

3M580

also listed as 08KH17N15M3T

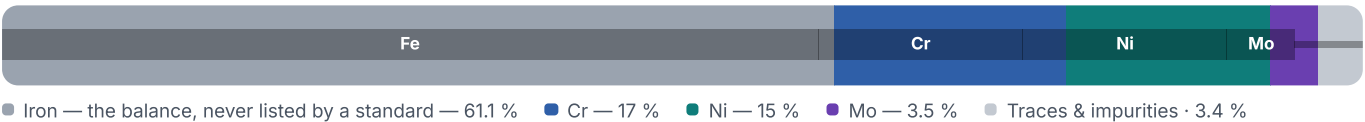
Chemical composition, mechanical and physical property values, and 4 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
4 in 1 regions	10 on file

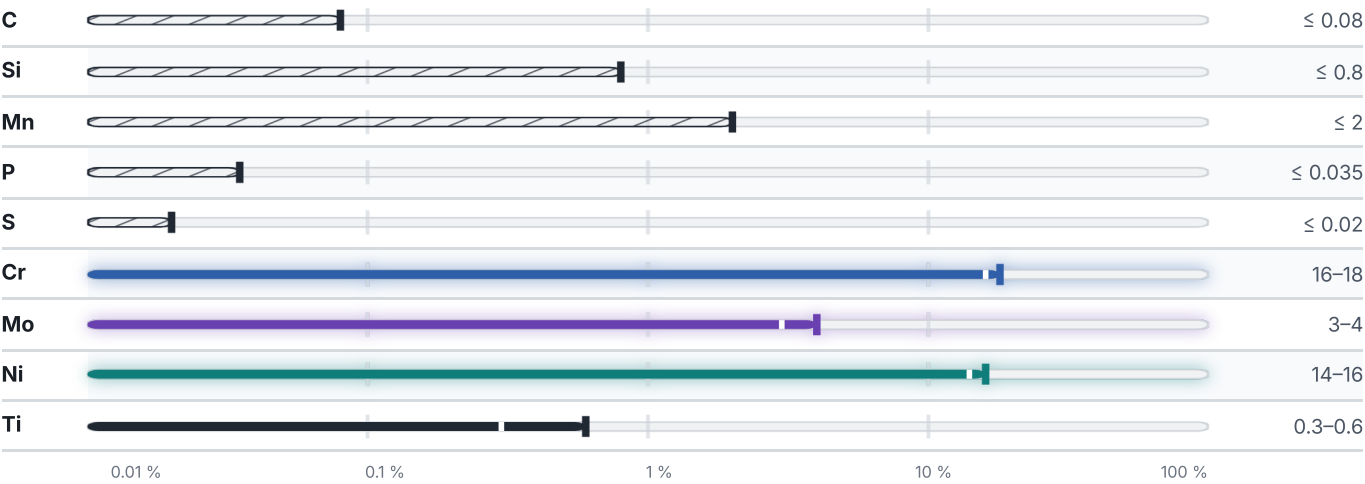
Chemical composition

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

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

19 values across 4 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	HB
Pipe cooling strain, GOST 9941-81	549	–	35	–	–
Pipe hot strain, GOST 9940-81	510	–	35	–	–
Forging, GOST 25054-81	490	196	30–38	40–50	–
08KH17N15M3T (08X17H15M3T) , Forging GOST 25054-81	–	–	–	–	200
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	
Bar, GOST 5949-75	490	196	35		45
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %		
Sheet trick, GOST 7350-77	510	196			40
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %		
Sheet thin, GOST 5582-75	530	205			35

Physical properties

1 values

CONDITION · DIMENSION	RHO g/cm ³
20	8.1

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	

Designations across standards

4 designations · 1 documented as identical

Russia / CIS	4
08KH17N15M3T This grade's own name	gost
08X17H15M3T	gost
0X17H16M3T	gost
3N580	gost

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 3N580

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

[Start an enquiry](#)

DATASHEET ONLINE

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GRADE SEARCH

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MATERIAL NO.

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ISSUED

Aug 15, 2026