**Instructions for use**

**Dental Co-based casting alloy, Type 5**

**Wironit®** is available as cylinders.

**Wironit® complies with ISO 22674.**

**REF 50030, 50020**

**Alloy characteristics**

- According to ISO 22674 free of nickel, cadmium, beryllium and lead
- Type (accord. to ISO 22674): 5
- Density: g/cm³ 8.3
- Preheating temperature: °C 950–1050
- Solidus, liquidus temperature: °C 1265, 1395
- Casting temperature: °C 1460
- Young’s modulus: GPa 185
- Proof strength (R p0.2): MPa 615
- Ultimate strength (R m): MPa 895
- Elongation after fracture (A g): % 10
- Vickers hardness (HV10): 360

**BEGO color code**

- REF 50030: R (white)

**Investment material:** phosphat bonded, e. g. Wirovest

**Crucible material:** ceramic

**Veneering ceramic:** not veneerable with ceramic

**Flux:** e. g. Minoxid (REF 52520)

**Brazing material:** Kobalt Chrom-Lot (REF 52520)

**Laser wire:** Wirorend (REF 50003, 50005)

**Melting powder:** Wirosmelt (REF 52526)

**Intended Use:** Wironit® is indicated for casting of dental restorations.

**Indication:** Wironit® is a cobalt-based dental casting alloy. It is suitable for the fabrication of partial dentures and combination occlusions. Safety and effectiveness in treatment of children or treatment of pregnant or nursing woman have not been established. 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. Usage Labeling requirements. The device labeling meets the recommendations of FDA applicable guidance documents.

**Modelling/Sprue system:** Always place sprues in the most solid, of bruxism stronger modellation is required. Do not taper the sprue.

**Investing/preheating:** Use phosphate-bonded partial-denture investment materials

**Melting/casting:** Do not overheat alloy. Use only clean ceramic crucibles, one crucible per alloy. Recommendation: to enable an exact identification of each case cast new metal only. In case of re-casting, only re-cast identical alloys. Blast old material thoroughly. Add at least 50 % of new material. I applicable use melting powder (REF 52525). Follow the instructions of the manufacturers of the casting devices for parameters and casting procedures. After casting the mould should cool down slowly.

**After deflasking:** Blast with Korox® to 250 at approx. 4 bar. Critical areas – e. g. inner clasps sides and stress breakers – are to be blasted extremely carefully (Blasting devices: Duostar or Easyblast, Korox® 50 blasting material). Use fine carbide, ceramically bonded stones or BEGO sintered diamond milling tools for finishing.

**Polishing:** polishing (Eltropol polishing unit, Wirolyt polishing liquid), rubber-polishing (BEGO rubber polisher, black) and finishing-polishing (BEGO cobalt chrome polishing paste, blue). Clean thoroughly (steam clean or boil in aqua dest).

**Acrylic veneering:** For veneering with acrylic material follow the recommendations of the manufacturers.

**Soldering/brazing:** Fixate the parts with soldering investment material (e. g. Bellasherm REF 51100). The prepared gap shall not exceed 0.2 mm with parallel walls. Use a suitable BEGO flux. The flux residues and oxides must be etched off. Clean surface thoroughly by steam cleaning or boiling in aqua dest.

**Laser welding:** If applicable use Y-fem and filter material. Follow manufacturer’s instructions for use and hazard notes of the laser welding devices.

**Storage conditions:** none

**Limit of Liability:** Except where prohibited by law, BEGO Bremer Goldschlägerei Wilh. Herbert 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.

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

Any serious incident that has occurred in relation to Wironit® should be reported to BEGO Bremer Goldschlägerei Wilh. Herbert GmbH & Co. KG and the competent authority.

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**Manufacturer**

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