Avesta Welding

2304

For welding steels such as Outokumpu	EN	ASTM	BS	NF	SS
2304	1.4362	S32304	–	–	2327

Standard designations
EN ISO 3581 E 23 7 N L R

Characteristics
AVESTA 2304 is a Cr-Ni alloyed duplex electrode for welding duplex stainless steels such as 2304. Welding should be carried out as for ordinary austenitic stainless steel. However, the somewhat lower penetration and fluidity of the weld should be considered.

Welding data

DC+ or AC	Diam. mm	Current, A
	2.5	50 – 80
	3.25	80 – 120
	4.0	100 – 160

Weld deposit data
Metal recovery approx. 110%.

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni	N
0.02	0.8	0.8	24.5	9.0	0.12

Ferrite 30 FN WRC-92

Mechanical properties	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	640 N/mm^2	–
Tensile strength R_m	780 N/mm^2	–
Elongation A_5	23 %	–
Impact strength KV		
+20°C	40 J	
–40°C	25 J	
Hardness approx.	260 Brinell	

Interpass temperature: Max. 150°C.

Heat input: 0.5 – 2.0 kJ/mm.

Heat treatment: Generally none (in special cases quench annealing at 1050°C).

Structure: Austenite with approx. 30% ferrite.

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

Corrosion resistance: Good resistance to pitting and stress corrosion cracking in chloride containing environments.

Approvals
- CE
- TÜV

Welding positions

Ø 2.5–3.25 Ø 4.0