TIG F609

Old reference: TIG 80SB8

Classification

AWS A5.28 : ER80S-B8 ISO 21952-A : W CrMo9

Description & Applications

Copper coated solid rod for GTAW of creep resistant steels alloyed with Chromium and Molybdenum (9% Cr - 1% Mo) applied at service temperature up to 600°C. Its corrosion resistance is higher than 5% Cr - 0.5% Mo steels requirements.

Main applications: High temperature exchangers, piping, steam boilers, pressure vessels, overheaters...

Base material:

Creep resisting steels :

EN	*ASTM*
X12CrMo 9-1	A 182 gr F9
X7CrMo 9-1	A 199 gr T9
	A 213 gr T9
	A 217 gr C12
	A 234 gr WP9
	A 335 gr 9
	A 387 gr 9

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	V	P	S
Min	0.06	0.30	0.40	8.5		0.80					
Max	0.10	0.50	0.70	10.0	0.50	1.20	0.3	0.01	0.15	0.025	0.025
Type	0.07	0.40	0.50	9.0	0.25	1.0	0.12	0.005	0.02	0.01	0.01

All Weld Metal Mechanical Properties*

	R_e (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	470	590	18	+20°C	34
Max					
Type	530	670	24	+20°C	150

* After PWHT at 745°C/2h

Welding Current & Instructions

Welding mode	Shielding Gas
TIG = -	ISO 14175: I1 (Ar): 6-12 l/min Back shielding : I1 (Ar) / N1 (Nitrogen) : 3-6 l/min

Preheating and interpasses temperature: 200-260°C

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