

MATERIAL NUMBER 1.4742 · CLASS 1.4

1.4742

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

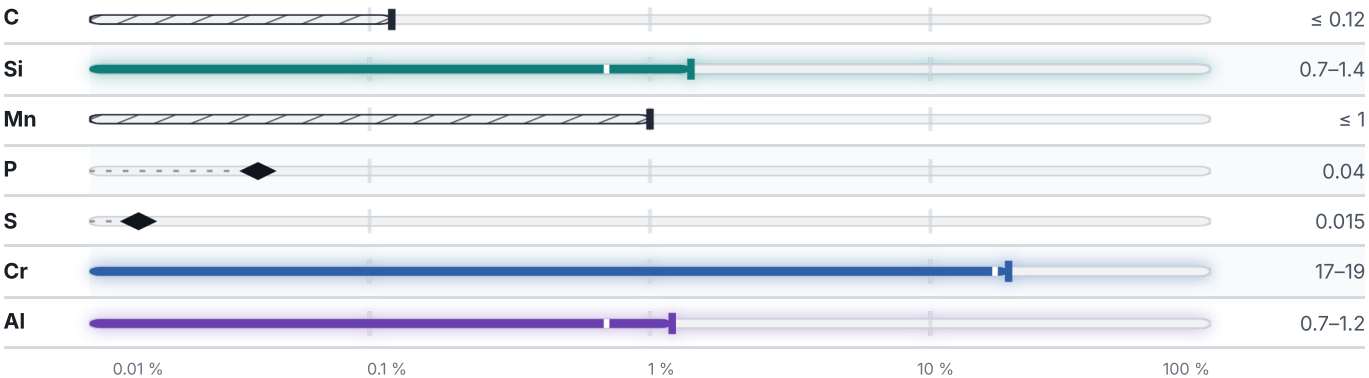
Mass fraction in %

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/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	Japan		3
15Ch18Ju	gost		SUH21	This grade's own name	jis
15Ch18SJ	gost		SUN21		jis
15KH18SYU	gost		SUS430		jis
15X18CЮ	gost				
X18CЮ	gost		France		2
ЭИ484	gost		Z10CAS18		afnor
			Z12CAS18		afnor
United States		5			
S44200	uns		China		2
430	aisi-sae		1Cr19Al3		gb
442	aisi-sae		Cr17		gb
51442	aisi-sae				
A176	astm		Italy		1
			X8Cr17		uni
Spain		5			
F.3113	une		Sweden		1
F.3153	une		SISI 442	This grade's own name	ss
F.3153-X10CrAl 18	une				
X10CrAl18	une		Serbia		1
X10CrAlSi18	une		Č.4973		srps
Europe		4			
1.4742	din-en		Poland		1
X10CrA118	din-en		H18JS		pn
X10CrAl18	This grade's own name	din-en	Hungary		1
X10CrAlSi18	This grade's own name	din-en	H13		msz
United Kingdom		3			
430S15	bs		Romania		1
EN60	bs		10AlCr180		stas
X10CrAlSi18	bs		Bulgaria		1
			Ch18SJ		bds

South Korea	1
STR21	ks

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 1.4742
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