

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.36	AWS A5.36M
T46 3 M M 1 H5	T553T15-1MA-H5	E70T15-M21A2-CS1-H4	E490T15-M21A3-CS1-H4

Characteristics and typical fields of application

Seamless metal-cored 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 flux 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, P195GHP265GH,
 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.-%)

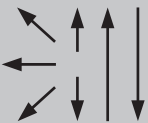
C	Si	Mn
0.06	0.8	1.5

Mechanical properties of all-weld metal

Condition	Yield strength	Tensile strength	Elongation	Impact work	
	R_e	R_m	A ($L_0=5d_0$)	ISO-V KV J	
	MPa	MPa	%	-20°C	-30°C
u	480 (≥ 460)	580 ($\geq 550 - 660$)	29 (≥ 22)	120	90 (≥ 47)

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

Operating data

	Polarity:	Shielding gases:	Redrying	\varnothing (mm)
	DC (+)	Argon + 15 – 25% CO ₂ 14 – 20 l/min	not necessary	1.2 1.4 1.6

Welding with standard GMAW-facilities possible.

Approvals

TÜV; DB; ABS; BV; DNV-GL; LR