

Wironit[®] extrahart

The ideal partial denture alloy for combination work

- Worldwide proven reliability in use since 1955
- Due to its high proof strength and ultimate strength, this alloy is ideally suited for combination work
- Outstanding casting properties thanks to the special composition with silicon and carbon
- Very low thermal conductivity of the alloy emphasises the wearing comfort of the prosthesis
- Biocompatible and corrosion-resistant



Partners in Progress

Wironit[®] extrahart – ideal for combination work

The mechanical properties of Wironit[®] extrahart are clearly above the requirements of national and international standards. They ensure a high strength of the finished work. Through the controlled addition of carbon the Young's modulus and the proof strength become additional elevated.

Benefits for the patient:

- The prostheses remain stable during chewing due to the strong resistance and ensure a safe function
- The low thermal conductivity of the alloy emphasises the wearing comfort of the prosthesis

Reduced Vickers hardness

Wironit® extrahart is easy to grind and to polish.

Benefits for the patient:

- High aesthetics
- The dense and smooth surface reduces plaque build-up and thus protects the restoration

Unique recognition of casting point

Wironit[®] extrahart can be used in all induction-heated casting machines such as Fornax[®] T or Nautilus[®] CC plus, as well as in the flame-casting process.

The advantages for you:

- Safe detection of the pouring time at all standard casting processes
- Smooth surfaces without overheating of the melt

Systematic processing

Wironit[®] extrahart is a material which has been tested since 1955 and is part of the BEGO system. The BEGO system stands for reproducible results at a high productivity level and offers everything for modern partial denture technique.

The advantages for you:

- Everything you need from a single supplier
- Coordinated process steps
- An optimally complementary product portfolio
- Best casting results

Biocompatibility

Wironit[®] extrahart is high corrosion resistant. Due to the pure elements the alloy is according to ISO 22674 free of nickel, cadmium, beryllium and lead.

The advantages for you:

- Biocertificate high degree of safety for the dentist and patient
- Biocertificate available at www.bego.com

Product details

Alloy characteristics	Standard values
• Alloy type (ISO 22674)	5
• Density	8.2 g/cm ³
Preheating temperature	950–1050 °C
Solidus, liquidus temperature	1260, 1390 °C
Casting temperature approx.	1420 °C
• Young's modulus	185 GPa
• Proof strength (R _{p0.2})	635 MPa
• Ultimate strength (R _m)	900 MPa
• Elongation after fracture (A ₅)	8 %
• Vickers hardness (HV10)	385 HV10

Composition in % by mass

	Co 63 0.	Cr 30 0.	Mo 5 0 . Si	1.0 · Mn 1.0 · C
•	0005.0.	Cr 30.0 ·	10 0 0.0 · 51	1.0 • 1011 1.0 • C

Availability	Presentation	Content	REF
• Wironit [®] extrahart	1 Pack	1000 g	50060
• Wironit [®] extrahart	1 Pack	250 g	50050

Accessories

Wiroweld CoCr laser wire, carbon-free

Ø 0.5 mm	1 Pack	1,5 m – 2 g	50005
Ø 0.35 mm	1 Pack	2 m – 1,5 g	50003
Cobalt-chrome solder	1 Pack	4 g	52520

Complementary products

Duplicating material	REF
• Castogel [®] , 6 kg tub	52052
• Castogel® mint, 10 kg tub	52049
• WiroGel [®] M, 6 kg tub	54351
• WiroGel® M, 10 kg tub	54354
• Wirosil®, duplicating silicone basic set	52000
Investment materials	REF
• Wirovest®, 45×400 g bag, 18 kg box	51046
• Wirovest®, 15×400 g bag, 6 kg box	51047
 WiroFine[®], shock-heat compatible directly at 1,000 °C 45 × 400 g bag, 18 kg box 15 × 400 g bag, 6 kg box 30 × 200 g bag, 6 kg box 	54345 54344 54348

ISO 22674

We reserve the right to modify the design, pack contents and composition. Technical information and recommendations are based on our experience and tests and should be regarded as guidelines. Date of issue: March 2017.