

BÖHLER Ti 52-FD

Flux-cored wire, mild steel, rutile

Classifications

EN ISO 17632-A

T 46 4 P M21 1 H10

T 42 2 P C1 1 H5

AWS A5.36 / SFA-5.36

E71T1-M21A4-CS1-H8

E71T1-C1A2-CS1-H4

Characteristics and typical fields of application

All position rutile flux-cored wire with fast freezing slag system. User friendly welding characteristics in all positions with one wire diameter 1.2 mm and same parameter setting. Excellent mechanical properties, easy slag removal, low spatter loss, smooth, finely rippled bead surface, high X-ray safety. The product performs to the highest productivity with significant savings in time and economical aspects when used for positional welding.

Base materials

Steels up to a yield strength of 460 MPa (67 ksi) (shielding gas M21)

S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P275NL1-P460NL1, P215NL, P265NL, P355N, P285NH-P460NH, P195TR1 - P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240,

shipbuilding steel: A, B, D, E, A 32-E 36

ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 350 Gr. LF1; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 513 Gr. 1018; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. C, E; A 662 Gr. B; A 711 Gr. 1013; A 841 Gr. A; API 5 L Gr. B, X42, X52, X56, X60, X65

Typical analysis of the wire

	Gas	C	Si	Mn
wt.-%	M21	0.06	0.50	1.20
wt.-%	C1	0.05	0.45	1.10

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

Condition	Yield strength R _e MPa	Tensile strength R _m MPa	Elongation A (L ₀ =5d ₀) %	Impact values ISO-V KV J		
				20°C	-20°C	-40°C
u	500 (\geq 460)	580 (550 – 740)	26 (\geq 20)	180	130	90 (\geq 47)
u1	480 (\geq 420)	550 (500 – 670)	25 (\geq 20)	160	110 (\geq 47)	

u untreated, as welded – shielding gas M21

u1 untreated, as welded – shielding gas C1

Operating data

	Polarity	DC+	Dimension mm	
			1.2	1.6
	Shielding gas (EN ISO 14175)	M21, C1		

Welding with standard GMAW-facilities possible

Approvals

TÜV, DB, ABS, LR, DNV GL, BV, CRS, CE