

MATERIAL NUMBER 1.4841 · CLASS 1.4

3M283

Material no. 1.4841

also listed as X15CrNiSi25-20

Chemical composition, mechanical and physical property values, and 60 standard designations from 16 regions.

DENSITY

7.9 g/cm³

OTHER DESIGNATIONS

60 in 16 regions

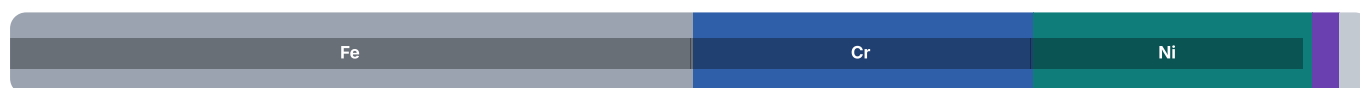
PROPERTY VALUES

10 on file

Chemical composition

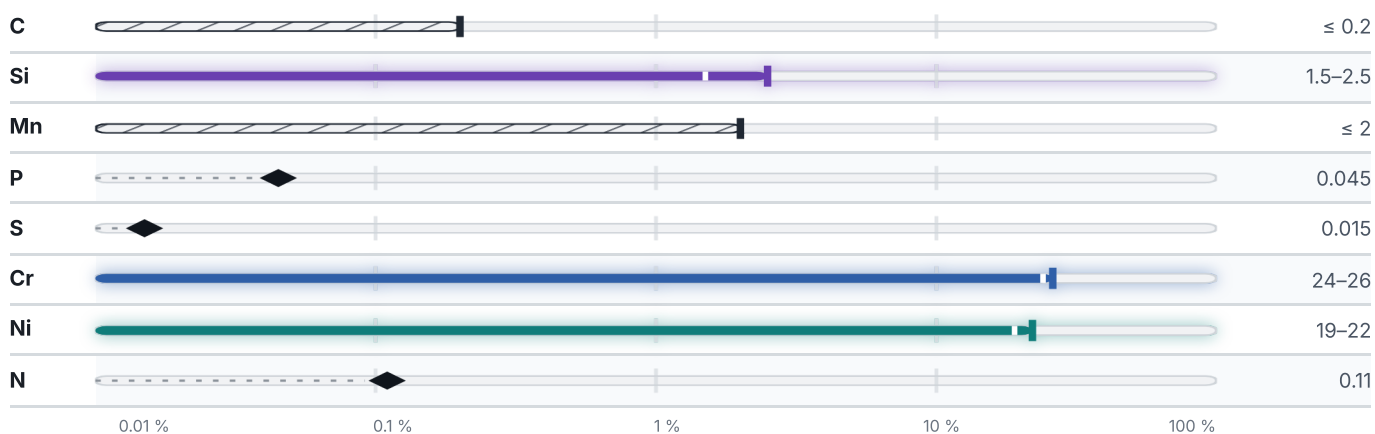
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 50.1 % ● Cr — 25 % ● Ni — 20.5 % ● Si — 2 % ● Traces & impurities · 2.4 %

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: Mo.

Mechanical properties

7 values across 3 conditions

SOLUTION ANNEALED				HB
Solution annealed				223
QUENCHING 1100 - 1150°C, AIR	RM N/mm²	RE N/mm²	A5 %	Z %
Ø 60	590	295	35	50
CONDITION · DIMENSION		RM N/mm²	A5 %	
Sheet thin, GOST 5582-75		490	35	

Physical properties

2 values

CONDITION · DIMENSION	RHO g/cm³	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)
20	7.72	–	–
100	7.68	16.1	15
500	–	–	22
600	–	17.8	24
700	–	17.8	25
800	7.44	18.1	27
900	7.39	18.5	29
1000	–	18.8	–
PROPERTY		VALUE	UNIT
Density		7.9	g/cm³

Technological properties

PROPERTY	VALUE	UNIT
Temper brittleness	predisposed	

Designations across standards

60 designations · 6 documented as identical

United States		27	Spain		3
S31000	This grade's own name	uns	F.3310		une
S31400	This grade's own name	uns	F.3310-X15 CrNiSi 25-20		une
S31500		uns	X15CrNiSi25-20		une
30310		aisi-sae	Czechia		3
30314		aisi-sae			
310	This grade's own name	aisi-sae	17255		csn
314	This grade's own name	aisi-sae	17265		csn
S31000		aisi-sae	17265PH		csn
S31400		aisi-sae	Europe		2
S31500		aisi-sae			
310 314		astm	X15CrNiSi25-20	This grade's own name	din-en
A1012		astm	X15CrNiSi25-21	This grade's own name	din-en
A1049		astm	United Kingdom		2
A167		astm			
A182		astm	310S24		bs
A213		astm	314 S 25		bs
A240		astm	United States / Aerospace		2
A249		astm			
A276		astm	5652		ams
A312		astm	7490		ams
A314		astm	Italy		2
A336		astm			
A473		astm	X16CrNiSi25-20		uni
A580		astm	X25CN25-20		uni
A632		astm	China		1
A965		astm			
F2281		astm	2Cr25Ni20		gb
Russia / CIS		6	Sweden		1
20Ch25N20S2		gost	2376		ss
20KH25N20S2		gost	Slovakia		1
20X25H20C2		gost			
сг.20X25H20C2		gost	17 265		stn
X25H20C2		gost	Serbia		1
3M283		gost	Č.4578		srps
Japan		4	former Yugoslavia		1
SUH310		jis			
SUS 310TB		jis	Č.4578		jus
SUS Y 310		jis	Poland		1
SUS18		jis			
France		3	H25N20S2		pn
Z12CN25.20		afnor			
Z12CNS25.20		afnor			
Z15CNS25-20		afnor			

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 3M283
Quotation, availability, mill certificate or a technical question — directly on the material page.

Start an enquiry

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View the material page

GRADE SEARCH
Search all grades

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ISSUED
Aug 23, 2026