



# CEWELD 312 Tig

**TYPE** Solid stainless steel welding wire for Tig welding. (Type 29 9, 312, 1.4337)

**APPLICATIONS** Buffer layers before hardfacing, armor plate, exhaust systems, high, Manganese austenitic steel, heterogeneous welding, difficult to weld and unknown steels. Is suitable for wear resisting build-ups on clutches, gear wheels, shafts, etc. It is also suitable for repair welding of tools. For welding of unalloyed steels with limited weldability and low-alloyed steels of higher strength. Used as stress-relieved buffer layer when cladding cold and warm machine tools. For joining of high manganese and CrNiMn-steels and combinations of steels of different chemical composition or strength.

**PROPERTIES** Scale resistance up to 1150°C, crack and wear resistant, suitable for rebuilding wornout parts. Excelent corrosion resistance against high temperature liquid acids. Application temperature max. 300°C. High resistance to hot cracking, good toughness and strength properties. The weld metal also work hardens.

**CLASSIFICATION**

AWS	A 5.9: ER312
EN ISO	14343-A: W 29 9
W.Nr.	1.4337
F-nr	6
FM	5

**SUITABLE FOR** **ISO 15608: 8 >19% Cr Type: 29% Cr, 9%Ni**  
 1.4762, 1.4085  
 X120Mn12, X10Cr13, GX32CrNi28-10, GX49CrNi27-4, GX8CrCrNiN26-7, X3CrNiMoN27-5-2, X 10 CrAl 24, G-X 70 Cr 29  
 UNS S41000  
 AISI 329, 410. S235, E295  
 Hss, C45, C60, dissimilar welding S335 - X120Mn12, maintenance, buffer layers, repairing cock wheels, 42MnV7, 25CrMo4, 42CrMo4, 50CrMo4, 1.5223, 1.7218, 1.7225, 1.7228, Armox, Hardox

**APPROVALS** CE

**WELDING POSITIONS**

**TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)**

C	Si	Mn	P	S	Cr	Ni
0.012	0.5	1.8	0.015	0.015	29	9.5

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>P0,2</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	Impact Energy (J) ISO-V		Hardness
				RT	-196°C	
As Welded	525	710	25	80	50	240 HB

**REDRYING** Not required

**GAS ACC. EN ISO 14175** I1



# CEWELD 312 Tig

312 TIG 1,0 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663417381

312 TIG 1,2 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663417398

312 TIG 1,6 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663417404

312 TIG 2,0 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663417411

312 TIG 2,4 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663417428

312 TIG 3,2 X 1000MM

Packaging	KG/unit	EanCode
Tube	5	8720663417435