

ER 310

Stainless Steel WIRE/GMAW

Standards

EN/ISO-Standard - 14343-A
EN/ISO-Classification - G 25 20

AWS-Standard - A5.9
AWS-Classification - ER 310

Features and Applications

- Austenitic stainless steel wire most often used to weld base metals of similar composition.
- Excellent resistance to oxidation, especially at high working temperatures (lower than 1000°C) due to its high Cr content.
- Fully austenitic and therefore sensitive to hot cracking.
- Ideal for welding and overlay of stainless steels of similar chemical composition including dissimilar welding.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on industrial furnaces, annealing chambers, fused salt treatment installations and boiler parts, as well as heat exchangers etc.
- **Test Certificates can be found online @wilkinsonstar247.com**



Typical Base Materials

300 series austenitic stainless steel for welding (e.g. AISI 310, 304); mild and carbon steels for overlay works*

* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF

Shielding Gases

EN ISO 14175 - M12, M13

Polarity

DC (+)

Welding Parameters - M12

Ø mm	0.80	1.00	1.20
Current (A)	40-120	80-160	100-210
Voltage (V)	15-20	16-22	17-23

Welding Parameters - M13

Ø mm	0.80	1.00	1.20
Current (A)	160-210	180-280	200-300
Voltage (V)	24-28	25-30	26-32

Mechanical Properties

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)
≥550	≥350	≥20

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

Chemical Composition % (Typical)

C %	Mn%	Si %	S %	P %	Ni %	Cr %	Mo %	Cu%
0.096	1.65	0.35	0.006	0.025	20.07	26.80	0.060	0.25

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6011100230	0.80	15	D300 PLW	72
6011100232	1.00	15	D300 PLW	72
6011100234	1.20	15	D300 PLW	72

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