Data sheet titanium metals Germany

# Titanium Grade 1 (3.7025)

Titanium Grade 1, also known as 3.7025, is the purest form of titanium available on the market. This alloy is used in a variety of industries due to its high ductility, corrosion resistance and weldability, especially where high resistance to corrosion is required.

## Main characteristics of Titanium Grade 1 (3.7025):

- Excellent corrosion resistance
- Very good ductility and weldability
- Low strength compared to other titanium alloys
- High resistance to fatigue and crack propagation

## Chemical analysis of Ti Gr 1 (3.7025)

| Element Fe % max. | O % max. | N % max. | C % max. | H % max. |
|---|---|---|---|---|
| 0,20 | 0,18 | 0,03 | 0,08 | 0,015 |

## Mechanical properties at room temperature

**Tensile strength: :** approx. 240 MPa (N/mm²)

**Yield strength:** approx. 170 MPa (N/mm²)

**Elongation:** approx. 24%

**Modulus of elasticity (GPa):** approx. 105 at room temperature

## Heat treatment and processing of titanium grade 1 (3.7025)

Titanium grade 1 is relatively easy to process due to its high degree of purity and good ductility. It can be welded and formed without special heat treatment, making it ideal for applications where high corrosion resistance and formability are required.

Please note that exact specifications and processing parameters may vary depending on manufacturer and application. We recommend direct consultation with the material manufacturer or a qualified engineer.

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