

MATERIAL NUMBER 1.3401 · CLASS 1.3

F.8251

Material no. 1.3401

also listed as X120Mn12

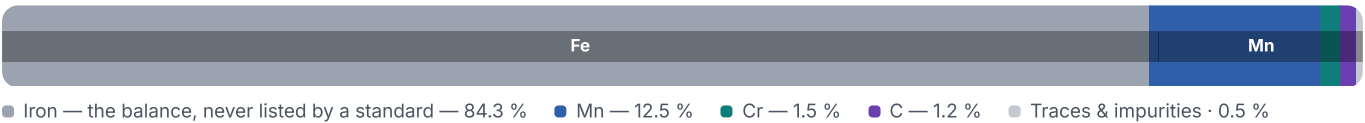
Chemical composition, mechanical and physical property values, and 57 standard designations from 19 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 57 in 19 regions	PROPERTY VALUES 10 on file
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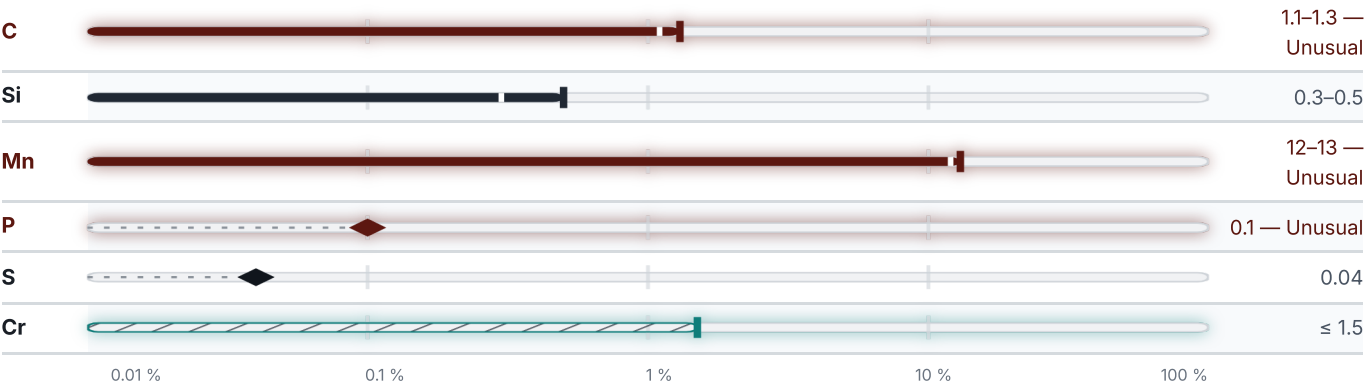
Chemical composition

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

4 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %
Casting, GOST 21357-87	800	400	25	35

Physical properties

4 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Technological properties

PROPERTY	VALUE	UNIT
Weldability	is not used.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

57 designations · 1 documented as identical

United States9		Japan5	
A128	aisi-sae	SCMnH	jis
A128(A)	aisi-sae	SCMnH1	jis
J91109	aisi-sae	SCMnH11	jis
J91119	aisi-sae	SCMnH2	jis
J91129	aisi-sae	SCMnH3	jis
J91139	aisi-sae		
J91149	aisi-sae	Russia / CIS5	
A128	astm	110G13L	gost
A128(A)	astm	110Г13Л	gost
		120G13	gost
Spain7		EI256	gost
120	une	G13	gost
AM-X-120Mn12	une		
F.240	une	France4	
F.8251	une	GD 233	afnor
F.82551-AM-X	une	Z120M12	afnor
Mn12	une	Z120M12M	afnor
X120Mn12	une	Z120Mn12	afnor
United Kingdom6		China4	
BW10	bs	ZGMn13-1	gb
Ma2	bs	ZGMn13-1-4	gb
Ma3	bs	ZGMn13-2	gb
Ma5	bs	ZGMn13-3	gb
MaZ	bs		
Z120M12	bs		

Europe	2	Sweden	1
1.3401	din-en	2183	ss
X120Mn12	This grade's own name din-en		
Italy	2	Slovakia	1
GX120Mn12	uni	17 618	stn
XG120Mn12	uni		
Czechia	2	Serbia	1
17618	csn	Č.3160	srps
422920	csn		
Poland	2	Hungary	1
C120G13	pn	X120Mn13	msz
L120G13	pn		
Romania	2	Austria	1
T105Mn120	stas	BOHLERK700	onorm
T130Mn135	stas		
		Finland	1
		G-X120Mn13	sfs
		South Korea	1
		SCMnH1	ks

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 F.8251

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

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GRADE SEARCH

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ISSUED

Aug 20, 2026