

ER 310

Stainless Steel WIRE/GTAW

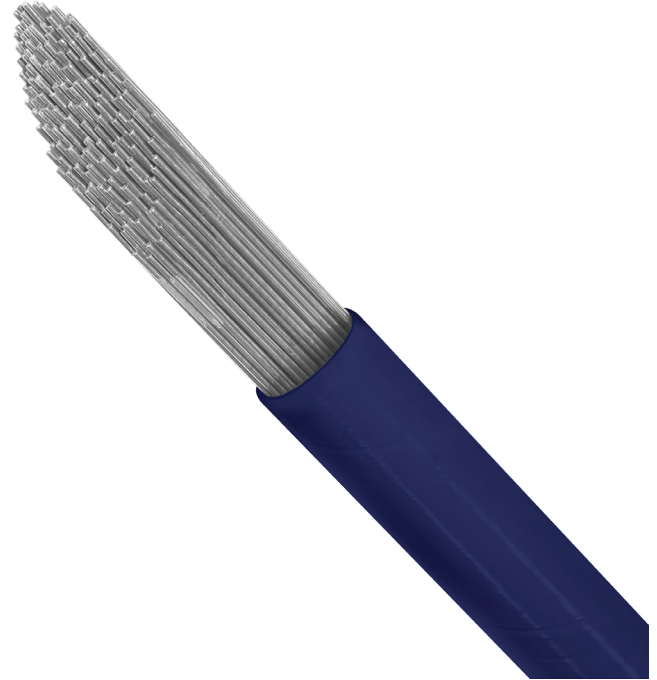
Standards

EN/ISO-Standard - 14343-A
EN/ISO-Classification - W 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.
- 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, PG

Shielding Gases

EN ISO 14175 - TIG: I1 (Argon)

Polarity

DC (-)

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 Length (mm) | Package Weight (Kg) | Package Type |
|------------|-----------------|---------------------|---------------------|----------------|
| 6011100339 | 1.60 | 1000 | 5 | Cardboard Tube |
| 6011100341 | 2.40 | 1000 | 5 | Cardboard Tube |
| 6011100342 | 3.20 | 1000 | 5 | Cardboard Tube |

Liability: Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.

