

Chemical Composition

C %	Si %	Mn ≤%	P ≤%	S ≤%
0.05-0.12	1.40-2.50	1.00	0.045	0.015
Cr %	Ni %	N %	Ce %	
20.0-22.0	10.0-12.0	0.12-0.20	0.03-0.08	

Description

Alloy 253 MA / 1.4835 is a heat resistant austenitic chromium-nickel-stainless steel.

Special Properties

Resistant to scaling up to 1150°C. Low resistance to oxidizing sulphuric gases.

Steel Grade

Alloy	UNS	Material No.	EN Designation
253MA	S30815	1.4835	X9CrNiSiNce21-11-2

Mechanical Properties 20 °C

0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Modulus of elasticity kN/mm ²	Hardness HB 30 ≤ HB
310	650-850	40	200	210

Resistant on air up to °C
1150

Physical Properties 20°C

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
7.8	500	15	0.85

Suitable Welding Filler Materials

1.4842

Application

Furnaces and furnace components, oil industry

Available Forms for ALLOY235MA

Sheets/Coils	Bars	Tubes / Pipes	Fittings	Forged / cast parts	Finished part (drawing)	Wire
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