

MATERIAL NUMBER 1.0033 · CLASS 1.0

ERW1

Material no. 1.0033

also listed as E155

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

Chemical composition

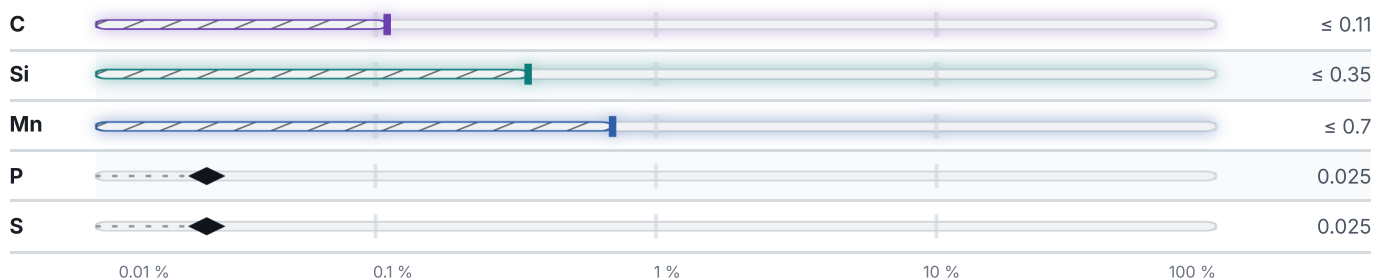
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 98.8 % ● Mn — 0.7 % ● Si — 0.4 % ● C — 0.1 % ● Traces & impurities · 0 %

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: Ni, Cr, Mo.

Mechanical properties

6 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	A5 %	Z %
Rolled stock, GOST 535-2005	300	15–18	—

CONDITION · DIMENSION	RM N/mm ²	A5 %	Z %
Sheet trick, GOST 14637-89	300	20–23	–
Wire rods , GOST 30136-95	420–470	–	58–68

Physical properties

4 values

CONDITION · DIMENSION	RHO g/cm ³
20	7.85

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

6 designations · 1 documented as identical

Europe	2	Russia / CIS	1	
E155	This grade's own name	din-en	STO	gost
ERW1	din-en	Czechia	1	
United Kingdom	2	10000	csn	
CEW1	bs			
ERW1	bs			

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 ERW1

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

Start an enquiry

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.0033	Aug 20, 2026