

MATERIAL NUMBER 1.0972 · CLASS 1.0

A1011 Grade 45 Class 2

Material no. 1.0972

also listed as QStE 300 TM

Chemical composition, mechanical and physical property values, and 14 standard designations from 6 regions.

DENSITY

7.85 g/cm³

OTHER DESIGNATIONS

14 in 6 regions

PROPERTY VALUES

10 on file

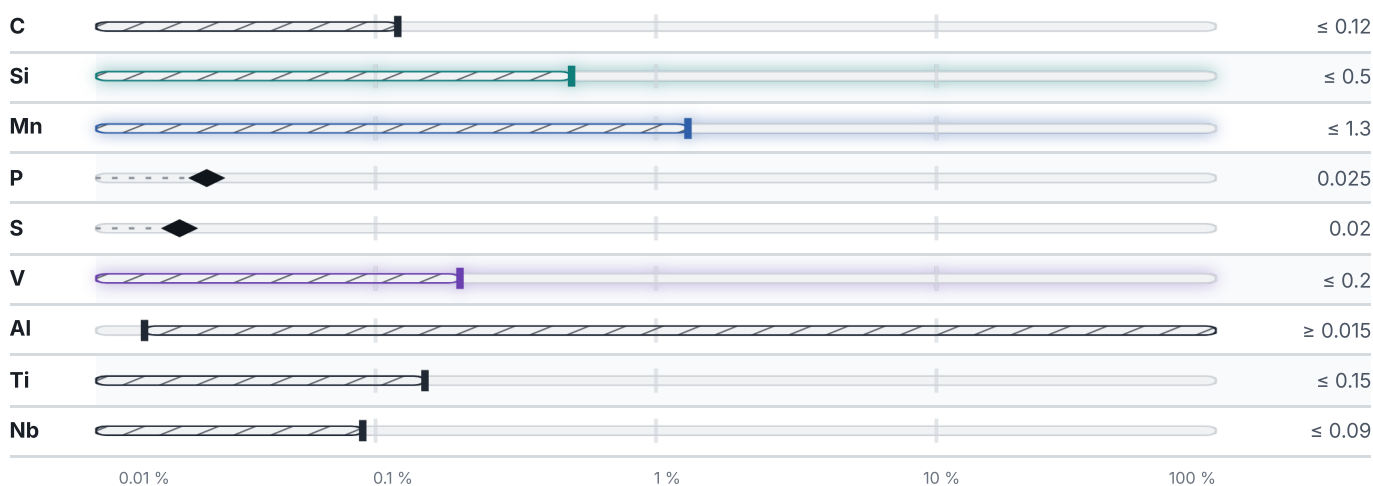
Chemical composition

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

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni, Cr, Mo.

Mechanical properties

5 values across 2 conditions

CONDITION · DIMENSION	A80	A
	% · Lo = 80 mm	% · Lo = 5,65 √So
≤ 3	20	–
≥ 3	–	24

CONDITION · DIMENSION	RM	RE	A
	N/mm²	N/mm²	%
Plate/Sheet Hot-rolled	490	325	22–25

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

14 designations · 6 documented as identical

United States5		Europe2	
1392	aisi-sae	QSTE 300 TM	This grade's own name din-en
A1008	astm	S315MC	This grade's own name din-en
A1008 Grade 45 Class 1	astm		
A1011 Grade 45 Class 2	astm		
A1011 Grade 50	astm		
United Kingdom3		France2	
43F30	bs	E315D	afnor
43F35	bs	E335D	afnor
HR43F35	bs		
		Spain1	
		AE275HC	une
		Japan1	
		SPFH490	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 A1011 Grade 45 Class 2

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

Start an enquiry

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.0972	Aug 20, 2026