

MATERIAL NUMBER 1.0398 · CLASS 1.0

StW23

Material no. 1.0398

also listed as DD 12 G 1

Chemical composition, mechanical and physical property values, and 10 standard designations from 5 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 10 in 5 regions	PROPERTY VALUES 5 on file
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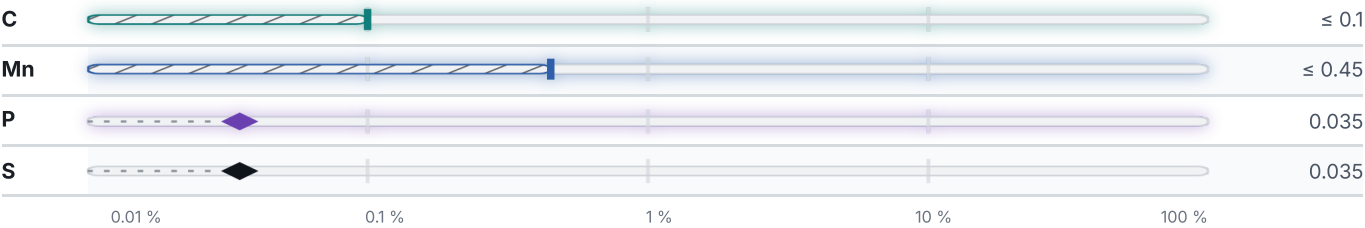
Chemical composition

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: Si, Ni, Cr, Mo.

Mechanical properties

6 values across 1 conditions

CONDITION · DIMENSION	REH N/mm ²	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So
1 – 2	170–340	–	–

CONDITION · DIMENSION	REH N/mm ²	A80 % · Lo = 80 mm	A % · Lo = 5,65 √So
1 – 1.5	–	24	–
1.5 – 2	–	25	–
2 – 11	170–320	–	–
2 – 3	–	26	–
3 – 11	–	–	30

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

10 designations · 4 documented as identical

Europe	4	United Kingdom	1
DD 12 G 1 This grade's own name	din-en	HR2	bs
DD12	din-en		
RRStW 23 This grade's own name	din-en	Japan	1
StW23	din-en	SPHE	jis
United States	3	Czechia	1
G10080 This grade's own name	uns	11325	csn
1008 This grade's own name	aisi-sae		
A621DQ	aisi-sae		

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 StW23

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	1.0398	Aug 20, 2026