

TI 312

TIG Welding Wire - Stainless Steels

Standards				
AWS/ASME SFA - 5.9	ER312			
EN ISO 14343 - A	W 29 9			
TS EN ISO 14343 - A	W 29 9			
DIN M. No.	1.4337			

Properties and Applications

Austenitic-ferritic stainless steel wire electrode for TIG welding of dissimilar steels and depositing buffer layers on ferritic steels. It features high resistance to cracking and toughness, is therefore suited for joining difficult to weld steels and depositing stress-relaxing buffer layers on crack sensitive base metals. Weld metal is non-scaling up to 1100 $^{\circ}\text{C}.$ Especially used in die and tool repair, crack repairs in difficult to weld steels, gear teeth repair and rebuilding, buffer layer application on cutting blades. Suitable also for welding galvanized steel plates.



Typical Chemical Features of the Welding Wire							
Type of Analysis	С	Si	Mn	Cr	Ni		
Welding Wire	0.10	0.40	1.80	30.00	9.00		

Typical Mechanical Values of Weld Metal					
Test Condition Protection Gas Yield Strength (N/mm²)		Tensile Strength (N/mm²)	Elongation A5 (%)	Charpy V-Notch Properties (J)	
As welded	11	700	770	21	20°C → 60

^{*} Chemical compositon and mechanical properties are valid when using shielding gas EN ISO 14175 - I1 (%100 Ar).

Application Information Welding Positions Polarity: **Protection Gas:** 11 Welding Parameters & Efficiency Diameter x Length (mm) 2.00x1000 2.40x1000

Packaging Information							
Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type	
23105HBKM2	2.00x1000	5 kg	5.30	4	21.40	Cardboard Tube	
23105IBKM2	2.40x1000	5 kg	5.30	4	21.40	Cardboard Tube	

Storage & Re-Drying Information

Shouldn t be exposed to high statical load and impact. It should be stored in a dry room (relative humidity < 50%, room temperature > 20° C) on wooden pallets.