BÖHLER DMO-IG

TIG rod, low-alloyed, creep resistant

Classifications

EN ISO 636-A / 21952-A	EN ISO 636-B / 21952-B	AWS A5.28 / SFA-5.28
W W2Mo / W MoSi	W W2M31 / W (1M3)	ER70S-A1 (ER80S-G)

Characteristics and typical fields of application

GTAW rod for welding of low alloy and creep resistant steels. Application area includes boiler, pressure vessel, tanks, pipeline, and crane constructions as well as in structural steel engineering. Approved in long-term service up to 550 °C.

Base materials

Similar alloyed creep resistant steels and cast steels, ageing resistant and steels resistant to caustic cracking

16Mo3, 20MnMoNi4-5, 15NiCuMoNb5, 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-GE300

ASTM A 29 Gr. 1013, 1016; A 106 Gr. C; A, B; A 182 Gr. F1; A 234 Gr. WP1; A 283 Gr. B, C, D; A 335 Gr. P1; A 501 Gr. B; A 533 Gr. B, C; A 510 Gr. 1013; A 512 Gr. 1021, 1026; A 513 Gr. 1021, 1026; A 516 Gr. 70; A 633 Gr. C; A 678 Gr. B; A 709 Gr. 36, 50; A 711 Gr. 1013; API 5 L B, X42, X52, X60, X65

Typical analysis of the TIG rods (wt.-%)

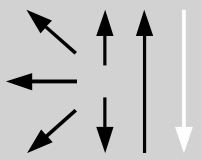
	C	Si	Mn	Mo
wt.-%	0.1	0.6	1.1	0.5

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	-30°C
u	**530** (≥ 460)	**650** (550 – 740)	**26** (≥ 22)	**200**	**80** (≥ 47)
a	**480**	**570**	**27**	**230**	

u untreated, as-welded – shielding gas Argon
a annealed, 620°C /1h / furnace down to 300°C / air – shielding gas Argon

Operating data



Polarity:	Shielding gas:	Rod marking:	ø (mm)
DC (–)	I1 (Ar)	✧ W MoSi / ER80S-G (A1)	1.6 x 1000 2.0 x 1000 2.4 x 1000 3.0 x 1000 3.2 x 1000

On request this wire is also available as TIG wire on spools.

Preheating, interpass temperature and post weld heat treatment as required by the base metal.

Approvals

TÜV (00020), KTA 1408.1 (8066.), DB (42.132.70), BV (UP), DNV GL, CRS, NAKS, CE