

## TIGWELD 309LSi

TIG Rods [GTAW]

Stainless and high alloyed steels

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 14343-A : W 23 12 LSi DIN 8556 : SG-X2 CrNi24 12 AWS A-5.9 : ER 309 LSi W.Nr. : 1.4332		Power generation industry Constructions & Engineering Petrochemical and chemical industry Shipbuilding&Offshore

- High-alloy rod for welding homogenous, forged, cast and rolled steels.
- Also used for welding 18-8 steels exposed to severe corrosion.
- The wire is especially recommended for welding dissimilar steels, such as 18-8 steel with carbon steel and for overlaying stainless steel plates on non-alloy steel.

### Application

Furnaces (burners, doors, fans, piping, recuperators, grates, air boxes), paper mill equipment, petroleum refining (catalytic recovery systems, recuperators), power generation (powder burners, pipe hangers), thermal treatment, waste incineration plants, rotary kilns, calciners, automotive exhaust system components, heat exchangers, glass blowing components, aircraft parts, boiler partitions, furnace linings, porcelain firing baskets, annealing containers, inserts for chimneys operating in dry conditions.

### Base material

AISI/ASTM	DIN	W.Nr.	
	G-X25 CrNiSi 18 9	1.4825	
	G-X40 CrNiSi22 9	1.4826	
309	X15 CrNiSi20 12	1.4828	H20N12S2
	G-X25 CrNiSi20 14	1.4832	
304	X5 CrNi18 10	1.4301	OH18N9
304L	X2 CrNi18 11	1.4306	OOH18N10
305	G-X10CrNi18 8	1.4312	
304LN	X2 CrNiN18 10	1.4311	
321	X10 CrNiTi18 9	1.4541	
347	X6 CrNiNb18 10	1.4550	
	X10 CrSi6	1.4712	
405	X10 CrAl13	1.4724	H13JS
422	X10 CrAl18	1.4742	H18JS
	X10CrAl7	1.4713	H6S2
	X10 CrSi13	1.4722	
	X10 CrSi18	1.4741	
	X10 CrAl24	1.4762	H24JS
	X10CrSi29	1.4772	
	X20CrNiSi25 4	1.4821	
High alloyed steels			
High tensile steels			
Austenitic-manganese steels			
Difficult to weld steels			

### Typical chemical composition %

<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>Cr</b>	<b>Ni</b>
<0,025	0,80	1,60	23,50	13,50

#### Typical mechanical properties

<b>Yield strength Re [N/mm2]</b>	>380
<b>Tensile strength Rm [N/mm2]</b>	550-700
<b>Elongation A5 [%]</b>	>22
<b>Impact energy Kv [J]</b>	>27] (20°C) /
<b>Wire/rod type</b>	solid

#### Welding current



#### Welding positions



#### Shielding gases acc. to EN ISO 14175

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