

10G2BD-1

also listed as 10G2B-1

Chemical composition, mechanical and physical property values, and 5 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
5 in 1 regions	18 on file

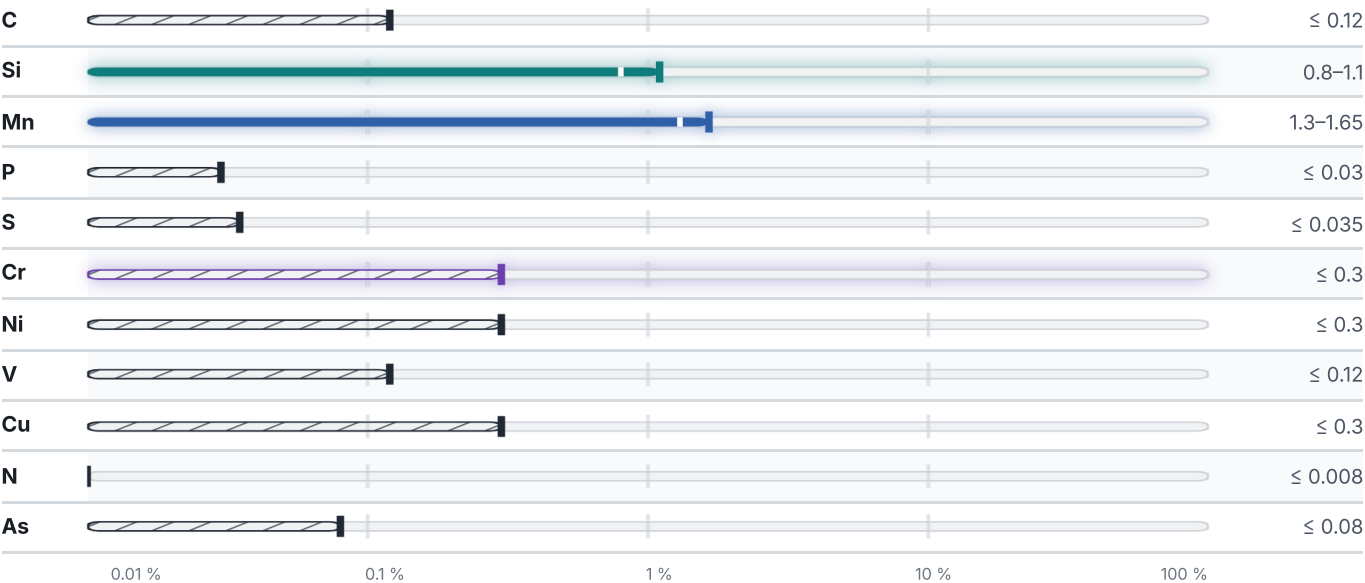
Chemical composition

Mass fraction in %



■ Iron — the balance, never listed by a standard — 96.3 % ■ Mn — 1.5 % ■ Si — 1 % ■ Cr — 0.3 % ■ Traces & impurities · 1 %

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

7 values across 2 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	KCU kJ/m ²
Sheet, GOST 5520-79	430-490	295-355	21	590-640

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %
to 140	480	345	21

Physical properties

7 values

PROPERTY	VALUE	UNIT
Transformation point Ac1	763	°C
Transformation point Ac3	920	°C
Transformation point Ar3	790	°C
Transformation point Ar1	640	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

5 designations · 1 documented as identical

Russia / CIS	5
10G2B-1	gost
10G2BD-1	gost
10G2FBYu-1	gost
10G2S1 This grade's own name	gost
10Г2С1	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 10G2BD-1

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