

MATERIAL NUMBER 1.2379 · CLASS 1.2

H12MF

Material no. 1.2379

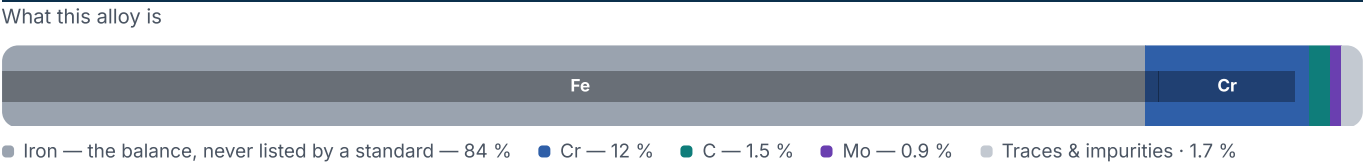
also listed as X153CrMoV12

Chemical composition, mechanical and physical property values, and 42 standard designations from 20 regions.

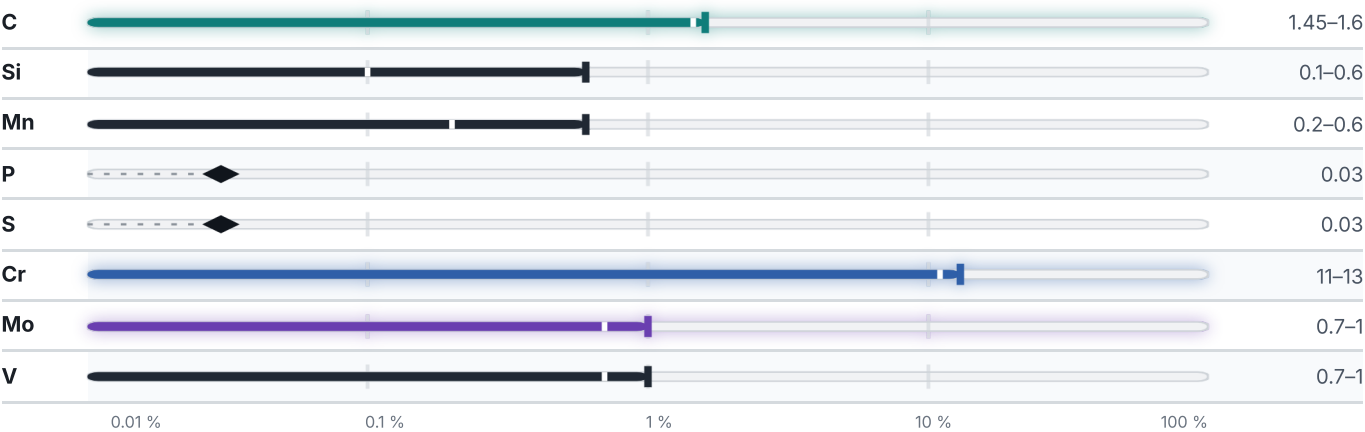
DENSITY 7.7 g/cm³	OTHER DESIGNATIONS 42 in 20 regions	PROPERTY VALUES 16 on file
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Chemical composition

Mass fraction in %



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.

Mechanical properties

4 values across 3 conditions

CONDITION · DIMENSION	HB	HRC
Annealed	255	–
Quenched and tempered	–	58
SOFT ANNEALED		HB
Soft annealed		255
CONDITION · DIMENSION		HB
(annealing) , GOST 5950-2000		255

Physical properties

8 values

CONDITION · DIMENSION	RHO_EL nΩ·m	
20	640	
PROPERTY	VALUE	UNIT
Density	7.7	g/cm³
Transformation point Ac1	810	°C
Transformation point Ac3	860	°C
Transformation point Ar3	780	°C
Transformation point Ar1	760	°C

Technological properties

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

Designations across standards

42 designations · 4 documented as identical

Russia / CIS		6	United States		4
Ch12MF	gost		T30402	This grade's own name	uns
H12MF	gost		D2	This grade's own name	aisi-sae
KH12F1	gost		D5		aisi-sae
KH12MF	gost		T30402		aisi-sae
X12MΦ	gost				
X12Φ1	gost				

France	4	Austria	2
X160CrMoV12	afnor	BOHLERK110	onorm
Z160CDV12	afnor	K105	onorm
Z160CDV12 / Z160CDV2	afnor		
Z160CDV12.03	afnor	United Kingdom	1
China	4	BD2	bs
Cr12Mo1V1	gb	Japan	1
Cr12MoV	gb	SKD11	jis
T21201	gb	Sweden	1
T21202	gb	2310	ss
Europe	3	Slovakia	1
X153CrMoV12	This grade's own name din-en	19 573	stn
X155CrVMo12-1	This grade's own name din-en	Serbia	1
X165CrMoV12	din-en	Č.4850	srps
Czechia	3	Croatia	1
19572	csn	Č4850	hrn
19573	csn	Poland	1
19573PH	csn	NC11LV	pn
Spain	2	Hungary	1
F-5211	une	K8	msz
X160CrMoV12	une	Bulgaria	1
International	2	Ch12MF	bds
X153CrMoV12	iso	South Korea	1
X160CrMoV12-1	iso	STD11	ks
Italy	2		
C165CrMoV12KU	uni		
X155CrVMo12-1KU	uni		

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 H12MF

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