Avesta 253 MA

Stick electrode

Classifications		high-alloyed
EN ISO 3581-A:		
E 21 10 R		

Characteristics and field of use

Avesta 253 MA is primarily designed for welding the high temperature stainless steel Outokumpu 253 MA, used for furnaces, combustion chambers and burners. Both the steel and filler metal offers excellent resistance to oxidation up to 1100°C. The chemical composition of Avesta 253 MA is balanced to give a crack resistant weld metal. The steel often forms a rather thick oxide in welding or hot rolling and oxidized plates and welds must be brushed or ground clean before welding.

Base materials

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

Typical analysis of all-weld metal (Wt-%)

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

Mechanical properties of all-weld metal

Heat Treatment	*Yield strength 0.2%*	*Tensile strength*	*Elongation (L_0=5d_0)*	*Impact values in J CVN*
	MPa	*MPa*	*%*	*+20°C:*
untreated	535	725	37	60

Operating data

Polarity = + / ~

Dimensions (mm)	*Amperage A*
2.0	45-65
2.5	60-80
3.25	70-110
4.0	100-140
5.0	150-200