

MATERIAL NUMBER 1.4625 · CLASS 1.4

1.4625

Chemical composition, mechanical and physical property values, and 23 standard designations from 6 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 23 in 6 regions	PROPERTY VALUES 9 on file
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Chemical composition

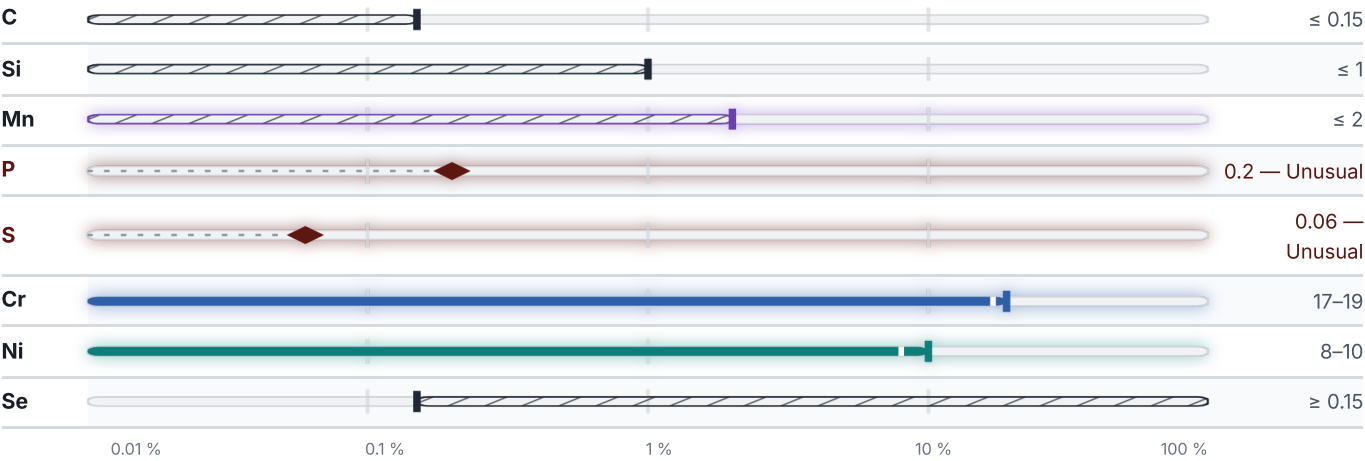
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 69.4 % ● Cr — 18 % ● Ni — 9 % ● Mn — 2 % ● Traces & impurities · 1.6 %

Logarithmic scale, 0.01 % to 100 % — every value here compares directly, decade by decade.



The scale is logarithmic, not the element's raw share of the alloy — the only honest way to fit 0.01 % and 100 % in one picture, and it means every value here can be compared with every other.

Predicted transformation temperatures

Not enough recorded composition to predict a transformation temperature for this grade — missing: Mo.

Mechanical properties

4 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	Z %
Bars/Rods	520	205	40	50

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

23 designations · 3 documented as identical

United States		16	United States / Aerospace		3
S30323	This grade's own name	uns	5640		ams
303 Se	This grade's own name	aisi-sae	5641		ams
30303Se		aisi-sae	5738		ams
A194		astm	Europe		1
A314		astm			
A320		astm	X12CrNiSe18-9	This grade's own name	din-en
A473		astm	United Kingdom		1
A511		astm			
A581		astm	303S41		bs
A582		astm	Japan		1
A895		astm			
F593		astm	SUS 303Se		jis
F594		astm	China		1
F738		astm			
F836		astm	Y1Cr18Ni9Se		gb
F880		astm			

Note on use. The data is compiled to the best of our knowledge from publicly available standards and manufacturer documentation. It replaces neither material testing nor an inspection document to EN 10204. Please request a mill certificate to EN 10204 2.1, 3.1 or 3.2 together with your enquiry. The standard in its current valid edition always prevails.

Enquiry about 1.4625

Quotation, availability, mill certificate or a technical question — directly on the material page.

Start an enquiry

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

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ISSUED

Aug 20, 2026