

MATERIAL NUMBER 1.0976 · CLASS 1.0

A1011 Grade 50 Class 1

Material no. 1.0976

also listed as QStE 360 TM

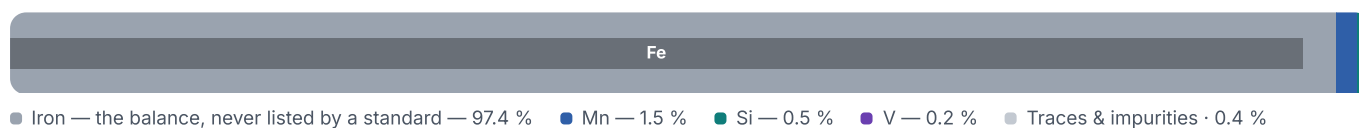
Chemical composition, mechanical and physical property values, and 15 standard designations from 9 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	15 in 9 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

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	19		–
≥ 3	–		23
CONDITION · DIMENSION	RM	RE	A
	N/mm ²	N/mm ²	%
Plate/Sheet Hot-rolled	540	355	21–24

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

15 designations · 5 documented as identical

United States		4	Spain		1
Gr.50	aisi-sae		AE390HC		une
A1008	This grade's own name	astm	International		1
A1011 Grade 50 Class 1	This grade's own name	astm			
A1011 Grade 50 Class 2	This grade's own name	astm	FeE355		iso
Europe		2	Japan		1
QStE 360 TM	This grade's own name	din-en	SPFH540		jis
S355MC	This grade's own name	din-en	Italy		1
United Kingdom		2			
46F35	bs		FeE355TM		uni
46F40	bs		Sweden		1
France		2			
E355D	afnor		2642		ss
E390D	afnor				

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 50 Class 1

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	1.0976	Aug 20, 2026