

# Avesta FCW-2D 317L/SNR

GMAW flux cored wire, high alloyed, special application

## Classification

EN ISO 17633-A	EN ISO 17633-B	AWS A5.22
-	-	E317LT0-4/-1

## Characteristics and typical fields of application

Avesta FCW-2D 317L/SNR is designed for welding 1.4438/ASTM 317 type stainless steels. The enhanced content of chromium, nickel and molybdenum compared to 316L gives improved corrosion properties in acid chloride containing environments.

Avesta FCW-2D 317L/SNR is primarily designed for flat welding but also can be used in the horizontal-vertical position with good result.

Avesta FCW-2D 316L/SKR should be welded using direct current positive polarity (DC+) with a recommended wire stick-out of 15 - 20 mm.

#### **Corrosion resistance:**

Better resistance to general, pitting and intergranular corrosion in chloride containing environments than AST1.4436/316L. Intended for severe service conditions, e.g. in dilute hot acids.

Base Materials								
Outokumpu	EN	ASTM	BS	NF	SS			
4438	1.4438	317L	317S12	Z3 CND 19-15-04	2367			
4439	1.4439	317LMN	-	Z3 CND 18-14-05 Az	-			

## Typical analysis of all-weld metal (wt.-%)

	С	Si	Mn	Cr	Ni	Мо
wt-%	0.03	0.7	1.3	18.5	13.0	3.4

#### Mechanical properties of all-weld metal

Heat- treat- ment	Yield strength R <sub>e</sub> N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J		Hardness
	MPa	MPa	%	+20 °C	–60 °C	HB
u	420	570	32	50	45	210

u untreated, as-welded – shielding gas Argon + 18 % CO<sub>2</sub>

## **Operating data**

Polarity	shielding gases:	re-drying if	<b>amps A</b>	<b>voltage V</b>	<b>ø (mm)</b>
DC(+)	Ar + 15 – 25% CO <sub>2</sub>	necessary:	125 – 280	20 – 34	1.2
	100 % CO <sub>2</sub>	150°C / 24 hrs			

Ar + 15 – 25% CO<sub>2</sub> offers the best weld ability, but 100% CO<sub>2</sub> can be also used (voltage should be increased by 2V). Gas flow rate 20 - 25 l/min.

#### Approvals

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