

Avesta 2507/P100 // Flux 805

SAW wire/flux combination, high-alloyed, high corrosion resistant

Classification

EN ISO 14343-A	AWS A5.9
S 25 9 4 L N	ER2594

Characteristics and typical fields of application

Avesta 2507/P100 is intended for welding super duplex alloys such as SAF 2507, ASTM S32760, S32550 and S31260. Avesta 2507/P100 provides a ferritic-austenitic weldment that combines many of the good properties of both ferritic and austenitic steels.

Structure: Austenite with 45 – 55 % ferrite.

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

Corrosion resistance:

Excellent resistance to pitting and stress corrosion cracking in chloride containing environments. Pitting resistance is in accordance with ASTM G48-A, better than 40 °C.

Base materials

Outokumpu	EN	ASTM	BS	NF	SS
SAF 2507®	1.4410	S32750	-	Z3 CND 25-06 Az	2328

Typical analysis of the solid wire and all-weld-metal (wt.-%)

	C	Si	Mn	Cr	Ni	Mo	N	Ferrite	
Wire	0.02	0.35	0.4	25.0	9.5	4.0	0.25	50 FN	WRC -92
Flux 805	0.02	0.5	0.3	25.5	9.0	4.0	-	50 FN	

Mechanical properties of all-weld-metal

Flux	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
Flux 805	650	870	26	80

Operating data

	Polarity DC (+)	Re-drying: 300 – 350 °C / min. 2 h	ø (mm) 2.4 3.2
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Heat treatment: Generally none (in special cases quench annealing at 1100 – 1150 °C).

Interpass temperature: max. 100 °C.

Heat input: max. 1.5 kJ/mm.

Zulassungen

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