

MATERIAL NUMBER 1.4747 · CLASS 1.4

80CrSiNi20-02

Material no. 1.4747

also listed as X80CrNiSi20

Chemical composition, mechanical and physical property values, and 13 standard designations from 7 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	13 in 7 regions	8 on file

Chemical composition

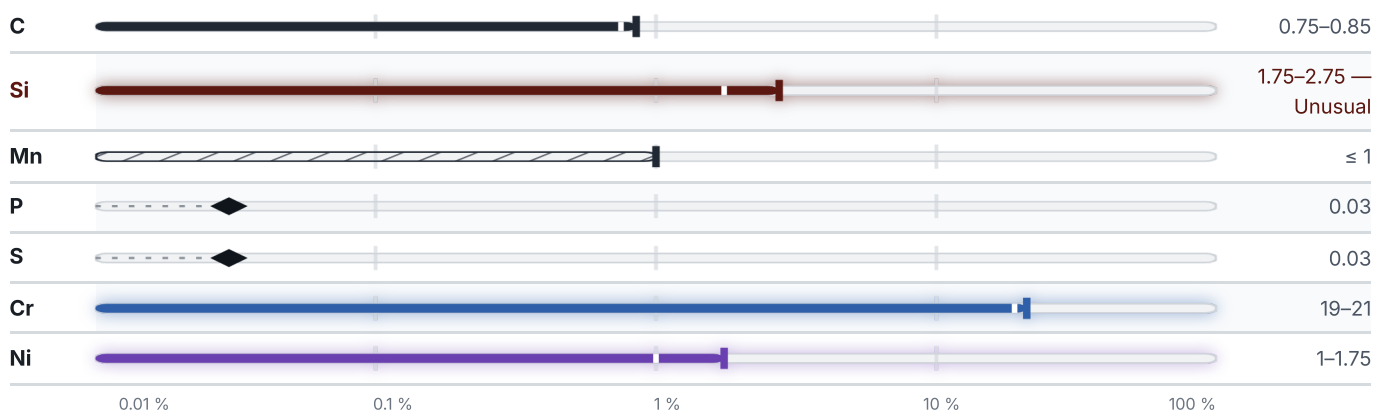
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 74.5 % ● Cr — 20 % ● Si — 2.3 % ● Ni — 1.4 % ● Traces & impurities · 1.9 %

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

6 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	Z %	AK J/cm ²	HB
Bars/Rods Quenching and tempering	880	685	10	15	10	–
Annealed	–	–	–	–	–	321

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

13 designations · 3 documented as identical

Spain	4	United Kingdom	2
80CrSiNi20-02	une	443S65	bs
F.320B	une	EN 59	bs
F.3222	une		
F.3222-X	une	France	1
		Z80CSN20.02	afnor
Europe	2		
1.4747	din-en	Japan	1
X80CrNiSi20 This grade's own name	din-en	SUH4	jis
United States	2	Italy	1
S65006 This grade's own name	uns	X80CrSiNi20	uni
HNV 6 This grade's own name	aisi-sae		

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 80CrSiNi20-02

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	1.4747	Aug 20, 2026