

# BEGO CATALOGUE DENTAL TECHNOLOGY

Valid from March 2015





Dipl.-Kfm. Christoph Weiss Managing Partner of BEGO

## Trustworthiness and reliability for today and the future

Dear interested parties,

The dental world is continually in flux. New materials, procedures and devices present dental technicians, dentists and implantologists with the challenge of staying abreast of contemporary developments in order to provide the best technical and highest-quality solutions. Yet, at the same time, they also have to guarantee that these solutions are economically viable. It is the good right of patients to expect nothing less.

In this situation it is good to have a fixed anchor point. A partner with comprehensive know-how, which has been gained in the course of many decades of experience, and a partner that, time and again, has set milestones as a pioneer of innovative ideas. Briefly stated: A partner like BEGO, which has already been demonstrating exactly these traits, every day, for nearly 125 years.

Be it because of our comprehensive competence in materials and alloys, our mastery of digital processes and production methods, the successful implementation of bionic insights gained in the field of implantology, the cooperation with the scientific world, or application-specific consultation offered at master-expert level: Operators worldwide rely on this specific BEGO competence, which has seen us become one of the internationally leading dental companies — with the unique portfolio of products and services "Made in Germany".

In everything we do, we are always guided by the principles of trustworthiness and reliability. These principles constitute the foundation for the cooperation with our customers, partners and employees. Our mutual objective: Peak performance in customer service and product quality.

Completely in tune with current developments, yet also keeping the future firmly in sight. This is what BEGO stands for. To ensure that you are always on the safe side – and always in the vanguard.

Bremen, in the spring of 2015

Christoph Weiss

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 $<sup>\</sup>ensuremath{^{*}}$  Please find the alphabetical index at the end of this catalogue.



### 3D PRINTING

With Varseo, BEGO offers an in-house developed 3D printing system perfectly tailored to dental applications for the production of a diverse range of solutions in the laboratory.

In addition to the printer, the associated materials, software tools and services for the rapid, simple and cost-effective production of, for example, splints, surgical guides, impression trays and CAD/Cast® partial denture frames further enhance the company's portfolio.

#### **Varseo**

## The 3D printer with innovative cartridge system developed specially for dental applications

- Unique precision, even of demanding applications
- High building speed regardless of the number of elements to be produced
- Large, extendible portfolio of materials and applications
- Unique cartridge system boosts economic efficiency and also optimises working processes in the laboratory:
  - Simple handling
  - The optically opaque housing reduces material ageing to a minimum
  - Rapid material changeover within just a few seconds
  - Low level of material consumption
- The user-friendly display provides information on all parameters and gives quick and easy access to all important functions

Details about
supplementary services,
software and further
applications are available
online at
www.bego.com/3d-printing

#### Product details

Physical data		
Max. height		857 mm
Width		456 mm
Depth		443.5 mm
Weight		50 kg
Rated voltage		100-240 V AC, 50 / 60 Hz
Rated power		100 VA
Build volume (L x W x H)		96 x 54 x 85 mm
Resolution		50 μm (± 25 μm)
Layer		50 to 100 μm
Building rate		20 to 40 mm/h
Scope of delivery	Quantity	REF
Varseo 100-240 VAC, 50/60 Hz, 100 VA	1	26435
Original operating instructions	1	86080
Wooden spatula	1	19548
Bubble syringe	1	19549
Stainless steel spatula	1	19550
Card set	1	19551
FEP foil	1	19511
Torque spanner	1	19556
O-ring	1	19524
Protective cap for resin pot	1	19563
3D printer software	1	19504
USA mains power cable	1	12554
Mini USB stick, 4 GB, calibration file	1	19451
Cartridge complete with stamp	1	19427



#### VarseoVest P

#### Phosphate-bonded, shock-heat precision investment material especially for casting 3Dprinted partial denture frames

- VarseoVest P has been specially developed for CAM partial denture constructions produced by means of 3D printing and offers an excellent fit and smooth cast objects every single time
- The outstanding flow properties ensure easy investment even on slender partial denture clasps and margins; the long working time of 6 minutes enables fatigue-free processing of the investment material
- The mould is inserted directly into the furnace, which is preheated to 800–950°C, only 20 mins after investing, which represents a considerable reduction in the duration of the heating process
- The impressive strength of the investment material ensures that the moulds do not crack or tear as a result of the plastic expanding and also guarantees reliable further processing
- VarseoVest P offers a high degree of edge strength yet still permits easy deflasking for economic use of the blasting material
- The unambiguous and clear expansion control with the special mixing liquid BegoSol® HE ensures reproducible fit results
- Simple application of VarseoVest P in combination with the VarseoWax CAD/Cast® resin thanks to processing techniques comparable to common investment materials

#### Product details Physical data Mixing liquid BegoSol® HE Working time at 20 °C approx. 6 min VarseoVest P Shelf life in unopened bag 24 months Key material values according to DIN EN ISO 15912 西泊 approx. 12 min Beginning of setting (Vicat time) Compressive strength [MPa] approx. 5 MPa XP 1.0% Linear thermal expansion [%] Flowability [mm] 137 mm Availabilty Contents Presentation **REF** Qty E 31/3590 VarseoVest P, 36 x 500 g bag 18 kg carton 1 54873 VarseoVest P, 60 x 300 g bag 1 54874 18 kg carton VarseoVest P, 20 x 300 g bag 54875 6 kg carton The packages do not contain any mixing liquid. (7 BEGO Accessories Contents Presentation Qty RFF BegoSol® HE mixing liquid\* 1 litre bottle 51095 1 canister BegoSol® HE mixing liquid\* 5 litres 1 51096 Silicone mould former 54877 set \* BegoSol® HE is sensitive to freezing

DIN EN ISO 15912

#### VarseoWax CAD/Cast

#### Special resin for the 3D printing of CAD/Cast® partial denture frames with BEGO Varseo

- VarseoWax CAD/Cast can be burned out without leaving any residue and thus provides optimal conditions for pore-free, smooth and precise partial dentures
- The resin expansion tailored to the investment material VarseoVest P facilitates preheating using the shock-heat method and significantly reduces the time required for heating
- The excellent dimensional stability of the plotted objects enables deformation-free investment and thus excellent accuracy of fit of the cast objects
- The printed plastic boasts first-class green strength, so that no light-curing is necessary if processed immediately, which in turn results in unparalleled process time savings
- As a system component of the Varseo 3D print system, VarseoWax CAD/Cast offers outstanding processing reliability the printing and processing parameters specially developed for the resin ensure smooth production sequences with reproducible results at any time

#### **Product details** Availability Colour yellow opaque Presentation Contents REF 41000 VarseoWax CAD/Cast 1.0 kg bottle 1 VarseoWax CAD/Cast 0.5 kg bottle 1 41020

#### VarseoWax Tray

#### Special resin for the 3D printing of individual impression trays with BEGO Varseo

- VarseoWax Tray is water- and solvent-resistant
- The printed objects can be universally used for all impression materials
- The outstanding dimensional stability and strength enable precise and deformation-free impressions to be taken on patients
- Thanks to the CAD wax-up, retention holes can be conveniently produced in the impression tray in one step there is no need for additional drilling
- CAM production ensures evenly rounded-off edges no time-consuming grinding of the margins necessary
- The smooth surfaces of the printed objects form the basis for an excellent fit
- Tested parameters adapted to the VarseoWax Tray resin ensure the rapid and economic production of impression trays
- The CE mark stands for excellent cross-batch quality standards and a high level of biocompatibility as confirmed by an independent institute
- VarseoWax Tray satisfies all the requirements for a Class 1 medical device as per DIN EN ISO 10993-1 and offers an accordingly high level of patient safety

Product details				
Availability				
Colour	blue opaque			
	Contents	Presentation	Qty	REF
VarseoWax Tray	1.0 kg	bottle	1	41013
VarseoWax Tray	0.5 kg	bottle	1	41033

#### VarseoWax Surgical Guide

#### Special resin for the 3D printing of drill templates with BEGO Varseo

- Excellent flow properties as part of the printing process result in great accuracy of fit and geometric fidelity as the most important features of drill templates to avoid infringing the anatomical characteristics
- The 3D printing parameters which are carefully aligned to the drill templates ensure exact shaping in the area around the drill sleeves and, consequently, precise drill holes as well as optimal accuracy of fit during subsequent insertion in the patient's mouth
- VarseoWax Surgical Guide is a resin which is highly resistant to chemicals; the printed objects can be cleaned and disinfected both conveniently and easily
- Particularly short production times and low material consumption equate to cost-efficient production in the laboratory
- The Varseo system is compatible with all common implant planning systems which export to STL format this facilitates simple transfer of the data sets and production of the drill templates
- VarseoWax Surgical Guide satisfies all the requirements for a Class 1 medical device as per DIN EN ISO 10993-1 and guarantees
  optimal controlled patient safety
- Great biocompatibility for tested safety for users and patients

## Product details Availability

Colour	blue transp	arent		
	Contents	Presentation	Qty	REF
VarseoWax Surgical Guide	1.0 kg	bottle	1	41012
VarseoWax Surgical Guide	0.5 kg	bottle	1	41032



#### VarseoWax Splint

#### Special resin for the 3D printing of splints with BEGO Varseo

- The resin's excellent flow properties produce a dense surface and high level of impact strength for guaranteed stability and long-term durability in the patient's mouth
- Smooth print surfaces provide the basis for great accuracy of fit and minimal finishing
- The 3D print parameters specially aligned to splints enable quick and cost-effective production of splints in the laboratory
- The excellent dimensional stability simplifies the processing of printed objects and enables further processing free from deformation
- The high level of transparency is equal to that of deep-drawn splints and provides the basis for ideally checking the accuracy of fit
- The CE mark underlines and guarantees the first-class cross-batch quality standards, the biocompatibility and also means monitored safety for all patients

#### Product details

Availability				
Colour	transparen	t		
	Contents	Presentation	Qty	REF
<ul> <li>VarseoWax Splint</li> </ul>	1.0 kg	bottle	1	41011
VarseoWax Splint	0.5 kg	bottle	1	41031



#### In the beginning there was gold

Two families by the names of Herbst and Weiss were instrumental in making the BEGO company what it is today. What was once a small firm manufacturing gold foil has grown into a globally operating dental company with branches and agencies in many important export markets, such as the USA, Canada, France, China and Australia.

When Bremer Goldschlägerei first opened its workshop in 1890, the foundation stone for the modern BEGO was laid. Back then, gold was the most important material in dentistry.

Today, precious metal continues to plays an important role in the company's extensive product mix. Successful precious-metal alloys such as Bio PontoStar® XL and InLloyd® 100 still enjoy market recognition and demand.

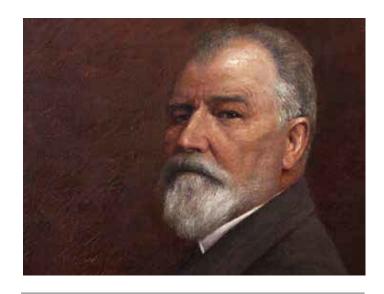
Gold will no doubt retain its importance as the highest-quality material available. But when it comes to material expertise, we have a lot more to offer.

In addition to high-gold alloys, BEGO supplies dental laboratories with numerous, different, non-precious alloys, e.g., Wirobond®, Wiron®, WIRONIUM® and Wironit®. These alloys are perfectly tailored to the investment materials and equipment from BEGO, and thus ensure optimal handling.

More than 100 years of experience form the basis of our expertise in the field of dental technology. Today, the Dental division supplies a wide range of high-quality products tailored to the dental technician's requirements. The decisive factors shaping the services we provide are expertise, know-how and creative company management which enables ideas and visions to be realised. This means that our business partners around the world know that they can always rely on an innovative range of high-quality products from BEGO Dental which offer optimum quality and functionality.

To complement its excellent materials, BEGO also supplies a wide range of highly specialised dental laboratory equipment. Together they form a perfect system which delivers high-quality and precise partial dentures and are also suitable for crown and bridge work.

Trust is worth its weight in gold.



Dr. h.c. Wilhelm Herbst, a dentist, laid the foundation of our company with his idea of using adhesive dental gold instead of beaten gold filling material.



## PRECIOUS-METAL ALLOYS

BEGO has the right alloy for every indication. All ceramics and composites used in the dental laboratory are suitable as veneering materials.

A full list of our precious metal alloys is available as a download from www.bego.com/download-center.

