TIG F69

Old reference: TIG CrMo5

Classification

AWS A5.28 : ER80S-B6 ISO 21952-A : W CrMo5Si

Description & Applications

Copper coated solid rod for GTAW of creep resistant steels alloyed with Chromium and Molybdenum (5% Cr – 0.5% Mo) applied at service temperature up to 600°C.

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

Base material:

Creep resisting steels:

EN	*ASTM*
X12CrMo5	A 182 / A 336 gr F5
G-X12CrMo5	A 199 / A 213 gr T5
	A 217 gr C5
	A 234 gr WP5
	A 335 gr P5
	A 387 gr 5

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	V	P	S
Min	0.03	0.30	0.40	5.50		0.50					
Max	0.10	0.50	0.70	6.00	0.3	0.65	0.3	0.01	0.03	0.020	0.020
Type	0.08	0.40	0.50	5.6	0.10	0.55	0.15	0.005	0.01	0.01	0.01

All Weld Metal Mechanical Properties*

	R_e (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	470	590	17	+20°C	47
Max					
Type	500	620	20	+20°C	160

* After PWHT at 745°C/1h

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: 200-230°C