SteelEquivalents.com

Material datasheet
As of Sep 8, 2026

MATERIAL NUMBER 1.4016 · CLASS 1.4

SIS 2320

Material no. 1.4016

also listed as X6Cr17

Chemical composition, mechanical and physical property values, and 68 standard designations from 17 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.7 g/cm³	68 in 17 regions	9 on file

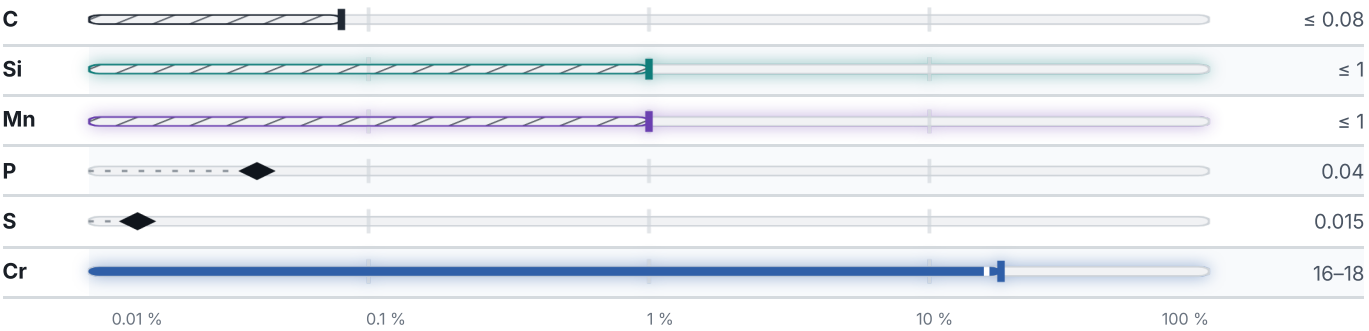
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 80.9 % · Cr — 17 % · Si — 1 % · Mn — 1 % · Traces & impurities · 0.1 %

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, Mo.

Mechanical properties

25 values across 7 conditions

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A %	Z %	HB	HRB	HV
Plate/Sheet Hot-rolled	420	205	22	–	–	–	–
Bars/Rods	450	205	22	50	–	–	–
Hot-rolled	–	–	–	–	183	88	200

CONDITION · DIMENSION	RM N/mm²	A5 %	HB
Pipe cooling strain, GOST 9941-81	441	17	–
Pipe hot strain, GOST 9940-81	441	17	–
12KH17 (12X17) (annealing) , Bar GOST 5949-75	–	–	126–197

COLD ROLLED	HV
Cold rolled	200–300

SOFT ANNEALED	HB
Soft annealed	200

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	Z %
Bar, GOST 5949-75	390	245	20	50

CONDITION · DIMENSION	RM N/mm²	A5 %
Sheet trick, GOST 7350-77	440	18

CONDITION · DIMENSION	RM N/mm²	A5 %
Sheet thin, GOST 5582-75	490	20

Physical properties

3 values

CONDITION · DIMENSION	RHO g/cm³	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)	CP J/(kg·K)	RHO_EL nΩ·m
20	7.72	232	–	–	–	560
100	–	227	10.4	24	462	610
200	–	219	10.5	24	–	680
300	–	211	10.8	25	–	770
400	–	201	11.2	26	–	850
500	–	192	11.4	26	–	950

CONDITION · DIMENSION	RHO g/cm³	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)	CP J/(kg·K)	RHO_EL nΩ·m
600	–	182	11.6	–	–	1030
700	–	165	11.9	–	–	1110
800	–	148	12.1	–	–	1150
900	–	–	–	–	–	1160

PROPERTY	VALUE	UNIT
Density	7.7	g/cm³

Technological properties

PROPERTY	VALUE	UNIT
Weldability	hard weldability.	
Temper brittleness	predisposed	

Heat treatment

2 regimes

STEP	TEMPERATURE	MEDIUM
Annealing	Temperature not stated	—
source joins the operations with (or)		
Quenching	Temperature not stated	—
Solution annealing	Temperature not stated	—

Designations across standards

68 designations · 2 documented as identical

United States 24

S43000	uns
430	aisi-sae
51430	aisi-sae
S43000	aisi-sae
A1012	astm
A182	astm
A240	astm
A268	astm
A276	astm
A314	astm
A473	astm
A479	astm
A484	astm
A493	astm
A511	astm
A554	astm
A580	astm
A815	astm
F2215	astm
F2281	astm
F593	astm
F594	astm
F738	astm
F836	astm

United Kingdom 6

17Cr	bs
430S1	bs
430S15	bs
430S17	bs
430S18	bs
EN 60	bs

Japan 6

SUS 430	jis
SUS 430TKA	jis
SUS 430TKC	jis
SUS 430TP	jis
SUS430TB	jis
SUS430TK	jis

Russia / CIS 6

12Ch17	gost
12KH17	gost
12X17	gost
12X17	gost
ст.12X17	gost
X17	gost

France 4

430F00	afnor
Z10CF17	afnor
Z6Cr17	afnor
Z8C17	afnor

Spain 4

F.310.D	une
F.3113	une
F.3113-X8Cr17	une
X6Cr17	une

China 3

1Cr15	gb
1Cr17	gb
ML1Cr17	gb

Europe 2

1.4016	din-en
X6Cr17 This grade's own name	din-en

United States / Aerospace 2

5503	ams
5627	ams

Italy 2

X6Cr17	uni
X8Cr17	uni

Sweden 2

2320	ss
SIS 2320 This grade's own name	ss

Czechia 2

17040	csn
17041	csn

Slovakia 1

17 040	stn

Brazil	1
430	abnt

former Yugoslavia	1
Č.4174	jus

Serbia	1
Č.4174	srps

Poland	1
H17	pn

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.

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.4016	Sep 8, 2026