



TIG F692

Classification

AWS A5.28 : ER90S-G

ISO 21952-A : W Z CrMoWVNb 9 0.5 1.5

Description & Applications

Copper coated solid rod for GTAW of creep resistant steels alloyed with Chromium and Molybdenum (9% Cr – 0.5% Mo) doped with Tungsten (1.7% W) like P92 applied at service temperature up to 620°C. Creep resistance improved due to Niobium (Nb), Vanadium (V) and Nitrogen (N) addition.

Main applications: Chemical and petrochemical industry...

Base materials:

Creep resisting steels :

EN	ASTM
X10CrWMoVNb 9-2	A 182 gr F92
	A 213 gr T92
	A 335 gr P92
	A 387 gr 92

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	V	W	N	P	S	Fe
Min														
Max	Not specified													
Type	0.10	0.40	0.45	8.8	0.50	0.40	0.03	0.05	0.20	1.6	0.05	0.01	0.005	Rem.

All Weld Metal Mechanical Properties (*)

	R _e (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min		620		
Max				
Type	540	630	17	+20°C / 100

* After PWHT at 760°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: 200-300°C

FT En-TF12-170306

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