

MATERIAL NUMBER 1.4742 · CLASS 1.4

H18JS

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/cm ³	OTHER DESIGNATIONS 38 in 16 regions	PROPERTY VALUES 8 on file
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Chemical composition

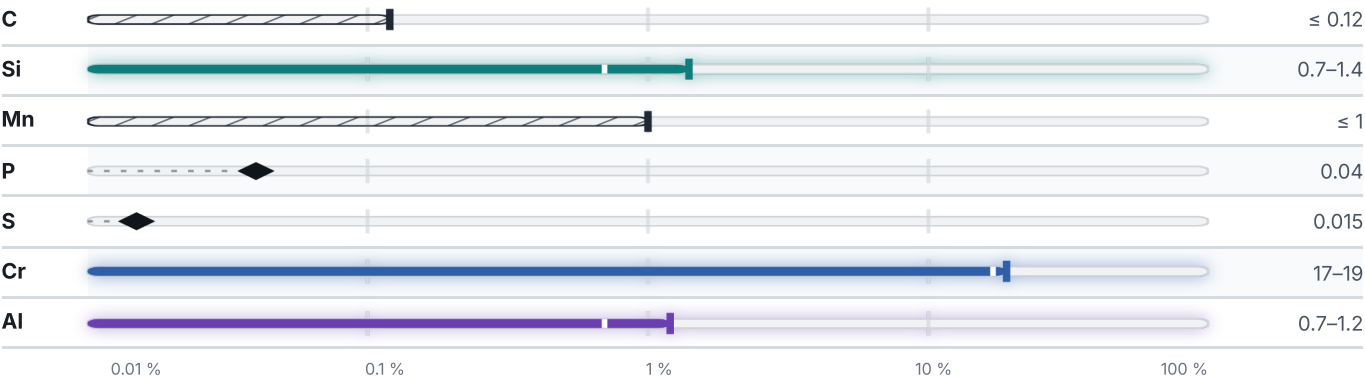
Mass fraction in %

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/mm ²	RE N/mm ²	A5 %	Z %
Bar, GOST 5949-75	490	295	20	50
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	
Plate/Sheet	440	245	15	

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.56	g/cm ³

Designations across standards

38 designations · 4 documented as identical

Russia / CIS		6	United Kingdom		3
15Ch18Ju	gost		430S15		bs
15Ch18SJU	gost		EN60		bs
15KH18SYU	gost		X10CrAlSi18		bs
15X18CЮ	gost		Japan		3
X18CЮ	gost		SUH21	This grade's own name	jis
ЭИ484	gost		SUN21		jis
United States		5	SUS430		jis
S44200	uns		France		2
430	aisi-sae		Z10CAS18		afnor
442	aisi-sae		Z12CAS18		afnor
51442	aisi-sae		China		2
A176	astm		1Cr19Al3		gb
Spain		5	Cr17		gb
F.3113	une		Italy		1
F.3153	une		X8Cr17		uni
F.3153-X10CrAl 18	une		Sweden		1
X10CrAl18	une		SISI 442	This grade's own name	ss
X10CrAlSi18	une		Serbia		1
Europe		4	Č.4973		srps
1.4742	din-en				
X10CrAl18	din-en				
X10CrAl18	This grade's own name	din-en			
X10CrAlSi18	This grade's own name	din-en			

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 H18JS

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