

DATA SHEET

TITANIUM GRADE 1

Major specifications

ASTM B265 | ASME SB265 | ASTM F67 | ISO 5832-2 | 3.7025 | UNS R50250

Product forms

Coils and sheets

The current Stock Range can be found on www.sd-metals.com. Further dimensions available upon request.

Key features

Pure titanium Grade 1 is characterized by very good ductility and, as a result, very good cold formability, which makes the material suitable for deep drawing. Titanium Grade 1 is known for its excellent general and seawater corrosion resistance and offers high corrosion resistance in oxidizing, neutral- and mildly reducing media (solutions) including chlorides.

Titanium's low density (about half that of nickel-based alloys), high strength-to-weight ratio- and corrosion resistance make it an ideal material for many corrosive chemical environments.

Areas of application

Chemical and maritime industries, pharmaceuticals, medical technology.

CHARACTERISTIC

Chemical composition limits in %

(ASTM B265 latest edition)

Ti	Rest
Fe	max. 0,20
O	max. 0,18
C	max. 0,08
N	max. 0,03
H	max. 0,015

Physical constants and thermal properties

Density	4,51 g/cm ³
Melting point	1670°C
Beta transus temperature	888 ± 4°C
Thermal conductivity at 20°C	16 W/ m°C

Typical mechanical properties (room temperature for ASTM B265)

Yield strength	min. 138, max. 310 MPa
Tensile strength	min. 240 MPa
Elongation	min. 24%

All information is subject to change without notice.

The properties correspond to the material in the heading. They may vary for other specifications. Please contact us for more details.

Do you have any questions? Contact us:

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