# ER 2209 (Duplex)

# Stainless Steel WIRE/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
- 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

~			_
N	hia	naih	Gases
		MIII	duscs

**Polarity** DC (-)

EN ISO 14175 - TIG: I1 (Argon)

### **Mechanical Properties**

Tensile Strength	Yield Strength	Elongation	Impact Strength
(N/mm²)	(N/mm²)	(%)	(J)
≥550	≥450	≥20	

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

### **Chemical Composition % (Typical)**

<b>C</b> %	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
6011100309	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.





