

MATERIAL NUMBER 1.0143 · CLASS 1.0

Fe 275 C

Material no. 1.0143

also listed as S275J0

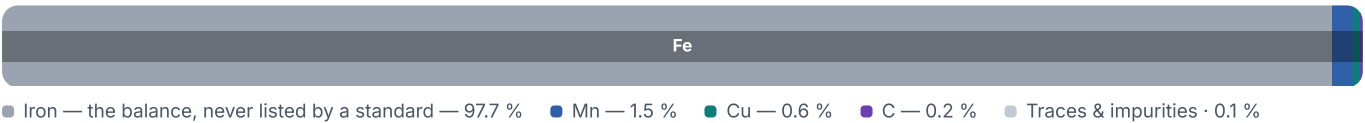
Chemical composition, mechanical and physical property values, and 25 standard designations from 16 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 25 in 16 regions	PROPERTY VALUES 8 on file
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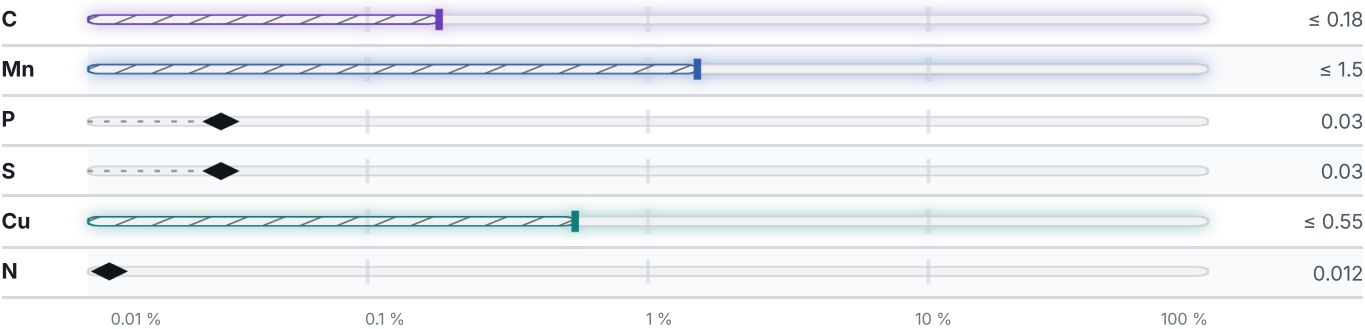
Chemical composition

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

31 values across 3 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	
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %
Pipe, GOST 10705-80	412	245	21
Rolled stock, GOST 535-2005	410–530	235–265	21–24
Sheet trick, GOST 14637-89	410–530	235–265	21–23

Physical properties

2 values

CONDITION · DIMENSION		RHO g/cm³	
20		7.85	

PROPERTY	VALUE	UNIT	
Density	7.85	g/cm³	

Technological properties

PROPERTY	VALUE	UNIT
Weldability	limited weldability.	

Designations across standards

25 designations · 3 documented as identical

Europe		5	France		1
Fe430C	din-en		E28-3		afnor
P265GH	din-en		International		1
S275J0	This grade's own name	din-en	E275C		iso
St 44-3 U	This grade's own name	din-en	Norway		1
St44-3	din-en		NS12143		ns
United States		2	Portugal		1
K02702	This grade's own name	uns	FE430-C		np
A578Gr.70	aisi-sae		China		1
United Kingdom		2	Q275		gb
43C	bs		Italy		1
Gr 43C	bs		Fe430C		uni
Spain		2	Poland		1
AE255C	une		St4W		pn
AE275C	une		South Africa		1
Russia / CIS		2	300 WC		sans
St4ps	gost		Austria		1
St4sp	gost		St430C		onorm
Hungary		2	Belgium		1
45 C	msz		AE295C		nbn
Fe 275 C	msz				

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 Fe 275 C

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