Avesta GT 308L

GTAW wire, High alloyed

Classification

AWS A5.9	EN ISO 14343-A	
ER308L	W 19 9 L	

Characteristics and typical fields of application

Avesta GT 308L is designed for welding austenistic stainless steel type 19Cr 10Ni or similar. The wire is also suitable for welding titanium and niobium stabilized steels such as ASTM 321 and ASTM 347 in cases where the construction is used at temperatures not exceeding 400ºC.

Avesta GT 308L is suit for cryogenic application with excellent weld metal toughness down to -196°C.

Base Materials

Outokumpu 4301, 4307, 4311, 4541; EN 1.4301, 1.4307, 1.4311, 1.4541; ASTM 304, 304L, 304LN, 321; BS 304S31, 304S11, 304S61, 321S31; NF Z7 CN 18-09, Z3 CN 18-10, Z3 CN 18-10 Az, Z6 CNT 18-10; SS 2333, 2352, 2371, 2337.

Typical analysis of solid wire (Wt.-%)

C	Si	Mn	Cr	Ni			
0.02	0.45	1.60	19.5	10.5			

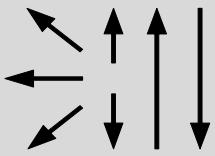
Ferrite Number ≈ 3-8 FN WRC 92

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	-196°C
As Welded	450 (≥ 320)	600 (≥ 520)	45 (≥ 35)	160 (≥ 47)	50 (≥ 32)

Shielding gas Argon

Operating Data



Polarity
DC (-)

Interpass temperature : 150°C
Heat Input: Max. 2.0 KJ/mm
Shielding gas EN ISO 14175 : I 1

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
3.20 x 1000	5.00	20.00	17 - 20	160 - 200