Avesta FC 316L-T1

Flux cored wire, high-alloyed, austenitic stainless

Classification

AWS A5.22

E316LT1-1

Characteristics and typical fields of application

Avesta FC 316L-T1 is designed for welding austenitic stainless steel type 17Cr 12Ni 2.5Mo or similar. This filler metal is also suitable for welding titanium and niobium stabilised steels such as ASTM 316Ti in case where the construction will be operating at temperatures below 400°C. For higher temperatures a niobum stabilised consumable such as Avesta 347/MVNb is required.

Avesta FC 316L-T1 provides the excellent usability with stable arc, less spattering, good bead appearance, better slag removal, and it is designed for all-round welding and can be used in all positions without cahnging parameter settings.

Base Materials

Outokumpu 4436, 4432, 4429, 4571; EN 1.4436, 1.4432, 1.4429, 1.4571; ASTM 316, 316L, S31653, 316Ti, BS 316S33, 316S13, 316S63, 320S31, NF Z7 CND 18-12-03, Z3 CND 17-12-03, Z3 CND 17-12 Az, Z6 CND 17-12; SS 2343, 2353, 2375, 2350.

Typical analysis of solid wire (wt.-%)

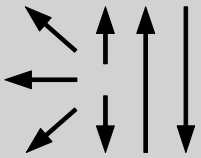
C	Si	Mn	Cr	Ni	Mo
0.03	0.70	1.30	18.0	12.2	2.5

Ferrite Number ≈ 3 – 10 FN WRC 92

Mechanical properties of all-weld metal

Heat treatment	Yield strength R_e N/mm²	Tensile strength R_m N/mm²	Elongation (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	- 20 °C
As Welded	400	560	37	60

Operating data



Polarity
DC+

Interpass temperature : Max. 150°C
Heat Input: Max. 2.0 KJ/mm
Shielding Gas : 100% CO_2
Gas Flow rate: 20-25 L/min
Wire stick out : 15-20 mm

Approvals

ABS

Size, Packaging and Electrical Operating Data

Size mm	Kg / Spool	Amperage (A)	Voltage (V)
1.20	15.0	120 – 280	22 – 30