

Technical datasheet

Titanium Grade 1

Major specifications

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

Available 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.

Applications

- chemical and maritime industries
- pharmaceuticals
- medical technology

Chemical properties

Composition - limits in %

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

Physical and thermal properties

Density	4,51 g/cm ³
Melting temperature	1670°C
Beta-Transus-Temperatur	888 ± 4°C
Thermal conductivity bei 20°C	16 W/ m°C

Physical and thermal 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.