

## Classifications

EN ISO 17632-A	EN ISO 17634-A	AWS A5.29 / SFA-5.29
T 46 0 Mo P M21 1 H5	T MoL P M21 1 H5	E81T1-A1MH4

## Characteristics and typical fields of application

Seamless rutile, Molybdenum alloyed flux cored wire, which provides easy all-position weld ability, primarily designed for the welding of 0,5% Mo alloyed base materials, that are used for the fabrication of vessels, high-pressure storage tanks, pipe systems as well as for structural steel applications. Main features: good weldability in all positions, good bead appearance and fast freezing, easy to remove slag and depositions with low contents of diffusible hydrogen. (< 4ml/100g weld metal)

## Base materials

Creep resistant steels and similar alloyed cast steels,

16Mo3, S235JR-S355JR, P195TR1-P265TR1, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE300

ASTM A 29 Gr. 1016; A 106 Gr. A, B; A 182 Gr. F1; A 234 Gr. WP1; A 283 Gr., C, D; A 335 Gr. P1; A 501 Gr. B; A 510 Gr. 1013; A 512 Gr. 1021, 1026; A 513 Gr. 1021, 1026; A 711 Gr. 1013; API 5 L B, X42, X52, X60, X65

## Typical analysis

	Gas	C	Si	Mn	Mo
wt.-%	M21	0.06	0.2	0.75	0.4

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

Condition	Yield strength $R_{p0.2}$	Tensile strength $R_m$	Elongation A ( $L_0=5d_0$ )	Impact energy ISO-V KV J	
	MPa	MPa	%	-20 °C	0 °C
s	550 (≥ 470)	630 (550 - 680)	24 (≥ 22)	60 (≥ 47)	100 (≥ 47)

s stress relieved 620°C / 1 h – shielding gas Ar + 15 – 25 % CO<sub>2</sub>

## Operating data

	<b>Polarity</b>	DC +	<b>Dimension mm</b>
	<b>Shielding gas (EN ISO 14175)</b>	M21	

Preheating, interpass temperature and post weld heat treatment as required by the base metal. For heavy walled components an interpass temperature to a min. 150°C recommended. Final PWHT should be carried out between 560°C to 620°C for a minimum of 1 hour.

## Approvals

TÜV (12205), CE