

Classification

EN ISO 3581-A

E 21 10 R

Characteristics and typical fields of application

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

ASTM S30415 ; S30415, Outokumpu 153 MA ; 253MA; EN 1.4835 ; 1.4818, SS 2368 ; 2372

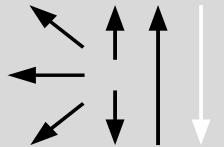
Typical analysis of all weld metal (Wt.-%)

C	Si	Mn	Cr	Ni	N		
0.06	1.40	0.50	22.0	10.0	0.14		

Mechanical properties of the weld metal

Heat Treatment	Yield strength R _e N/mm ²	Tensile strength R _m N/mm ²	Elongation (L ₀ =4d ₀)	Impact work ISO-V K _V (J)	
	MPa	MPa	%	+20°C	
As Welded	500	700	40	60	

Operating Data

	Polarity DC (+) / AC	Heat Input: Max. 1.5 kJ/mm Interpass temperature: Max. 150°C Scaling Temperature : Approx. 1150°C (air)
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Approval

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Size, Packing and Recommended welding parameters

Size (mm)	Kg / Pack	Kg / Box	Amperage (A)
2.50 x 350	5.00	15.00	50-80
3.25 x 350	5.00	15.00	70-110
4.00 x 450	5.00	15.00	100-140