

## Classifications

EN ISO 14343-A	AWS A5.9 / SFA-5.9
S Z 23 7 N L	ER2307

## Characteristics and typical fields of application

Wire for submerged arc welding the lean duplex stainless steel LDX 2101® (1.4162 / UNS S32101) and similar alloys. Solid wire of S Z 23 7 N L / ER2307 type. Over-alloyed with nickel to promote weld metal austenite formation and designed to result in weld metal ferrite levels of 35 – 65%. The combination of excellent strength and better resistance to pitting corrosion, crevice corrosion and stress corrosion cracking than 1.4301 / 304 makes this alloy suitable for construction of i.e. storage tanks, containers, heat exchangers and pressure vessels. Typical applications are within civil engineering, transportation, desalination, water treatment, pulp & paper, etc. Very good resistance to pitting and stress corrosion cracking in nitric acid environments.

**Recommended SAW flux:**  
Marathon 805

## Base materials

1.4162 X2CrMnNiN21-5-1, 1.4362 X2CrNiN23-4, 1.4482 X2CrMnNiMoN21-5-3  
UNS S32101, S32001, S32304  
LDX 2101®, SAF 2304, 2001  
ASME SA 240, ASME SA 790, ASME Code Case 2418 and similar alloys.

## Typical analysis

	C	Si	Mn	Cr	Ni	Mo	N	FN
wt.-%	0.015	0.40	0.75	23.5	7.5	0.25	0.15	-

## Operating data

	Dimension mm	Current A	Voltage V
	2.4	300 – 500	28 – 33
	3.2	400 – 600	29 – 34

Suggested heat input is max. 1.5 kJ/mm and interpass temperature max. 100°C. Polarity: DC+  
Post-weld heat treatment generally not needed. In special cases, solution annealing can be performed at 1020 – 1080°C followed by water quenching.

## Approvals

-