#### Bio PontoStar® XL

- High-gold alloy with a high gold and platinum content for optimal processing
- Rich yellow colour for restorations which are at once aesthetic and high-quality
- Contains no copper or palladium extremely corrosion-resistant
- Light-coloured oxide for greater reliability in aesthetic ceramic veneering
- Biocompatible verified by an independent institute

#### PontoLloyd® G

- Extra-hard, high-gold universal alloy suitable for all indications!
- Yellow colour for aesthetic and high-quality restorations
- With indium for reliable ceramic veneering
- Copper-free also suitable for sensitive patients
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute









#### Product details

Composition in % by mass	
Au 86.0 · Pt 11.5 · Zn 1.6 · In, Rh, Fe eac	h < 1
Alloy characteristics	Standard values
Type (ISO 22674)*	4
Density (spec. gravity) [g/cm <sup>3</sup> ]	18.8
Coefficient of thermal expansion [10-6 K-1] 25–500 $^{\circ}\text{C}$	14.2
Coefficient of thermal expansion [10-6 K-1] 20-600 $^{\circ}\text{C}$	14.4
Preheating temperature [°C]	850
Casting temperature [°C]	approx. 1270
Melting interval solidus-liquidus [°C]	1045-1100
Modulus of elasticity [GPa]	100
Elongation limit (R <sub>p0.2</sub> ) [MPa] after firing	500
Ductile yield (A <sub>5</sub> ) [%] after firing	7
Vickers hardness (HV5) after firing	215
BEGO Colour Code	yellow 5
Availability	REF
Bio PontoStar® XL	61140
Laser welding wire Bio PontoStar®-XL wire Ø 0.35 mm	61167
Accessories	
Solder (cadmium-free) before firing	PontoStar®-G solder (1030 °C)
Solder (cadmium-free) after firing	BEGO-GOLD solder I (810 °C)
Flux	Minoxyd

Conforms with ISO 9693-1 for metal-ceramics Conforms with ISO 22674 for use as crown and bridge alloy

#### Product details

Composition in	%	b۷	mass
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Au 84.1 · Pt 8.3 · Pd 4.8 · In 2.7 · Ta < 1	
Alloy characteristics	Standard values
Type (ISO 22674)*	4
Density (spec. gravity) [g/cm <sup>3</sup> ]	18.1
Coefficient of thermal expansion [10-6 K-1] 25–500 °C	14.1
Coefficient of thermal expansion [10-6 K-1] 20-600 °C	14.3
Preheating temperature [°C]	850
Casting temperature [°C]	approx. 1370
Melting interval solidus-liquidus [°C]	1100-1230
Modulus of elasticity [GPa]	100
Elongation limit (R <sub>p0.2</sub> ) [MPa] after firing	470
Ductile yield (A <sub>5</sub> ) [%] after firing	6
Vickers hardness (HV5) after firing	200
BEGO Colour Code	yellow 6
Availability	REF
PontoLloyd® G	61106
Laser welding wire PontoLloyd®-G wire Ø 0.35 mm	61166
Accessories	
Solder (cadmium-free) before firing	PontoStar®-G solder (1030 °C)
Solder (cadmium-free) after firing	• BEGO-GOLD solder I (810 °C) • Pre-flux U Goldsolder (810 °C)
Flux	Minoxyd

Conforms with ISO 9693-1 for metal-ceramics Conforms with ISO 22674 for use as crown and bridge alloy

#### BegoCer® G

- Extra-hard universal alloy with reduced gold content for ceramic veneering
- Wide range of indications from crowns to superstructures
- Copper-free ideal for sensitive patients
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



#### BegoPal® 300

- Wide range of indications from crowns to suprastructures
- Copper-free ideal for sensitive patients
- Light-coloured oxide greater reliability in the colouring of the ceramic
- Alloyed with gold and silver excellent melting, flow and soldering properties
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



### Composition in % by mass

Product details

Au 51.5 · Pd 38.4 · In 8.7 · Ga 1.3 · Ru	
Alloy characteristics	Standard values
Type (ISO 22674)*	4
Density (spec. gravity) [g/cm <sup>3</sup> ]	14.3
Coefficient of thermal expansion [10-6 K-1] 25–500 $^{\circ}\text{C}$	13.7
Coefficient of thermal expansion [ $10^{-6} \text{ K}^{-1}$ ] 20–600 °C	13.9
Preheating temperature [°C]	850
Casting temperature [°C]	approx. 1390
Melting interval solidus-liquidus [°C]	1155–1310
Modulus of elasticity [GPa]	125
Elongation limit (R <sub>p0.2</sub> ) [MPa] heat-treated	550
Ductile yield (A <sub>5</sub> ) [%] heat-treated	12
Vickers hardness (HV5) heat-treated	230
BEGO Colour Code	white 8
Availability	REF
BegoCer® G	61097
Laser welding wire BegoCer® G wire Ø 0.35 mm	61164
Accessories	

BegoStar® solder (1125 °C)

Minoxyd

BEGO-Gold solder I (810 °C)

Conforms with ISO 9693-1 for metal-ceramics Conforms with ISO 22674 for use as crown and bridge alloy

Solder (cadmium-free) before firing

Solder (cadmium-free) after firing

#### Product details

Composition in % by mass	
Au 6.0 · Pd 75.4 · Ag 6.2 · In 6.3 · Ga 6.0	⋅ Ru < 1
Alloy characteristics	Standard values
Type (ISO 22674)*	4
Density (spec. gravity) [g/cm <sup>3</sup> ]	11.0
Coefficient of thermal expansion [10 $^{\text{-}6}$ K $^{\text{-}1}$ ] 25–500 $^{\circ}\text{C}$	13.8
Coefficient of thermal expansion [10-6 K-1] 20-600 $^{\circ}\text{C}$	14.0
Preheating temperature [°C]	850
Casting temperature [°C]	approx. 1390
Melting interval solidus-liquidus [°C]	1175–1320
Modulus of elasticity [GPa]	135
Elongation limit (R <sub>p0.2</sub> ) [MPa] after firing	520
Ductile yield (A <sub>5</sub> ) [%] after firing	28
Vickers hardness (HV5) after firing	240
BEGO Colour Code	white 8
Availability	REF
BegoPal® 300	61105
Laser welding wire BegoPal®-300 wire Ø 0.35 mm	61165
Accessories	
Solder (cadmium-free) before firing	BegoStar® solder (1125 °C)
Solder (cadmium-free) after firing	• BEGO-GOLD solder I (810 °C) • Pre-flux U Goldsolder (810 °C)
Flux	Minoxyd

Conforms with ISO 9693-1 for metal-ceramics Conforms with ISO 22674 for use as crown and bridge alloy

Flux

#### ECO d'OR

- Extra-hard universal alloy with reduced gold content suitable for all indications
- Also suitable for veneering with LFC materials strong bond even when subjected to multiple firing
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



#### **Product details** Composition in % by mass Ag $40.5 \cdot \text{Au } 38.1 \cdot \text{Pd } 13.0 \cdot \text{In } 8.0 \cdot \text{Mn}$ , Ta each < 1 Alloy characteristics Standard values Type (ISO 22674)\* Density (spec. gravity) [g/cm<sup>3</sup>] 13.1 Coefficient of thermal expansion [10-6 K-1] 17.0 25-500 °C Coefficient of thermal expansion [10-6 K-1] 17.4 20-600 °C Preheating temperature [°C] 700 Casting temperature [°C] approx. 1200 975-1030 Melting interval solidus-liquidus [°C] Modulus of elasticity [GPa] 114 500 Elongation limit (R<sub>p0.2</sub>) [MPa] after firing 7 Ductile yield (A<sub>5</sub>) [%] after firing Vickers hardness (HV5) after firing 215 yellow 6 **BEGO Colour Code** Availability **REF** ECO d'Or 61112 61170 Laser welding wire ECO d'Or wire Ø 0.35 mm Accessories Solder (cadmium-free) before firing • BEGO-LFC solder I (930 °C) Bio PlatinLloyd® solder (870 °C) Solder (cadmium-free) after firing Bio PlatinLloyd® solder (710 °C) Flux Minoxyd

Conforms with ISO 9693-1 for metal-ceramics Conforms with ISO 22674 for use as crown and bridge alloy

#### BegoPal® S

- Suitable for veneering with composites and conventional ceramics
- Copper-free ideal for sensitive patients
- Light-coloured oxide greater reliability in the colouration of the ceramic
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



Product details
Composition in % by mass

Pd 57.5 · Ag 31.5 · Sn 9.0 · In 1.9 · Ru < 1	
Alloy characteristics	Standard values
Type (ISO 22674)*	4
Density (spec. gravity) [g/cm <sup>3</sup> ]	11.1
Coefficient of thermal expansion [10-6 K-1] 25–500 °C	14.4
Coefficient of thermal expansion [ $10^{-6}$ K <sup>-1</sup> ] $20-600$ °C	14.6
Preheating temperature [°C]	850
Casting temperature [°C]	approx. 1400
Melting interval solidus-liquidus [°C]	1210-1290
Modulus of elasticity [GPa]	118
Elongation limit (R <sub>p0.2</sub> ) [MPa] after firing	480
Ductile yield (A <sub>5</sub> ) [%] after firing	7
Vickers hardness (HV5) after firing	220
BEGO Colour Code	white 8
Availability	REF
BegoPal® S	61086
Laser welding wire BegoPal® 300 wire Ø 0.35 mm	61165
Accessories	
Solder (cadmium-free) before firing	BegoStar® solder (1125 °C)
Solder (cadmium-free) after firing	BEGO-Gold solder I (810 °C)
Flux	Minoxyd

Conforms with ISO 9693-1 for metal-ceramics Conforms with ISO 22674 for use as crown and bridge alloy

Alloy	Bio- certificate	Standards ISO	REF	Type according to ISO	code	Compo (x = <	osition i 1%)	n % by ı	mass					Other elements (< 1%)	Density [g/cm <sup>3</sup> ]		rs hardness i)	
				22674	no.	Au	Pt	Pd	Ag	Cu	Sn	Zn	In			soft	after casting/ firing	heat- treated
Alloys for cor																		
Bio PontoStar® XL	. ✓ 	9693-1 + 22674	61140	4	5	86.0	11.5	_	_	_	_	1.6	X	Rh · Fe	18.8	155	215	220
Bio PontoStar®	✓	9693-1 + 22674	61104	4	5	87.0	10.6	-	-	-	-	1.5	Х	Rh · Mn · Ta	18.8	160	225	235
PontoStar® G	<b>√</b>	9693-1 + 22674	61046	4	4	85.6	11.4	-	-	-	-	-	2.3	Rh · Fe	18.0	130	175	190
PontoStar® H		9693-1 + 22674	61030	4	7	77.6	18.8	_	Х	_	-	2.2	_	Ir · Fe	18.5	150	220	220
PontoLloyd® G	<b>√</b>	9693-1 + 22674	61106	4	6	84.1	8.3	4.8	-	-	-	-	2.7	Та	18.1	190	200	210
PontoLloyd® P	<b>√</b>	9693-1 + 22674	61087	4	8	77.5	9.9	8.9	1.0	Х	Х	-	1.4	Ir · Fe	17.9	175	205	210
PontoLloyd® L		9693-1 + 22674	61100	4	8	75.0	_	17.9	3.0	_	1.5	-	2.5	Re	16.3	150	205	220
BegoCer® G	<b>√</b>	9693-1 + 22674	61097	4	8	51.5	-	38.4	-	-	-	-	8.7	Ru · Ga 1.3	14.3	190	220	230
BegoStar®	<b>√</b>	9693-1 + 22674	61080	4	8	54.0	_	26.5	15.5	_	2.4	_	1.4	Ru · Re	13.8	205	225	230
BegoStar® ECO	✓	9693-1 + 22674	61121	4	8	15.0	_	51.9	23.0	_	4.0	_	6.0	Ru	11.2	205	215	_
BegoPal® 300	✓	9693-1+	61105	4	8	6.0	_	75.4	6.2	_	-	-	6.3	Ru · Ga 6.0	11.0	220	240	260
BegoPal® S	✓	22674 9693-1 + 22674	61086	4	8	-	-	57.5	31.5	-	9.0	_	1.9	Ru	11.1	210	220	230
Alloys for hig	h-expan		amics	(low-fus	ing de	ental	ceran	nics)										
Bio PlatinLloyd®		9693-1 + 22674			4	75.1	7.8	-	14.8	-	-	1.8	-	Rh · Mn · Mg	16.3	165	205	215
Pontonorm (only available in Germany)	<b>√</b>	9693-1 + 22674	61126	4	3	73.8	9.0	-	9.2	4.4	-	2.0	1.5	lr	16.7	150	200	230
PontoRex® G	✓	9693-1 + 22674	61016	4	4	70.0	9.4	-	13.2	3.0	-	2.0	1.9	Ir · Rh	16.2	155	200	220
PlatinLloyd® KF	<b>√</b>	9693-1 + 22674	61025	4	4	72.8	2.0	5.7	16.1	-	-	3.0	-	Mn · Rh	15.6	155	250	255
BegoLloyd® LFC	<b>√</b>	9693-1 + 22674	61116	4	5	62.8	3.0	5.7	25.0	-	-	2.2	1.2	Ru	14.6	150	225	225
AuroLloyd® KF	<b>√</b>	9693-1 + 22674	61052	4	6	55.0	_	10.0	29.2	_	1.0	1.2	3.5	Ru	13.9	150	200	220
ECO d'OR	✓	9693-1 + 22674	61112	4	6	38.1	_	13.0	40.5	-	-	-	8.0	Mn · Ta	13.1	-	215	220
BegoStar® LFC	✓	9693-1 + 22674	61107	4	8	Х	-	35.0	58.9	-	1.0	4.0	-	Zr · Ru	10.8	175	200	-
Alloys for cro		bridges	(only	suitable	for ve	neeri	ng wi	th cor	mposi	ite)								
InLloyd® 100	<b>√</b>	22674	61120	2	2	78.1	3.9	-	15.5	-	-	2.4	-	Ir	16.5	120	150	150
PlatinLloyd® 100	<b>√</b>	22674	61020	4	3	72.0	3.5	-	13.7	9.8	-	Х	-	lr	15.5	155	220	225
PlatinLloyd® M		22674	61009	4	4	70.0	5.0	1.0	11.7	10.0	-	1.9	Х	Re	15.7	190	270	285
BegoLloyd® M		22674	61036	4	4	65.0	Х	3.1	19.1	10.0	-	2.0	Х	Ir	14.7	155	235	240
AuroLloyd® M		22674	61054	4	5	54.0	1.0	5.0	29.0	8.0	-	1.0	1.9	lr	13.5	190	250	270
Midigold		22674	61082	1	5	49.5		3.4	35.0	10.0			2.0	Ru	13,0	120	235	245

BEGO GOLD alloys and solders are medical divices in accordance with Regulation 93/42 EEC. According to the Annex IX, the products are classified in Class IIa.

Types according to ISO 22674

Type 2: Intended for fixed, single-tooth restorations, e.g. crowns or inlays, where the number of surfaces is not limited.

Type 3: Intended for fixed, multi-unit restorations, e.g. bridges, telescopic and conical crowns, posts.

Type 4: Intended for restorations with thin cross-sections which are exposed to very high loads, e.g. removable partial dentures, clasps, veneered crowns, bridges with long spans or small cross-sections, bars, fixtures, implant-supported superstructures.

