

MATERIAL NUMBER 1.0036 · CLASS 1.0

S235JRG1

Material no. 1.0036

also listed as S235JR

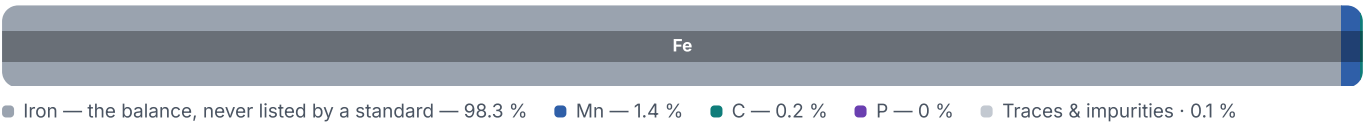
Chemical composition, mechanical and physical property values, and 99 standard designations from 21 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 99 in 21 regions	PROPERTY VALUES 7 on file
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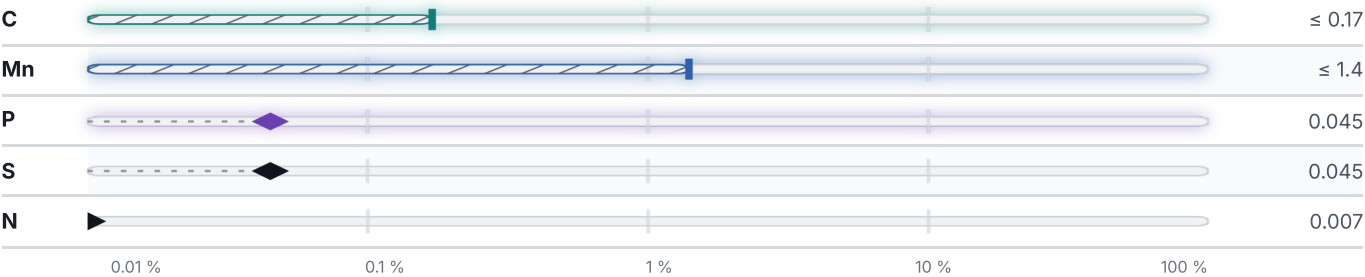
Chemical composition

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

34 values across 3 conditions

FLAT AND LONG PRODUCTS	REH N/mm ²	RM N/mm ²
≤ 3	—	360–510

FLAT AND LONG PRODUCTS	REH N/mm ²	RM N/mm ²	
3 – 100	–	360–510	
≤ 16	235	–	
16 – 40	225	–	
40 – 63	215		
63 – 80	215	–	
80 – 100	215	–	
100 – 150	195	350–500	
150 – 250	–	340–490	
150 – 200	185	–	
200 – 250	175	–	
CONDITION · DIMENSION	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So	
≤ 1	17	–	
1 – 1.5	18	–	
1.5 – 2	19	–	
2 – 2.5	20	–	
2.5 – 3	21	–	
3 – 40	–	26	
40 – 63	–	25	
63 – 100	–	24	
100 – 150	–	22	
150 – 250	–	21	
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %
2 - 3.9	380	255	20
4 - 10	380	245	25
10 - 20	370	245	25
20 - 40	370	235	25

Physical properties

2 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	

Designations across standards

99 designations · 3 documented as identical

United States	13	France	7
A283(A)	aisi-sae	4360-40D	afnor
A284Gr.D	aisi-sae	E24-3	afnor
A570(33)	aisi-sae	E24-4	afnor
A570(36)	aisi-sae	S235J0	afnor
A573Gr.58	aisi-sae	S235J2G3	afnor
A611Gr.C	aisi-sae	S235J2G4	afnor
K01804	aisi-sae	S235JRG1	afnor
K02001	aisi-sae		
K02301	aisi-sae	China	7
K02502	aisi-sae	A3	gb
K02601	aisi-sae	Q235	gb
K02701	aisi-sae	Q235A	gb
K02702	aisi-sae	Q235A-F	gb
		Q235A-Z	gb
Italy	11	Q235B	gb
Fe360B	uni	Q235B-Z	gb
Fe360BFU	uni		
Fe360C	uni	Spain	6
Fe360CFN	uni	AE235B	une
Fe360D	uni	AE235D	une
Fe360DFF	uni	Fe360B	une
Fe37-2	uni	Fe360D1FF	une
S235J0	uni	S235J2G3	une
S235J2G3	uni	S235JRG1	une
S235J2G4	uni		
S235JRG1	uni	Hungary	6
		A1	msz
United Kingdom	10	B38.24	msz
1449-37/23CR	bs	B38.24B	msz
235JRG1	bs	Fe235B/FU	msz
4360-40B	bs	S235J2G3	msz
4449-250	bs	S235JRG1	msz
Fe360B	bs		
Fe360D1FF	bs	Bulgaria	6
Gr 40A	bs	BSt3kp	bds
HFS4	bs	BSt3ps	bds
HFW4	bs	Ew-08AA	bds
S235J2G3	bs	S235J2G3	bds
		S235JRG1	bds
		WSt3kp	bds

Czechia	5	Brazil	3
10216	csn	NBR 6648 CG26	abnt
10370	csn	NBR 6650 CF26	abnt
11343	csn	NBR 7007 MR250	abnt
11373	csn		
11378	csn	International	2
		E235-A	iso
Russia / CIS	4	Fe360-A	iso
S255	gost		
St3kp	gost	Japan	2
C255	gost	SS400	jis
Cт3kn	gost	STKM12A	jis
Poland	4	Romania	2
SS400	pn	OB37	stas
St3SX	pn	OL37.1	stas
St3SY	pn		
St3W	pn	Belgium	2
		FE360B	nbn
Europe	3	FED1FF	nbn
S235JR This grade's own name	din-en		
S235JRG1 This grade's own name	din-en	Slovakia	1
Ust 37-2 This grade's own name	din-en	11 373	stn
Sweden	3	South Africa	1
1311	ss	240 WA	sans
1312	ss		
1313	ss	Austria	1
		St37F	onorm

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 S235JRG1

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

[Start an enquiry](#)

DATASHEET ONLINE

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GRADE SEARCH

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ISSUED

Aug 20, 2026