

MATERIAL NUMBER 1.1160 · CLASS 1.1

SMn420H

Material no. 1.1160

also listed as 22Mn6

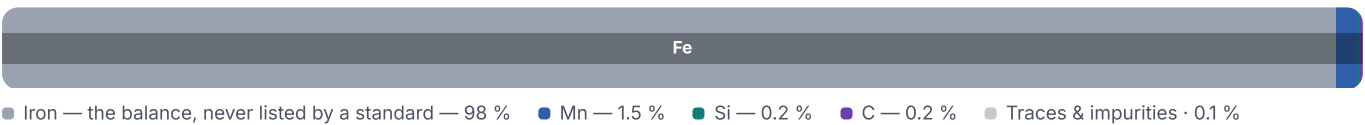
Chemical composition, mechanical and physical property values, and 14 standard designations from 6 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 14 in 6 regions	PROPERTY VALUES 6 on file
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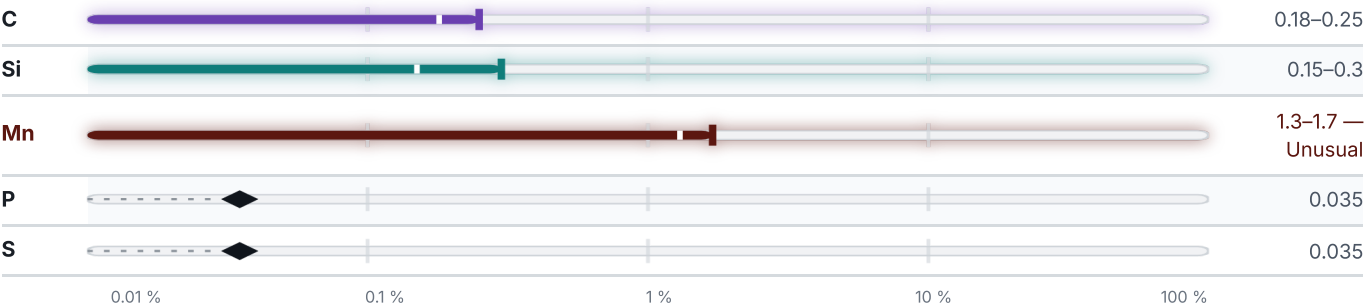
Chemical composition

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, Cr, Mo.

Mechanical properties

3 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	HB
Steel cold-drawn , GOST 10702-78	490–686	–
(hot-rolled, annealing)	–	187
Bar GOST 10702-78	–	179

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

14 designations · 5 documented as identical

United States		6	Russia / CIS		2
G15240	This grade's own name	uns	20G2		gost
H15240	This grade's own name	uns	20Г2		gost
1524	This grade's own name	aisi-sae	South Korea		2
1524H	This grade's own name	aisi-sae			
G15240		aisi-sae	SMn420		ks
H15240		aisi-sae	SMn420H		ks
Japan		2	Europe		1
SMn420		jis	22Mn6	This grade's own name	din-en
SMn420H		jis	Spain		1
			F.120L		une

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 SMn420H

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

[Start an enquiry](#)

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

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ISSUED

Aug 20, 2026