

MATERIAL NUMBER 1.8961 · CLASS 1.8

S235J2W

Material no. 1.8961

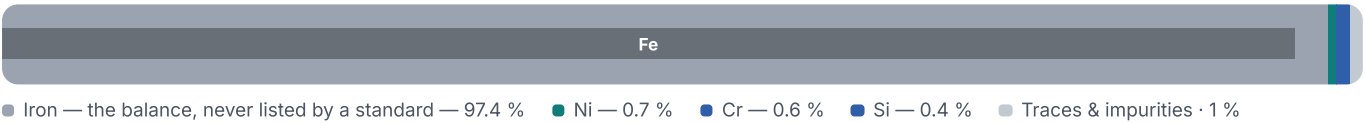
Chemical composition, mechanical and physical property values, and 6 standard designations from 4 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 6 in 4 regions	PROPERTY VALUES 9 on file
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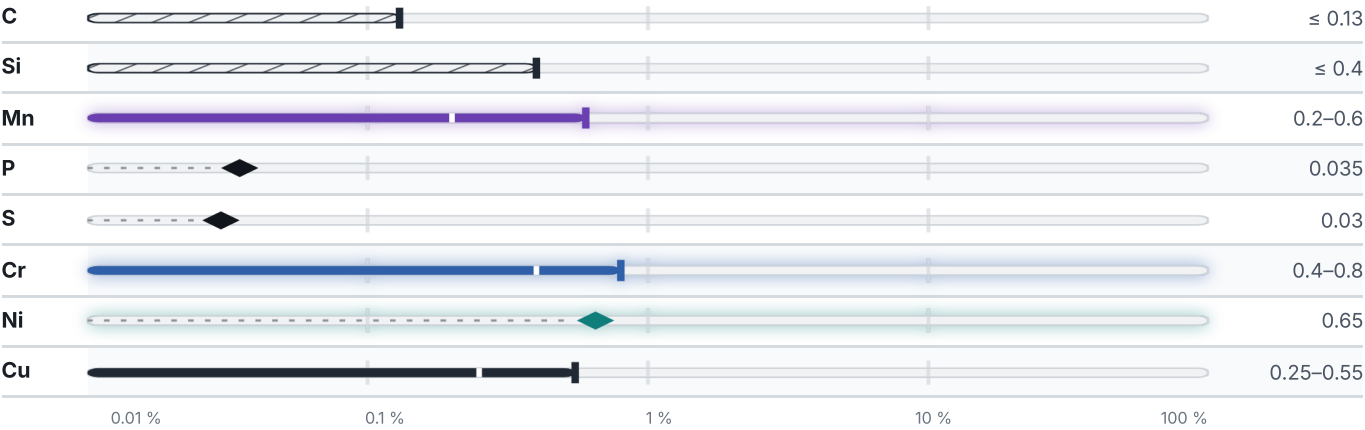
Chemical composition

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: Mo.

Mechanical properties

16 values across 1 conditions

CONDITION · DIMENSION	REH N/mm ²	RM N/mm ²	A80 %	A %
1.5 – 2	–	–	19	–
2 – 2.5	–	–	20	–
2.5 – 3	–	–	21	–
≤ 3	–	360–510	–	–
3 – 100	–	360–510	–	–
3 – 40	–	–	–	26
≤ 16	235	–	–	–
16 – 40	225	–	–	–
40 – 63	215	–	–	25
63 – 80	215	–	–	–
63 – 100	–	–	–	24
80 – 100	215	–	–	–
100 – 150	195	350–500	–	22

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

6 designations · 2 documented as identical

Europe	3	Japan	1
Fe360DKI	din-en	SMA490CW	jis
S235J2W This grade's own name	din-en		
WTSt 37-3 This grade's own name	din-en	Italy	1
		Fe360DK1	uni
France	1		
E24W4	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 S235J2W

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

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DATASHEET ONLINE

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ISSUED

Aug 20, 2026