

312 Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Solid stainless steel welding wire for Tig welding

APPLICATIONS Buffer layers before hardfacing, armor plate, exhaust systems, high, Manganese austenitic steel, heterogeneous welding, difficult to weld and unknown steels.

PROPERTIES Scale resistance up to 1150°C, crack and wear resistant, suitable for rebuilding wornout parts. Excellent corrosion resistance against high temperature liquid acids.

CLASSIFICATION

AWS	A 5.9: ER 312
EN ISO	14343-A: W 29 9
DIN: W.Nr.	1.4337
DIN	8556: SG-X10CrNi 30 9

SUITABLE FOR Buffer layers, armor plate, 409, 304, difficult to weld steels such as: 25CrMo4, 42CrMo4, 50CrMo4, 42MnV7, 1.7218, 1.7225, 1.7228, 1.7223, AISI: 4130, 4140, 4150, C45, C60, tool steel repairs etc..

APPROVALS CE approved

WELDING POSITIONS:

WELD DEPOSIT ANALYSIS

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
<0.15	28.0-32.0	8.0-10.5	<0.75	1.0-2.5	0.30-0.65	<0.03	<0.03	<0.75

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HB
				+20°C	-40°C	-60°C	
AW	640	800	22	50			240

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters		Packing (kg)	Packing
D (mm)	Current (A) DC-	Single	Master
1.0 x 1000	20-50	5	25
1.6 x 1000	50-80	5	25
2.0 x 1000	70-110		25
2.4 x 1000	110-180	5	25
3.2 x 1000	150-250		

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1