

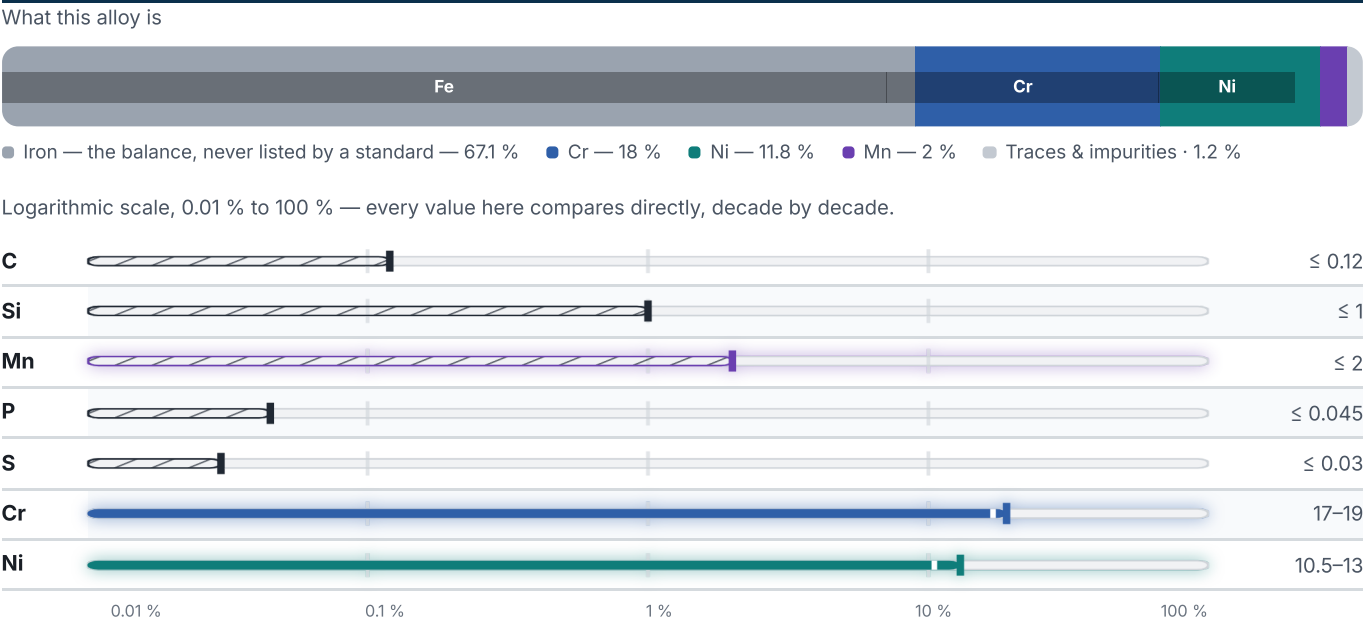
10Cr18Ni12

Chemical composition, mechanical and physical property values, and 1 standard designations from 1 regions.

ELASTIC MODULUS 193 GPa	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 12 on file
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Chemical composition

Mass fraction in %



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.

Physical properties

5 values

CONDITION · DIMENSION	E GPa	ALPHA 10 ^{^-6} /K	LAMBDA W/(m·K)	CP J/(kg·K)
20	200	—	—	—

CONDITION · DIMENSION	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	CP J/(kg·K)
100	194	16	16.3	—
200	186	16.5	—	—
300	179	17	—	—
400	172	17.5	—	—
500	165	18	21.5	500
PROPERTY		VALUE	UNIT	
Elastic modulus		193	GPa	
Thermal expansion coefficient		17.3	10 ⁻⁶ /K	
Thermal conductivity		15	W/(m·K)	
Specific heat capacity		500	J/(kg·K)	
Electrical resistivity		730	nΩ·m	

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
Solution annealing	Temperature not stated	—

Designations across standards

1 designations · 1 documented as identical

China	1
10Cr18Ni12 This grade's own name	gb

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 10Cr18Ni12

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

Start an enquiry

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	—	Aug 15, 2026