

MATERIAL NUMBER 1.0060 · CLASS 1.0

E 335 Fe 590

Material no. 1.0060

also listed as E335

Chemical composition, mechanical and physical property values, and 69 standard designations from 21 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 69 in 21 regions	PROPERTY VALUES 11 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: C, Mn, Si, Ni, Cr, Mo.

Mechanical properties

27 values across 3 conditions

FLAT AND LONG PRODUCTS	REH N/mm ²	RM N/mm ²
≤ 3	—	590–770
3 – 100	—	570–710

FLAT AND LONG PRODUCTS	REH N/mm²	RM N/mm²	
≤ 16	335	–	
16 – 40	325	–	
40 – 63	315	–	
63 – 80	305	–	
80 – 100	295	–	
100 – 150	275	550–710	
150 – 250	–	540–710	
150 – 200	265	–	
CONDITION · DIMENSION	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So	
≤ 1	8	–	
1 – 1.5	9	–	
1.5 – 2	10	–	
2 – 2.5	11	–	
2.5 – 3	12	–	
3 – 40	–	16	
40 – 63	–	15	
63 – 100	–	14	
100 – 150	–	12	
150 – 250	–	11	
AS-DELIVERED STATE	RM N/mm²	RE N/mm²	A5 %
to 20	590	315	15
20 - 40	590	305	14

Physical properties

8 values

CONDITION · DIMENSION	RHO g/cm ³	E GPa
20	7.85	197
100	–	197
200	–	186
300	–	175

CONDITION · DIMENSION	RHO g/cm³	E GPa
400	–	168
PROPERTY	VALUE	UNIT
Density	7.85	g/cm³
Transformation point Ac1	725	°C
Transformation point Ac3	790	°C
Transformation point Ar3	780	°C
Transformation point Ar1	690	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	limited weldability.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

69 designations · 4 documented as identical

Russia / CIS		17	United Kingdom		6
6KHS		gost	4360-55C		bs
6KHVG		gost	4360-55E		bs
L6		gost	55 C E 335		bs
LR6		gost	55C		bs
PA-ZhGrDK6		gost	E335		bs
PKKh6		gost	Fe590-2FN		bs
S345		gost	United States		5
St5ps		gost			
St5sp		gost		A572	aisi-sae
St6ps		gost		A572Gr.65	aisi-sae
St6sp		gost		A 572 Grade 65	astm
VSt6ps		gost		A572 Grade 55	astm
VSt6sp		gost		AGrade2	astm
ACHS-6		gost	Italy		5
ЖГр1.5Д3		gost			
ПКХ6-7.4		gost		E 335 Fe 590	uni
Ст6nc		gost		E335	uni
				Fe580	uni
				Fe590	uni
				Fe60-2	uni

Spain	4	International	2
A590	une	Fe590	iso
A590-2	une	FeE690	iso
E355	une		
Fe590-2FN	une	China	2
Europe	3	HRB335	gb
E335 This grade's own name	din-en	Q345C	gb
Fe590-2	din-en	Poland	2
St 60-2 This grade's own name	din-en	MSt6	pn
		St6	pn
Japan	3	Austria	2
SM 570 SM 58	jis	St590	onorm
SM570	jis	St60F	onorm
SM58	jis		
Sweden	3	Belgium	2
1650	ss	A590-1.2	nbn
1650-00	ss	FE590-2FN	nbn
1650-01	ss		
Hungary	3	Czechia	1
A 60	msz	11600	csn
E355	msz	Slovakia	1
Fe590-2	msz	11 600	stn
Bulgaria	3	Serbia	1
ASt6	bds	Č.0645	srps
E335	bds	Romania	1
WSt6sp	bds	OL60.1k	stas
France	2	Switzerland	1
A60-2	afnor	St60-2	snv
E335	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 E 335 Fe 590

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