

MATERIAL NUMBER 1.6587 · CLASS 1.6

817M17

Material no. 1.6587

also listed as 17CrNiMo6

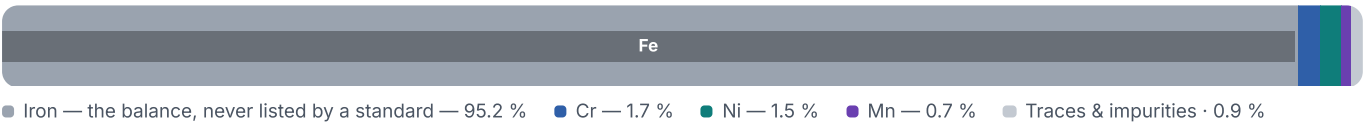
Chemical composition, mechanical and physical property values, and 41 standard designations from 15 regions.

DENSITY 7.77 g/cm³	OTHER DESIGNATIONS 41 in 15 regions	PROPERTY VALUES 14 on file
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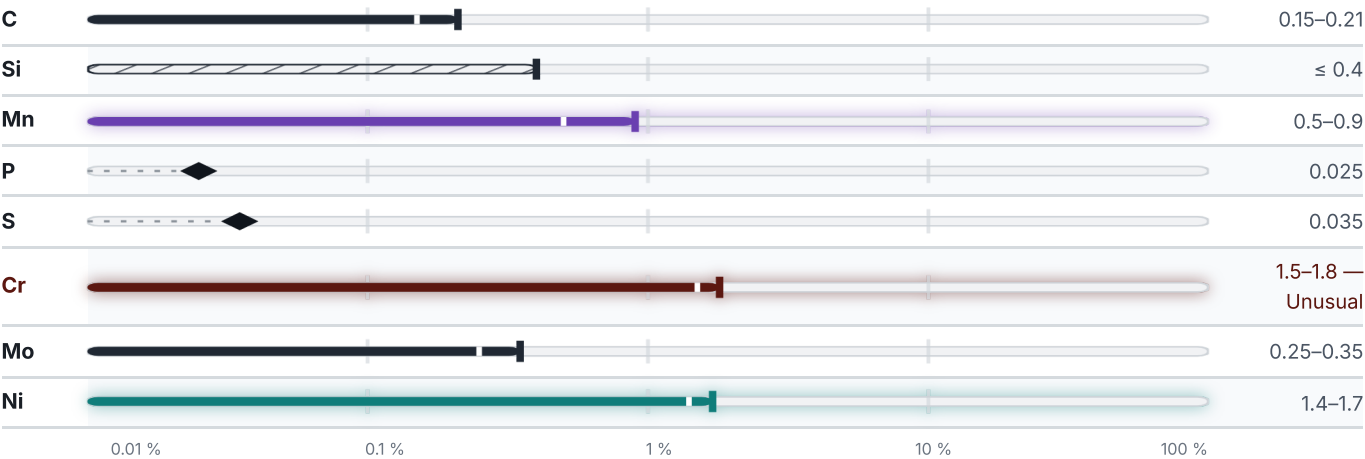
Chemical composition

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

computed from composition · °C

PREDICTED AE3 789 °C	PREDICTED AE1 737 °C	PREDICTED ACM 480 °C	PREDICTED BS 492 °C
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Mechanical properties

10 values across 6 conditions

QUENCHING AND DRAWING	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Ø 15	880	685	11	50	780
TREATED TO IMPROVE SHEARABILITY					HB
Treated to improve shearability					255
SOFT ANNEALED					HB
Soft annealed					229
TREATED TO HARDNESS RANGE					HB
Treated to hardness range					179–229
TREATED TO FERRITE-PEARLITE STRUCTURE AND HARDNESS RANGE					HB
Treated to ferrite-pearlite structure and hardness range					159–207
CONDITION · DIMENSION					RM N/mm ²
200					1200

Physical properties

6 values

PROPERTY	VALUE	UNIT
Density	7.77	g/cm ³
Transformation point Ac1	720	°C
Transformation point Ac3	825	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	limited weldability.	
Flake sensitivity	predisposed	
Temper brittleness	not predisposed	

Designations across standards

41 designations · 6 documented as identical

United States6		Spain3	
G48200	uns	14NiCrMo13	une
4320	aisi-sae	F.1560	une
4320H	aisi-sae	F.1560-14NiCrMo13	une
4820	aisi-sae	France2	
G43200	aisi-sae	18NCD6	afnor
H43200	aisi-sae	18NiCrMo6	afnor
United Kingdom6		Czechia2	
22H17	This grade's own namebs	16326	csn
817M17	This grade's own namebs	16326PH	csn
820A16	bs	Poland2	
822A17	This grade's own namebs	17HGM	pn
822M17	bs	17HNM	pn
EN355	This grade's own namebs	International1	
Russia / CIS6		18CrNiMo7	iso
12ChN4A	gost	China1	
18KH2N4VA	gost	17Cr2Ni2Mo	gb
18X2H4BA	gost	Italy1	
20KHN2M	gost	18NiCrMo7	uni
20XH2M	gost	Latin America1	
20XHM	gost	4820	copant
Europe4		Serbia1	
1.6587	din-en	Č.4520	srps
17CrNiMo6	This grade's own namedin-en	Finland1	
17CrNiMo7	din-en	511	sfs
18CrNiMo7-6	This grade's own namedin-en		
Japan4			
SNCM415	jis		
SNCM420	jis		
SNCM420H	jis		
SNCM815	jis		

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 817M17

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

Start an enquiry