SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.4568 · CLASS 1.4

Z8CNA17-7

Material no. 1.4568

also listed as X7CrNiAl17-7

Chemical composition, mechanical and physical property values, and 42 standard designations from 11 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.8 g/cm³	42 in 11 regions	9 on file

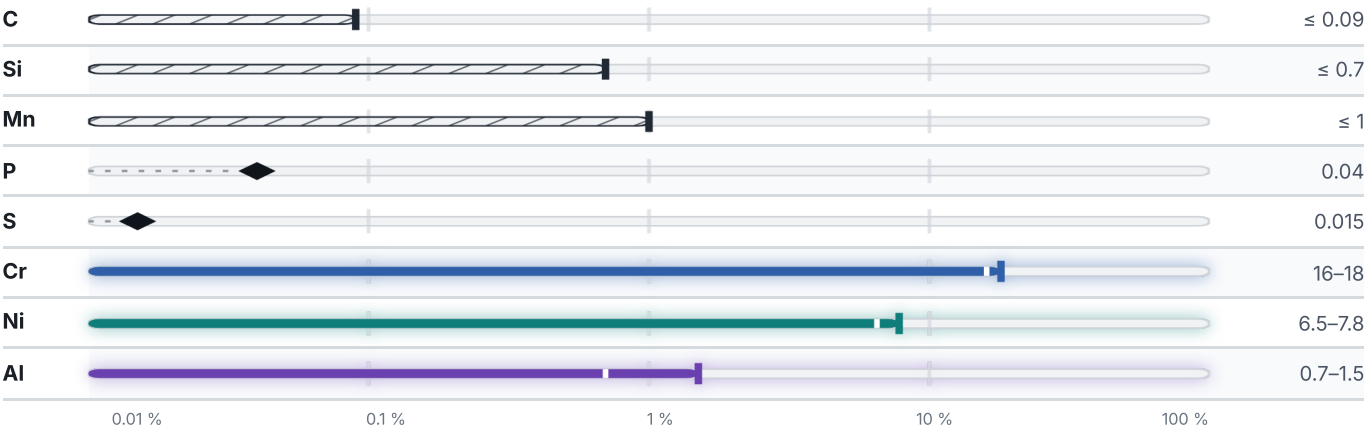
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 72.9 % · Cr — 17 % · Ni — 7.2 % · Al — 1.1 % · Traces & impurities · 1.8 %

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

5 values across 2 conditions

SOLUTION ANNEALED	HB
Solution annealed	255

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	KCU kJ/m²
Sheet trick, GOST 7350-77	830	735	12	490

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.8	g/cm³

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
Ageing	Temperature not stated	—

Designations across standards

42 designations · 4 documented as identical

United States 15

AMS 5529/5528	uns
AMS 5644	uns
AMS 5678	uns
S17700 This grade's own name	uns
17-7PH	aisi-sae
631 This grade's own name	aisi-sae
J2171994 This grade's own name	aisi-sae
S17700	aisi-sae
17-7PH	astm
A 313	astm
A 564	astm
A 564 Type 631	astm
A 579	astm
A 693	astm
A 705	astm

Russia / CIS 8

09Ch17N7Ju1	gost
09KH17N7YU	gost
09KH17N7YU1	gost
09X17H7Ю	gost
09X17H7Ю	gost
09X17H7Ю1	gost
0X17H7Ю	gost
0X17H7Ю1	gost

United States / Aerospace 6

5528	ams
5529	ams
5568	ams
5644	ams
5678	ams
5824	ams

France 3

Z8CNA17-07	afnor
Z8CNA17-7	afnor
Z9CNA17-07	afnor

Europe 2

1.4568	din-en
X7CrNiAl17-7 This grade's own name	din-en

United Kingdom 2

301S81	bs
316S111 –	bs

Japan 2

SUS 631-CSP	jis
SUS631	jis

International 1

X7CrNiAl17-7	iso

China 1

0Cr17Ni7Al	gb

Italy 1

X2CrNiMo1712	uni

Sweden 1

2388	ss

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	1.4568	Aug 20, 2026