

MATERIAL NUMBER 1.3255 · CLASS 1.3

S18-1-2-5

Material no. 1.3255

also listed as HS18-1-2-5

Chemical composition, mechanical and physical property values, and 25 standard designations from 14 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
8.7 g/cm ³	25 in 14 regions	11 on file

Chemical composition

Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 69.2 % ● W — 18 % ● Co — 4.8 % ● Cr — 4.2 % ● Traces & impurities · 3.9 %

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.

Mechanical properties

1 values across 1 conditions

CONDITION · DIMENSION	HB
Annealed	269

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	8.7	g/cm³

Heat treatment

2 regimes

STEP	TEMPERATURE	MEDIUM
Annealing	Temperature not stated	—
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—

Designations across standards

25 designations · 5 documented as identical

Europe3		Russia / CIS2	
1.3255	din-en	R18K5F2	gost
HS18-1-2-5	This grade's own name din-en	P18K5Φ2	gost
S18-1-2-5	This grade's own name din-en		
United States3		Italy2	
T12004	This grade's own name uns	HS18-1-1-5	uni
T12004	aisi-sae	X78WCo1805KU	uni
T4	This grade's own name aisi-sae	United Kingdom1	
France3		BT4	bs
18-05-04-01		Japan1	
Z80WKCV	afnor	SKH3	jis
Z80WKCV18-05-04-01	afnor	Czechia1	
Spain3		19 855	csn
18-1-1-5	une	Serbia1	
F.5530	une	Č.6980	srps
HS18-1-1-5	une	Bulgaria1	
China2		R18K5F2	bds
W18Cr4VCo4	gb	Austria1	
W18Cr4VCo5	gb	S305	onorm

South Korea	1
SKH3 This grade's own name	ks

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 S18-1-2-5

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	1.3255	Aug 20, 2026