BÖHLER CM 9-IG

TIG rod, high-alloyed, creep resistant

Classifications

EN ISO 21952-A	EN ISO 21952-B	AWS A5.28	AWS A5.28M
W CrMo9Si	W 55 I1 9C1M	ER80S-B8	ER55S-B8

Characteristics and typical fields of application

GTAW rod for 9 % Cr 1 % Mo creep resistant steels and steels for hot hydrogen service, particularly for application in oil refineries and the base metals X12CrMo9-1 (P9). Approved in long-term condition up to +600 °C service temperature.

Base materials

Similar alloyed creep resistant steels

1.7386 X11CrMo9-1, 1.7388 X7CrMo9-1

ASTM A 182 Gr. F9; A 213 Gr. T9; A 217 Gr. C12; A 234 Gr. WP9; A 335 Gr. P9; A 336 Gr. F9; A 369 Gr. FB9; A 387 Gr. 9 u. 9CR; A 426 Gr. CP9; A 989 Gr. K90941

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

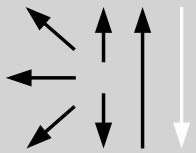
	C	Si	Mn	Cr	Mo
wt.-%	0.07	0.4	0.5	9.0	1.0

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
a	**530** (≥ 470)	**670** (≥ 590)	**24** (≥ 18)	**220** (≥ 34)

a annealed 760 °C / 2 h / furnace down to 300 °C / air – shielding gas Argon

Operating data



Polarity:	Shielding gas:	Rod marking:	ø (mm)
DC (–)	100 % Argon	front: W CrMo9 Si back: ER80S-B8	2.4

Preheating and interpass temperature 250 – 350 °C. Tempering at 710 – 760 °C for at least 1 h followed by cooling in furnace down to 300 °C/air. For detailed information about the welding technology please contact our service departments.

Approvals

TÜV (2182.), SEPROZ, CE