

MATERIAL NUMBER 1.3255 · CLASS 1.3

18-05-04-01

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	din-en	This grade's own name	P18K5Φ2		gost
S18-1-2-5	din-en	This grade's own name			
United States3			Italy2		
T12004	uns	This grade's own name	HS18-1-1-5		uni
T12004	aisi-sae		X78WCo1805KU		uni
T4	aisi-sae	This grade's own name	United Kingdom1		
France3			BT4		bs
18-05-04-01	afnor		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 18-05-04-01
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