

MATERIAL NUMBER 1.7006 · CLASS 1.7

1.7006

Chemical composition, mechanical and physical property values, and 13 standard designations from 5 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 13 in 5 regions	PROPERTY VALUES 7 on file
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Chemical composition

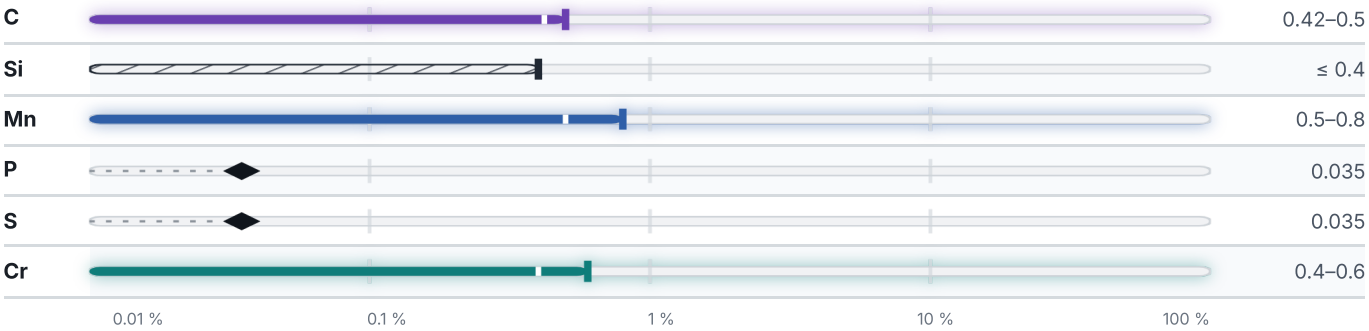
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 97.9 % ● Mn — 0.7 % ● Cr — 0.5 % ● C — 0.5 % ● Traces & impurities · 0.5 %

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, Mo.

Mechanical properties

5 values across 3 conditions

QUENCHED AND TEMPERED · ROUND PRODUCTS		A % · Lo = 5,65 √So
≤ 16		12
16 – 40		14

QUENCHED AND TEMPERED · ROUND PRODUCTS	A % · Lo = 5,65 √So
40 – 100	15
TREATED TO IMPROVE SHEARABILITY	HB
Treated to improve shearability	255
SOFT ANNEALED	HB
Soft annealed	223

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

13 designations · 7 documented as identical

United States	7	France	3
G50460	This grade's own name uns	42C2	afnor
G51500	uns	45 C 2	afnor
H51500	This grade's own name uns	46Cr2	afnor
5045	This grade's own name aisi-sae	Europe	1
5046	This grade's own name aisi-sae	46Cr2	This grade's own name din-en
5150	This grade's own name aisi-sae	Latin America	1
5150H	This grade's own name aisi-sae	5150	copant
		Serbia	1
		Č.4133	srps

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 1.7006

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	1.7006	Aug 20, 2026