

Classifications

EN ISO 3581-A	AWS A5.4
E 25 9 4 N L R	E2594-16

Characteristics and typical fields of application

Avesta 2507/P100 rutile is designed for welding super duplex steels such as 2507/1.4410.

The weldability of duplex and super duplex steels is excellent but the welding should be adapted to the base material, considering fluidity, joint design, heat input etc. For detailed welding recommendations, please see "How to weld duplex stainless steels" or contact voestalpine Böhler Welding.

Corrosion resistance:

Very good resistance to pitting and stress corrosion cracking in chloride containing environments. PREN >40. Meets the corrosion test requirements per ASTM G48 Methods A, B, E (40°C).

Base materials

Outokumpu	EN	ASTM	BS	NF	SS
2205	1.4462	S32205	318S13	Z3 CND 22-05 Az	2377

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

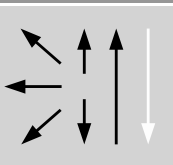
	C	Si	Mn	Cr	Ni	Mo	N
wt-%	0.03	0.5	1.3	25.2	9.5	3.6	0.23

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R _e N/mm ²	Tensile strength R _m N/mm ²	Elongation (L ₀ =5d ₀)	Impact work ISO-V KV J		Hardness
	MPa	MPa	%	+20 °C	-46°C	
u	700	900	26	80	45	250

u untreated, as-welded

Operating data

	Polarity: DC (+)	Electrode identification:	ø (mm)	L mm	Amps A
			2.5	300	
			3.25	350	
			4.0	350	

Approvals

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