TIG F77G

Classification

AWS A5.28 : ER100S-G ISO 16834-A : W 69 4 I1 Mn3Ni1CrMo

Description & Applications

Copper coated solid rod, low alloyed with Nickel and Molybdenum for GTAW of high strength steels (Re > 700MPa). Good impact strength at low temperature down to -40°C.

Main applications: Chemical and petrochemical industry, offshore fabrication, industrial machinery construction, cranes…

Base materials:

High strength steels :

EN	*ASTM*
S420N-S500N	A 514
P420NH-P500NH	HY80
S420NL-S500NL	HY100
S690QL1	Q1(N)
S700MC	

Typical Weld Metal Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Al	Ti	Zr	V	P	S
Min		0.40	1.30	0.20	1.20	0.20					0.05		
Max	0.12	0.70	1.80	0.40	1.60	0.30	0.35	0.12	0.10	0.10	0.13	0.015	0.018
Type	0.08	0.60	1.6	0.30	1.4	0.25	0.15	0.005	0.002	0.002	0.08	0.010	0.010

All Weld Metal Mechanical Properties

	R_e (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	690	770	17	-40°C	47
Max		940			
Type	730	800	18	-40°C	55

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: 135-165°C.