

Avesta FCW-2D LDX 2101

Flux cored wire

Classifications

high-alloyed rutile

EN ISO 17633-A:

AWS A5.22:

T 23 7 N L R M21 3 ; T 23 7 N L R C 3

E2307T0-4 ; E2307T0-1

Characteristics and field of use

Avesta FCW-2D LDX 2101 is designed for welding the duplex stainless steel Outokumpu LDX 2101. The steel is a "lean duplex" steel with excellent strength and medium corrosion resistance. LDX 2101 is mainly intended for applications such as civil engineering, storage tanks, containers etc. Avesta FCW-2D LDX 2101 provides excellent weldability in flat as well as horizontal/vertical position. Welding in vertical-up and overhead positions is preferably done using FCW LDX 2101-PW. Avesta FCW-2D LDX 2101 should be welded using direct current positive polarity (DC+) with a recommended wire stick-out of 15 – 20mm. The weldability of duplex steels is excellent, but the welding should be adapted to the base material, considering fluidity, joint design, heat input etc.

Corrosion resistance:

Good resistance to general corrosion. Better resistance to pitting, crevice corrosion and stress corrosion cracking than 1.4301/AISI 304.

Base materials

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
LDX 2101®	1.4162	S32101	-	-	-

Typical analysis of all-weld metal (Wt-%)


C	Si	Mn	Cr	Ni	Mo	N
0.025	0.7	1.1	24.0	9.0	0.5	0.14

Ferrite 35 FN; WRC-92

Mechanical properties of all-weld metal

Heat Treatment	Yield strength 0.2%	Tensile strength	Elongation ($L_0=5d_0$)	Impact values in J CVN	
	MPa	MPa	%	+20°C:	-40°C:
untreated	550	740	31	65	45

Operating data

	Polarity = +	Shielding gas: Ar + 15 – 25% CO ₂ offers the best weldability, but 100% CO ₂ can also be used (voltage should be increased by 2V). Gas flow rate 20 – 25 l/min.
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Dimensions (mm)

Amperage A

1.2

125-280