

ER 2209 (Duplex)

Stainless Steel TIG/GTAW

Standards

EN/ISO-Standard - 14343-A
EN/ISO-Classification - W 22 9 3 N L

AWS-Standard - A5.9
AWS-Classification - ER 2209

Features and Applications

- Austenitic-ferritic duplex stainless steel wire characterised by its high tensile strength.
- The weld metal offers excellent resistance to stress corrosion, cracking and pitting.
- Ideal for joining 22% Cr duplex stainless steel base materials, commonly called 2205.
- The ferrite content of the weld metal will be lower than the ferrite content of 2205 base metals.
- Recommended working temperature ranges from cryogenic to 300°C.
- Typically used in the petrochemical and offshore industries, acid gas industry and on chemical transportation equipment etc.
- **Test Certificates can be found online @wilkinsonstar247.com**



Typical Base Materials

UNS S31803, UNS S32205, UNS S39209*
* 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

TIG DC (-)

Mechanical Properties

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)
≥550	≥450	≥20	≥50

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 %	N %
<0.03	1.52	<0.90	<0.020	<0.030	8.55	22.95	3.11	<0.50	0.159

Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
6011100485	1.60	1000	5	Cardboard Tube
6011100310	2.40	1000	5	Cardboard Tube
6011100311	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.



TDS.ER2209.GTAW_rev1