	Elong (R <sub>p0.2</sub>	ation limit ) [MPa]		Duct (A <sub>5</sub> )	tile yield [%]		Modulus of elasticity [GPa]	Melting range [°C]	Casting temperature approx. [°C]	perature	CTE 25-500°C (20-600°C)	Oxid	e firi	ng	Laser weld- ing/pure filler alloy	Solders  ● Before firing  ■ After firing
	soft	after casting/ firing	heat- treated	soft	after casting/ firing	heat- treated				[°C]	[10 <sup>-6</sup> K <sup>-1</sup> ]	°C	min.	with vacuum	available	
	330	500	510	18	7	6	100	1045-1100	1270	850	14.2 (14.4)	900	5	<b>√</b>	<b>√</b>	PontoStar® G solder 1030     BEGO-Gold solder I 810
	380	550	560	11	8	6	100	1040-1150	1270	850	14.2 (14.4)	950	10	-	<b>√</b>	PontoStar® G solder 1030     BEGO-Gold solder I 810
	225	430	460	13	9	8	92	1055-1140	1320	850	14.4 (14.6)	950	1	_	<b>√</b>	● PontoStar® G solder 1030 ■BEGO-Gold solder I 810
	380	520	520	10	6	6	115	1080-1180	1320	850	13.8 (14.0)	950	10	_	PontoStar® G wire	PontoStar® G solder 1030     ■BEGO-Gold solder I 810
	430	470	495	10	6	3	100	1100-1230	1370	850	14.1 (14.3)	960	10	-	<b>√</b>	<ul><li>PontoStar® G solder 1030</li><li>BEGO-Gold solder I 810</li></ul>
	470	490	500	7	5	4	110	1145-1215	1380	850	13.8 (14.0)	960	10	-	<b>√</b>	<ul> <li>PontoLloyd® solder 1120</li> <li>■BEGO-Gold solder I 810</li> </ul>
	350	530	560	26	8	6	110	1150-1240	1430	850	14.1 (14.3)	960	10	_	<b>√</b>	<ul><li>PontoLloyd® solder 1120</li><li>■BEGO-Gold solder I 810</li></ul>
	475	520	550	19	16	12	125	1155-1310	1450	850	13.7 (13.9)	960	2-3	_	<b>√</b>	■ BegoStar® solder 1125°     ■ BEGO-Gold solder I 810
	460	510	530	21	15	13	113	1230-1280	1420	850	14.0 (14.2)	960	10	_	BegoCer® G wire	<ul> <li>BegoStar® solder 1125°</li> <li>BEGO-Gold solder I 810</li> </ul>
	360	440	_	35	22	_	135	1250-1310	1430	850	14.2 (14.5)	960	2-3	-	<b>√</b>	■ BegoStar® solder 1125°     ■ BEGO-Gold solder I 810
	450	520	540	30	28	25	135	1175-1320	1390	850	13.8 (14.0)	960	2-3	-	<b>√</b>	■ BegoStar® solder 1125°     ■ BEGO-Gold solder I 810
	400	480	520	10	7	6	118	1210-1290	1400	850	14.4 (14.6)	960	10	-	BegoPal® 300 wire	■ BegoStar® solder 1125°     ■ BEGO-Gold solder I 810
	330	490	520	10	6	5	120	990-1065	1250	700	16.0 (16.2)	780	10	-	<b>√</b>	BEGO LFC solder I 930° BioPlatinLloyd® solder 870 BioPlatinLloyd® solder 710  BioPlatinLloyd® solder 710
	_	480	500	-	12	6	105	900-990	1150	700	16.5 (16.8)	780	5	✓	✓	PontoRex® solder 710°C  PontoRex® solder 710°C  PontoRex® solder 710°C
	310	440	450	16	11	9	100	910-995	1150	700	16.1 (16.3)	800	10	-	<b>√</b>	● PontoRex® solder 880°C ■ PontoRex® solder 710°C
	330	580	600	18	6	4	120	980-1070	1200	750	16.2 (16.4)	800	10	-	<b>√</b>	BEGO LFC solder I 930°     PontoRex® solder 880°C     PontoRex® solder 710°C
	330	575	575	23	13	6	105	985-1060	1250	700	16.4 (16.9)	800	5	✓	PlatinLloyd® M wire	BEGO LFC solder I 930°     BioPlatinLloyd® solder 870°     BioPlatinLloyd® solder 710°     BioPlatinLloyd® solder 710°
_	315	480	520	18	7	6	106	950-1060	1230	700	17.1 (17.3)	800	10	_	✓	PontoRex® solder 880°C     PontoRex® solder 710°C
	-	500	565	-	7	8	114	975-1030	1200	700	17.0 (17.4)	800	5	_	✓	BEGO LFC solder I 930°     BioPlatinLloyd® solder 870     BioPlatinLloyd® solder 710     BioPlatinLloyd® solder 710
	_	400	-	-	12	-	113	1080-1150	1300	700	16.6 (16.8)	780	10	-	ECO d'OR wire	BEGO LFC solder I 930° PontoRex® solder 880°C PontoRex® solder 710°C
	200	245	245	26	12	12	90	935-1005	1200	700	-	-	-	-	✓	BEGO-Gold solder   810°(
	340	500	510	40	15	14	95	900-940	1050	700	_	_	_	_	<b>√</b>	BEGO-Gold solder II 765° Pre-flux U Gold solder 810 BEGO-Gold solder I 810°0
																BEGO-Gold solder II 765° Pre-flux U Gold solder 810
	440	650	690	25	11	8	98	880-940	1020	700	_	-	_	-	√ 	BEGO-Gold solder I 810°0 BEGO-Gold solder II 765° Pre-flux U Gold solder 810
	350	560	570	50	23	21	102	860-940	1050	700	-	-	-	_	PlatinLloyd® M wire	BEGO-Gold solder I 810°0 BEGO-Gold solder II 765° Pre-flux U Gold solder 810
	350	455	460	12	6	4	107	860-920	1100	700	-	-	-	-	PlatinLloyd <sup>®</sup> M wire	BEGO-Gold solder I 810°C BEGO-Gold solder II 765° Pre-flux U Gold solder 810
	225	620	650	15	5	3	93	830-920	1030	700	-	-	-	-	ECO d'OR wire	BEGO-Gold solder I 810°( BEGO-Gold solder II 765° Pre-flux U Gold solder 810



The specified data are standard. Subject to change.

The BEGO Colour Code
The areas of colours within the characteristic fields approximately correspond to the intensity of the alloy colours.



## WORK PREPARATION

Proven materials and techniques in work preparation provide the basis for successful, accurate fabrication of a restoration.

#### **Blow-off nozzle**

• The tried and tested blow-off nozzle, made of rugged hard rubber, is ideal for cooling and blowing off models

Product details			
Availability	Presentation	Qty	REF
Blow-off nozzle	piece	1	21700

#### Ney measuring set

• The measuring instruments are used for model analysis, measuring undercuts and marking the equator in the partial denture technique

Scope of delivery	Presentation	Qty	REF	_				
Set of tools, shaft Ø 3 mm; 1 set consisting of undercut measuring instruments:			22160	- 1	ŧ.	П	н	
1 0.25 mm	piece	1	22145			8 I		ш
2 0.50 mm	piece	1	22146	- 1	7	7	, 1	Ш
3 0.75 mm	piece	1	22147	- 1				ш
4 Locating pin	piece	1	22148	- 8				
5 Wax scraper	piece	1	22149	- 1	- 11	1		ш
6 Refill holder	piece	1	22163	- 1	Ш	1		
Graphite refills	pack	1	22150	1	2	3	5	6

#### **Model base former**

- Ensures clean, smooth model base without grinding
- Two sizes are available for both the upper and lower jaw

Availability	Contents	Dimensions W x H x D (mm)	Presentation	Qty	REF
U1 (Lower jaw small)	5 pieces	80 x 15 x 57	set	1	52641
U2 (Lower jaw large)	5 pieces	90 x 15 x 66	set	1	52642
O1 (Upper jaw small)	5 pieces	80 x 15 x 57	set	1	52661
O2 (Upper jaw large)	5 pieces	88 x 15 x 64	set	1	52671
sorted (U1, U2, O1, O2 for each piece)	4 pieces	see above	pack	1	52630

#### **BegoStone plus**

#### super-hard plaster

- Type 4 high-quality, super-hard plaster which has been tried and tested over many years for building up models for the crown and bridge, inlay, partial denture and CAD/CAM techniques
- Optimal accuracy of detail with all standard impression materials demonstrates the extraordinary versatility of the product
- The thixotropic properties of BegoStone allow an immediate build-up
- BegoStone exhibits outstanding flow properties with only gentle vibration, making it easy to ensure that all parts of the impression are filled without any bubbles
- An ideal working time of approx. 5 minutes enables fatigue-free working
- The colour, ivory 35, guarantees that all fine details and preparation margins can be clearly captured and recognised in a scan
- Very smooth model surfaces and high abrasion resistance combined with ideal expansion values (0.09%, linear) provide an optimal basis for extremely precise restorations
- Extremely high bending tensile strength ensures optimal resistance against teeth and stumps breaking off
- Controlled batch-to-batch consistency means that BegoStone plus facilitates precise results which can be reproduced at any time

Product details						Scanna	ble!
Physical data							
Colour		ivory 35					
Soaking time		15 seconds					
Processing time at 20 °C		approx. 5 min	utes		N CELL	14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Setting time (Vicat test)		approx. 10 mi	nutes		4		
Compressive strength after 1 hour [MPa]		60				Begriftung plat	-
Bending tensile strength (DIN) after 24 hours [	MPa]	12			16		
Setting expansion [%]		0.09			Ŷ.		tion plant
Hardening time		approx. 30 mi	nutes			Property Comments	
Hardness after 1 hour [MPa]		approx. 220					31
Availability	Contents	Presentation	Qty	REF		7 Head	
BegoStone plus	5 kg	tub	1	54812	137/11	7 1 2 2 2 2	
BegoStone plus	12 kg	tub	1	54811			

A detailed brochure can be found at www.bego.com/download-center.

**DIN EN ISO 6873** 

#### Iso 8

#### Insulating material for composite techniques

• Iso 8 reliably insulates plaster against composite and facilitates clean and simple separation

Availability	Contents	Presentation	Qty	REF
Iso 8	1 litre	bottle	1	52700



### **DUPLICATING AND HARDENING**

The duplicate model is an important step in achieving an accurate fit.

Here BEGO offers an optimised and practical system: gels and silicones with high impression-taking accuracy, tried and tested duplicating flasks and perfect equipment for their handling.

#### **Gelovit 200**

## Robust duplicating unit – reliable, consistent results

- The programmable brushless motor offers greater reliability than conventional motors for unrivalled durability
- Intelligent programming emphasises the unit's reliability and long service life
- Innovative preparation concept with intelligent temperature control effectively prevents lumps forming in the hydrocolloid and guarantees the fastest possible preparation without scorching
- The special heating strategy prevents residue deposits and nozzle blockages whilst maintaining homogeneity
- A third temperature level minimises the heat shrinkage of the hydrocolloid and ensures an optimal fit
- The time at which the hydrocolloid is required to be ready can be easily pre-programmed for optimum processing.
- The number of required melting cycles can be entered individually. This ensures consistent quality of the duplicate models.
- The clearly laid out display provides information on all parameters and gives quick and easy access to all important functions



#### **Product details**

Technical data	
Height	565 mm
Width	310 mm
Depth	355 mm
Rated voltage	230 VAC, 50/60 Hz
Special voltage	100–240 VAC, 50/60 Hz
Power at rated voltage 230 V	900 VA
Capacity	3–6 kg
Weight	21 kg

Availability		Presentation	Qty	REF
Gelovit 200, 230 VAC, 50/60 Hz		piece	1	26330
Accessories	Contents	Presentation	Qty	REF
WiroGel® M duplicating gel for plaster, investment material and acrylic casting technique	6 kg	tub	1	54351
Castogel® duplicating gel for investment material and acrylic casting technique	6 kg	tub	1	52052
Wirodouble® duplicating gel for investment material	6 kg	tub	1	52050
Combi duplicating flask, acrylic		piece	1	52090

A detailed brochure can be found at www.bego.com/download-center.



**Duplicating gel** 

#### WiroGel® M

## Environmentally friendly duplicating gel based on agar-agar hydrocolloid for producing models using investment material, plaster and the acrylic casting technique

- For universal use: For all phosphate-bonded investment materials and type 4 plasters as well as the acrylic casting technique
- Highly accurate impression-taking; smooth model surfaces guarantee reliability in use and enable work results which meet the highest demands in terms of precision
- 15 melting cycles mean a very good cost-benefit ratio suitable for melting in a microwave without compromising quality or precision
- Duplicating with WiroGel® M is more than five times less expensive than with silicone, taking into account the costs for the duplicating unit
- Colour geared to contrast optimisation, thus ensuring optimal process reliability

A detailed brochure can be found at www.bego.com/download-center.





