

# Titandraht Grade 2

Ti100.0 [%]  
 CE 0197

## Instructions for use

Laser wire (welding material for dental alloys).

Titandraht Grade 2 is supplied in form of wire.

Titandraht Grade 2 equates ISO 28319.

REF 50008 2.0 g / 5 mm

### Alloy characteristics

According to ISO 28319 free of nickel, cadmium, beryllium and lead

Liquidus temperature	°C	1600
BEGO color code		8
Diameter	mm	0.35

**Indications for use:** Titandraht Grade 2 is a filler material for laser welding dental restorations

**Contraindications:** No contraindications are known. However, unwanted biological reactions such as allergies to contents of the alloy or electrochemically based reactions may very rarely occur. In case of known incompatibilities and allergies to contents of the metallic material it should not be used.

**Warnings:** Metal dust is harmful to your health. When grinding and blasting use suitable air extraction system/ventilation at the workplace and breathing mask type FFP3-EN149! When using a laser welder, the safety precautions provided by the manufacturer should be followed.

**Precautions:** In case of occlusal or approximal contact with a different alloy electrochemically based reactions may very rarely occur. Safety and effectiveness in treatment of children or treatment of pregnant or nursing woman have not been established. Titandraht Grade 2 may influence negatively the interpretation of MRI investigations.

**Adverse reactions:** No adverse reactions are known. Nevertheless, the rare case of occurrence of individual reactions against single components of Titandraht Grade 2 can never be excluded completely. In this case, the application of Titandraht Grade 2 should not be continued.

**Prescription device:** Caution: US Federal law restricts this device to sale by or on the order of a licensed dentist.

**Preparation and welding:** Before fusing the surfaces must be cleaned and blasted. If possible use a X-seam (= double V-seam) and build up with the laser wire material. The laser seam should be placed in a low loaded area of the restoration if possible. The surface of the joining parts should be so large as possible (regard Bruxism!). When using a butt joint notice the differing parameters for welding. In general follow the recommendations of the manufacturer of the laser welder.

In every case the bead must be build up by overlapping (approx. 80 %) welding spots. First distortion has to be avoided by applying single opposing weld spots. Similar

welding material should be used. By heterogenous material combinations use the more precious one. If possible use mechanical support structures (e. g. box peg joint).

The usage of Argon (purity: at least 99.996 %) is recommended for all materials, for titanium it is mandatory. Discoloration of the weld point to inadequate gas infiltration round the welded joint and an insufficient welding.

The setting of the parameters of the laser welder has to be customised regarding the material and situation. Please follow the instruction of the producer of the laser welding device.

After welding the fused surfaces have to be treated analogous to the fused metals/alloys (grinding, blasting).

**Storage conditions:** none

**Limit of Liability:** Except where prohibited by law, BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG will not be liable for any loss or damage arising from this product, whether direct, indirect, special, incidental or consequential, regardless of the theory asserted, including warranty, contract, negligence or strict liability.

**Warranty:** Whether given verbally, in writing or by practical instructions, our recommendations for use are based upon our own experience and trials and can be considered as standard values. Our products are subject to a constant further development. Therefore alterations in construction and composition are reserved.

**US Labeling requirements:** The device labeling meets the recommendations of FDA applicable guidance documents.

Any serious incident that has occurred in relation to Titandraht Grade 2 should be reported to BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG and the competent authority.



Consult instructions for use



Caution



Use-by-date



Batch code



Non-sterile

**Rx only**  
 For professional use only



Catalogue number



Manufacturer

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