

38X10

also listed as 38KH2YU

Chemical composition, mechanical and physical property values, and 3 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
3 in 1 regions	12 on file

Chemical composition

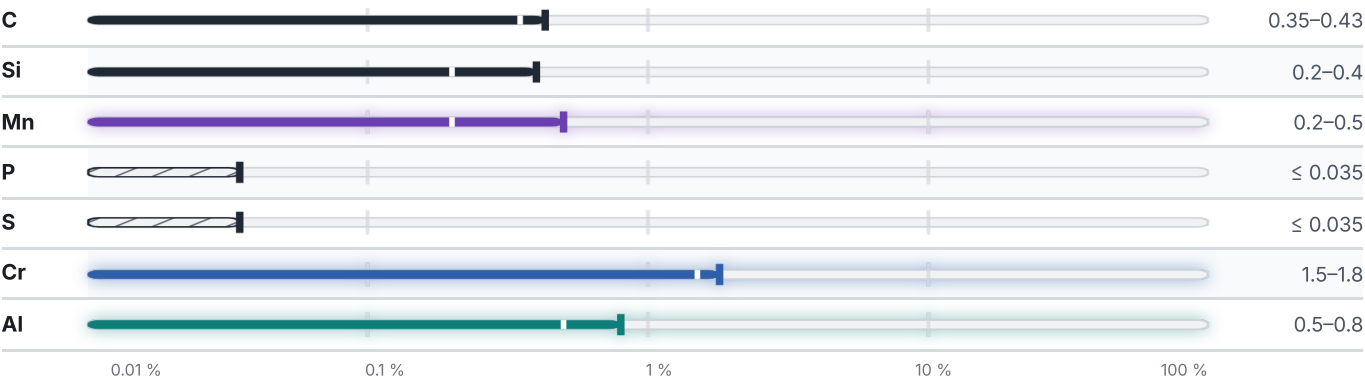
Mass fraction in %

What this alloy is



Iron — the balance, never listed by a standard — 96.6 % Cr — 1.7 % Al — 0.7 % C — 0.4 % Traces & impurities · 0.7 %

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.

Mechanical properties

6 values across 2 conditions

QUENCHING 930°C, WATER, DRAWING 630°C, WATER	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Ø 30	880	735	10	45	780
CONDITION · DIMENSION					HB
38KH2YU (38X210) (annealing)					229

Physical properties

5 values

PROPERTY	VALUE	UNIT
Transformation point Ac1	810	°C
Transformation point Ac3	880	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	is not used.	
Flake sensitivity	not predisposed	
Temper brittleness	predisposed	

Designations across standards

3 designations · 1 documented as identical

Russia / CIS	3
38KH2YU This grade's own name	gost
38X210	gost
38X10	gost

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 38X10

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