

Technical datasheet

Titanium Grade 11

Major specifications

ASTM B265	ASME SB265	3.7225	UNS R52250
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Available product forms

Coils

The current stock range can be found on www.sd-metals.com.

Further dimensions available upon request.

Use our Service Centre to have the available sizes cut to your desired dimensions.

Key features

An unalloyed titanium grade with low oxygen content and additions of palladium for outstanding corrosion resistance. Titanium Grade 11 has physical and mechanical properties similar to Grade 1 and is highly ductile making it ideal for components requiring deep drawing or complex geometries. The addition of 0.12-0.25% Palladium gives outstanding corrosion resistance to localized crevice corrosion, particularly in chloride-containing environments, and to reducing acids.

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

ASTM B265

Highly corrosive environments in chemical processing and manufacturing, piping systems, industrial pumps and valves and heat exchangers.

Chemical properties

Composition - limits in % (ASTM B265 latest edition)

Fe	O	Pd	C	N	H	Ti
max. 0,20	max. 0,18	0,12-0,25%	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-Temperature	888 ± 4°C
Thermal conductivity at 20°C	16 W/ m°C

Physical and thermal properties

(at 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.