

MATERIAL NUMBER 1.7006 · CLASS 1.7

5046

Material no. 1.7006

also listed as 46Cr2

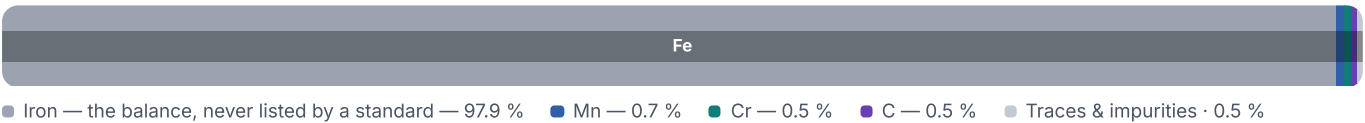
Chemical composition, mechanical and physical property values, and 13 standard designations from 5 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 13 in 5 regions	PROPERTY VALUES 7 on file
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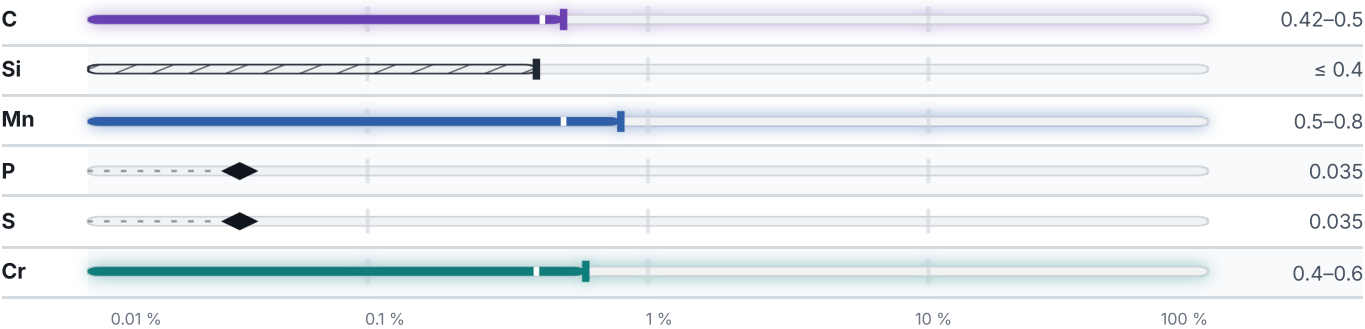
Chemical composition

Mass fraction in %

What this alloy is



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
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/cm ³

Designations across standards

13 designations · 7 documented as identical

United States7		France3	
G50460	This grade's own nameuns	42C2	afnor
G51500	uns	45 C 2	afnor
H51500	This grade's own nameuns	46Cr2	afnor
5045	This grade's own nameaisi-sae	Europe1	
5046	This grade's own nameaisi-sae		
5150	This grade's own nameaisi-sae	46Cr2	This grade's own namedin-en
5150H	This grade's own nameaisi-sae	Latin America1	
		5150	copant
		Serbia1	
		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 5046

Quotation, availability, mill certificate or a technical question — directly on the material page.

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ISSUED

Aug 20, 2026