

## Classifications

high-alloyed rutile

EN ISO 17633-A:

T 23 7 N L P M21 1 ; T 23 7 N L P C 1 1

E2307T1-4 ; E2307T1-1

## Characteristics and field of use

Avesta FCW LDX 2101-PW 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 LDX 2101-PW has a stronger arc and a faster freezing slag compared to the 2D type. It is designed for all-round welding and can be used in all positions without changing the parameter settings. Weldability is excellent in the vertical-up and overhead welding positions. Avesta FCW LDX 2101-PW should be welded using direct current positive polarity (DC+) with a recommended wire stick-out of 15 – 20 mm. 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	0.9	24.3	9.0	0.3	0.13

Ferrite 30 FN; WRC-92

## Mechanical properties of all-weld metal

Heat Treatment	Yield strength	Tensile strength	Elongation	Impact values	
	0.2%		( $L_0=5d_0$ )	in J CVN	
	MPa	MPa	%	+20°C:	-40°C:
untreated	575	765	30	70	50

## Operating data

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

Amperage A

1.2

150-240