

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.36	AWS A5.36M
T 46 4 P M 1 H10	T554T1-1MA-UH10	E71T1-M21A4-CS1-H8	E491T1-M21A4-CS1-H8
T 42 2 P C 1 H5	T492T1-1CA-UH5	E71T1-C1A2-CS1-H4	E491T1-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, Schiffbaustähle: 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 all-weld metal (wt.-%)

	C	Si	Mn	Ti
Wt-%	0.06	0.5	1.2	0.05

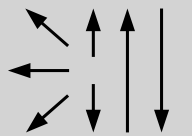
Mechanical properties of all-weld metal

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

u untreated, as welded – shielding gas Ar + 15 – 25 % CO₂

u1 untreated, as welded – shielding gas 100 % CO₂

Operating data

	Polarity:	Shielding gases:	Redrying:	ø (mm)
		DC (+)	Argon + 15 – 25 % CO ₂ 100 % CO ₂	possible, 150 °C/24 h

Welding with standard GMAW-facilities possible

Approvals

TÜV (11164.), DB (42.014.35), ABS, GL, LR, DNV, BV, CRS, CE