

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.20 / SFA-A5.20
T 46 3 P C1 1 H5	T 49 3 T1-1C1A-H5	E71T-1C H4 / E71T-9C H4

Characteristics and typical fields of application

Seamless rutile flux-cored wire for single or multilayer welding of carbon, carbon-manganese steels and similar types of steels including fine grain steels with pure CO₂ shielding gas. Main features: excellent weldability in all positions especially vertical upward position, also with high parameters (300 A), very low spatter losses, fast freezing, easy to remove slag and smooth and bright bead. This wire is especially suitable for ship building where excellent performance and welding speed are needed.

Base materials

S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240
 Ship building steels: 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 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

	Gas	C	Si	Mn
wt.-%	C1	0.065	0.45	1.3

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

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J		
	MPa	MPa	%	20°C	-20°C	-30°C
u	520 (≥ 460)	580 (550-660)	25 (≥ 20)	100	95	70 (≥ 47)

u untreated, as welded – shielding gas C1

Operating data

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

Welding with standard GMAW-facilities possible

Approvals

TÜV (06221), DB (42.052.07), DNV, ABS, LR, BV, RINA, RS, CE