BÖHLER CN 24/9 LDX PW-FD

Flux cored wire, high-alloyed, highly corrosion resistant

Classifications

EN ISO 17633-A	AWS A5.22
T 23 7 N L P M21 1/ T 23 7 N L P C1 1	E2307T1-4/ E2307T1-1

Characteristics and typical fields of application

BÖHLER CN 24/9 LDX PW-FD is a rutile flux cored wire for positional welding of ferritic-austenitic lean- duplex stainless steels. The weld metal has a high strength and medium corrosion resistance and is mainly intended for application such as bridge building, civil engineering, plant engineering in the paper industry, storage tanks, containers etc. The filler material is over alloyed with respect to nickel to ensure the right ferrite balance in the weld metal. The corrosion resistance is comparable with the steel AISI 304. The filler material is suitable for service temperatures from –50°C to +250°C.

Base materials

1.4162 X2CrMnNiN21-5-1, UNS S32101

1.4362 X2CrNiN23-4, UNS S32304, and other comparable materials

Typical analysis of all-weld metal (wt.-%)

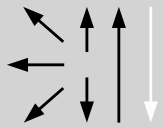
	C	Si	Mn	Cr	Ni	Mo	N	Ferrite acc. to WRC-92
wt-%	0.03	0.7	0.9	24.0	9.0	0.4	0.13	≥ 30

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	–50 °C
u	**575** (≥ 450)	**765** (≥ 570)	**30** (≥ 20)	**67**	**47**

u untreated, as welded – shielding gas Ar + 18% CO_2

Operating data



Polarity:	Shielding gases:	Redrying if necessary:	ø (mm)	Amps A	Voltage V
DC (+)	M1 – M3; C1	150°C / 24 h	1.2	120 – 220	20 – 32

Interpass temperature: ≤ 6 mm wall thickness 150 °C; ≥ 10 mm wall thickness max. 200 °C

Heat input: 0.5 – max. 2.0 kJ / mm. The gas flow should be 15 – 18 l / min.