



FCW-2D LDX 2101

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-2D LDX 2101 is designed for welding the ferritic-austenitic (duplex) stainless steel Outokumpu LDX 2101. 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-2D LDX 2101 provides excellent weldability in flat as well as horizontal-vertical position.

Welding data

Diameter mm	Welding position	Current A	Voltage V
1.20	Flat, horizontal	125 – 280	20 – 34

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 20 – 25 l/min.

Chemical composition, all weld metal (typical values, %)

C	Si	Mn	Cr	Ni	Mo	N
0.03	0.7	0.8	24.0	9.0	0.2	0.14

Ferrite 30 FN WRC-92

Mechanical properties	Typical values (IIW)	Min. values EN ISO 17633
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Yield strength R _{p0,2}	580 N/mm ²	–
Tensile strength R _m	760 N/mm ²	–
Elongation A ₅	25 %	–
Impact strength KV		
+20°C	63 J	
–40°C	45 J	
Hardness	240 Brinell	

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 30 – 70% ferrite.

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

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

Approvals
CE, TÜV