

AISI 314 / EN 1.4841 is an austenitic steel which has good heat resistance and strength at high temperatures. The scaling resistance is increased by the silicon content of 1.5 - 2.00 % to about 1150°C (in air). This stainless steel grade is well suited for welding, forging and cold forming.

Typical areas of application are in apparatus engineering, furnace construction or the chemical industry.

Chemical composition (% by mass according to DIN EN 10095 for EN 1.4841)

C	Si	Mn	P	S	N	Cr	Cu	Mo	Ni	Ti	Other
≤ 0,20	1,50 – 2,00	≤ 2,00	≤ 0,045	≤ 0,015	≤ 0,11	24,0 – 26,0	-	-	19,0 – 22,0	-	-

Specification

EN-grade	1.4841
EN-short name	X15CrNiSi25-21
EN-standard	10095
AISI	314 *
B.S.	314S25 *
JIS	SUH310 *
Microstructure	austenite

Physical properties

Magnetizability	non
Density (kg/dm ³)	7,9
Thermal conductivity (up to 20°C)	15
Electronic resistance at room temperature (in Ω mm ² /m)	0,9

Possible fields of application

apparatus engineering
 automotive industry
 chemical industry
 petroleum industry
 mechanical engineering
 furnace construction
 and more

Heat treatment and hot forming

Solution heat treatment (cooling by air or water)	1050-1150 °C
Hot forming (cooling by air)	1150-800 °C

Welding

The material AISI 314 / EN 1.4841 can be used for all common welding methods, but hot cracks may occur.

A later heat treatment is not necessary.

Note: In the welded condition the material does not show any resistance to intergranular corrosion.

If you have further questions about this or any other product, please contact our team at +49 2263-9240-0 or email agst@agst.de

(* 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.