

45MnB

also listed as 50B44

Chemical composition, mechanical and physical property values, and 2 standard designations from 2 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
2 in 2 regions	0 on file

Chemical composition	Mass fraction in %
No chemical composition is on file for this material number.	

Predicted transformation temperatures
Not enough recorded composition to predict a transformation temperature for this grade — missing: C, Mn, Si, Ni, Cr, Mo.

Mechanical properties	4 values across 1 conditions			
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	HB
25 – 25	≥ 1030	≥ 835	≥ 9	≤ 217

Heat treatment	1 regimes	
STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—

Designations across standards

2 designations · 1 documented as identical

United States		1	China		1
50B44	astm		45MnB	This grade's own name	gb

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 45MnB

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	—	Aug 15, 2026