

MATERIAL NUMBER 1.2550 · CLASS 1.2

1.2550

Chemical composition, mechanical and physical property values, and 31 standard designations from 15 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 31 in 15 regions	PROPERTY VALUES 14 on file
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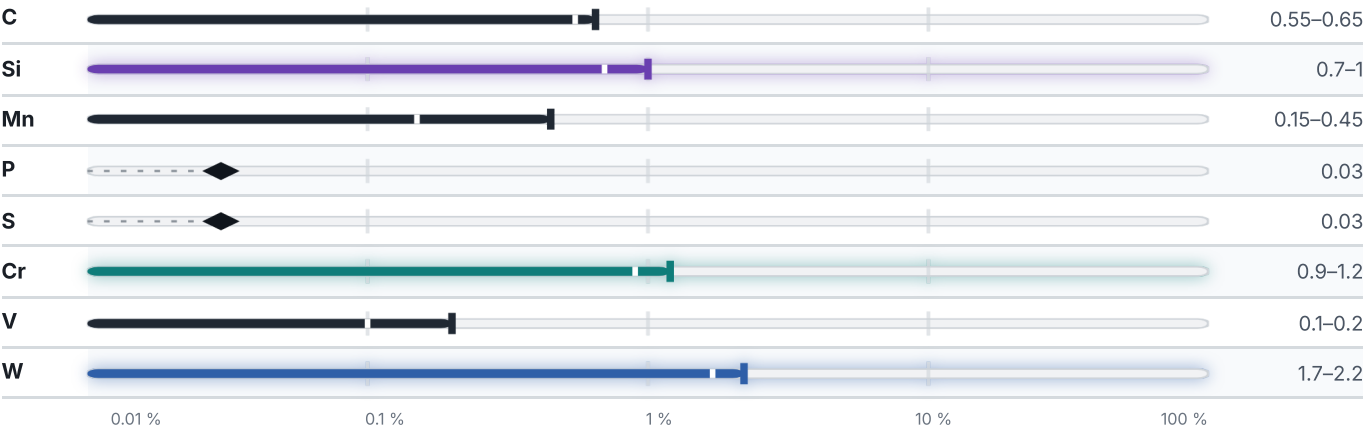
Chemical composition

Mass fraction in %

What this alloy is



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

7 values across 3 conditions

SOFT ANNEALED					HB
Soft annealed					229
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Steel	1470	1290	10	30	230
CONDITION · DIMENSION					HB
(annealing)					229–255

Physical properties

6 values

CONDITION · DIMENSION	CP J/(kg·K)	RHO_EL nΩ·m
20	–	300
100	462	–
200	–	420
300	462	–
500	–	690
600	655	–
800	–	1080
900	832	1150
1000	752	–
PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³
Transformation point Ac1	775	°C
Transformation point Ac3	860	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	is not used.	
Flake sensitivity	predisposed	
Temper brittleness	weakly predisposed	

Heat treatment

3 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	Temperature not stated	—
Quenching	860–900 °C	Oil
Annealing	Temperature not stated	—

Designations across standards

31 designations · 2 documented as identical

Russia / CIS	9	Italy	2
5ChV2S	gost	55WCrV8KU	uni
5ChV2SF	gost	60WCrV8KU	uni
5KHV2S	gost		
5XB2C	gost	Czechia	2
5XB2C	gost	19733	csn
6ChV2S	gost	19735	csn
6HW2S	gost		
6KhV2S	gost	Poland	2
6XB2C	gost	NZ2	pn
		NZ3	pn
Europe	2	United Kingdom	1
60WCrV7 This grade's own name	din-en	BS1	bs
60WCrV8 This grade's own name	din-en		
United States	2	Slovakia	1
T41901	uns	19 735	stn
S1	aisi-sae		
France	2	Serbia	1
55WC20	afnor	Č.6444	srps
55WCrV8	afnor		
International	2	Croatia	1
45WCrV7	iso	Č6444	hrn
60WCrV8	iso		
China	2	Hungary	1
5CrW2Si	gb	W6	msz
6CrW2Si	gb	Austria	1
		K455	onorm

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 1.2550

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

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ISSUED

Aug 20, 2026