

Stainless steel 1.4835 / AISI 253MA is an austenitic chromium-nickel steel that essentially corresponds to the material 1.4828 / AISI 309. However, it differs from this material due to its higher nitrogen content and the addition of rare earths (cerium) as an alloy component. Stainless steel 1.4835 has good scaling resistance of up to approx. 1100 °C in dry air. It also has good weldability. This material is particularly suitable for applications in the high temperature range, which is why it is used, for example, in industrial furnace construction or in the construction of heat exchangers.

**Chemical composition (% by mass according to DIN EN 10095 for EN 1.4835)**

C	Si	Mn	P	S	N	Cr	N	Mo	Ni	Ti	Other
0,05 – 0,12	1,40 – 2,5	≤ 1,00	≤ 0,045	≤ 0,015	0,12 – 0,20	20,0 – 22,0	0,12 – 0,20	-	10,0 – 12,0	-	-

**Specification**

EN-grade	1.4835
EN-short name	X9CrNiSiNCe21-11-2
EN-standard	10095
AISI	253MA *
B.S.	S30815 *
JIS	SS2368 *
Microstructure	austenite

**Physical properties**

Magnetizability	non
Density (kg/dm <sup>3</sup> )	7,8
Thermal conductivity (up to 20°C)	15
Electronic resistance at room temperature (in Ω mm <sup>2</sup> /m)	0,85

**Possible fields of application**

Apparatus engineering  
 Chemical industry  
 Petroleum plants  
 Power plant construction  
 Kiln construction  
 Cement industry  
 and more

**Heat treatment and hot forming**

Solution heat treatment (cooling by air or water)	1020-1120 °C
Hot forming (cooling by air)	1150-900 °C

**Welding**

The material 1.4835 has good welding properties and can be used with all common welding processes. Preheating and post-weld heat treatment are not normally required.

If you have any further questions about this or any other product, please contact our [team](#).

(\* in accordance with)

**Please note:**

The information given in this data sheet has been compiled to the best of our knowledge and is based on the current version of the relevant standard. It is considered for reference only and we assume no liability for any errors.