

TIG Rod for High Strength and Low Alloyed Steels

Classification

AWS A5.28 : ER80S-B2
 TS EN ISO 21952-A : W CrMo1Si*
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(*) Nearest classification

General Description

It is a low alloyed TIG rod, used for the welding high temperature strength Cr-Mo (1.25 % Cr, 0.5 % Mo) steels (boiler and pressure vessels) in operating temperatures up to 550°C. Also It is used in the welding cementation and nitride steels.

Industry: Chemical and petro-chemical industry

Chemical Composition (w%), Typical, Wire

C	Si	Mn	Ni	Cr	Mo	Cu
0.08	0.55	0.60	< 0.20	1.30	0.55	< 0.30

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 510 N/mm²
 Tensile Strength : 620 N/mm²
 Elongation (L=5d) : 24 %
 Impact (ISO-V) : 120 J (+20°C)
 100 J (-10°C)

Shielding Gases (ISO 14175 / EN 439)

TIG : I1 - Ar (100%)
 Current Type and Polarity : DC (-)

Materials to be Welded

	DIN	EN	Wr. Nr.
Creep Resistant Steels	15 CrMo 5	-	1.7205
	25 CrMo 4	-	1.7218
	42 CrMo 4	-	1.7225
	13 CrMo 44	13 CrMo 4-5	1.7335
	22 CrMo 44	-	1.7350
	13 CrMoV 42	-	1.7709
	16 CrMoV 4	-	1.7728
Cast Steels	GS-25 CrMo 4	G25CrMo4	1.7218
	GS-22 CrMo 5 4	G22CrMo5-4	1.7354
	GS-17 CrMo 5 5	G17CrMo5-5	1.7357
Cementation Steels	-	16MnCr5	1.7131

Packing and Diameter Informations

Diameter	0.8	1.0	1.2	1.6	2.0	2.4	3.2	Tube Weight
TIG Rod	-	-	-	X	X	X	-	5 kg