



# 2507/P100

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
SAF 25074307	1.4410	S32750	–	Z3 CND 25-06 Az	2328

### Standard designations

EN 1600 E 25 9 4 N L R  
 AWS A5.4 E2594-17

### Characteristics and welding directions

AVESTA 2507/P100 produces a high-alloy, duplex weld metal. It is characterised by its exceptionally good arc stability and weld pool control. The slag removal is very good and no slag residues are left on the weld surface.

It is recommended, in particular, for applications where charpy toughness requirements are moderate; > 27J at +0°C. If the requirements are higher, it is recommended to use Avesta 2507/P100 rutile.

### Welding data

DC+	Diam., mm	Current, A
	2.50	50 – 75
	3.25	70 – 100
	4.00	100 – 140

### Weld deposit data

Metal recovery approx. 110 %.

### Chemical composition (typical values, %)

C	Si	Mn	Cr	Ni	Mo	N
0.02	0.9	0.9	25.5	9.2	3.6	0.24

Ferrite 45 FN WRC-92

### Mechanical Properties

	Typical values (IIW)	Min. values EN 1600
Yield strength $R_{p0.2}$	720 N/mm <sup>2</sup>	550 N/mm <sup>2</sup>
Tensile strength $R_m$	900 N/mm <sup>2</sup>	620 N/mm <sup>2</sup>
Elongation $A_5$	23 %	18 %
Impact strength KV +/- 0°C	32 J	

**Interpass temperature:** Max. 150°C.

**Heat input:** Max. 1.5 kJ/mm

**Heat treatment:** Generally none. In special cases quench annealing at 1100 – 1150°C.

**Structure:** Austenite with 40 – 50 FN.

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

**Corrosion resistance:** Good resistance to pitting and stress corrosion. Critical pitting temperature according to ASTM G48E approx. 45°C.

**Approvals:** –

### Welding positions

