

diamondspark DMO RC

Flux cored wire, seamless, unalloyed, rutile type

Classifications							
EN ISO 17632-A	EN ISO 17632-B	AWS A5.36/SFA-5.36	AWS A5.36M/SFA-5.36M				
T46 0 Mo P M21 1 H5	T550T1-1M21-2M3-PH5	E81T1-M21P0-A1-H4	E551T1-M21P0-A1-H4				
EN ISO 17634-A							
T MoL P M21 1 H5							

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 of all-weld metal (wt.-%) C Si Mn Mo wt-% 0.06 0.2 0.75 0.4

Mechanical properties of all-weld metal					
Heat- treat-ment	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)		ct work V KV J
	MPa	MPa	%	0°C	-20 °C
S	550 (≥ 470)	630 (≥ 550 – 680)	24 (≥ 22)	100 (≥ 47)	60 (≥ 27)
s stress re	lieved 620°C / 1 h	n – shielding gas M21			

Stress relieved 620 C / 1 11 - Shielding gas M2 i

Operating data							
→ ↑ ↑ ↓	Polarity:	Shielding gases:	ø (mm)				
	DC (+)	(EN ISO 14175) M21	1.2				

Welding with standard GMAW-facilities possible.

Preheating, interpass temperature and psot 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; CE