

# Avesta FCW-2D 308L/MVR AG

Flux cored wire, high-alloyed, stainless

# Classifications

EN ISO 17633-A	EN ISO 17633-B	AWS A5.22
T 19 9 L R C1 3	TS308L-F C1 0	E308LT0-1
T 19 9 L R M21 3	TS308L-F M21 0	E308LT0-4

### Characteristics and typical fields of application

Rutile strip alloyed flux cored welding wire of type T 19 9 L R / E308LT0 for GMAW of stainless steels like 1.4306 / 304L. This product achieves high productivity and is easy to operate providing excellent operating characteristics, self-releasing slag, almost no spatter formation and temper discoloration, smooth weld finish and safe penetration. Increased travel speeds as well as little demand for cleaning and pickling provide considerable savings in time and money. Suitable for service temperatures from  $-120^{\circ}$ C to  $+350^{\circ}$ C. Avesta FCW-2D 308L/MVR AG Ø1,2 mm can be used for wall thicknesses from 3 mm upwards. Wire Ø 1,2 mm and Ø 1,6 mm are recommended mainly for downhand and horizontal welding positions as well as in position PC/2G. FN 4 – 8 (calculated WRC-92, 100 % CO<sub>2</sub>).

## **Base materials**

1.4306 X2CrNi19-11, 1.4301 X5CrNi18-10, 1.4311 X2CrNiN18-10, 1.4312 GX10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10 AISI 304, 304L, 304LN, 302, 321, 347; ASTM A157 Gr. C9, A320 Gr. B8C or D

Typical analysis of all-weld metal (wt%)						
	С	Si	Mn	Cr	Ni	
wt%	0.03	0.7	1.5	19.5	10.5	

# Mechanical properties of all-weld metal

Heat- treatment	Yield strength $R_{p2.0}$	Tensile strength $R_m$	Elongation A ( $L_0=5d_0$ )	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	–120 °C
u	380 (≥ 320)	560 (≥ 520)	40 (≥ 35)	≥ 47	≥ 32
$\gamma$ untracted convolded (Argen 115, 25.0/ CO 1100.0/ CO )					

u untreated, as welded – (Argon +  $15 - 25 \% CO_2$ ; 100 %  $CO_2$ )

#### **Operating data**

Polarity: DC(+)	Shielding gases: C1; M1 – M3	<b>Redrying:</b> possible 150 °C / 24 h	<b>ø (mm)</b> 1.2 1.6	<b>Amps A</b> 120 – 280 200 – 350	<b>voltage V</b> 21 – 36 25 – 37

Welding with standard GMAW-facilities possible, slightly trailing torch position (angel appr. 80°), when using Argon + 15 - 25 % CO<sub>2</sub> as shielding gas it is necessary to decrease the voltage by 2 V; the gas flow should be 15 - 18 l/min

#### **Approvals**

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