



# TIG F78

## Classification

AWS A5.28 : ER110S-G

ISO 16834-A : W Z Mn3Ni2,5CrMo

## Description & Applications

Copper coated solid rod for GTAW of high strength steels. Mainly used to construction with high mechanical properties ( $R_e > 750\text{MPa}$ ). Excellent impact strength at low temperature down to  $-50^\circ\text{C}$ .

### Base materials:

### High strength steels :

EN	ASTM
S460-S690	A 514
L480-L550	A 517
	HY80, HY90, HY100
	API 5 LX: X65-70-80

## Typical Weld Metal Composition ( % )

	C	Si	Mn	Cr	Ni	Mo	Cu	Al	Ti	Zr	V	P	S
Min													
Max	Not specified												
Type	0.06	0.40	1.6	0.30	2.5	0.40	0.12	0.003	0.002	0.001	0.003	0.007	0.007

## All Weld Metal Mechanical Properties

	$R_e$ ( MPa )	$R_m$ ( MPa )	$A_5$ ( % )	$KV$ ( J )	
Min	-	760	-	-	-
Max	-	-	-	-	-
Type	750	820	17	+20°C	190
				-20°C	150
				-40°C	100
				-50°C	75

## 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:  $\leq 175^\circ\text{C}$ .

FT En-TF16-190219

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