SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.0528 · CLASS 1.0

1.0528

Chemical composition, mechanical and physical property values, and 54 standard designations from 14 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	54 in 14 regions	16 on file

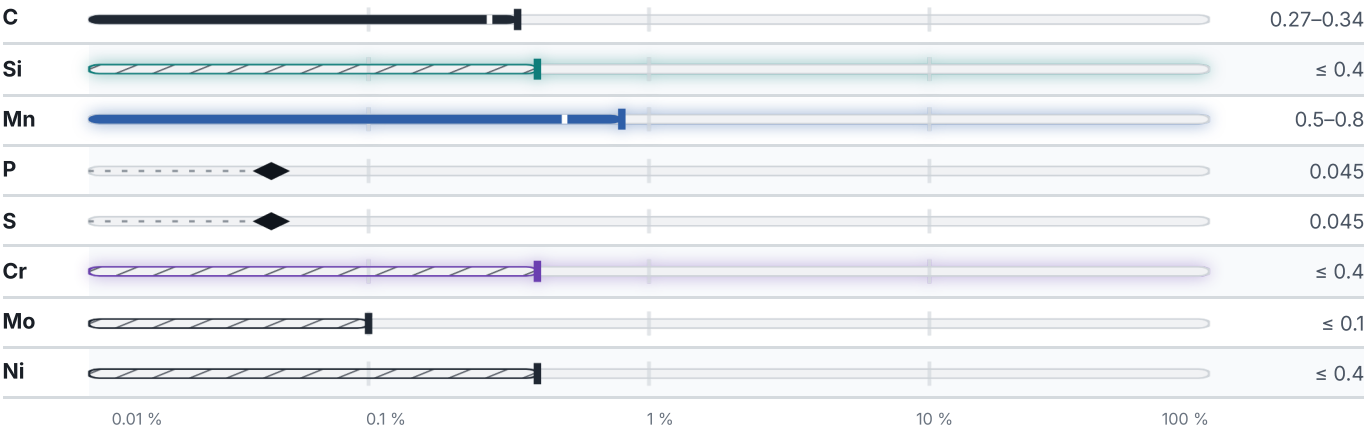
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 97.7 % · Mn — 0.7 % · Si — 0.4 % · Cr — 0.4 % · Traces & impurities · 0.9 %

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

computed from composition · °C

PREDICTED AE3	PREDICTED AE1	PREDICTED ACM	PREDICTED BS
792 °C	724 °C	539 °C	566 °C

Mechanical properties

21 values across 4 conditions

CONDITION · DIMENSION	RM N/mm²	A5 %	Z %	HB
Rolled stock cold-worked , GOST 1050-88	560	7	35	–
Rolled stock annealed , GOST 1050-88	440	17	45	–
Band annealed , GOST 2284-79	390–640	16	–	–
Band cold-worked , GOST 2284-79	640–930	–	–	–
Sheet GOST 4041-71	–	–	–	149
Rolled stock GOST 1050-88	–	–	–	229

NORMALIZED	RM N/mm²	A %
≤ 100	480	21
100 – 250	460	21

CONDITION · DIMENSION	RM N/mm²	A5 %
4 - 14	430–590	24

NORMALIZING	RM N/mm²	RE N/mm²	A5 %	Z %
to 80	490	295	21	50

Physical properties

8 values

CONDITION · DIMENSION	RHO g/cm³	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)	CP J/(kg·K)
20	7.85	200	–	52	–
100	–	196	12.1	51	470
200	–	191	12.9	49	483
300	–	185	13.6	46	546
400	–	–	14.2	43	563
500	–	–	14.7	39	764
600	–	164	15	36	–
700	–	–	15.2	32	–

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³
Transformation point Ac1	730	°C

PROPERTY	VALUE	UNIT
Transformation point Ac3	820	°C
Transformation point Ar3	796	°C
Transformation point Ar1	680	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	limited weldability.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
Annealing	Temperature not stated	—

Designations across standards

54 designations · 3 documented as identical

Russia / CIS — 15

30	gost
30GL	gost
30KHGFRL	gost
30KHGS	gost
30KHGSFL	gost
30KhGSNMA	gost
30KHGT	gost
30KhL	gost
30KhML	gost
30KHRA	gost
CHVG30	gost
CHYU30	gost
PKh30	gost
AS30KHM	gost
ASTS30KHM	gost

United States — 5

G10300 This grade's own name	uns
1030 This grade's own name	aisi-sae
G10300	aisi-sae
M1031	aisi-sae
SAE1030	aisi-sae

United Kingdom — 5

060A30	bs
080A32	bs
080M32	bs
C30 C30E C30R	bs
En5	bs

Japan — 5

S28C	jis
S30C	jis
S33C	jis
SWRCH30K	jis
SWRCH33K	jis

France — 4

AF50C30	afnor
C30E	afnor
FR32	afnor
XC32	afnor

International — 4

C30	iso
C30 C30E4 C30M2	iso
C30E	iso
C30E4	iso

Europe 3

1.0528	din-en
C30 This grade's own name	din-en
Ck30	din-en

China 3

30	gb
ML25Mn	gb
ML30	gb

Italy 3

C30	uni
C30E	uni
C30R	uni

Poland 3

30	pn
30A	pn
30rs	pn

Czechia 1

12031	csn

Slovakia 1

12 031	stn

Romania 1

OLC30	stas

Bulgaria 1

30	bds

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 1.0528

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	1.0528	Aug 20, 2026