SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.8945 · CLASS 1.8

Fe360-2KG

Material no. 1.8945

also listed as S355J0WP

Chemical composition, mechanical and physical property values, and 37 standard designations from 16 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	37 in 16 regions	17 on file

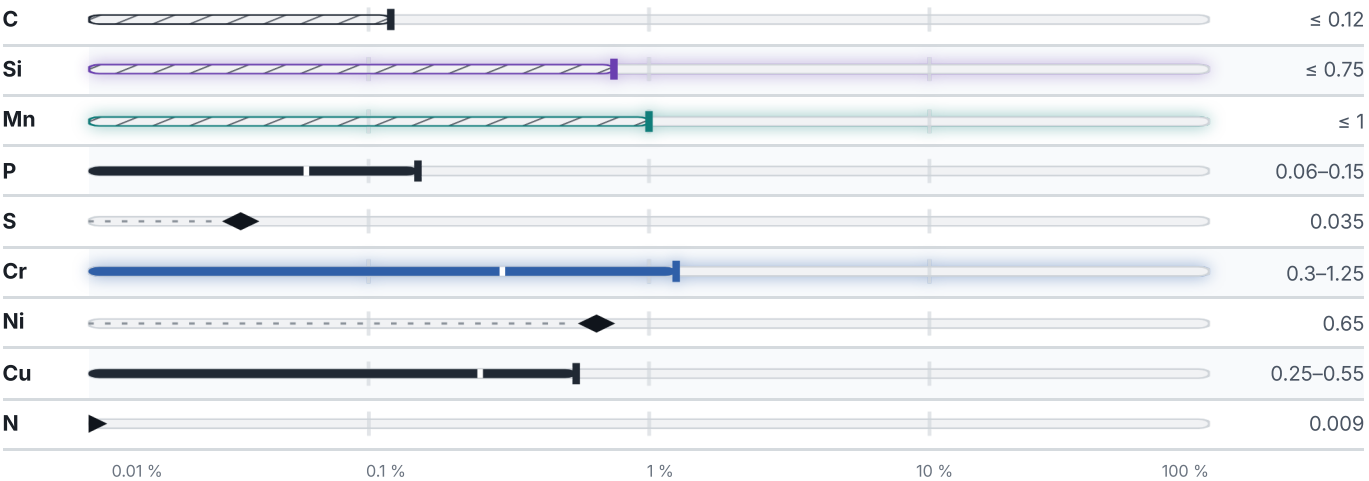
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 96.2 % · Mn — 1 % · Cr — 0.8 % · Si — 0.8 % · Traces & impurities · 1.3 %

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: Mo.

Mechanical properties

12 values across 2 conditions

CONDITION · DIMENSION	REH N/mm²	RM N/mm²	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So
1.5 – 2	–	–	16	–
2 – 2.5	–	–	17	–
2.5 – 3	–	–	18	–
≤ 3	–	510–680	–	–
3 – 100	–	470–630	–	–
3 – 40	–	–	–	22
≤ 16	355	–	–	–
16 – 40	345	–	–	–

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	KCU kJ/m²
Sheet, GOST 5520-79	370–480	205–225	25–27	640–690

Physical properties

8 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	7.87	211	–	–	–	200
100	7.84	208	–	57	486	219
200	7.81	205	12	53	498	292
300	7.78	200	12.8	–	514	381
400	7.74	191	13.2	45	533	487
500	7.71	180	13.6	–	555	601
600	7.67	165	13.85	38	584	758
700	7.63	–	–	–	636	925
800	–	–	–	–	703	1094
900	7.61	–	–	–	703	1135
1000	7.55	–	–	–	695	1167
1100	7.49	–	–	–	691	1194
1200	–	–	–	–	687	1219

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³
Transformation point Ac1	724	°C

PROPERTY	VALUE	UNIT
Transformation point Ac3	860	°C
Transformation point Ar3	830	°C
Transformation point Ar1	676	°C

Technological properties

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

Designations across standards

37 designations · 2 documented as identical

Italy 5

Fe360-1KG	uni
Fe360-2KG	uni
Fe410KW	uni
Fe510C1K1	uni
S355JOWP	uni

France 4

A37AP	afnor
A37CP	afnor
A37FP	afnor
E36WA3	afnor

Czechia 4

11368	csn
11369	csn
11418	csn
15217	csn

Europe 3

9CrNiCuP324	din-en
Fe510C1KI	din-en
S355J0WP This grade's own name	din-en

United States 3

K11535 This grade's own name	uns
Gr.1	aisi-sae
K02001	aisi-sae

United Kingdom 3

WR50A	bs
WR50B	bs
WR50C	bs

Japan 3

SGV410	jis
SPA-H	jis
STPL380	jis

Russia / CIS 2

15K	gost
15K	gost

Sweden 2

1330	ss
1332	ss

Poland 2

10H	pn
St41K	pn

International 1

Fe355W-1A	iso

China 1

09CuPCrNi-A	gb

Slovakia 1

15 217	stn

Hungary 1

KL2	msz

Bulgaria 1

16K	bds

Austria	1
St35KW	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.

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.8945	Aug 20, 2026