

# DATA SHEET

## TITAN GRADE 2

### Major specifications

ASTM B348 | ASTM F67 | ASTM B265 | ASME SB 265 | ISO 5832-2 | 3.7035 | UNS R50400

### Product forms

Coils in ASTM B265 + ASTM F67 + ISO 5832 + ASME SB 265

Sheets in ASTM B265 + ASTM F67 + ISO 5832 + ASME SB 265

Electroplated titanium profiles in ASTM B348

Plates in ASTM B265 + ASME SB 265

Round bars in ASTM B348 + ASTM F67 + ISO 5832

Hexagonal bars in ASTM B348

The current Stock Range can be found on [www.sd-metals.com](http://www.sd-metals.com). Further dimensions available upon request.

### Key features

Commercially pure unalloyed titanium, which offers an excellent balance between strength and ductility. It has good impact strength and is readily weldable. It has good corrosion resistance in highly oxidizing environments, alkaline media, aqueous salt solutions, slightly reducing environments, nitric acid- and wet chlorine gas. It also has excellent resistance to seawater and salt solutions. Titanium's low density, high strength-to-weight ratio- and resistance to corrosion make it an ideal material for a wide range of applications. Because it is castable, it is often used for cast valves and fittings.

### Areas of application

Corrosion resistance in chemical and maritime industries, plate heat exchangers, reaction vessels, evaporators, condensers, electroplating equipment, desalinization plants and seawater heaters, medical equipment, and structural engineering.

## CHARACTERISTIC

### Chemical composition limits in %

(ASTM B265 + ASTM B348)

Ti	Rest
Fe	max. 0,30
O	max. 0,25
C	max. 0,08
N	max. 0,03
H	max. 0,015

### Physical constants and thermal properties

Density	4,51 g/cm <sup>3</sup>
Melting point	1670°C
Beta transus temperature	920 ± 4°C
Thermal conductivity at 20°C	16 W/ m°C

### Typical mechanical properties (room temperature)

<b>ASTM B265</b>	
Yield strength	min. 275, max. 450 MPa
Tensile strength	min. 345 MPa
Elongation	min. 20 %
<b>ASTM B348</b>	
Yield strength	min. 275 MPa
Tensile strength	min. 345 MPa
Elongation	min. 20 %

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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