

LDX 2101-PW

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

Standard designations

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Characteristics and welding directions

AVESTA FCW LDX 2101-PW is designed for welding the ferritic-austenitic (duplex) stainless steel Outokumpu LDX 2101 and equivalent. LDX 2101 is a "lean duplex" steel with excellent strength and medium corrosion resistance. The steel is mainly intended for applications such as civil engineering, storage tanks, containers etc.

AVESTA FCW LDX 2101-PW provides excellent positional welding characteristics, e.g. in the vertical-up and overhead positions.

Welding data

Diameter mm	Welding position	Current A	Voltage V
1.20	Flat, horizontal	150 – 240	24 – 32
	Vertical-up	130 – 160	23 – 28
	Overhead	150 – 200	24 – 29
	Vertical-down	120 – 180	22 – 27

For further recommendations, please contact Avesta Welding.

Shielding gas

Ar + 15 – 25% CO₂ offers the best weldability, but 100 % CO₂ can also be used (voltage should be increased by 2V).

Gas flow rate 15 – 20 l/min.

Chemical composition, wire (typical values, %)

C	Si	Mn	Cr	Ni	Mo	N
0.03	0.7	0.9	24.0	9.0	0.4	0.13

Ferrite 30 FN WRC-92

Mechanical Properties

	Typical values (IIW)	Min. values EN ISO 17633
Yield strength R _{p0,2}	575 N/mm ²	–
Tensile strength R _m	765 N/mm ²	–
Elongation A ₅	30 %	–
Impact strength KV		
+20°C	70 J	–
–40°C	50 J	–

Interpass temperature: Max. 150°C

Heat input: 0.5 – 2.0 kJ/mm

Heat treatment: Generally none. In special cases quench annealing at 1020 – 1080 °C.

Structure: Austenite with approx. 30 – 70 % ferrite.

Scaling temperature: Approx. 850°C (air).

Corrosion resistance: Good resistance to general corrosion. Corrosions resistance on a level with or better than AISI 304.

Approvals

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