TIG F83

Old reference: TIG 80SNi3

Classification

AWS A5.28 : ER80S-Ni3 ISO 636-B : W 57P 7 N71

Description & Applications

Copper coated solid rod, low alloyed with Nickel (3.5% Ni) for GTAW of fine grain steels and cold tough steels at low service temperature. Good impact strength at low temperatures down to -70°C.

Main applications: For liquid gas distribution pipes, tanks, off shore, and petro-chemistry**.**

Base material:

High strength steels, fine grain construction steels, cold tough:

EN	*ASTM*
BS 1501 Gr 503	A 203 Gr D, E, F
BS 1503 Gr 503	A 333 Gr 3
BS 1504 Gr 503 LT60	A350 Gr LF3
	A 352 Gr LC3

Typical Weld Metal Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Al	Ti	V	P	S	Fe
Min		0.40			3.00								
Max	0.12	0.80	1.25	-	3.75	-	0.35	-	-	-	0.025	0.025	Rem.
Type	0.10	0.60	1.0	0.05	3.5	0.01	0.12	0.005	0.002	0.005	0.01	0.01	Rem.

All Weld Metal Mechanical Properties

	R_e (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	490	570	24	-75°C	27
Max		770			
Type	560	630	25	-50°C -60°C -75°C	90 60 40

* After PWHT at 620°C/1h

Weld 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 interpass temperature: 150°C.

FT En-TF22-160915

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company FSH Welding Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for FSH Welding Group. **Fumes:** Consult information on MSDS, available upon request.