

MATERIAL NUMBER 1.3551 · CLASS 1.3

M50

Material no. 1.3551

also listed as 80MoCrV42-16

Chemical composition, mechanical and physical property values, and 6 standard designations from 3 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 6 in 3 regions	PROPERTY VALUES 11 on file
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Chemical composition

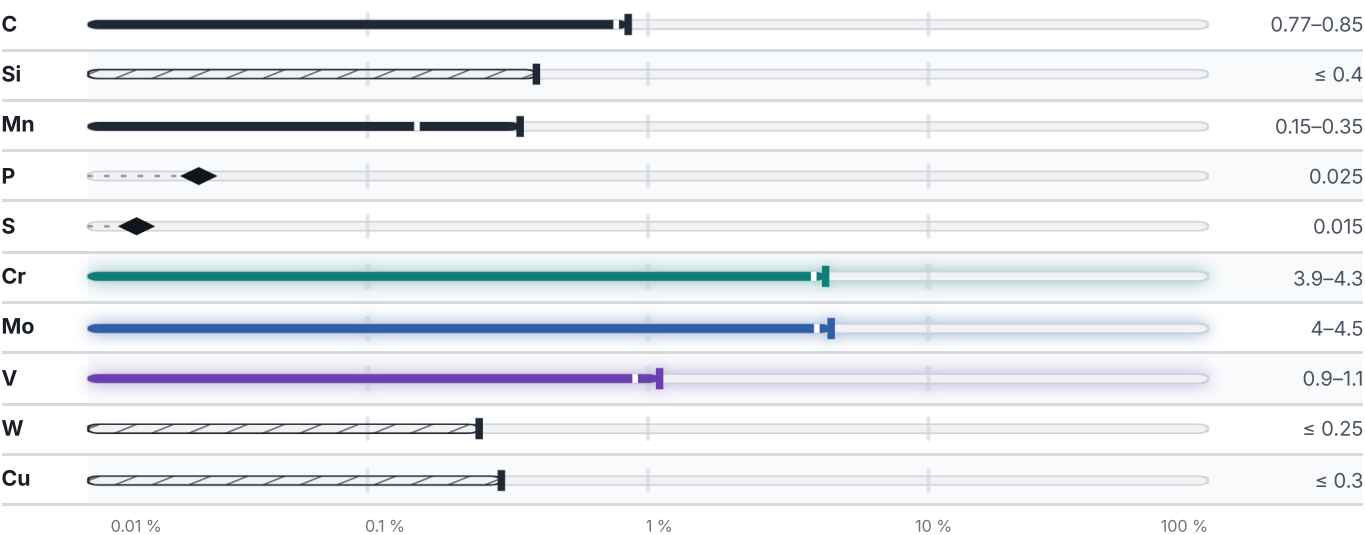
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 88.6 % ● Mo — 4.3 % ● Cr — 4.1 % ● V — 1 % ● Traces & impurities · 2.1 %

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.

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

6 designations · 3 documented as identical

United States	3	United States / Aerospace	2
T11350 This grade's own name	uns	6490	ams
M50 This grade's own name	aisi-sae	6491	ams
A600 M50	astm	Europe	1
		80MoCrV42-16 This grade's own name	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 M50

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	1.3551	Aug 20, 2026