

MATERIAL NUMBER 1.4445 · CLASS 1.4

X6CrNiMo19-13-4

Material no. 1.4445

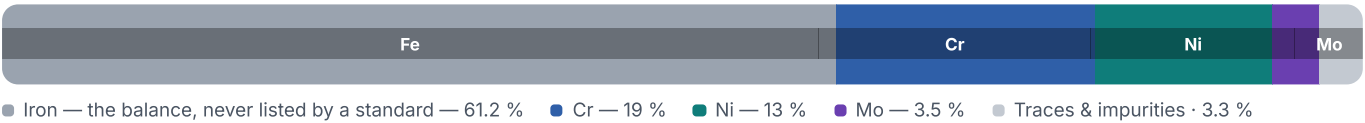
Chemical composition, mechanical and physical property values, and 30 standard designations from 5 regions.

DENSITY 7.85 g/cm³	ELASTIC MODULUS 193 GPa	OTHER DESIGNATIONS 30 in 5 regions	PROPERTY VALUES 15 on file
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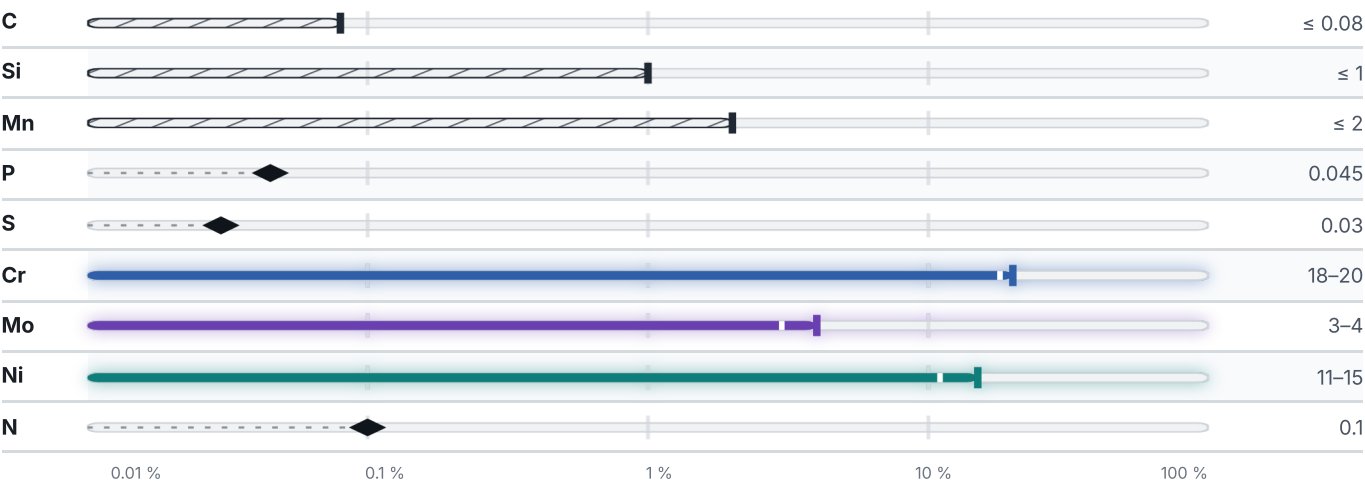
Chemical composition

Mass fraction in %

What this alloy is



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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no transformation temperature is predicted here.

Mechanical properties

6 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	HB	HRB	HV
Plate/Sheet Hot-rolled	520	205	40	–	–	–
Hot-rolled	–	–	–	187	90	200

Physical properties

6 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³
Elastic modulus	193	GPa
Thermal expansion coefficient	16	10 ^{^-6} /K
Thermal conductivity	15	W/(m·K)
Specific heat capacity	500	J/(kg·K)
Electrical resistivity	740	nΩ·m

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
Solution annealing	Temperature not stated	—

Designations across standards

30 designations · 3 documented as identical

United States		26	A580	astm
S31700	This grade's own name	uns	A632	astm
30317		aisi-sae	A813	astm
317	This grade's own name	aisi-sae	A814	astm
A1012		astm	A943	astm
A1049		astm	A988	astm
A182		astm	F899	astm
A213		astm		
A240		astm	Europe	1
A249		astm	X6CrNiMo19-13-4	This grade's own name din-en
A269		astm		
A276		astm	United Kingdom	1
A312		astm	317S16	bs
A314		astm		
A409		astm	Japan	1
A473		astm	SUS 317	jis
A478		astm		
A479		astm	China	1
A511		astm	0Cr19Ni13Mo3	gb
A554		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 X6CrNiMo19-13-4
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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1.4445

ISSUED
Aug 20, 2026