

MATERIAL NUMBER 1.0338 · CLASS 1.0

1449-12CR

Material no. 1.0338

also listed as DC 04

Chemical composition, mechanical and physical property values, and 69 standard designations from 18 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 69 in 18 regions	PROPERTY VALUES 8 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

21 values across 5 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
0.3 – 0.5	270–370	≤ 240	≥ 30

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
0.5 – 0.7	270–370	≤ 240	≥ 32
≥ 0.7	270–370	≤ 240	≥ 34

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	HB
Pipe, GOST 10705-80	255	174	30	–
Sheet GOST 4041-71	–	–	–	118
(annealing) , Strip GOST 1577-93	–	–	–	131

SOFT ANNEALED	HV
Soft annealed	100

CONDITION · DIMENSION	RM N/mm ²	A5 %
4 - 8	360	36

NORMALIZING	RM N/mm ²	RE N/mm ²	A5 %	Z %
6 - 60	290	175	35	60

Physical properties

4 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
Annealing	Temperature not stated	—

Designations across standards

69 designations · 5 documented as identical

United Kingdom		15	Australia / New Zealand		5
1449		bs	CA2		as-nzs
1449-12CR		bs	CA3		as-nzs
1449-1CR		bs	CA4		as-nzs
1449-3CR		bs	HA3		as-nzs
1CR		bs	HA4N		as-nzs
1CS		bs			
1HR		bs	Russia / CIS		4
1HS		bs	05kp		gost
2CR		bs	08kp		gost
2HR		bs	08YU		gost
3HR		bs	08IO		gost
CR1		bs			
DC03		bs	Spain		3
DC04		bs	AP04		une
FeP01		bs	DC03		une
			DC04		une
Europe		7	Japan		3
1.0338		din-en	CR4		jis
DC 04	This grade's own name	din-en	SPCC		jis
DDS		din-en	SPCE		jis
FeP04		din-en			
RRSt14		din-en	Czechia		3
St 14	This grade's own name	din-en	11305		csn
St 4	This grade's own name	din-en	11321		csn
			11325		csn
United States		5	International		2
A619		aisi-sae	Cr04		iso
A620		aisi-sae	CR24		iso
DDS		aisi-sae			
K00040		aisi-sae	China		2
A620		astm	DC03	This grade's own name	gb
			DC04	This grade's own name	gb
France		5	Sweden		2
3C		afnor	1142		ss
DC03		afnor	1147		ss
DC04		afnor			
ES		afnor	Poland		2
FeP01		afnor	08J		pn
			08JA		pn
Italy		5	Austria		2
DC01		uni	St02F		onorm
DC03		uni	St04F		onorm
DC04		uni			
FeP02		uni			
FeP04		uni			

Finland	2	Slovakia	1
RACOLD03F	sfs	11 305	stn
RACOLD04F	sfs		
		Romania	1
		A3k	stas

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 1449-12CR

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	1.0338	Aug 20, 2026