

MATERIAL NUMBER 1.5710 · CLASS 1.5

1.5710

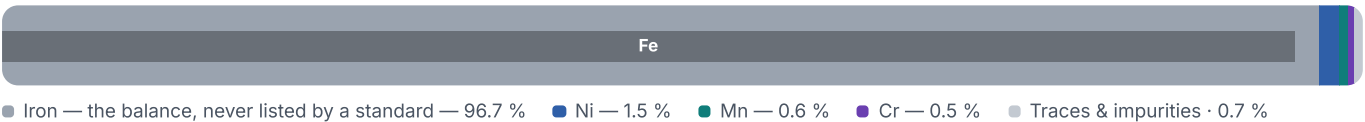
Chemical composition, mechanical and physical property values, and 26 standard designations from 13 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 26 in 13 regions	PROPERTY VALUES 15 on file
--	---	--------------------------------------

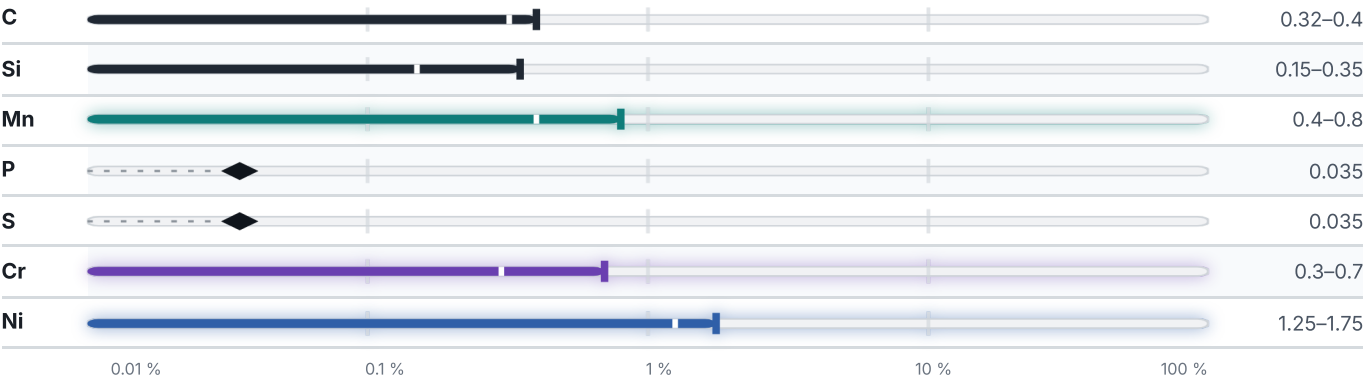
Chemical composition

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: Mo.

Mechanical properties

7 values across 2 conditions

CONDITION · DIMENSION	HB
(annealing) , GOST 4543-71	207

CONDITION · DIMENSION					HB
Bar GOST 10702-78					179
QUENCHING AND DRAWING	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Ø 25	980	785	11	45	690

Physical properties

8 values

CONDITION · DIMENSION	RHO g/cm ³	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)
20	7.82	200	–	–
100	7.8	–	11.8	44
200	7.77	–	12.3	43
300	7.74	–	13.4	41
400	7.7	–	14	39
500	–	–	–	37

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³
Transformation point Ac1	735	°C
Transformation point Ac3	768	°C
Transformation point Ar3	700	°C
Transformation point Ar1	660	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	hard weldability.	
Flake sensitivity	predisposed	
Temper brittleness	predisposed	

Designations across standards

26 designations · 3 documented as identical

United States		6	United Kingdom		4
K22033	This grade's own name	uns	111A		bs
3135	This grade's own name	aisi-sae	640A35		bs
3140		aisi-sae	640M40		bs
3140H		aisi-sae	EN111A		bs
G31400		aisi-sae			
AMS 6330E		astm			

Europe	2	Japan	1
1.5710	din-en	SNC236	jis
36NiCr6	This grade's own name din-en	China	1
France	2	40CrNi	gb
30NC6	afnor	Sweden	1
35NC6	afnor	2530	ss
Russia / CIS	2	Czechia	1
40KHN	gost	16240	csn
40XH	gost	Serbia	1
Australia / New Zealand	2	Č.5434	srps
3140	as-nzs	Bulgaria	1
3140H	as-nzs	40ChN	bds
Romania	2		
40CrNi12	stas		
40CrNi12q	stas		

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 1.5710

[Start an enquiry](#)

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

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

1.5710

ISSUED

Aug 20, 2026