

MATERIAL NUMBER 1.0405 · CLASS 1.0

A 234 Grade WPB

Material no. 1.0405

also listed as P255G1TH

Chemical composition, mechanical and physical property values, and 13 standard designations from 3 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	13 in 3 regions	6 on file

Chemical composition

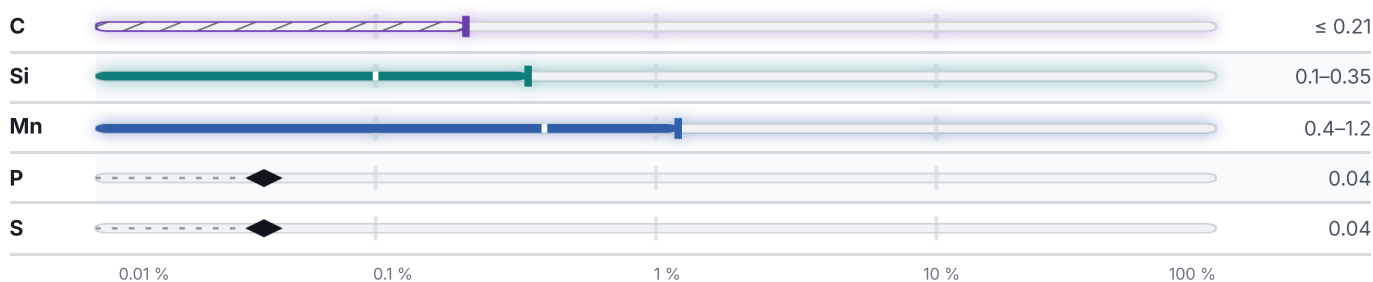
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 98.7 % ● Mn — 0.8 % ● 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/mm ²	RM N/mm ²
≤ 16	265	—

NORMALIZED	REH N/mm ²	RM N/mm ²
16 – 40	255	–
40 – 60	245	–
60 – 100	215	–
≤ 100	–	410–530
100 – 150	200	400–530
150 – 250	185	390–530

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

13 designations · 5 documented as identical

Europe	8	United States	4
1.0405	din-en	K02707 This grade's own name	uns
P255G1TH This grade's own name	din-en	K03006 This grade's own name	uns
P265GH This grade's own name	din-en	A 106 Grade B	astm
P265GH TC1	din-en	A 234 Grade WPB	astm
P265GH TC2	din-en		
St 45.8 This grade's own name	din-en	Czechia	1
St 45.8/I	din-en	12022	csn
St 45.8/III	din-en		

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 A 234 Grade WPB

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	1.0405	Aug 20, 2026