

T12

also listed as C120U

Chemical composition, mechanical and physical property values, and 11 standard designations from 8 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
11 in 8 regions	7 on file

Chemical composition

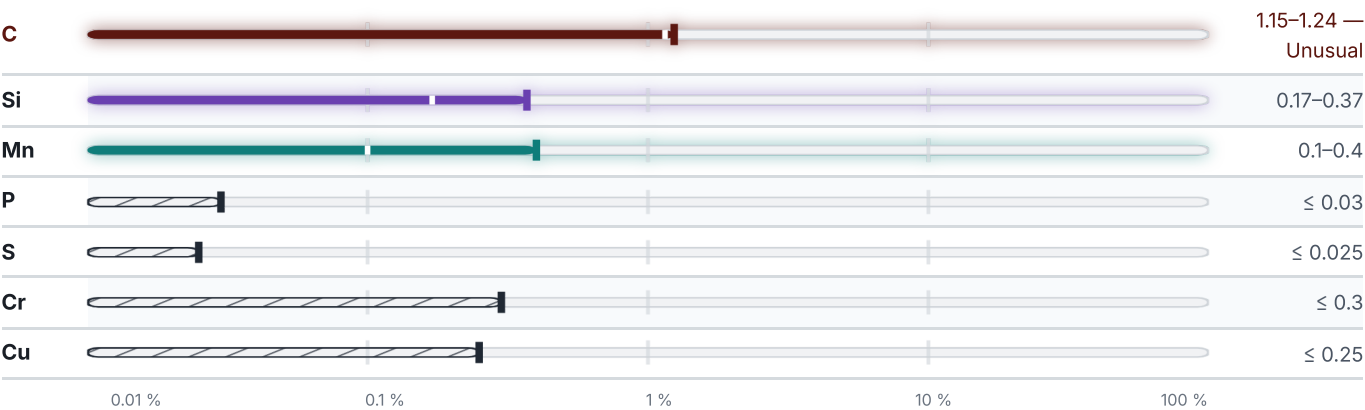
Mass fraction in %

What this alloy is



Iron — the balance, never listed by a standard — 97.7 % C — 1.2 % Cr — 0.3 % Si — 0.3 % Traces & impurities · 0.6 %

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: Ni, Mo.

Heat treatment

3 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	Temperature not stated	—
Quenching	760–780 °C	Water
Annealing	Temperature not stated	—

Designations across standards

11 designations · 1 documented as identical

Europe	2	France	1
C120U	din-en	C120U	afnor
C125W2	din-en		
		Japan	1
United Kingdom	2	SK120	jis
BW1C	bs		
C120U	bs	China	1
		T12 This grade's own name	gb
International	2		
C120U	iso	Russia / CIS	1
TC120	iso	Y12-1	gost
		South Korea	1
		STC2	ks

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 T12

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

MATERIAL NO.

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ISSUED

Aug 15, 2026