

MATERIAL NUMBER 1.4837 · CLASS 1.4

1.4837

Chemical composition, mechanical and physical property values, and 20 standard designations from 7 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 20 in 7 regions	PROPERTY VALUES 12 on file
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Chemical composition

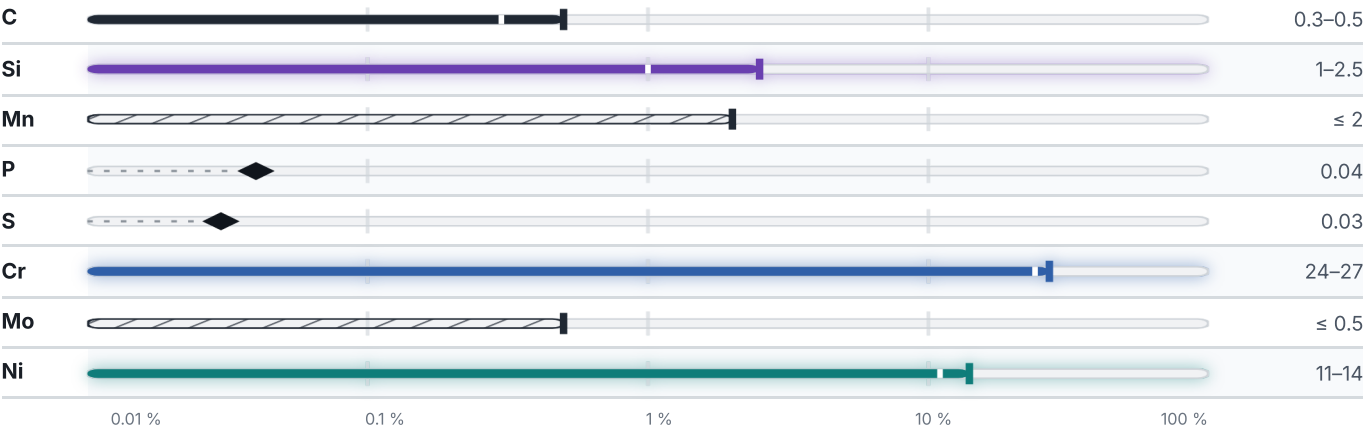
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 57.3 % ● Cr — 25.5 % ● Ni — 12.5 % ● Mn — 2 % ● Traces & impurities · 2.7 %

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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no transformation temperature is predicted here.

Mechanical properties

4 values across 1 conditions

QUENCHING 1050°C	RM N/mm ²	RE N/mm ²	A5 %	Z %
to 100	491	245	20	28

Physical properties

4 values

CONDITION · DIMENSION	RHO g/cm ³	E GPa	ALPHA 10 ^{^-6} /K	RHO_EL nΩ·m
20	7.8	196	–	860
100	–	–	18.4	–
500	–	167	–	–
600	–	157	–	–
700	–	145	–	–

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

20 designations · 5 documented as identical

United States		8	Europe		2
J93503	This grade's own name	uns	1.4837		din-en
J93513	This grade's own name	uns	GX40CrNiSi25-12	This grade's own name	din-en
J93633	This grade's own name	uns			
J94003		uns	Russia / CIS		2
J94013	This grade's own name	uns	40Ch24N12SL		gost
J93503		aisi-sae	40KH24N12SL		gost
J94003		aisi-sae			
J94013		aisi-sae	United Kingdom		1
			309C30		bs
Japan		5	China		1
SCH 13		jis	ZG35Cr26Ni12		gb
SCH 13A		jis			
SCH 13X		jis	Czechia		1
SCH 17		jis			
SCS 17		jis	422 936		csn

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 1.4837
Quotation, availability, mill certificate or a technical question — directly on the material page.

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MATERIAL NO.
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ISSUED
Aug 20, 2026