

# TIGWELD 310

TIG Rods [GTAW]

Stainless and high alloyed steels

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 14343-A : W 25 20 DIN 8556 : SG-X12 CrNi25 20 AWS A-5.9 : ER 310 W.Nr. : 1.4842		Power generation industry Constructions & Engineering Petrochemical and chemical industry

- Austenitic wire used for welding heat-resistant steels, pipes and castings made of 25% Cr and 20% Ni heat-resistant steels as well as for welding ferritic heat resistant steels, chromium steels that are not exposed to sulfur compounds.
- The joint is resistant to elevated temperatures up to 1200°C.
- 100% austenite deposit.

## Application

Typical applications include high-temperature furnaces, radiant pipes, steam boilers, internal components of coal gasifiers, thermowells, burners, combustion chambers, retorts, muffers, food processing equipment, cryogenic structures, fans, pipes. Pharmaceutical and chemical industry. It is used in equipment for continuous casting of steel, used in ore and steel processing plants, catalytic recovery systems, oil refining industry, sinter plants, cement plants, annealing casings and boxes, fans.

## Base material

DIN	W.Nr.	AISI/ASME	PN
X15 CrNiSi 20 12	1.4828	309	H20N12S2
X15 CrNiSi 25 20	1.4841	314/310	H25N20S2
X12 CrNi 25 21	1.4845	310S	H23N18
X10 CrAl 24	1.4762	446	H24JS
GX25CrNiSi 18 9	1.4825		
GX40CrNiSi 22 9	1.4826		
GX25CrNiSi 20 14	1.4832		
GX40CrNiSi 25 20	1.4848	HK40	
G-X15 CrNi25 20	1.4840	310	
G-X40 CrNiSi25 12	1.4837		
X10 CrAl7	1.4713		H6S2
X10 CrAl 13	1.4724	405	H13JS
X10 CrAl 18	1.4742		H18JS
G-X30 CrSi 6	1.4710		
G-40 CrSi 17	1.4740		
G-X15 CrNiSi 25 20	1.4741	A 297 HF	

## Typical chemical composition %

C	Si	Mn	Cr	Ni
0,12	0,50	1,75	25,00	20,00

## Typical mechanical properties

<b>Yield strength Re [N/mm<sup>2</sup>]</b>	>300
<b>Tensile strength Rm [N/mm<sup>2</sup>]</b>	540-640
<b>Elongation A5 [%]</b>	>30
<b>Impact energy Kv [J]</b>	>70J (20°C) /

<b>Wire/rod type</b>	solid
<b>Welding current</b>	
<b>Welding positions</b>	
<b>Shielding gases acc. to EN ISO 14175</b>	I1 - Ar / I3 - Ar + >0-95% He /

#### Welding parameters and packing

∅	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