels with Ar-CO_2 shielding gas.
Main features: excellent weldability in all positions, excellent bead appearance, low spatter losses, fast freezing and easy to remove slag. The exceptional mechanical properties of this wire even at low temperatures (-60°C) as well as the low content of diffusible hydrogen make it especially suitable for off-shore applications. This wire is CTOD tested at -50°C.

Base materials

10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6, S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P275NL1-P460NL1, P275NL2-P460NL2, L245NB-L415NB, L245MB-L450MB, L360QB-L450QB; S500Q, S500QL

ASTM A 203 Gr. D, E; A 333 Gr. 3; A334 Gr. 3; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65; AA 529 Gr. 50; A 572 Gr. 42, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C, API 5 L X42, X52, X60, X65, X52Q, X60Q, X65Q

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

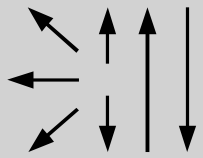
	Gas	C	Si	Mn	Ni
wt-%	M21	0.06	0.45	1.30	2.00

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	-60°C
u	**580** (≥ 500)	**640** (570 – 690)	**25** (≥ 18)	**80** (≥ 47)

u untreated, as welded – shielding gas M21

Operating data



Polarity:	Shielding gas:	ø (mm)
DC (+)	(EN ISO 14175) M21	1.0 1.2 1.4 1.6

Welding with standard GMAW power source possible

Approvals

ABS, DNV-GL, LR, RS, CE