



Kjellberg Finsterwalde Elektroden und Maschinen GmbH, Germany

Product Data Sheet

SUPERTIG 2209

SS TIG WELDING WIRE
Stainless and Heat resistant steels

Classification :

AWS A 5.9 : ER 2209
EN 14343 - A : W 22 9 3 NL

Description: SUPERTIG 2209 is a W 22 9 3 NL/ ER 2209 type solid TIG welding rod depositing a low C 22Cr 8Ni 3Mo weld metal. Suitable for use mainly with Ar shielding gas. SUPERTIG 2209 is used for the welding of duplex stainless steels in a range of applications including the Fabrication of pipe and plate.

The weld metal provides a high resistance to pitting and stress corrosion cracking especially in high chloride media. The weld metal nickel content over matches the parent material by 2-3% to provide an optimum balance of austenite and ferrite in the as welded condition.

Materials to be welded

1.4462 (X2CrNiMoN22-5-3)
UNS S31803 - S31500 - S31200 - S32304.

Shielding Gas

EN ISO 14175 : I1

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Cu	S	P	N2
0.030 max	0.50-2.00	0.90 Max	21.50-23.50	7.50-9.50	2.50-3.50.	0.50 max.	0.03 max.	0.03 max.	0.08-0.20

Typical All Weld Mechanical Properties

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO-V(J) 20° C
≥ 480	≥ 690	≥ 22	≥ 50

Corrosion Resistance :- Corresponding to ER 2209 i.e. fairly good under severe conditions such as oxidising and cold dilute reducing acids .

Current Conditions: - DC (-)

Storage: - Keep dry and avoid condensation.

Welding Position:-



Packing Data

Size(mm) DxL	1.20 x 1000	1.60 x 1000	2.00 x 1000	2.40 x 1000	3.20 x 1000	4.00 x 1000
Net wt. per tube(kg)	5	5	5	5	5	5
Net wt. per Box(kg)	20	20	20	20	20	20



Product Data Sheet

SUPERMIG 2209

SS MIG WELDING WIRE
Stainless and Heat resistant steels

Classification:

AWS A 5.9 : ER 2209
EN ISO 14343 - A : G 22 9 3 N L

Description: SUPERMIG 2209 is a G 22 9 3 N L/ ER 2209 type solid MIG welding wire supplied precision layer wound, depositing a low C-22Cr8Ni3Mo weld metal suitable for use with Ar+2%O₂ or Ar+0.5...5%CO₂ mixed shielding gases.

SUPER MIG 2209 is used for the welding of duplex stainless steels in a range of applications including the fabrication of pipe and plate.

The weld metal provides a high resistance to pitting and stress corrosion cracking especially in high chloride media. The nickel is over matches the parent material by 2-3% to provide an optimum balance of austenite and ferrite in the as welded condition.

Precision layer winding technologies ensure smooth, virtually trouble-free feeding.

Materials to be welded

1.4462 (X2CrNiMoN22-5-3)
UNS S31803 - S31500 - S31200 - S32304

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Cu	S	P	N ₂
0.030 max	0.50-2.00	0.90 Max	21.50-23.50	7.50-9.50	2.50-3.50	0.50 max.	0.03 max.	0.03 max.	0.08-0.20

Typical All Weld Mechanical Properties

Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO - V (J) 20° C
As Welded	≥480	≥690	≥22%	≥50

The chemistry and all weld mechanical properties will vary with the type of shielding gas used. Recommended shielding gas is 98% Ar + 2% O₂ or Ar + 0.5 – 5% CO₂.

Shielding Gas

EN ISO 14175 : M12, M13

Welding Directions :- MIG welding can be performed as short, spray or pulsed arc. Short arc is preferably used for thin gauges, both for horizontal and positional welding. Spray arc increases the deposition rate. Welding with pulsed arc gives excellent possibilities for a good result in varying plate thicknesses in all positions. The highest flexibility using pulsed arc is achieved with 1.20 mm

Current Conditions:- DC (+)

Storage: - Keep dry and avoid condensation.

Product Data Sheet

Welding position:-



Recommended Welding Data:-

Diameter (mm)		0.8	1.0	1.2
		Operating range		
Ar+0.5~5%CO ₂	Amp	40~120	80~160	100~210
	Volt	15~20	16~22	17~22
Ar+1~2%O ₂	Amp	160~210	180~280	200~300
	Volt	24~28	24~30	24~30

Packing Data:

Size (mm)	0.60	0.80	0.90	1.00	1.10	1.20	1.60
Weight (kg)	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00