Wirovest® or WiroFast

Optimally coordinated system components make for simple handling and maximum user safety (partial denture investment materials on pages 40 and 42)

Wirovest® or WiroFast

#### WiroGel® C

## Reversible natural duplicating gel based on agar-agar hydrocolloid for producing models using investment material, plaster and the acrylic casting technique

- For universal use: For all phosphate-bonded investment materials and type 4 plasters, as well as a wide range of applications in the acrylic casting technique
- Shortened solidification times thanks to cooling in the fridge or cold water bath
- Highly accurate impression-taking and smooth model surfaces guarantee reliability in use and enable work results which meet the highest demands in terms of precision
- Natural hydrocolloid for excellent process reliability, particularly with white and light plasters
- Up to 12 melting cycles ensure very good value for money without compromising quality and precision
- WiroGel® C is suitable for melting in the microwave
- Naturally biodegradable

Availability	Contents	Presentation	Qty	REF
WiroGel® C	6 kg	tub	1	54870
WiroGel® C	10 kg	tub	1	54871
Accessories	Contents	Presentation	Qty	REF
Combination duplicating flask		set	1	52090

#### Castogel® and Castogel® mint

#### Reversible special duplicating hydrocolloid

- Special duplicating hydrocolloid for sophisticated partial dentures, combination work and the acrylic casting technique
- User-friendly thanks to its high level of impression-taking accuracy, even with the finest of details, and tear-resistant due to its outstanding elasticity.
  - This offers you the necessary reliability and precision in use
- Castogel® mint with additional fresh mint fragrance
- Economical can be reused many times
- Ecological completely biodegradable

Product details				
Availability	Contents	Presentation	Qty	REF
Castogel®	6 kg	tub	1	52052
Castogel® mint	10 kg	tub	1	52049

#### Wirodouble®

#### Reversible duplicating hydrocolloid

- Proven duplicating hydrocolloid for phoshate- or silicate-bonded investment models
- Frequent reusability is guaranteed by a high quality standard and makes for a user-friendly and economical product

Product details				
Availability	Contents	Presentation	Qty	REF
Wirodouble <sup>®</sup>	6 kg	tub	1	52050

### Combi duplicating flask for partial denture technique

#### Combi duplicating flask

- The low thermal conductivity of the plastic guarantees stress-free cooling of the duplicating material
- Two wedges integrated in the flask cover prevent rotation and ensure proper placement of the form back in the flask
- The Combi duplicating flasks are designed for use with our mould rings

Product details			
Availability	Presentation	Qty	REF
1 Combi duplicating flask with wedge top, base and 2 base formers (2 sizes)	piece	1	52090

#### Wirosil® Duplicating silicone

- Wirosil® is an addition-cured two-component silicone that reproduces master models extremely accurately due to its excellent dimensional stability
- With economy flask and stabilisation insert it enables work to be carried out easily and reliably without wasting material
- Ideal for duplicating milled areas in combination work. Mixing ratio: 1:1

#### Product details Physical data approx. 5 minutes Processing time • Setting time (22 °C) 30-40 minutes Mixing time 30 s • Shore A hardness (1 hr.) 17 Wirosil\* 1 Wirosil® 2 99,7 % • Recovery following deformation • Contraction (DIN 14356) 0.03 % Availability REF Contents Presentation Qty Tig Basic Wirosil® set: 1 bottle each = 1 kg Wirosil® 52000 piece 1 1+2, 1 measuring and mixing cup, 1 spatula, 1 duplicating flask, small, 1 duplicating flask, large, 1 spray bottle Aurofilm wetting agent, 1 spray bottle Durofluid model spray, 1 instruction for use Single pack Wirosil® 1 + 2 2 x 1 kg bottle 1 each 52001 Large pack Wirosil® 1 + 2 2 x 10 kg 51995 canister 1 each

#### Wirosil®plus Duplicating silicone

- Outstanding dimensional stability for extremely precise duplicate models
- 1:1 silicone for manual processing and use in the metering device
- Wirosil® plus has a setting time of just 10 minutes making it ideal for all dental technology work which demands speed as well as uncompromising precision
- Free-flowing consistency and optimal elastic recovery ensure perfect reproduction of combination work with milled surfaces

Product details						
Physical data					Fi 1	T-Comp
Processing time	3 min 30 s				Sales and the sales and the sales are the sa	
• Setting time (22 °C)	10–12 min	utes			William and No.	Virosit*** 2
Mixing time	30 s				Street digitality or closes	Other Silitane International Indiana International Indiana
Shore A hardness (1 hr.)	20				Marine Ma Marine Ma Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Marine Ma Marine Marine Ma Marine Marine Marine Marine Marine Marine Ma M	TOTAL STREET
Recovery following deformation	99,8 %				TT. 2	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL
Contraction (DIN 14356)	0,01 %				100	1 (X
Availability	Contents	Presentation	Qty	REF	Special services (C) sector	() BESIG
• Wirosil®plus	2 x 1 kg	bottle	je 1	54854		

	Contents	Presentation	Qty	REF		
Wirosil® mixing set		set	1	52004	Wiroplus* S	WiroFine
Aurofilm wetting agent (spray bottle)	100 ml	piece	1	52019	CONTROL OF THE PARTY OF THE PAR	77.
Wirosil® duplicating flask system		set	1	52083	And He	HAME THE
Complementary product					-	Sec. Mar.
Wiroplus® S or Wirofine Optimally matched system components mear expert results (page 43 and 39)	n clear handling,	processing relia	bility wit	h high-quality	Since Owner	

#### Wirosil® duplicating flask system

- Precise reproduction, saving of material, dimensional stability and easy handling characterise the Wirosil® duplicating flask system
- It consists of:
  - the base that holds the model
  - the sleeve with the optimal shape for upper and lower jaw models
  - the stabilisation insert of crucial importance for precision after removal of the master model and
  - three replaceable palate formers that essentially support reproduction accuracy and enable extremely economical silicone consumption through flexible positioning

Product details			
Availability	Presentation	Qty	REF
Wirosil® duplicating flask system incl. stabilisation ring with 3 palate formers			
small	set	1	52072
large	set	1	52083
Accessories	Presentation	Qty	REF
Stabilisation ring with 3 palate formers:			
for small duplicating flask	piece	1	52079
for large duplicating flask	piece	1	52084

#### **Durol E Eco hardening liquid**

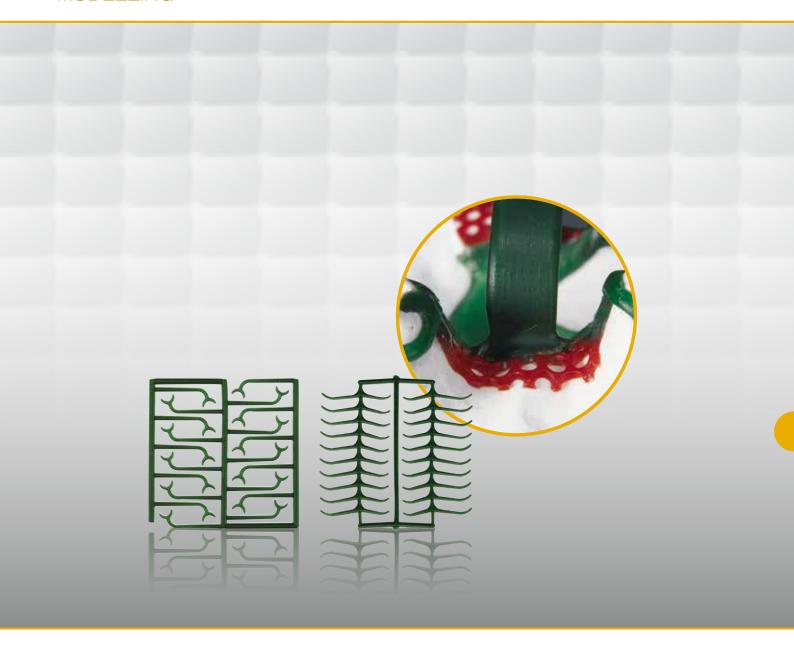
- The ecological dipping hardener Durol E is solvent-free and therefore completely biologically safe. During drying, hardly any odour develops since there are no solvents present
- Contamination can be easily removed with water
- 25 % saving in time and energy, because a drying temperature of 150 °C is sufficient

Product details				
Availability	Contents	Presentation	Qty	REF
Durol E Eco hardening liquid	1 litre	bottle	1	52148

#### **Durol / Durofluid Hardening liquid**

- Cold hardener for investment models
- Durol and Durofluid are used cold and penetrate extremely well into the surface of duplicate models during hardening; the models become hard and smooth
- Durol: the recommended drying temperature for the duplicate model is 250 °C
- Durofluid: to promote the adhesion of wax moulded parts, investment material models duplicated in silicone can be dried at approx. 70 °C–100 °C for approx. 10 minutes. The investment material models are then sprayed with a thin and even layer of Durofluid modelling spray.

Product details				
Availability	Contents	Presentation	Qty	REF
Durol dipping hardener	1 litre	bottle	1	52111
Durofluid modelling spray (1 spray bottle)	100 ml	piece	1	52008



### MODELLING

Your wax-up is like the signature of your dental laboratory: carefully selected wax components help you to achieve perfect results. Partially prefabricated profiles make for reliable and fast work.

#### Preparation wax for the partial denture technique

- The preparation wax is exceptionally malleable, allowing it to be adapted to the master model perfectly and with firm adhesion, which saves having to use an additional wax adhesive
- The exemplary shape retention and edge strength of the preparation wax, with a high solidification point of approx. 70 °C, mean that it can be used with duplicating hydrocolloid at working temperatures of 55 °C
- Simple removal from the master model following duplication rounds off the user-friendly working characteristics perfectly

Product details				
Availability	Contents	Presentation	Qty	REF
Preparation wax, colour: red, sheet size 17.5 x 8 cm				
0.5 mm	15 sheets	pack	1	40036
0.6 mm	15 sheets	pack	1	40037
0.7 mm	15 sheets	pack	1	40038

#### Blocking-out wax tailored to the particular requirements of the partial denture technique

- This wax was developed for blocking out undercuts, creating clasp steps and relieving critical areas of the model
- This blocking-out wax can be easily scraped and cut, is hard and thus ensures the dimensionally-stable, well-defined reproduction of clasp steps on the investment model
- The boiling-out temperature of approx. 90 °C, the setting temperature of approx. 68 °C and the melting temperature of approx. 80–85°C guarantee reliability and resilience during duplication, even at high temperatures

roduct details						
vailability	Contents	Presentation	Qty	REF	O. C.	
locking-out wax, colour: pink	70 g	tin	1	40032		

#### **Smooth casting wax**

- Simple, crease-free adaptation
- Adheres firmly to the investment model and burns out leaving no residue
- The high transparency of the wax makes for optimal clarity of the construction markings on the master model and saves unnecessary, time-consuming corrections to the wax-up

Product details				
Availability	Contents	Presentation	Qty	REF
Smooth casting wax, colour: green, Sheet size 17.5 x 8 cm				
0.25 mm	15 sheets	pack	1	40091
0.3 mm	15 sheets	pack	1	40092
0.4 mm	15 sheets	pack	1	40093
0.5 mm	15 sheets	pack	1	40094
0.6 mm	15 sheets	pack	1	40095

#### Stippled casting wax

- Tried and tested wax for modelling the bases of upper partial dentures
- Can be easily adapted and adheres firmly to the investment model with no additional wax adhesive
- The stippled casting wax is available in three different surface textures from fine to coarse and allows customisation of the surface shape as required by the practitioner
- The individual stippling of the cast partial denture base facilitates the gripping of food and reduces the foreign body sensation for the patient's tongue

#### **Wax profiles**

- Tried and tested wax profile shapes make for easy, customised wax-up for a wide range of indications in dental technology
- BEGO wax profiles are very easy to mould, do not bend up and can be easily fixed to the investment model
- The wax formula is designed to provide high internal stability and thus offers remarkable protection against inadvertent deformation and constriction during shaping

Product details					
Availability	Contents	Presentation	Qty	REF	
Wax profiles, colour: green, length 17 cm					
0.8 mm beading wire	30 g	pack	1	40261	
1.0 mm beading wire	40 g	pack	1	40263	
1.35 mm sprues	50 g	pack	1	40301	
1.6 x 4.0 mm bars, lower jaw	75 g	pack	1	40421	
2.0 x 4.0 mm bars, lower jaw	85 g	pack	1	40422	
1.15 x 1.75 mm clasps, continuous clasps	50 g	pack	1	40441	
<ul> <li>2.0 x 4.5 mm casting strips, upper jaw (small bases)</li> </ul>	90 g	pack	1	40462	
2.0 x 6.5 mm casting strips, upper jaw	125 g	pack	1	40461	

#### Flat casting strips – optimally adapted for the casting of maxillary bases

- The creation and dimensioning of the sprues are just as important as a precise wax-up
- In the case of transverse bars, horseshoe-shaped and large maxillary partial denture bases, the flat casting strips have proven
  particularly successful

#### Tip:

- Wax profiles 2.0 mm x 6.5 mm for sprues on large maxillary wax-ups
- Wax profiles 2.0 mm x 4.5 mm for delicate maxillary wax-ups

#### Wax profile assortment

- The BEGO wax profile assortment includes the most widely used profiles for wax-ups, which come in a practical box with compartments
- Medium-hard wax quality

/ax profile assortment, colour: green, length 17 cm pack 1 40250 onsisting of:  0.8 mm beading wire = 6 g
1.35 mm Gusskanäle = 10 g 2.0 x 4.0 mm bars, lower jaw = 17 g
<ul> <li>2.0 x 6.5 mm casting strips, upper jaw = 2 x 25 g</li> <li>1.15 x 1.75 mm clasps, cont. clasps = 10 g</li> </ul>

#### Anatomical wax bar profiles for lower-jaw partial denture frames

- The rounded upper edge and concave shape facing the tongue plus the anatomical lower-jaw profile make for good patient acceptance.
- Tip: For periodontal prophylaxis, a distance of 4 mm should be maintained between the gingival margin and the upper edge of the bar in the case of lower-jaw partial denture bases

Product details							
Availability	Contents	Presentation	Qty	REF			
Anatomical wax bar profile, colour: green, length 17 cm	15 pieces	pack	1	40075			

#### Modelling wax starter set for the partial denture technique

- The modelling wax starter set for the partial denture technique includes the most commonly used wax patterns and profiles, ideal for familiarisation and for dental laboratories with a small proportion of partial dentures
- The various profiles cover almost all the indications of the partial denture technique

ails		
Pre	esentation Qty RI	EF
x starter set pied	ece 1 40	0251

#### **Wax retentions** for lower-jaw partial denture frames

• For the secure attachment of plastic saddles to lower partial dentures

Product details				
Availability	Contents	Presentation	Qty	REF
Colour: red, length: 17 cm				
1 Wax hole retentions	15 pieces	pack	1	40620
Wax hole retentions (laboratory pack)	150 pieces	pack	1	40630
2 Wax retentions with round holes	15 pieces	pack	1	40051
Wax retentions with round holes (laboratory pack)	150 pieces	pack	1	40052

#### Wax grid retentions for maxillary partial denture frames

1 Wax grid retentions – permit the simple and effective shaping of retentions to total or partial dentures. They guarantee a high level of security in the connection between the resin and the partial denture plate. The large grid retentions facilitate very economical use of material

- 2 the same as 1 but with a larger plate
- 3 Wax diagonal grid retentions for shaping the retentions for partial dentures. This particularly advantageous shape offers a very high degree of security in the connection between the resin and the dentures
- 4 + 5 Wax grid retentions with holes can be used as retentions for partial maxillary dentures and as a reinforcement for acrylic full maxillary acrylic dentures

