

## Technical datasheet

## Titanium Grade 4

### Major specifications

|          |           |            |        |            |
|----------|-----------|------------|--------|------------|
| ASTM F67 | ASTM B265 | ISO 5832-2 | 3.7065 | UNS R50700 |
|----------|-----------|------------|--------|------------|

### Available product forms

Round bars in ASTM F67

The current stock range can be found on [www.sd-metals.com](http://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

Titanium Grade 4 has a higher gas content compared to other classic pure titanium grades, which results in higher strengths. The level of strength is comparable to that of classic stainless steels while offering a high strength-to-weight ratio and superior corrosion resistance. For example, Titanium Grade 4 has excellent corrosion resistance in brine and salt solutions, oxidizing media, alkaline media, organic acids and seawater.

### Applications

- chemical and maritime industries
- frame construction
- fasteners where applicable
- medical devices
- dental implants
- surgical instruments

### Chemical properties

Composition - limits in % according ASTM B265

|           |           |           |           |            |           |
|-----------|-----------|-----------|-----------|------------|-----------|
| <b>Fe</b> | <b>O</b>  | <b>C</b>  | <b>N</b>  | <b>H</b>   | <b>Ti</b> |
| max. 0,50 | max. 0,40 | max. 0,08 | max. 0,05 | max. 0,015 | Rest      |

### Physical and thermal properties

|                              |                        |
|------------------------------|------------------------|
| Density                      | 4,51 g/cm <sup>3</sup> |
| Melting temperature          | 1670°C                 |
| Beta transus temperature     | 835 ± 4°C              |
| Thermal conductivity at 20°C | 17 W/ m°C              |

### Typical mechanical properties

(room temperature according ASTM B265)

|                  |                            |
|------------------|----------------------------|
| Yield strength   | min. 483 MPa, max. 655 MPa |
| Tensile strength | min. 550 MPa               |
| Elongation       | min. 15%                   |

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.

#### Team Germany and France

|                 |                     |                                                                          |
|-----------------|---------------------|--------------------------------------------------------------------------|
| Dirk Verhoeven  | +49 211 23 09 99-10 | <a href="mailto:d.verhoeven@sd-metals.com">d.verhoeven@sd-metals.com</a> |
| Kevin Verhoeven | +49 211 23 09 99-13 | <a href="mailto:k.verhoeven@sd-metals.com">k.verhoeven@sd-metals.com</a> |
| Seda Ceyhan     | +49 211 23 09 99-20 | <a href="mailto:s.cejhan@sd-metals.com">s.cejhan@sd-metals.com</a>       |

#### Team Export

|                 |                     |                                                                  |
|-----------------|---------------------|------------------------------------------------------------------|
| Thomas Ziert    | +49 211 23 09 99-12 | <a href="mailto:t.ziert@sd-metals.com">t.ziert@sd-metals.com</a> |
| S+D METALS GmbH | +49 4174 66 94 -0   | <a href="http://www.sd-metals.com">www.sd-metals.com</a>         |