

Classifications

high-alloyed

EN ISO 3581-A:

E 23 7 N L R

Characteristics and field of use

Avesta 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 used in many various applications such as bridges, process equipment in desalination, pressure vessel in the pulp/paper industry and transport and storage tanks for chemicals. To ensure the right ferrite balance in the weld metal, Avesta LDX 2101 is over-alloyed with respect to nickel. The weldability of duplex steels is excellent but the welding should be adapted to the base material, considering fluidity, joint design, heat input etc.

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
0.04	0.8	0.7	23.5	7.0	0.3	0.14

Ferrite 45 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	640	780	25	45	35

Operating data



Polarity = + / ~

Dimensions (mm) Amperage A

2.0	50-80
3.25	70-120
4.0	100-160