Product details								
Availability	Contents	Presentation	Qty	REF				
Wax grid retentions, colour: red								
1 60 x 42 mm	25 pieces	pack	1	40060				
2 100 x 100 mm	10 pieces	pack	1	40062				
3 75 x 150 mm	10 pieces	pack	1	40061				
4 for partial upper-jaw dentures, 70 x 70 mm	20 pieces	pack	1	40066	0 0	3	4	5
5 for upper-jaw dentures, 70 x 70 mm	20 pieces	pack	1	40039				

#### Wax border strips with retentions

- Time savings when modelling upper-jaw frames with large saddles
- A great advantage is that the border strip can easily be shaped as desired since the size can be varied by trimming the tips of the retentions
- The wax is so supple that it can be shaped easily and reliably as required onto the duplicate model

Product details				
Availability	Contents	Presentation	Qty	REF
Wax border strips, colour: red, length 17 cm	25 pieces	pack	1	40025

#### Wax clasp profiles for molars and premolars – medium hard, dimensionally stable –

- The half tear-drop shaped cross section prevents food residues from getting stuck on molars and premolars and increases the stability over the entire clasp length
- All in all a very slender clasp profile with very good acceptance among patients

Product details				
Availability	Contents	Presentation	Qty	REF
Vax clasp profiles, colour: green, 280 clasps)	10 sheets	pack	1	40020

#### Wax patterns / wax clasp profile

- These preshaped clasp profiles simplify modelling and help save time
- The shape of the profiles enables a large number of variations by shortening the wax form

#### Wax patterns ring clasp profile

• Slender standard clasp profiles for molars

Availability	Contents	Presentation	Qty	REF
Wax patterns ring clasp profile colour: green				
1 straight	10 sheets	pack	1	40029
2 curved	10 sheets	pack	1	40023

#### **Wax wire for sprues**

- BEGO wax wires are very easy to shape, do not bend up, and burn out leaving no residue. This allows casting of stress-free constructions and use with pressable ceramics
- The wax formula is designed to provide high internal stability and offers remarkable protection against inadvertent deformation and constriction during bending
- The wax wire facilitates economical use because only the length that is actually required can be cut off.
- An opening in the side of the outer packaging allows the wax wire to be fed directly from the pack, thus offering optimal protection against undesirable impurities and deformations

Product details				
Availability	Contents	Presentation	Qty	REF
Wax wire, medium-hard, colour: green				
Ø 2.5 mm, approx. 50 m	250 g	roll	1	40085
Ø 3.0 mm, approx. 36 m	250 g	roll	1	40086
Ø 3.5 mm, approx. 28 m	250 g	roll	1	40087
Ø 4.0 mm, approx. 21 m	250 g	roll	1	40088
Ø 5.0 mm, approx. 17 m	250 g	roll	1	40089

#### Plastic sticks and plastic hollow sticks for distribution channels

- They stabilise the wax-up when using the lift-off technique for crowns and bridges, can be easily shaped over a flame, and burn out leaving no residue
- Hollow sticks are used in metal-ceramic work for non-precious alloys and alloys with a reduced precious metal content, especially in larger multi-unit constructions

Product details					
Availability	Contents	Presentation	Qty	REF	
Sticks, length 17 cm, Ø 2.5 mm	40 pieces	pack	1	52590	
Cross section 1:1)					
Hollow sticks, length 16.5 cm, Ø 5 mm (Cross section 1:1)	12 pieces	pack	1	52595	

#### Rapid-Wax-System compatibel with Rapid Ringless System

- Time savings as compared to individual sprue system technique
- Secure position and dimensions
- Reliable sprue transitions
- Modelling wax that burns without residue

Product details				
Availability	Contents	Presentation	Qty	REF
Direct wax sprues				
Ø 2.0 mm	250 pieces	pack	1	40654
Ø 2.5 mm	250 pieces	pack	1	40655
Ø 3.2 mm	250 pieces	pack	1	40656
Ø 5.0 mm with distributor bar	100 pieces	pack	1	40652
Ø 5.0 mm with distributor bar	250 pieces	pack	1	40653
Wax button for Rapid Ringless System	100 pieces	pack	1	40657

#### Occlusal wax

- Ideal for efficient and aesthetic wax-ups of the occlusal surfaces
- The opaque wax is extremely easy to apply, the contours already stand out clearly whilst still in a heated condition
- The BEGO occlusal waxes do not stain or stick and are highly suitable for milling

Product details					
Availability	Contents	Presentation	Qty	REF	
Occlusal wax, colour: grey	70 g	tin	1	40114	
Occlusal wax, colour: ivory	70 g	tin	1	40118	Chichadriaetha  Chichadriaetha

#### Aroma occlusal wax

· Aroma occlusal wax is based on BEGO occlusal wax and comes with individual fragrances



#### FC modelling wax for pressable ceramics

- Special wax for crowns and bridges in press technique and press-to-metal technique, burns out leaving no residue
- This high-quality modelling wax is specially formulated for the full ceramic sector

Product details					
Availability	Contents	Presentation	Qty	REF	
FC modelling wax, colour: navajowhite	70 g	tin	1	40103	
FC modelling wax, colour: grey	70 g	tin	1	40105	Modelmanning FC  William Common Commo

#### **Crown wax**

- High-quality hard and medium-hard wax for wax-ups in the crown and bridge technique
- It can be built up very easily, solidifies quickly and exhibits ideal scraping characteristics

Product details				
Availability	Contents	Presentation	Qty	REF
hard: colour blue	70 g	tin	1	40111
hard: colour grey	70 g	tin	1	40145
hard: colour ivory	70 g	tin	1	40146
medium-hard: colour dark blue	70 g	tin	1	40115
medium-hard: colour grey	70 g	tin	1	40147
medium-hard: colour ivory	70 g	tin	1	40148

#### Milling wax

- BEGO milling waxes in green and grey are specially formulated to meet the particular challenges of machine processing.
- The ideal hardness of the wax prevents shavings from adhering to the wax-up and clogging up the milling tool, so the view of the milled surface is unobstructed at all times
- The grey milling wax is also formulated with the maximum possible opacity, thus enabling optimal visual assessment of the milled surfaces and contours
- · Also ideal for milled bar constructions, e.g. on implants, thanks to its hardness and excellent milling properties

Tip: Optimal milling speed in the range 2500–5000 rpm (depending on the cutting edge geometry and diameter of the cutter)

Product details					
Availability	Contents	Presentation	Qty	REF	
colour green	70 g	tin	1	40113	
colour grey	70 g	tin	1	40119	Francische  Company of the Company o

#### **Cervical wax**

- · Special wax with a low elastic limit for modelling cervical margins of crowns, precision components and inlays
- Stress-free, smooth-flowing and burns out leaving no residue

Product details				
Availability	Contents	Presentation	Qty	REF
colour eggplant	70 g	tin	1	40112

#### ScanWax / ScanBlock

- An increasing number of waxed-up restorations are being scanned using the CAD/CAM technique
- The use of highly opaque wax is the most effective way of preventing translucent effects and ensuring optimal data generation
- · Precision dental restorations using the CAD/CAM technique can only be fabricated if there is high data density
- The high degree of hardness and opacity of BEGO ScanBlock wax also makes it ideal for waxing up restorations fabricated by the milling technique, and for modelling standard crowns and bridges
- The solidification temperature of both waxes is 62°C
- · A wax with very high opacity is required for blocking out small cavities on the plaster die in CAD/CAM work
- Translucent effects cause data loss during scanning
- ScanBlock ensures data density, even with thin layers of wax

Product details					
Availability	Contents	Presentation	Qty	REF	
ScanWax colour dentine	70 g	tin	1	40151	Seattles Scatters
ScanBlock colour sky-blue	70 g	tin	1	40152	CA HECO S

#### **1** Dipping wax

#### 2 Dipping wax hard-elastic

- 1 For the fabrication of wax copings for the crown and bridge technique. Working temperature 70–75°C
- 2 The red BEGO hard-elastic dipping wax ensures a distinct, reproducible quality of coping. The viscosity remains constant even if the wax is kept at stand-by temperature for a long time, and thus enables targeted control of the coping thickness. Only contains organic components

Product details					
Availability	Contents	Presentation	Qty	REF	
1 Dipping wax colour green	150 g	pack	1	40009	
2 Dipping wax hard-elastic colour red	70 g	tin	1	40155	

#### Adapta deep-drawing system

- Simple and fast deep-drawing of copings
- Reasonably priced system which has been proven over many years with special plastic foils
- A uniform minimum wall thickness ensures a high level of stability in the copings
- Ideal for the double-crown technique; coated with milling wax, the Adapta coping offers a high level of protection against inadvertent milling through
- The thin 0.1 mm spacer foil, which is used as part of the system, frees up the necessary, defined space for the luting material

Product details				
Availability		Presentation	Qty	REF
Adapta deep drawing system comprising: 1 Forming tub with Adapta mastic 1 Spare pack Adapta mastic 1 Foil holder 100 Adapta foils, 0.6 mm in foil dispenser 1 Pack, 100 Adapta foils, 0.6 mm 200 Adapta foils, 0.1 mm red, in foil dispenser		set	1	20500
Adapta deep drawing system intro set comprising: 1 Forming tub with Adapta mastic 1 Foil holder 50 Adapta foils, 0.6 mm 50 Spacer foils, 0.1 mm		set	1	20520
Accessories	Contents	Presentation	Qty	REF
Adapta mastic (spare pack)		pack	1	20503
Forming tub with Adapta mastic, 1 Forming tub		piece	1	20504
Adapta foil holder		piece	1	20510



Contents	Presentation	Qty	REF
	pack	1	20503
	piece	1	20504
	piece	1	20510
	pack	1	20519
	pack	1	20521
200 pcs.	pack	1	20517
200 pcs.	pack	1	20502
100 pcs.	pack	1	20501
	200 pcs. 200 pcs.	pack piece piece pack pack 200 pcs. pack 200 pcs. pack	pack         1           piece         1           piece         1           pack         1           pack         1           200 pcs.         pack         1           200 pcs.         pack         1

### Rapidi

#### modelling knife

- The Rapidi modelling knife is ideal for cutting, scraping and modelling
- Easy-to-change blade

vailability	Contents	Presentation	Qty	REF
apidi modelling knife		piece	1	52270
apidi spare blades	40 pieces	set	1	52280

## **BEGO** modelling wax for prosthetics

- Sheets of pink standard wax for wax-ups of bases for full or partial dentures, partial denture saddles and occlusal registrations
- Easily shaped and modelled with minimal contraction
- Ideal strength for secure attachment of acrylic teeth
- Solidification point of approx. 59 °C guarantees stable try-ins and enables use as a modelling wax in the acrylic casting technique

Product details				
Availability	Contents	Presentation	Qty	REF
BEGO modelling wax, colour: pink, thickness 1.5 mm	500 g	pack	1	40001
BEGO modelling wax, colour: pink, thickness 1.5 mm	2.5 kg	pack	1	40007

### Isocera

# Separating liquid for the crown and bridge technique

- Isocera separates wax from the plaster model very effectively
- · Highly suitable for insulating plaster dies when copings are created using the wax dipping technique

Product details				
Availability	Contents	Presentation	Qty	REF
Isocera	200 ml	bottle	1	52705

### **Aurofilm**

# Wetting agent for investment and releasing the surface tension of silicone duplicating moulds

- Reliable preparation agent for investment in CoCr as well as crown and bridge work
- Aurofilm eliminates the water-repellent effects of the wax pattern ensuring smooth casting surfaces
- Aurofilm is also used successfully in the silicone duplication technique to reduce surface tension

Product details				
Availability	Contents	Presentation	Qty	REF
Aurofilm	1 litre	bottle	1	52015
Aurofilm (spray bottle – for refilling)	100 ml	bottle	1	52019



# INVESTING

For investing wax-ups, BEGO offers you a whole range of innovative investment materials with a proven track record. Bellavest® SH, Wirovest® and WiroFine are well-known branded products. Mixing liquids specially formulated for use with the particular type of investment material regulate the expansion reliably and ensure excellent casting results.

Guaranteed 24-month shelf life in the sealed sachet ensures reproducible quality over a long period of time.

### WiroFine

Universal investment material for all indications in the partial denture and combination technique, for gel or silicone duplication

- Can be heated rapidly or conventionally to 1050 °C with ideal expansion values, offers the level of flexibility essential for the modern dental laboratory
- Rapid preheating up to 1000 °C: Insertion temperature = final temperature means a time saving of 20%-30% in comparison with investment materials which have to be heated up from 600 °C
- Ideal flow properties make for reliable, fatigue-free working, since even the finest areas are precisely reproduced
- The precision of the duplicate models, along with high edge strength, makes for an optimal accuracy of fit without time-consuming finishing – ideal for combination work
- · Can be used for all shapes of mould and wax-up geometries: System-independent whilst ensuring reliable, efficient processing
- Excellent deflasking properties thanks to the minimal reaction between the investment material and the alloy. The advantage for you: Time saving and economical use of blasting materials (Korox® 110 µm, REF 46044, page 93)
- Free selection of duplicating method
  - Duplication with gel (e.g., Wirogel® M, REF 54351, page 21) results in good model surfaces and cost effectiveness
  - Combination with silicone duplication (e.g., Wirosil®, REF 52000, page 23) facilitates maximum precision and time savings (no hardening necessary)
- Reliable expansion control for excellent fit results thanks to the special liquid BegoSol® K
- System components for one-piece casting. The combination with WiroOneplus and Wirobond® 280 facilitates the casting of perfectly fitting, solder- and adhesive-free combined restorations



Product details	
Physical data	
Mixing liquid	BegoSol® K / optional BegoSol® (BegoSol® Anti-freeze optimization up to -10 °C)
Processing time at 20 °C	approx. 3 minutes 30 seconds
Shelf life in unopened bag	24 months
Characteristic values of the material according to DIN	EN ISO 15912
Beginning of solidification (Vicat time)	6 minutes
Compressive strength [MPa]	11

Availability		Contents	Procentation	Otv	DEE
Linear thermal expansion [%]	0.8				
Compressive strength [MPa]	11				
Beginning of solidification (Vicat time)	6 minutes				

Availability	Contents	Presentation	Qty	REF
WiroFine, 45 piece 400 g bags	18 kg	carton	1	54345
WiroFine, 15 piece 400 g bags	6 kg	carton	1	54344
WiroFine, 30 piece 200 g bags	6 kg	carton	1	54348
The packs do not contain any mixing liquid.				

