



MIG F77

Old reference: MIG 100S1

Classification

AWS A5.28 : ER100S-1

ISO 16834 : G Z Mn3Ni1.5Mo

Description & Applications

Copper coated solid wire for GMAW to weld high strength steels with Rm up to 800 MPa (Re up to 690MPa). Used for general metal constructions, blacksmithing, ship building etc. Also used as buffer or build up layer before hardfacing.

Base materials:

Fine grain and cold tough steels:

NF A 36-204	:	E 500T* . E 620T* ,. E 690T* .
DIN 17102	:	StE 590* . StE690* . TStE 500* . WStE 500* . 17MnCrMo 33, 11 NiMnCrMo 55, 16 NiCrMo 12, 12MnNiMo 55.
Material N°.	:	1.8928* - 1.7279* - 1.6780* - 1.6782* - 1.6343* etc.
ASTM	:	A517 - A533GrA - A537 - A678 - A633Gr C bis E N-A XTRA; N-A XTRA70* (Thyssen).
Tube steels	:	API 5 LX: X70* . X75* . X80*

Typical Chemical Composition (%)

C	Si	Mn	Cr	Ni	Mo	S	P	Fe
0.08	0.5	1.5	0.15	1.6	0.35	<0.02	<0.02	Rem.

All Weld Metal Mechanical Properties

R _e (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
730	820	19	-51°C 70

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Pulsed arc (A)	(V)	
MIG = +	1.0	150-170	25-28	EN 439: M21 (Ar/CO ₂) C1 (100% CO ₂) 12-15 l/min
	1.2	180-250	26-28	

Ind.10



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.