

MATERIAL NUMBER 1.1165 · CLASS 1.1

SMn423H

Material no. 1.1165

also listed as G28Mn6

Chemical composition, mechanical and physical property values, and 56 standard designations from 16 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	56 in 16 regions	9 on file

Chemical composition

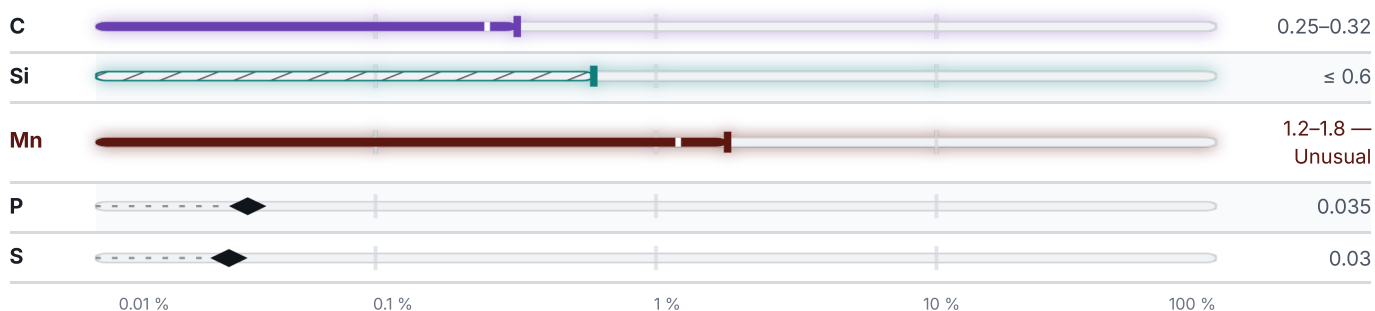
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 97.6 % ● Mn — 1.5 % ● Si — 0.6 % ● C — 0.3 % ● Traces & impurities · 0.1 %

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

10 values across 2 conditions

NORMALIZING 870 - 890°C,DRAWING 570 - 600°C	RM N/mm²	RE N/mm²	A5 %	Z %	KCU kJ/m²
to 100	589	343	14	25	294

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	Z %	KCU kJ/m²
Casting, GOST 977-88	638	392	14	30	491

Physical properties

4 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Technological properties

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

Designations across standards

56 designations · 4 documented as identical

United States10		Spain6	
D50500	This grade's own nameuns	30Mn5	une
G13300	uns	AM30Mn5	une
H1330	uns	F.1203	une
1036	aisi-sae	F.1203-36Mn5	une
1132	aisi-sae	F.8211	une
1330	aisi-sae	F.8311	une
1330H	aisi-sae		
G11320	aisi-sae	Japan6	
G13300	aisi-sae	SCMn2	jis
H13300	aisi-sae	SCSiMn2	jis
		SMn423H	jis
United Kingdom8		SMn433	jis
120M36	bs	SMn433H	jis
150M28	bs	SMn438	jis
150M36	bs		
38Cr2	bs	Russia / CIS4	
A5	bs	30G2	gost
A6	bs	30GSL	gost
En15	bs	30Г2	gost
En15A	bs	30ГCЛ	gost

Europe	3	Italy	2
G28Mn6 This grade's own name	din-en	28Mn6	uni
GS-30 Mn 5 This grade's own name	din-en	C28Mn	uni
GS-30Mn5V	din-en		
France	3	Hungary	2
30Mn5	afnor	Ao30MnSi5	msz
35M5	afnor	AO35MnSi5	msz
40M5	afnor		
China	3	Romania	2
30Mn2	gb	T30Mn14R	stas
80 This grade's own name	gb	T30SiMn12	stas
ZG35SiMn	gb		
Bulgaria	3	Czechia	1
30G2	bds	13141	csn
30GL	bds		
30GSL	bds	Poland	1
		30G2	pn
		Belgium	1
		28Mn6	nbn
		South Korea	1
		SCMn2	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 SMn423H

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

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ISSUED

Aug 20, 2026