



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.

FT En-TF15-190219

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.

www.fsh-welding.com - info@fsh-welding.fr