TIGWELD 312

TIG Rods [GTAW]

Stainless and high alloyed steels

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 14343-A : W 29 9 DIN 8556 : SG-X10 CrNi 30 9 AWS A-5.9 : ER 312 W.Nr. : 1.4337		Hardfacing and repairing Constructions & Engineering

- Solid wire for welding dissimilar steels, armor steels, high-carbon steels, spring steels and difficult-to-weld steels.
- Material resistant to cracking and abrasion, and it is stainless.
- The weld hardens.

Application

Surfacing of metal parts cooperating with each other and exposed to abrasion. For high temperature tools and furnace parts. Hardfacing of rails, dies and tools for hot forming. Making welds on difficult-to-weld materials with high carbon content and ingredients that increase hardenability. Reconstruction of mechanical elements, including racks, piston rods, etc., reconstruction of dies, buffer layer for cutting blades.

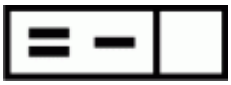
Base material

DIN	W.Nr.	AISI/ASME	PN
X10 CrAl24	1.4762	446	H24JS
G-X70 Cr29	1.4085		
G-X32 CrNi28 10	1.4339		
G-X40 CrNi27 4	1.4340		
G-X8 CrNi26 7	1.4347		
X2 CrTi12	1.4512	409	
X5 CrNi18 9	1.4301	304	0H18N9
25CrMo4	1.7218	4130	20HM, 25HM
42CrMo4	1.7225	4145	40HM
50CrMo4	1.7228	5150	50H
42MnV7	1.5223		
34CrNiMo6	1.6582		34HNM
41CrMo4	1.7223	4140	
C45	1.0503	M1044	C45
C60	1.0601	1060	C60
C55	1.0535	1055	C55
Difficult to weld steels			
Austenitic-manganese steels			
High tensile steels			
Tool steels			
High carbon steels			
High alloyed steels			

Typical chemical composition %

C	Si	Mn	Cr	Ni
<0,14	0,50	1,75	30,50	9,00

Typical mechanical properties

Yield strength Re [N/mm2]	>540
Tensile strength Rm [N/mm2]	740-850
Elongation A5 [%]	>18
Impact energy Kv [J]	>30J (20°C) /
Hardness	app. 240 HB (pure alloy) /
Wire/rod type	solid
Welding current	
Welding positions	
Shielding gases acc. to EN ISO 14175	I1 - Ar / I3 - Ar + >0-95% He /

Welding parameters and packing

ø	Length [mm]	Weight of packet [kg]
1,6	1000 /	5,0
2,0	1000 /	5,0
2,4	1000 /	5,0
3,2	1000 /	5,0

METALWELD-FIPROM POLSKA spółka z o.o.

ul. Mikołajczyka 57, 41-200 Sosnowiec

+48 (32) 297 75 50 - 51

+48 (32) 297 75 88

export@metalweld.pl