

Classification

AWS A5.9	EN ISO 14343-A
ER2209	W 22 9 3 N L

Characteristics and typical fields of application

Avesta GT 2209 is primarily designed for welding the duplex grade Outokumpu 2205 and similar but it can also be used for SAF 2304 type of steels. Avesta GT 2209 provides a ferritic-austenitic weldment that combines many of the good properties of both ferritic and austenitic stainless steel. Welding without filler metal (i.e. TIG dressing) is not allowed since the ferrite content will increase drastically and both mechanical and corrosion properties will be negatively affected.

Very good resistance to pitting and stress corrosion cracking in chloride containing environments.

Base Materials

Outokumpu 2205; EN 1.4462; ASTM S32205; BS 318S13; NF Z7 CND 22-05 Az; SS 2377

Typical analysis of solid wire (Wt.-%)

C	Si	Mn	Cr	Ni	Mo	N
0.02	0.50	1.70	22.9	8.7	3.1	0.15

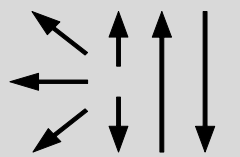
Ferrite Number \approx 45-55 FN WRC 92

Mechanical properties of the weld metal

Heat Treatment	Yield strength R_e N/mm ²	Tensile strength R_m N/mm ²	Elongation ($L_0=4d_0$)	Impact work ISO-V K_V (J)	
	MPa	MPa	%	+20°C	-40°C
As Welded	620 (\geq 450)	800 (\geq 690)	35 (\geq 20)	150 (\geq 47)	100 (\geq 32)

Shielding gas Argon

Operating Data

	Polarity DC (-)	Interpass temperature : 150°C Heat Input: Max. 0.5 - 2.5 KJ/mm Shielding gas EN ISO 14175 : I 1
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Approval

ABS, DNV-GL, CE

Size, Packing and Recommended welding parameters

Size (mm)	Kg / Tube	Kg / Box	Voltage (V)	Amperage (A)
1.60 x 1000	5.00	20.00	10 - 12	80 - 110
2.00 x 1000	5.00	20.00	14 - 16	100 - 130
2.40 x 1000	5.00	20.00	16 - 18	130 - 160