



ER 2209 (DUPLEX)

Stainless Steel WIRE/GMAW



Standards

EN/ISO-Standard - 14343-A **EN/ISO-Classification -** G 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.
- Precision layer wound for superior wire feeding characteristics.
- 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





Yield Strength

 (N/mm^2)

≥450

Mechanical properties are approximate and may vary based on the heat, shielding

Mechanical Properties

gas, welding parameters and other factors.

Tensile Strength

 (N/mm^2)

≥550

Optional Plastic Alignment Hole Clip Order Code: BS300-CLIP

Impact Strength

(J)

≥50

Elongation

(%)

≥20

Approvals

CE, UKCA

Typical Base Materials

UNS S31803, UNS S32205, UNS S39209*

* Illustrative, not exhaustive list

Welding Positions

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

Shielding Gases

Polarity

EN ISO 14175 - M12, M13

DC (+)

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 | |
|------------|-----------------|---------------------|---------------------|------------------------|--|
| 6011100530 | 0.80 | | BS300 PLW | 72 | |
| 6011100531 | 1.00 | 15 | BS300 PLW | 0 0 0 0 0 72 0 0 0 0 0 | |
| 6011100435 | 1.20 | 15 | BS300 PLW | 72 | |

Other diameters available on request