SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.0762 · CLASS 1.0

1.0762

Chemical composition, mechanical and physical property values, and 52 standard designations from 19 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	52 in 19 regions	10 on file

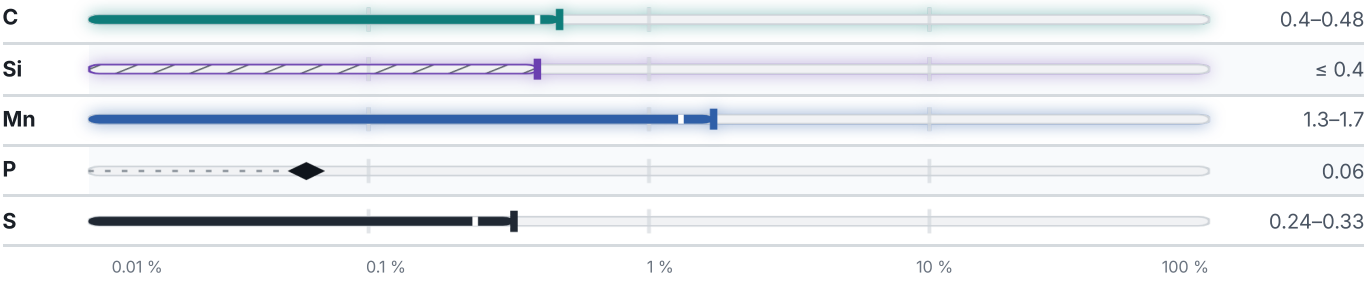
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 97.3 % · Mn — 1.5 % · C — 0.4 % · Si — 0.4 % · Traces & impurities · 0.3 %

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, Cr, Mo.

Mechanical properties

18 values across 4 conditions

COLD DRAWN / HARD	RM N/mm²	A %
5 – 10	760–1030	5
10 – 16	710–980	5

COLD DRAWN / HARD	RM N/mm²	A %
16 – 40	660–900	6
40 – 63	650–870	7
63 – 100	630–840	7

CONDITION · DIMENSION	RM N/mm²	A5 %	Z %	HB
Rolled stock hotrolled, GOST 1414-75	590	14	20	–
Rolled stock GOST 1414-75	–	–	–	207
(annealing) , Rolled stock GOST 1414-75	–	–	–	229

CONDITION · DIMENSION	RM N/mm²	A5 %
Rolled stock cold-drawn , GOST 1414-75	590	17

AS ROLLED AND TURNED	HB
As rolled and turned	181–242

Physical properties

5 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³
Transformation point Ac1	730	°C
Transformation point Ac3	830	°C

Technological properties

PROPERTY	VALUE	UNIT
Flake sensitivity	predisposed	
Temper brittleness	predisposed	

Heat treatment

2 regimes

STEP	TEMPERATURE	MEDIUM
Tempering	Temperature not stated	—
Tempering	Temperature not stated	—

Designations across standards

52 designations · 5 documented as identical

United States 13

G11440 This grade's own name	uns
1141	aisi-sae
1144 This grade's own name	aisi-sae
1345	aisi-sae
1345H	aisi-sae
C1144	aisi-sae
G11410	aisi-sae
G11440	aisi-sae
G11444	aisi-sae
G11460	aisi-sae
G13450	aisi-sae
H13450	aisi-sae
C1144	astm

Japan 6

44SMn28 This grade's own name	jis
SMn3	jis
SMn433	jis
SMn433H	jis
SUM42	jis
SUM43	jis

Russia / CIS 5

45G2	gost
45Г2	gost
A40G	gost
A40G	gost
A40Г	gost

United Kingdom 4

216M36	bs
225M36	bs
226M44	bs
44SMn28	bs

China 3

45Mn2	gb
45Mn2A	gb
Y40Mn	gb

Poland 3

45G2	pn
A35G2	pn
A45	pn

Bulgaria 3

44SMn28	bds
45G2	bds
A45	bds

Europe 2

40S20	din-en
44 SMn 28 This grade's own name	din-en

France 2

45MF4	afnor
45MF6	afnor

International 2

35SMn20	iso
44SMn28	iso

Spain 1

45MnS6	une

Italy 1

CF44SMn28	uni

Sweden 1

2120	ss

Czechia 1

11140	csn

Latin America 1

1144	copant

Hungary 1

ANS2	msz

Romania 1

AUT40Mn	stas

Australia / New Zealand 1

X1345	as-nzs

South Korea 1

SUM43 This grade's own name	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 1.0762

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	1.0762	Aug 20, 2026