SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.0305 · CLASS 1.0

1.0305

Chemical composition, mechanical and physical property values, and 16 standard designations from 3 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	16 in 3 regions	6 on file

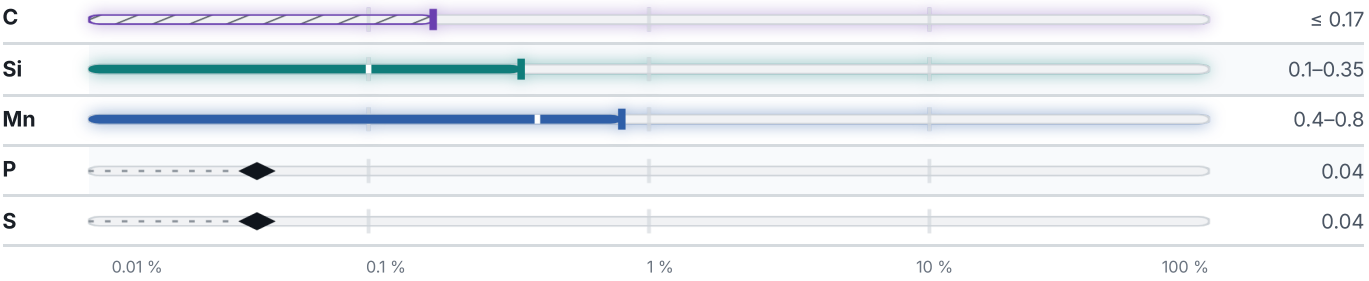
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 98.9 % · Mn — 0.6 % · Si — 0.2 % · C — 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

9 values across 1 conditions

NORMALIZED	REH N/mm²	RM N/mm²
≤ 16	235	–
16 – 40	225	–

NORMALIZED	REH N/mm²	RM N/mm²
40 – 60	215	–
60 – 100	200	–
≤ 100	–	360–480
100 – 150	185	350–480
150 – 250	170	340–480

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

16 designations · 8 documented as identical

Europe 8

1.0305	din-en
P235G1TH This grade's own name	din-en
P235GH This grade's own name	din-en
P235GH TC1	din-en
P235GH TC2	din-en
St 35.8 This grade's own name	din-en
St 35.8/I	din-en
St 35.8/III	din-en

United States 7

K01200 This grade's own name	uns
K01201 This grade's own name	uns
K01807 This grade's own name	uns
K02501 This grade's own name	uns
K02504 This grade's own name	uns
A 106 Grade A	astm
A 234 Grade WPA	astm

Czechia 1

12021	csn

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 1.0305

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	1.0305	Aug 20, 2026