Accessories	Contents	Presentation	Qty	REF
BegoSol® K mixing liquid*, 1 bottle	1 litre	bottle	1	51120
BegoSol® K mixing liquid*, 1 canister	5 litre	canister	1	51121
BegoSol® mixing liquid**, 1 bottle	1 litre	bottle	1	51090
BegoSol® mixing liquid**, 1 canister	5 litre	canister	1	51091

**DIN FN ISO 15912** 





### Wironit® and WIRONIUM® group alloys (59 onwards)

Optimally matched system components mean clear handling, processing reliability with high-quality expert results

Non precious metal alloy

A detailed brochure can be found at www.bego.com/download-center. \* BegoSol® K is sensitive to freezing - \*\* BegoSol® (with freeze protection) only suitable for conventional preheating

### Wirovest®

# Standard investment material for the partial denture technique

- Classic phosphate-bonded partial denture investment material with particularly good results in the gel-duplication technique
- High expansion for accuracy of fit and minimal finishing
- Smooth model surfaces facilitate modelling and ensure equally smooth cast surfaces
- When mixed with water (for pouring the cylinder), Wirovest® exhibits a significantly reduced deflasking hardness – this saves time and money
- BegoSol® mixing liquid (frost protected to -10°C) for assured procurement all year round



# Physical data

Product details

Filysical data	
Mixing liquid	BegoSol® (Anti-freeze optimization up to -10 °C)
Processing time at 20 °C	approx. 3 minutes
Shelf life in unopened bag	24 months

Characteristic	values of the	material	according to	DIN	EN ISO	15912

Characteristic values of the material according to	DIN EN 130 13912				
Beginning of solidification (Vicat time)	5 minutes				
Compressive strength [MPa]	15				
Linear thermal expansion [%]	1.15				
Availability		Contents	Presentation	Qty	REF
Wirovest®, 45 pieces 400 g bags		18 kg	carton	1	51046
Wirovest®, 15 pieces 400 g bags		6 kg	carton	1	51057
Wirovest®, 4 pieces 4,5 kg bags		18 kg	carton	1	51048
The packs do not contain any mixing liquid.					
Accessories		Contents	Presentation	Qty	REF

BegoSol® mixing liquid 1 litre bottle 51090 BegoSol® mixing liquid 51091 5 litres canister

**DIN EN ISO 15912** 





### Wironit® and WIRONIUM® group alloys (59 onwards)

Optimally matched system components mean clear handling, processing reliability with high-quality expert results

Non precious metal alloy

### Wirovest®plus

# Enhanced version of Wirovest® partial denture investment material

- Wirovest<sup>®plus</sup> offers the benefits of extended working time and universal suitability for duplication within all conceivable areas of indication
- Wirovest<sup>®plus</sup> is a partial denture investment material which achieves excellent accuracy of fit with a wide range of duplication techniques and working parameters
- Extended working time enables fabrication of several models and moulds in a single working step, thus saving time
- Very smooth surfaces ensure equally smooth casting results
- Precise duplicate models with high edge strength make for easy modelling and exactly fitting castings, without the need for timeconsuming finishing
- The good deflasking properties reduce the effort required in deflasking and simplify the cleaning of the cast object
- Qualified for conventional casting of plotted CAD/Cast®-frames
- BegoSol® Mixing liquid for simple expansion control



		_		_			
Product details							
Physical data					·		
Mixing liquid	BegoSol® (Anti-freeze o	ptimization up to	-10 °C)				
Processing time at 20 °C	3 minutes 15 seconds						
Shelf life in unopened bag	24 months						
Characteristic values of the material according to D	IN EN ISO 15912						
Beginning of solidification (Vicat time)	approx. 6 minutes						
Compressive strength [MPa]	15						
Linear thermal expansion [%]	1.15						
Availability		Contents	Presentation	Qty	REF		
Wirovest®plus, 45 pieces 400 g bags		18 kg	carton	1	54821		
Wirovest®plus, 15 pieces 400 g bags		6 kg	carton	1	54822		
The packs do not contain any mixing liquid.							
Accessories		Contents	Presentation	Qty	REF		
BegoSol® mixing liquid, 1 bottle = 1 l		1 litre	bottle	1	51090		
BegoSol® mixing liquid, 1 canister = 5 l		5 litres	canister	1	51091		

**DIN EN ISO 15912** 





### Wironit® and WIRONIUM® group alloys (59 onwards)

Optimally matched system components mean clear handling, processing reliability with high-quality expert results

Non precious metal alloy

### WiroFast

# Partial denture investment material suitable for shock heating

- WiroFast is the phosphate-bonded partial denture investment material developed specifically to offer both homogeneous duplication properties in gel and optimal suitability for shock heating
- The mould is inserted directly into the furnace, which is preheated to 900 °C, only 10 mins after investing, which represents a considerable reduction in the duration of the heating process
- Optimal duplication properties in gel for very smooth model surfaces – duplication in silicone is also possible
- Excellent flow properties facilitate fatigue-free working even on slender model parts
- Ideal deflasking properties shorten the deflasking process and reduce the necessary use of blasting materials
- Excellent accuracy of fit and smooth cast objects ensure little effort is expended on adjustments to the cast
- Suitability for both shock heat and conventional heating processes offers the flexibility required for day-to-day work in the laboratory
- As a mixing liquid, BegoSol® ensures economical processing all year round



Product details					
Physical data					
Mixing liquid	BegoSol® (Anti-freeze	optimization up to	-10 °C)		
Processing time at 20 °C	approx. 3 minutes				
Characteristic values of the material according to	DIN EN ISO 15912				
Beginning of solidification (Vicat time)	approx. 5 minutes				
Compressive strength [MPa] (after 2 hours)	approx. 11.9				
Linear thermal expansion [%]	approx. 0.8				
Flowability [mm]	approx. 141				
Availability		Contents	Presentation	Qty	REF
WiroFast, 45 pieces 400 g bags		18 kg	carton	1	54834
WiroFast, 15 pieces 400 g bags		6 kg	carton	1	54835
Test Kit					54839
Accessories		Contents	Presentation	Qty	REF
BegoSol® mixing liquid		1 litre	bottle	1	51090
BegoSol® mixing liquid		5 litres	canister	1	51091

### Wiroplus® S

# Precision partial denture investment material for the silicone duplication technique

- Long working time for perfect filling
   – even with the finest details
   – makes for reliable processing
- The high edge strength makes for stable, precise modelling
- Very smooth duplicate models and equally smooth cast surfaces ensure impressive accuracy of fit and minimise the finishing required
- Optimal expansion parameters mean a reproducible accuracy of fit plus considerable time savings, especially on milled surfaces
- Very good deflasking properties save time and reduce material consumption
- Reliable expansion control for excellent fit results with BegoSol® mixing liquid



Product details	
Physical data	
Mixing liquid	BegoSol® (Anti-freeze optimization up to -10 °C)
Processing time at 20 °C	approx. 4 minutes
Shelf life in unopened bag	24 months
Characteristic values of the material according	g to DIN EN ISO 15912
Beginning of solidification (Vicat time)	5.5 minutes
Compressive strength [MPa]	18
Linear thermal expansion [%]	1.2
Availability	REF
1 carton, 18 kg = 45 pieces 400 g bags	50248
1 carton, 6 kg = 15 pieces 200 g bags	54353
The packs do not contain any mixing liquid.	
Accessories	REF
BegoSol® mixing liquid, 1 bottle = 1 l	51090
BegoSol® mixing liquid, 1 canister = 5 l	51091

A detailed brochure can be found at www.bego.com/download-center.

DIN EN ISO 15912

### WiroOne<sup>plus</sup>

# double crowns and partial dentures in the BEGO one-piece casting technique, simple, effective and economical

- WiroOne<sup>plus</sup> has been specially developed for the dies on duplicated models
- It is used in combination with the tried and tested WiroFine
  partial denture investment material and, with its optimal working
  parameters, it allows effective and economical fabrication of a
  combined restoration using the one-piece casting technique
- Fine, creamy consistency for smooth cast surfaces and a significant reduction in the amount of finishing required
- A working time of approx. 5 mins enables effortless filling of even the finest model parts
- Exact expansion control with special liquid ensures reproducible accuracy of fit
- The elimination of soldering saves time, reduces material consumption and optimises biocompatibility
- High-quality, space-saving restorations with a slender design for all-round patient satisfaction





Product details		
Physical data	50 %	80 %
Processing time at 20 °C	approx. 5 min.	approx. 4.5 min.
Total expansion [%]	1.7	2.2
Shelf life in unopened bag	24 months	24 months
Characteristic values of the materia	al according to DIN	N EN ISO 15912
Beginning of solidification (Vicat time)	approx. 10.5 minutes	approx. 10 min.
Compressive strength [MPa] (after 2 hours)	4.2	5.1
Linear thermal expansion [%]	0.8	0.9
Availability		REF
1 carton, 5 kg = 50 pieces 100 g without liquid	bags	54823
Accessories		REF
WiroOne-Liquid,1 bottle = 1 I		54824
Measuring cylinder 25 ml		18073
Measuring cylinder 50 ml		18074
Test Kit		54829

### Bellavest® SH

Shock heat – rapidly or conventionally heatable precision casting investment material for crowns and bridges – also those made from pressable or press-to-metal ceramics

- The precision crown and bridge investment material Bellavest®
   SH offers outstanding versatility and flexibility
- Appointments can be coordinated with ease because Bellavest<sup>®</sup>
   SH can either be preheated rapidly, with an insertion temperature of up to 900°C, or conventionally
- Phosphate-bonded precision casting investment material offers reliable, simple handling along with optimal parameters of use
- Simple to use with the special mixing liquid BegoSol® HE for maximum flexibility in conjunction with just a single liquid
- Precise expansion control and fine, creamy consistency for reliable processing and reproducible quality for a range of indications, from pressable ceramics to telescopic crowns made from non-precious alloys
- Long working time of 5 minutes enables reliable, fatigue-free working
- Extremely smooth cast surfaces make for a good accuracy of fit and time savings due to minimal finishing times
- Cures with a high edge-strength, yet still permits easy deflasking. For the user, this means time savings and economical use of blasting materials (Korox®, REF 46014, page 93)









### Wirobond® 280 premium alloy

- REF 50134 (page 58)
- Easy preparation due to a low hardness, biocompatibility tested and certified

### Wiron® 99 non-precious alloy

- REF 50225 (page 61)
- Biocompatible and proven worldwide for over 25 years

Wirobond® 280, Wiron® 99

Product details					
Physical data					
Mixing liquid	BegoSol® HE				
Processing time at 20 °C	approx. 4.5-5 minutes				
Shelf life in unopened bag	24 months				
Characteristic values of the material according	to DIN EN ISO 15912				
Beginning of solidification (Vicat time)	approx. 10 minutes				
Compressive strength after 2 hours [MPa]	4.2-5.1				
Linear thermal expansion [%]	0.85				
Availability		Contents	Presentation	Qty	REF
Bellavest® SH, 80 x 160 g bags		12.8 kg	carton	1	54252
Bellavest® SH, 30 x 160 g bags		4.8 kg	carton	1	54247
Bellavest® SH, 144 x 90 g bags		12.96 kg	carton	1	54257
Bellavest® SH, 50 x 100 g bags		5 kg	carton	1	70060
The packs do not contain any mixing liquid.					
Accessories		Contents	Presentation	Qty	REF
BegoSol® HE Mixing liquid*		1 litre	bottle	1	51095
BegoSol® HE Mixing liquid*		5 litres	canister	1	51096

A detailed brochure can be found at www.bego.com/download-center.

\* BegoSol® HE is sensitive to freezing

**DIN EN ISO 15912** 

# Instructions for using Bellavest® SH:

Universal investment materials are characterised by adjustable expansion levels and resistance to temperature and pressure. Bellavest® SH combines all the requirements for crown and bridge work. This applies equally to precious-metal and non-precious alloys, and also includes pressable ceramics. With BegoSol® HE the desired expansion can be adjusted for every application and indication. This makes Bellavest® SH one of the world's leading crown and bridge investment materials. It is best to use Bellavest® SH and BegoSol® HE at a constant temperature of + 20 °C and processing parameters, such as mixing time and mixing speed, should also be constantly maintained to ensure consistent.

# **Tips for application**

- The higher the concentration of BegoSol®, the greater the expansion of the investment material
- Lowering the concentration reduces the level of expansion
- Uniform parameters of use are essential for achieving reproducible casting results

### Bellavest® DR

# Low-dust, shock-heat or conventionally heatable precision casting investment material for crown and bridge techniques

- The new precision crown and bridge investment material Bellavest® DR is characterised by its considerably (up to 80 %) reduced dust creation during processing which in turn contributes to a significant reduction of harmful guartz and cristobalite dust in laboratories
- Bellavest® DR can be heated conventionally or using shock-heat at an insertion temperature of up to 900 °C and results in a considerable reduction in the duration of the heating process
- Bellavest® DR has been developed based on tried-and-tested Bellavest investment materials and thus offers simple handling along with optimal parameters of use
- Bellavest® DR is a phosphate-bonded precision casting investment material with a long processing time of approx. 5 minutes for reliable and fatigue-free processing
- Precise expansion control and a fine and creamy consistency ensure smooth casting surfaces and consistent reproducible fit results
- Simple to use with the special mixing liquid BegoSol® HE for maximum flexibility in conjunction with just a single liquid
- Bellavest® DR cures with a high edge-strength, yet still permits easy deflasking which means time savings and the economic use of blasting materials for the user

# Product details

Physical data				
Mixing liquid		BegoSol® HE		
Working time at 20°C		approx. 5 min		
Shelf life in unopened bag		24 months		
Key material values according to DIN EN ISO 15912				
Beginning of setting (Vicat time)		approx. 10 min		
Compressive strength [MPa]		approx. 4 MPa		
Linear thermal expansion [%]		approx. 1.1 %		
Availability	Contents	Presentation	Qty	REF
Availability  Bellavest® DR, 80 x 160 g bag	Contents 12.8 kg	<b>Presentation</b> carton	Qty	<b>REF</b> 54861
			<b>Qty</b> 1	
Bellavest® DR, 80 x 160 g bag	12.8 kg	carton	<b>Qty</b> 1 1	54861
Bellavest® DR, 80 x 160 g bag Bellavest® DR, 30 x 160 g bag	12.8 kg	carton	Qty 1 1 Qty	54861
Bellavest® DR, 80 x 160 g bag  Bellavest® DR, 30 x 160 g bag  The packages do not contain any mixing liquid.	12.8 kg 4.8 kg	carton carton	1 1	54861 54862
Bellavest® DR, 80 x 160 g bag Bellavest® DR, 30 x 160 g bag The packages do not contain any mixing liquid.  Accessories	12.8 kg 4.8 kg	carton carton  Presentation	1 1	54861 54862 <b>REF</b>



DIN EN ISO 15912

A detailed brochure can be found at www.bego.com/download-center.





