

MATERIAL NUMBER 1.0332 · CLASS 1.0

1449-4HR

Material no. 1.0332

also listed as DD 11

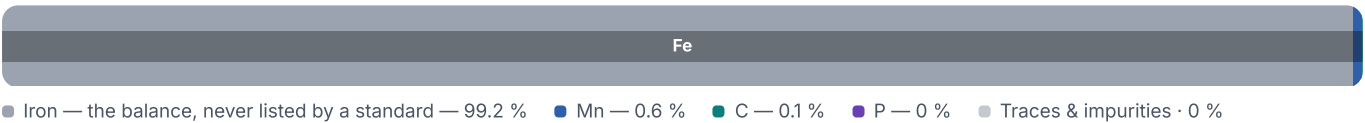
Chemical composition, mechanical and physical property values, and 42 standard designations from 16 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 42 in 16 regions	PROPERTY VALUES 5 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

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

Mechanical properties

10 values across 3 conditions

CONDITION · DIMENSION	REH N/mm ²	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So
1-2	170-360	—	—

CONDITION · DIMENSION	REH N/mm ²	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So
1 – 1.5	–	22	–
1.5 – 2	–	23	–
2 – 11	170–340	–	–
2 – 3	–	24	–
3 – 11	–	–	28
CONDITION · DIMENSION	RM N/mm ²	A %	
Plate/Sheet Hot-rolled	270	30–39	
CONDITION · DIMENSION	RM N/mm ²	A %	
Plate/Sheet	270	30–39	

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

42 designations · 4 documented as identical

United States12		Europe3	
1015	aisi-sae	CS	din-en
1017	aisi-sae	DD 11This grade's own name	din-en
A366	aisi-sae	StW 22This grade's own name	din-en
A621	aisi-sae	Russia / CIS3	
A621CQ	aisi-sae	15kp	gost
CS	aisi-sae	15кп	gost
G10080	aisi-sae	ст.15кп	gost
G10150	aisi-sae	France2	
G10170	aisi-sae	1 C	afnor
M1015	aisi-sae	DD11	afnor
M1017	aisi-sae	Spain2	
A 1011CS Type BThis grade's own name	astm	AP11	une
United Kingdom4		DD11	une
1449-4HR	bs	Japan2	
14HR	bs	PHD	jis
DD11	bs	SPHD	jis
HR3	bs		

Czechia	2	Austria	2
11320	csn	St12F	onorm
11331	csn	St22F	onorm
Poland	2	International	1
08J	pn	HR2	iso
15X	pn	China	1
Australia / New Zealand	2	15F	gb
CA1	as-nzs	Italy	1
HA1	as-nzs	FeP11	uni
Bulgaria	2	South Korea	1
15kp	bds	SPHD This grade's own name	ks
DD11	bds		

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 1449-4HR

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	1.0332	Aug 20, 2026