

MATERIAL NUMBER 1.4742 · CLASS 1.4

15Ch18SJü

Material no. 1.4742

also listed as X10CrAl18

Chemical composition, mechanical and physical property values, and 38 standard designations from 16 regions.

DENSITY 7.56 g/cm³	OTHER DESIGNATIONS 38 in 16 regions	PROPERTY VALUES 8 on file
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Chemical composition

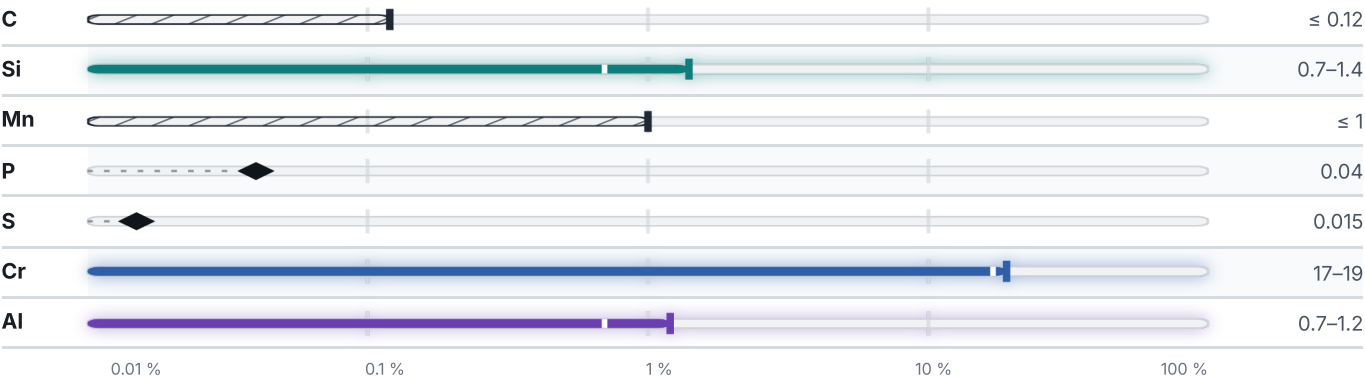
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 78.8 % ● Cr — 18 % ● Si — 1 % ● Mn — 1 % ● Traces & impurities · 1.1 %

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

8 values across 3 conditions

SOFT ANNEALED				HB
Soft annealed				212
CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	Z %
Bar, GOST 5949-75	490	295	20	50
CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A %	
Plate/Sheet	440	245	15	

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.56	g/cm³

Designations across standards

38 designations · 4 documented as identical

Russia / CIS	6	United Kingdom	3
15Ch18Ju	gost	430S15	bs
15Ch18SJü	gost	EN60	bs
15KH18SYU	gost	X10CrAlSi18	bs
15X18CÜ	gost		
X18CÜ	gost	Japan	3
3Ü484	gost	SUH21 This grade's own name	jis
		SUN21	jis
		SUS430	jis
United States	5		
S44200	uns		
430	aisi-sae	France	2
442	aisi-sae	Z10CAS18	afnor
51442	aisi-sae	Z12CAS18	afnor
A176	astm		
Spain	5	China	2
F.3113	une	1Cr19Al3	gb
F.3153	une	Cr17	gb
F.3153-X10CrAl 18	une		
X10CrAl18	une	Italy	1
X10CrAlSi18	une	X8Cr17	uni
Europe	4	Sweden	1
1.4742	din-en	SISI 442 This grade's own name	ss
X10CrA118	din-en		
X10CrAl18 This grade's own name	din-en	Serbia	1
X10CrAlSi18 This grade's own name	din-en	Č.4973	srps

Poland	1	Bulgaria	1
H18JS	pn	Ch18SJ	bds
Hungary	1	South Korea	1
H13	msz	STR21	ks
Romania	1		
10AICr180	stas		

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 15Ch18SJ

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

[Start an enquiry](#)

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.4742	Aug 20, 2026