### Wirobond® 280 premium alloy

- REF 50134 (page 58)
- Easy preparation due to a low hardness, biocompatibility tested and certified

### Wiron® 99 non-precious alloy

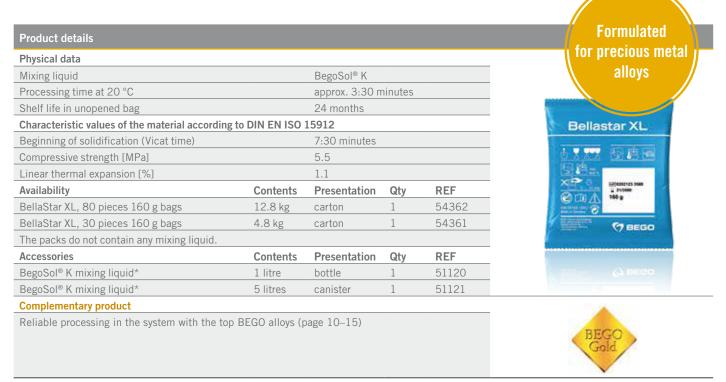
- REF 50225 (page 61)
- Biocompatible and proven worldwide for over 25 years

Wirobond® 280, Wiron® 99

### BellaStar XL

# The premium investment material for crowns and bridges

- Extremely fine-grained with an excellent accuracy of fit
- Ideal for precious-metal alloys, but also well suited for non-precious alloys in many indications
- BellaStar XL is suitable for rapid or conventional heating, and the insertion temperature can be the same as the final temperature
- Thin-to-creamy consistency and optimal flow properties allow problem-free filling of even the finest model details
- Fine-grained raw materials make for extremely smooth and precise cast surfaces
- The casting mould can be fabricated with a fixed ring or without a ring, and the mould sizes can be freely selected
- Outstanding deflasking properties make it easier to remove the investment material This saves time and emphasises the balanced application properties
- BellaStar XL stands for flexibility and trusted, reliable and fatigue-free processing with superb precision
- Reliable expansion control for excellent fit results thanks to BegoSol® K special liquid



A detailed brochure can be found at www.bego.com/download-center.

\* BegoSol® K is sensitive to freezing

**DIN EN ISO 15912** 

### Instructions on the use of BellaStar XL

For reproducible, reliable results, all working steps must be carried out under constant conditions. The working temperature and mixing conditions are of particular importance. Here it is absolutely essential that the recommended values are adhered to. We recommend a working temperature of +20 °C for the investment material and the liquid. Parameters of use, such as the mixture intensity, should be kept constant. The type of mixing device and the volume of the mixing bowl are used consistently. Accordingly, either a 250 ml or 1,000 ml mixing bowl should be used consistently to mix 160 g of investment material. Strict adherence to pre-mixing times of at least 15 secs. ensures a consistent quality of the desired expansion parameters.

### Bellavest® T

# The precision casting investment material for The conventionally heatable the crown and bridge technique

- Standard investment material with a proven track record worldwide and high reliability in accuracy of fit and processing
- Bellavest® T is preheated using conventional methods only
- Creamy consistency for smooth castings with accuracy in every detail
- Working time of 5 minutes for reliable, fatigue-free investing
- BegoSol® ensures reliable expansion control; BegoSol® HE –as an alternative – enables higher expansion values
- Bellavest® T has, for many years, been synonymous with clear and simple handling and confidence in optimal results with great economy



### Product details

Physical data	
Mixing liquid	BegoSol® or BegoSol® HE
Processing time at 20 °C	approx. 5 minutes
Shelf life in unopened bag	24 months
Characteristic values of the material according to	DIN EN ISO 15912
Beginning of solidification (Vicat time)	9.5 minutes
Compressive strength [MPa]	10
Linear thermal expansion [%]	1.2
Availability	REF
1 carton, 12.8 kg = 80 pieces 160 g bags	54202
1 carton, 4.8 kg = 30 pieces 160 g bags	54201
1 carton, 12.96 kg = 144 pieces 90 g bags	54213
The packs do not contain any mixing liquid.	
Accessories	REF
BegoSol® mixing liquid, 1 bottle = 1 l	51090
BegoSol® mixing liquid, 1 canister = 5 l	51091
BegoSol® HE Mixing liquid*, 1 bottle = 1 l	51095
BegoSol® HE Mixing liquid*, 1 bottle = 1 l	51096

**DIN FN ISO 15912** 

### Bellasun

# crown and bridge investment material

- Bellasun is characterised by reliable processing, precision-fitting results and extra-long working time: at least 3 minutes at an ambient temperature of 30°C
- Excellent flow properties combined with a long working time make for fatigue-free and reliable investing in all crown and bridge indications
- BegoSol® allows reproducible expansion control and ensures excellent accuracy of fit with precious-metal and non-precious
- Universal use of all shapes and sizes of mould and the low deflasking hardness round off the working characteristics
- Bellasun delivers exemplary quality even at unfavourable working temperatures



the extra-long processing time, even at high ambient temperatures

### Product details

Linear thermal expansion [%]

Availability

Physical data	
Mixing liquid	BegoSol® (Anti-freeze optimization up to -10 °C)
Processing time at 20 °C	approx. 7 minutes
Processing time bei 30 °C	approx. 4 minutes
Shelf life in unopened bag	24 months
Characteristic values of the material according	ng to DIN EN ISO 15912
Beginning of solidification (Vicat time)	13 minutes
Compressive strength [MPa]	7.5

1 carton, 12.8 kg = 80 pieces 160 g bags	54270
The pack does not contain any mixing liquid.	
Accessories	REF
BegoSol® mixing liquid, 1 bottle = 1 l	51090
BegoSol® mixing liquid, 1 canister = 5 l	51091

1.36

REF

**DIN FN ISO 15912** 

<sup>\*</sup> Alternatively, for greater expansions: BegoSol® HE mixing liquid BegoSol® HE is sensitive to freezing

# **BegoForm®**

# Refractory stump material for ceramic inlays, onlays and veneers

- The expansion properties of BegoForm®, which have been tailored for the ceramics from well-known manufacturers, enable an excellent accuracy of fit for individually layered inlays, onlays and veneers
- Stumps with an extremely high edge-strength and smooth, precise surfaces mean optimal conditions for problem-free processing of ceramic materials – avoiding undesirable cracks, for example
- The consistently high firing stability of BegoForm®, even after several cycles, enables ceramic corrections without any loss of precision
- Pleasant deflasking properties round off the clear and simple handling
- Reliable expansion control for excellent fit results thanks to the special BegoForm® mixing liquid

Product details				
Scope of delivery	Contents	Presentation	Qty	REF
BegoForm®, 40 pieces 30 g bags with 1 metering syringe, 250 ml mixing liquid	1.2 kg	box	1	52785
Accessories	Contents	Presentation	Qty	REF



A detailed brochure can be found at www.bego.com/download-center.





### Wirosil®

- REF: 52000 (page 23)
- Wirosil® is an addition-curing two-component silicone, which reproduces duplicate models extremely precisely thanks to its high dimensional stability

Wirosil®

# BegoSol® and WiroOne

# Mixing liquids for BEGO investment materials

- Depending on the alloy and the field of application, the required mixing ratio can be created for these liquids using distilled or demineralised water
- The higher the concentration of the mixing liquid, the greater the expansion of the investment material

Product details							
Availability	Contents	Presentation	Qty	REF			
BegoSol® (Anti-freeze optimization up to -10 °C) Mixing liquid for Wirovest®plus, WiroFast, Wiroplus® S, Wirovest®, Bellavest® T and Bellasur		bottle	1	51090			
BegoSol®	5 litres	canister	1	51091			
BegoSol® HE (frost-sensitive) Spezial-Mixing liquid for Bellavest® SH, Bellavest® T	1 litre	bottle	1	51095		A P	SUPPLIE
BegoSol® HE	5 litres	canister	1	51096	2100		1
BegoSol® K (frost-sensitive) Spezial-Mixing liquid for WiroFine, BellaStar XL	1 litre	bottle	1	51120			
BegoSol® K	5 litres	canister	1	51121			
WiroOne Liquid	1 litre	bottle	1	54824			



### **Bellatherm®**

# Phosphate-bonded soldering investment material

- Bellatherm® is dimensionally stable, thixotropic and suitable for high soldering temperatures
- Bellatherm® has extremely high edge-strength, enables an excellent accuracy of fit and can be separated from the soldered object under cold running water

Product details				
Availability	Contents	Presentation	Qty	REF
Bellatherm <sup>®</sup>	4.5 kg	tub	1	51105

# Wiropaint plus

# Fine investment material for partial denture technique

- It provides a very smooth casting surface and speeds up finishing work consider-ably
- Wiropaint plus hardly settles in the bottle and is always ready for use.

Product details					
Availability	Contents	Presentation	Qty	REF	
Wiropaint plus	200 ml	bottle	1	51100	Wireppaint plut Wireppaint plu

# **Measuring cylinder**

• Measuring cylinder with high precision (+/- 0.5 ml) for optimal control of the mixing concentrations

Availability	Contents	Presentation	Qty	REF	
Measuring cylinder, high type	25 ml	piece	1	18073	
Measuring cylinder, high type	50 ml	piece	1	18074	
Universal measuring cup	100 ml	piece	1	14607	Tanas Tanas

# **SecuPress** Ring system

- For investing pressable ceramic restorations with Bellavest® SH, three different re-usable ring sizes are available
- The markings facilitate optimal positioning and simplify the task of deflasking the restoration

Product details	
Availability	REF
SecuPress Ring system for 100 g investment / 2 g ingots 100 g/12 mm	70050
SecuPress Ring system for 200 g investment / 2 g ingots 200 g/12 mm	70051
SecuPress Ring system for 300 g investment / 2 g ingots 300 g/12 mm	70053





### Bellavest® SH precision investment

- REF 54252 (page 44)
- Bellavest® SH produces optimal press results. A phosphate-bonded precision investment for conventional and speed heating guarantees accurately fitting and reproducible press results. The 100 g portion bags in particular ensure compatibility with the SecuPress ring system.

Bellavest® SH

# **SecuPress Ring base**

• Ring base for using 5 g or 16 mm ingots in combination with the 16 mm plungers. This enables the problem-free fabrication of long-span bridges that require a large quantity of ceramic

Product details		
Availability	REF	
SecuPress Ring base 200 g/16 mm	70052	(a) (b)
SecuPress Ring base 300 g/16 mm	70054	88

# Single-use Plunger

 $\bullet \ \ Single-use \ Plunger \ which \ does \ not \ require \ time-consuming \ cleaning \ after \ pressing, \ such \ as \ with \ AlO_2 \ plungers.$ 

Product details		
Availability	REF	
Single-use Plunger 2 g/ 20 pieces	70700	
Single-use Plunger 5 g/ 20 pieces	70701	
		6/

# Rapid Ringless System compatible with BEGO Rapid wax system

- For all BEGO crown and bridge investment materials
- Compatible with Rapid Wax System Minimal wear, thus lower costs than with comparable systems
- Universally applicable for many casting systems Easy separation of mould and mould ring
- Time savings in relation to mould systems with foil sleeve, iron ring, etc.

