SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.1525 · CLASS 1.1

1.1525

Chemical composition, mechanical and physical property values, and 44 standard designations from 19 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	44 in 19 regions	11 on file

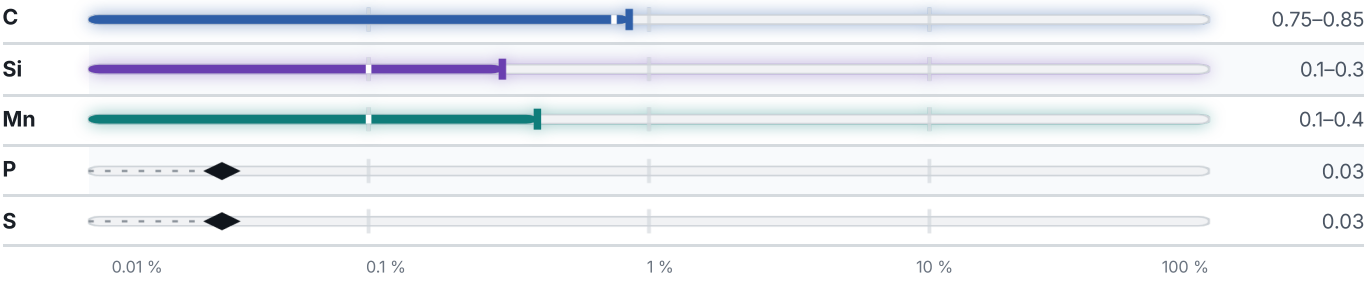
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 98.7 % · C — 0.8 % · Mn — 0.3 % · Si — 0.2 % · Traces & impurities · 0.1 %

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: Ni, Cr, Mo.

Mechanical properties

10 values across 5 conditions

CONDITION · DIMENSION	HB	HRC
(SK5) Annealed	207	–
(SK5) Quenched and tempered	–	59

SOFT ANNEALED	HB
Soft annealed	192

QUENCHING 780°C, OIL, DRAWING 400°C	RM N/mm²	RE N/mm²	A5 %	Z %
6	1420	1230	10	37

CONDITION · DIMENSION	RM N/mm²	A5 %
1.5	750	10

CONDITION · DIMENSION	HB
(annealing) , GOST 1435-99	187

Physical properties

6 values

CONDITION · DIMENSION	RHO g/cm³	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)	CP J/(kg·K)	RHO_EL nΩ·m
20	7.839	209	–	–	–	–
100	7.817	205	11.4	49	477	230
200	7.786	199	12.2	46	511	305
300	7.752	192	13	42	528	395
400	7.714	185	13.7	38	548	491
500	7.676	175	14.3	35	565	625
600	7.638	166	14.8	33	594	769
700	7.6	–	15.2	30	624	931
800	7.852	–	14.5	24	724	1129
900	–	–	–	–	–	1165

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³
Transformation point Ac1	720	°C
Transformation point Ar1	700	°C

Technological properties

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

PROPERTY	VALUE	UNIT
Temper brittleness	not predisposed	

Designations across standards

44 designations · 4 documented as identical

United States 8

T72301	uns
W1	aisi-sae
W1-7	aisi-sae
W1-8	aisi-sae
W108 This grade's own name	aisi-sae
W108Extra	aisi-sae
W1C 0,80% This grade's own name	aisi-sae
W1A-8	astm

Russia / CIS 6

U8	gost
U8A	gost
U8G	gost
U9	gost
У8Г	gost
У9	gost

Japan 4

SK5	jis
SK6	jis
SK75	jis
SK85	jis

Europe 3

C80U This grade's own name	din-en
C80W1 This grade's own name	din-en
C80W2	din-en

France 3

C90E2U	afnor
Y1-90	afnor
Y180	afnor

Poland 3

N8	pn
N8E	pn
N9	pn

International 2

C80U	iso
TC80	iso

Italy 2

C80KU	uni
C90KU	uni

Hungary 2

S91	msz
S92	msz

South Korea 2

STC5	ks
STC6	ks

United Kingdom 1

BW1A	bs

Spain 1

F-513	une

China 1

T8	gb

Czechia 1

19152	csn

Slovakia 1

19 152	stn

Serbia 1

Č.1840	srps

Romania 1

OSC8	stas

Bulgaria 1

U9	bds

Austria 1

K980	onorm

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 1.1525

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	1.1525	Aug 20, 2026