

Classifications

EN ISO 17632-A	EN ISO 17632-B	EN ISO 17634-A
T46 2 Mo M M21 1 H5	T552T15-1M21-2M3-H5	T Mo M M21 1 H5
AWS A5.36/SFA-5.36		AWS A5.36M/SFA-5.36M
E81T15-M21P0-A1-H4		E551T15-M21P2-A1-H4

Characteristics and typical fields of application

Seamless, Molybdenum alloyed, metalcored wire for single- or multilayer welding of creep resistant steels up to 450°C with Ar-CO₂ shielding gas.
 Features include: high yield, good weldability, excellent bead appearance and low spatter losses. Wire with very low amount of diffusible hydrogen (<3ml/100g) that reduces the risk of cracks.

Base materials

16Mo3, 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
 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.-%)

	Gas	C	Si	Mn	Mo
wt-%	M21	0.09	0.35	1.10	0.50

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation $A (L_0=5d_0)$	Impact work ISO-V KV J
	MPa	MPa	%	-20°C
S	550 (≥ 470)	630 (550 – 680)	25 (≥ 22)	90 (≥ 47)

s stress relieved 620°C / 60min – shielding gas M21

Operating data

Polarity: DC (+)	Shielding gas: (EN ISO 14175) M21	ϕ (mm)
		1.0
		1.2
		1.4
		1.6

Welding with standard GMAW power source possible

Approvals

TÜV, DB, CE