

Classifications

Characteristics and field of use

UTP 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.

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.

Typical analysis in %

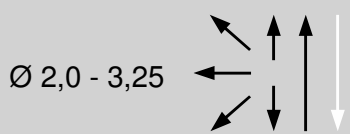
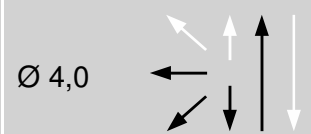
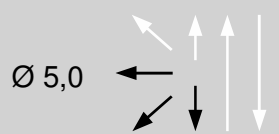
C	Si	Mn	Cr	Ni	N
0,08	1,5	0,7	22,0	10,5	0,18

Ferrite 10 FN DeLong

Mechanical properties of the weld metal

Values	Yield strength $R_{P0,2}$	Tensile strength R_m	Elongation A	Impact strength K_v	Hardness Brinell
	MPa	MPa	%	J	HB
typical (IIW)	535	725	37	60	approx. 215

Welding positions

			Current type DC (+) / AC
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Recommended welding parameters

Electrodes $\varnothing \times L$ [mm]	2,0 x 300	2,5 x 350	3,25 x 350	4,0 x 400	5,0 x 400
Amperage [A]	30 – 65	45 – 80	55 – 120	100 – 140	150 – 200