

MATERIAL NUMBER 1.0044 · CLASS 1.0

Gr.D

Material no. 1.0044

also listed as S275JR

Chemical composition, mechanical and physical property values, and 130 standard designations from 25 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 130 in 25 regions	PROPERTY VALUES 7 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

22 values across 2 conditions

FLAT AND LONG PRODUCTS	REH N/mm ²	RM N/mm ²
≤ 3	–	430–580
3 – 100	–	410–560
≤ 16	275	–
16 – 40	265	–
40 – 63	255	–
63 – 80	245	–
80 – 100	235	–
100 – 150	225	400–540
150 – 250	–	380–540
150 – 200	215	–
200 – 250	205	–
CONDITION · DIMENSION	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So
≤ 1	15	–
1 – 1.5	16	–
1.5 – 2	17	–
2 – 2.5	18	–
2.5 – 3	19	–
3 – 40	–	23
40 – 63	–	22
63 – 100	–	21
100 – 150	–	19
150 – 250	–	18

Physical properties

1 values

CONDITION · DIMENSION	RHO g/cm ³	RHO_EL nΩ·m
20	7.65	500
PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

130 designations · 13 documented as identical

United States		25	Japan		14
G10200	This grade's own name	uns	SM400A		jis
K 02598	This grade's own name	uns	SM400B		jis
K02301	This grade's own name	uns	SM400C		jis
K02595	This grade's own name	uns	SM41A		jis
K02596	This grade's own name	uns	SM520B		jis
K02597	This grade's own name	uns	SN400B		jis
K02598	This grade's own name	uns	SN400C		jis
K02599	This grade's own name	uns	SN490B		jis
K02702	This grade's own name	uns	SN490C		jis
K03000	This grade's own name	uns	SS400		jis
1020	This grade's own name	aisi-sae	SS41		jis
A283D		aisi-sae	STK400		jis
A529		aisi-sae	STKM19C		jis
A570		aisi-sae	STKR400		jis
A570(40)		aisi-sae			
A570Gr.40		aisi-sae	Spain		7
A573Gr.70		aisi-sae	A430B		une
A611Gr.D		aisi-sae	AE255B		une
G10200		aisi-sae	AE275B		une
Gr.40		aisi-sae	AE275D		une
Gr.D		aisi-sae	Fe430BFN		une
GradeA		aisi-sae	Fe430D1FF		une
GradeD		aisi-sae	S275JR		une
K02702		aisi-sae			
A570		astm	International		6
			E275-C		iso
			E275-D		iso
1449-43/25HR		bs	E275B		iso
161-430		bs	Fe430-B		iso
4360-43B		bs	Fe430-C		iso
4360-43C		bs	Fe430-D		iso
43A		bs			
43B		bs	Europe		5
43C		bs	Fe430B		din-en
43D		bs	Gr.D		din-en
CEW4		bs	RSt42-2		din-en
ERW4		bs	S275JR	This grade's own name	din-en
Fe430BFN		bs	St 44-2	This grade's own name	din-en
Fe430D1FF		bs			
Gr 43B		bs	China		5
HFS4		bs	Q225		gb
HFW4		bs	Q225A		gb
HS		bs	Q255		gb
S275J2G3		bs	Q255A		gb
S275JR		bs	Q275Z		gb
S275N		bs			
SAW4		bs			

Italy	5	Czechia	3
FE430B	uni	11423	csn
Fe430BFN	uni	11425	csn
Fe430C(FN)	uni	11443	csn
Fe430D(FF)	uni		
S275JR	uni	Belgium	3
Hungary	5	AE295B	nbn
45 B	msz	FE430BFN	nbn
A 44	msz	FE430D1FF	nbn
Fe275B	msz	Canada	3
FK	msz	260W	csa
S275JR	msz	260WT	csa
Bulgaria	5	38W	csa
BSt4ps	bds	Romania	2
BSt4sp	bds	OL42.1	stas
S275JR	bds	OL44.2	stas
WSt4ps	bds	Austria	2
WSt4sp	bds	St42F	onorm
France	4	St430B	onorm
E28-2	afnor	Norway	1
E28-3	afnor	NS12142	ns
E28-4	afnor	Portugal	1
S275JR	afnor	FE430-B	np
Poland	4	Slovakia	1
St4S	pn	11 443	stn
St4SY	pn	South Africa	1
St4V	pn	300 WB	sans
St4VY	pn	Finland	1
Russia / CIS	3	Fe44B	sfs
St4ps	gost	South Korea	1
St4sp	gost	STKM19C	ks
Cт4nc	gost		
Sweden	3		
1411	ss		
1412	ss		
1414	ss		

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 Gr.D

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ISSUED

Aug 20, 2026