

Classifications		
EN ISO 21952-A	EN ISO 21952-B	AWS A5.28
W CrMo1	W 1CM	ER80S-G
		ER80S-B2

Characteristics and typical fields of application

GTAW rod for 1 % Cr 0,5 % Mo alloyed boiler, plate and tube steels as well as in oil refineries. Preferably used for base metal 10CrMo9-10 (ASTM A335 P22). Approved in long-term condition up to +600 °C service temperature. Very good operating characteristics. *For step- cooling applications we can offer special products.

Base materials

Creep resisting steels and similar alloyed cast steels and case hardening steels
 ASTM A182 Gr. F12 Cl. 1+2 – K11562+K11564 – 1.7335 – 13 CrMo4-5;
 ASTM A213 Gr. T2, T12 – K11547, K11562
 ASTM A217 Gr. WC6 – J12072 – 1.7357 – G17CrMo5-5
 ASTM A217 Gr. WC11 – J11872; ASTM A234 Gr. WP12 Cl. 1+2 – K12062
 ASTM A250 Gr. T2, T12 – K11547, K11562
 ASTM A335 Gr. P2, P11, P12 – K11547, K11597, K11562

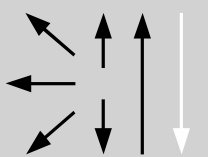
Typical analysis of the TIG rods (wt.-%)

	C	Si	Mn	Cr	Mo
wt.-%	0.10	0.55	0.60	1,30	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
a	470	550	19	90
a annealed, 620 °C/1 h				

Operating data

	Polarity:	Shielding gas:	Rod marking:	ø (mm)
	DC (-)	100 % Argon I 1-3	✦ ER80S-B2	1.6 2.0 2.4 3.0 3.2

Preheating and interpass temperature 200 – 350 °C. Tempering at 700 – 750 °C at least 1 h followed by cooling in furnace down to 300 °C and still air.

Approvals

On request