



253 MA

For welding steels such as Outokumpu	EN	ASTM	BS	NF	SS
253 MA [®]	1.4835	S30815	–	–	2368
153 MA [™]	1.4818	S30415	–	–	2372

Standard designations

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Characteristics

AVESTA 253 MA is primarily designed for welding the high temperature stainless steel Outokumpu 253 MA with excellent resistance to oxidation up to 1100°C. The electrode has a ferrite content of approx. 10%, which gives high resistance to hot cracking.

Welding data

DC+ or AC	Diam. mm	Current, A
	2.0	45 – 65
	2.5	60 – 80
	3.25	70 – 110
	4.0	100 – 140
	5.0	150 – 200

Weld deposit data at maximum welding current

Electrode diam. mm	length mm					Metal recov. ~ %
		N	B	H	T	
2.0	300					
2.5	350	0.58	78	0.80	58	109
3.25	350	0.58	46	1.18	66	108
4.0	400	0.62	27	1.63	82	105
5.0	400					

Typical analysis % (All weld metal)

C	Si	Mn	Cr	Ni	N
0.08	1.5	0.7	22.0	10.5	0.18

Ferrite 10 FN DeLong

Mechanical properties

	Typical values (IIW)	Min. values EN 1600
Yield strength R _{p0.2}	535 N/mm ²	–
Tensile strength R _m	725 N/mm ²	–
Elongation A ₅	37 %	–
Impact strength KV +20°C	60 J	
Hardness approx.	215 Brinell	

Interpass temperature: Max. 150°C.

Heat input: Max. 1.5 kJ/mm.

Heat treatment: Generally none.

Structure: Austenite with 3 – 10% ferrite.

Scaling temperature: Approx. 1150°C (air).

Corrosion resistance: Excellent resistance to high temperature corrosion. Not intended for applications exposed to wet corrosion.

Approvals

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Welding positions

