

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.36/SFA-5.36	AWS A5.36M/SFA-5.36M
T46 3 M M21 1 H5	T553T15-1M21A-H5	E71T15-M21A5-CS1-H4	E491T15-M21A5-CS1-H4
T46 3 M M20 1 H5	T553T15-1M20A-H5	E71T15-M20A5-CS1-H4	E491T15-M20A5-CS1-H4

Characteristics and typical fields of application

Seamless all positional metalcored wire for semi-automatic and fully automatic joint welding of unalloyed and fine-grained constructional steels utilizing service temperatures from -30°C to +450°C. Steady spray arc-like droplet transfer with minimal spatter formation. High resistance to porosity, good wetting behaviour as well as low hydrogen contents (≤ 5 ml/100 g deposit) are further quality features of this metal-cored wire. Ideal for horizontal and flat fillet welds. This wire is designed for minimum oxide residues permit the welding of multi passes without the need for inter-run cleaning.

Base materials

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

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 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 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 516 Gr. 55, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. C; A 662 Gr. B; A 711 Gr. 1013; A 841 Gr. A; API 5 L Gr. B, X42, X52, X56, X60, X65

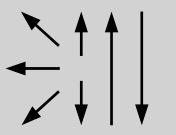
Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn
wt-%	0.06	0.8	1.5

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		
				-20°C	-30°C	-50°C
u	480 (≥ 460)	580 ($\geq 550 - 660$)	29 (≥ 22)	120	90 (≥ 47)	70 (≥ 27)
u untreated, as welded – shielding gas Ar + 5 – 25% CO ₂						

Operating data

	Polarity: DC (+)	Shielding gases: Argon + 5% – 25 % CO ₂ 14 – 20 l/min	Redrying not necessary	ø (mm)			
				1.0			
				1.2			
				1.4			
1.6							

Welding with standard GMAW-facilities possible.

Approvals

TÜV; DB; ABS; BV; DNV-GL; LR, CWB, CE