Product details				
Availability	Presentation	Qty	REF	
Casting ring and base Size 1 for up to 100 g of investment material	set	1	52665	
Size 3 for up to 180 g of investment material	set	1	52666	
Size 6 for 360 g of investment material	set	1	52667	Town 1 Community

# Vacuum mixing bowl for Motova 100 and Motova 300

- Two versions of the tried and tested vacuum mixing bowl are available for use in Motova 100/300 due to the highly diverse properties of the mixture
- For reliably mixing investment material and plaster, the M version is used
- For thoroughly mixing silicone, the MS version is used

Product details			
Availability	Presentation	Qty	REF
For investment material and plaster			
Vacuum mixing bowl M 250 ml     Quantity of powder: 60 - 180 g	piece	1	16271
Vacuum mixing bowl M 550 ml Quantity of powder 100 - 400 g	piece	1	16272
Vacuum mixing bowl M 835 ml     Quantity of powder 160 - 550 g	piece	1	16273
Vacuum mixing bowl M 1200 ml Quantity of powder 320 - 800 g	piece	1	16274
For duplicating silicone			
<ul> <li>Vacuum mixing bowl MS 550 ml</li> <li>Filling quantity of silicone 50 - 250 g</li> </ul>	piece	1	16275
Vacuum mixing bowl MS 835 ml     Filling quantity of silicone 100 - 375 g	piece	1	16276
Vacuum mixing bowl MS 1200 ml     Filling quantity of silicone 150 - 600 g	piece	1	16277

# Base socket mould formers for crown and bridge work

• For making moulds with metal mould rings with hard rubber base plate

# Metal mould rings for crown ans bridge work

- Suitable for all BEGO crown and bridge investment materials
- Long service life thanks to special steel design

Product details  Availability	Contents	Presentation	Qty	REF
Metal mould rings			,	
Size 3 – for 180 g of investment material	4 piece	set	1	52422
Size 6 – for 360 g of investment material	4 piece	set	1	52423
Size 9 – for 540 g of investment material	4 piece	set	1	52424

# Fleecy inlay strips for moulds permit unimpeded expansion of the investment material

- The BEGO fleecy inlay strips for moulds contain no asbestos. They burn without residue and provide room for the investment material to expand
- The lining strips are the same height as the rings

Product details				
Availability	Contents	Presentation	Qty	REF
Fleecy inlay strips for moulds				
40 mm	3 x 30 m	pack	1	52409
45 mm	3 x 30 m	pack	1	52408

# **Overview of BEGO investment materials**

Overview of BEGO investmen	nt materials: Indication	s and recommended liqu	id		
	Crowns and bridges				
	Bellavest® SH	Bellavest® DR	Bellavest® T	BellaStar XL	Bellasun
	Bellavest* SH	Bellavest® DR	Bellavest* T	Bellastar XL	Hellasun    Hellasun
Casting non-precious alloys	<b>√</b> √√	$\checkmark\checkmark\checkmark$	<b>√</b> √√	<b>√</b> √	<b>√√</b> √
Double crowns in non-pre- cious alloys	<b>√√</b> √	<b>/</b> //	√√***	✓	<b>√</b> √
Casting precious alloys	√√	<b>√</b> √	√√	$\checkmark\checkmark\checkmark$	√√
Pressable ceramics	$\checkmark\checkmark\checkmark$				
Implant prosthodontics	<b>√√√</b>	<b>V V V</b>	<b>√</b> √	<b>√√</b> √	✓
CoCr partial-denture duplication with silicone	√**		√**	√**	√**
CoCr partial-denture hydrocolloid duplication					
Shock heat	<b>√√</b> √	<b>√√√</b>		<b>√√</b> √	
Conventional	<b>√√</b> √	<b>√√√</b>	<b>√√</b> √	<b>√√</b> √	<b>√</b> √√
Working time* (20°C) [min]	5	5	5	3:30	7
Flowability [mm]	140–145	135–140	approx. 125	approx. 135	approx. 155
BegoSol®			✓		√
BegoSol® HE	✓	✓	✓		
BegoSol® K				✓	
WiroOne Liquid					

 $<sup>\</sup>begin{tabular}{ll} \checkmark\checkmark\lor & \text{optimal} \cdot \checkmark\checkmark & \text{recommended} \cdot \checkmark$ & \text{suitable} \\ * & \text{after mixing} \cdot ** & \text{lift-off procedure} \cdot *** & \text{with BegoSol HE} \cdot **** & \text{only conventional} \\ \end{tabular}$ 

Partial dentures					3D CAD/Cast <sup>®</sup> partia denture frames
WiroFine	WiroFast	Wirolus® S	Wirovest®	Wirovest®plus	VarseoVest P
Wirolfine	WiroFast	Wiroplus* S	Wirovest®	Wirovest*	VarseoVest P
					<b>√</b> √
✓	√	√√	✓	<b>√</b>	
<b>√√√</b>	√√	<b>√√</b> √	<b>√</b> √	<b>√</b> √	<b>√</b> √
√√	<b>√</b> √√		<b>√</b> √√	<b>√√</b> √	
<b>√</b> √√	<b>V</b> V				<b>√</b> √√
<b>√√√</b>	<b>√</b> √√	<b>√√</b> √	<b>√√</b> √	<b>√√</b> √	
3:30	3	4	3	3:15	6:00
approx. 140	approx. 141	approx. 130	approx. 115	approx. 120	ca. 137
√****	✓	✓	<b>√</b>	✓	
					✓
✓					

# Funnel formers for partial denture technique

To be used when there is insufficient space for the other funnel former:

- 1 Universal funnel former for partial denture work. Matches all BEGO casting systems
- 2 Funnel former with reservoir for combination crucible
- 3 Funnel former, standard model. It is used when there is insufficient space for the other funnel former
- 4 Funnel former for Nautilus® and other casting systems

### **BEGO** mould formers

- Eliminates fixing and grinding of the investment models when the BEGO combination duplicating flask is used
- Both mould formers can also be used with all other duplicating systems
- Bases for lifting technique, ideal for plotted CAD/CAM frames and partial denture frames made from light-curing wax

Product details				
Availability	Contents	Presentation	Qty	REF
Mould former, small, red	4 pieces	set	1	52390
Mould former, large, blue	4 pieces	set	1	52400
Base with funnel former set (2 x large/2 x small)	4 pieces	set	1	52401
Silicon mould former incl. funnel former	1 pieces	set	1	54877

# Combi duplicating flask for partial denture technique

• The plastic combi duplicating flasks are tailored to BEGO mould formers

Product details	
Availability Presentation Qty	REF
1 Combi duplicating flask with wedge top, base piece 1 and 2 base formers (2 sizes)	52090



# NON-PRECIOUS ALLOYS

With non-precious alloys from BEGO you're always on the safe side. Millions of patients treated world-wide are best proof of this. For partial dentures and crowns and bridges, the BEGO range of alloys are optimised on the basis of decades of research and continuous innovation.

WIRONIUM® and Wironit®, Wiron® and Wirobond® are the names many people automatically think of when it comes to non-precious alloys. Their physical and biological properties are legendary.

### Wirobond® 280

# The non-precious premium alloy for the past 10 years – nickel- and beryllium-free

- Wirobond® 280 is setting new standards in the non-precious metal-to-ceramic alloy segment because, with a Vickers hardness of 280 HV10, it can be finished to a particularly high standard
- Extremely corrosion resistant thanks to the optimal interaction of the indispensable elements chrome and molybdenum
- Very good melting and casting properties
- No prolonged cooling necessary\*, even with large spans
- Secure bonding with ceramics
- High strength irrespective of the span size, and therefore a wide range of indications
- Reliable processing in accordance with the proven BEGO system
- Biocompatibility examined by an independent institute and confirmed with a biocertificate





Product details					
Alloy characteristics	Standard values	·			
Type (ISO 22674)	5				
Density [g/cm³]	8.5				
Coefficient of thermal expansion [10-6 K-1] 25-500 °C	14.0				
Coefficient of thermal expansion [10-6 K-1] 20-600 °C	14.2				
Preheating temperature [°C]	900-1000				
Casting temperature [°C]	approx. 1500				
Melting range [°C]	1360-1400				
Modulus of elasticity [GPa]	220				
Elongation limit (R <sub>p0.2</sub> ) [MPa]	540				
Tensile strength (R <sub>m</sub> ) [MPa]	680				
Ductile yield (A <sub>5</sub> ) [%]	14				
Vickers hardness (HV10)	280				
Composition in % by mass					
Co 60.2 $\cdot$ Cr 25 $\cdot$ W 6.2 $\cdot$ Mo 4.8 $\cdot$ Ga 2.9 $\cdot$ Si, Mn each	1 < 1				
Availability		Contents	Presentation	Qty	REF
Wirobond® 280	<u> </u>	1000 g	pack	1	50134
Wirobond® 280		250 g	pack	1	50135
Accessories		Contents	Presentation	Qty	REF
Wiroweld CoCr laser wire, carbon-free		2 m	pack	1	50003

Availability	Contents	Presentation	Qty	REF
Wirobond® 280	1000 g	pack	1	50134
Wirobond® 280	250 g	pack	1	50135
Accessories	Contents	Presentation	Qty	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm	2 m	pack	1	50003
Ø 0.5 mm	1,5 m	pack	1	50005
Wirobond® soldering rods before firing	8 pieces	pack	1	52622
WGL solder after firing	5 g	pack	1	61079

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center.

ISO 22674 · ISO 9693-1





• REF 54252 (page 44)

Bellavest® SH precision investment

· A universal investment for crowns and bridges and for pressable or press-on ceramic, speed or conventional heating, also suitable for telescope crowns fabricated using non-precious alloy

Bellavest® SH

### Wirobond® C

# Cobalt-chrome metal-to-ceramic alloy

- Nickel- and beryllium-free
- Simple processing thanks to reliable casting time recognition
- Carbon-free composition particularly well suited for laser welding
- The element cerium ensures high bond strength with the ceramic, minimising the risk of subsequent flaking or chipping
- Low thermal conductivity protects the pulp and ensures high wearing comfort for the patient
- Biocompatible and corrosion-resistant thanks to a firmly-adhering passive layer biocompatibility verified by an independent institute



Product details					
Alloy characteristics	Standard values				
Type (ISO 22674)	4				
Density [g/cm³]	8.5				
Coefficient of thermal expansion [10 <sup>-6</sup> K <sup>-1</sup> ] 25–500 °C	14.0				
Coefficient of thermal expansion [10-6 K-1] 20-600 °C	14.2				
Preheating temperature [°C]	900-1000				
Casting temperature [°C]	approx. 1500				
Melting range [°C]	1370-1420				
Modulus of elasticity [GPa]	210				
Elongation limit (R <sub>p0.2</sub> ) [MPa]	480				
Tensile strength (R <sub>m</sub> ) [MPa]	720				
Ductile yield (A <sub>5</sub> ) [%]	9				
Vickers hardness (HV10)	310				
Composition in % by mass					
Co 63.3 · Cr 24.8 · W 5.3 · Mo 5.1 · Si, Fe, Ce each < 1					
Availability		Contonto	Drocontation	Otre	DEE

Co 63.3 · Cr 24.8 · W 5.3 · Mo 5.1 · Si, Fe, Ce each < 1				
Availability	Contents	Presentation	Qty	REF
Wirobond® C	1000 g	pack	1	50115
Wirobond® C	250 g	pack	1	50116
Accessories	Contents	Presentation	Qty	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm	2 m	pack	1	50003
Ø 0.5 mm	1,5 m	pack	1	50005
Wirobond® soldering rods	8 pieces	pack	1	52622
WGL solder	5 g	pack	1	61079

ISO 22674 · ISO 9693-1

# Types acc. to ISO 22674

- Type 3: Indicated for fixed, multi-unit prosthetic restorations, e.g. bridgework.
- Type 4: Indicated for prosthetic restorations or sections thereof with thin cross-sections exposed to very high loads, e.g. removable partial dentures, clasps, veneered crowns, long-span bridgework or bridges with small cross-sections, bars, retainers, implant-supported superstructures.
- Type 5: Indicated for prosthetic restorations where parts thereof require a combination of high rigidity and strength, e.g. thin removable partial dentures, sections with thin cross-sections, clasps.

### Wirobond® SG

### Cobalt-chrome metal-to-ceramic alloy

- Nickel- and beryllium-free
- Reliable use even in problematic cases and restorations with large bridge spans
- Simple and reliable casting time recognition thanks to optimal silicon content
- Normal cooling facilitates economical and effective working
- Reliable metal-ceramic bond with no need for an additional, expensive bonder
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



#### Product details Alloy characteristics Standard values Type (ISO 22674)\* 4 8.5 Density [g/cm<sup>3</sup>] Coefficient of thermal expansion [10-6 K-1] 25-500 °C 14.1 Coefficient of thermal expansion [10-6 K-1] 20-600 °C 14.3 Preheating temperature [°C] 900-1000 Casting temperature [°C] approx. 1480 1370-1420 Melting range [°C] Modulus of elasticity [GPa] 200 Elongation limit (R<sub>p0.2</sub>) [MPa] 470 Tensile strength (R<sub>m</sub>) [MPa] 650 Ductile yield (A<sub>5</sub>) [%] 8 Vickers hardness (HV10) 310 Composition in % by mass Co $63.8 \cdot \text{Cr } 24.8 \cdot \text{W} 5.3 \cdot \text{Mo} 5.1 \cdot \text{Si}$ , Fe each < 1**Availability** REF Wirobond® SG, 1 pack = 1000 g 50128 Wirobond® SG, 1 pack = 250 g 50127 REF Accessories Wiroweld CoCr laser wire, carbon-free 50003 $\emptyset$ 0.35 mm, 1 pack = 2 m 50005 $\emptyset$ 0.5 mm, 1 pack = 1.5 m Wirobond® soldering rods, 1 pack = 8 pieces 52622 WGL solder, 1 pack = 5 g 61079

### \* The various types are shown on page 59

ISO 22674 · ISO 9693-1

### Wirobond® LFC

### Special alloy for low-fusing ceramic materials

- Cobalt-chrome metal-to-ceramic alloy for high-expanding ceramics (low-fusing ceramic materials)
- The CTE value of 16.1 [10-6 x K-1] enables normal cooling for economical and effective working
- Strong bond with the low-fusing ceramic even when subjected to multiple firing
- Controlled carbon content very well suited for soldering and laser welding
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



Product details	
Alloy characteristics	Standard values
Type (ISO 22674)*	5
Density [g/cm³]	8.2
Coefficient of thermal expansion [10 <sup>-6</sup> K <sup>-1</sup> ] 25–500 °C	15.9
Coefficient of thermal expansion [10 <sup>-6</sup> K <sup>-1</sup> ] 20–600 °C	16.1
Preheating temperature [°C]	900-1000
Casting temperature [°C]	approx. 1480
Melting range [°C]	1280-1350
Modulus of elasticity [GPa]	200
Elongation limit (R <sub>p0.2</sub> ) [MPa]	660
Tensile strength (R <sub>m</sub> ) [MPa]	950
Ductile yield (A <sub>5</sub> ) [%]	16
Vickers hardness (HV10)	310
Composition in % by mass	
Co 33.9 · Cr 28.5 · Fe 30 · Mo 5 · Mn 1 · Si, N, C each	< 1
Availability	REF
Wirobond® LFC, 1 pack = 1000 g	50255
Wirobond® LFC, 1 pack = 250 g	50256
Accessories	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm, 1 pack = 2 m	50003
Ø 0.5 mm, 1 pack = 1.5 m	50005
Wirobond® soldering rods, 1 pack = 8 pieces	52622

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center.

ISO 22674 · ISO 9693-1

### Wiron® 99

# Premium NiCr alloy for metal-to-ceramic work or composite veneering

### - beryllium-free

- Proven reliability in use worldwide for over 25 years
- Secure metal-ceramic bond, minimising the risk of subsequent flaking or chipping
- Low hardness of 180 (HV10) for easy, fast finishing and polishing to a high lustre
- Simple casting time recognition problem-free processing in all induction casting machines
- High modulus of elasticity for greater protection against deformations caused by masticatory forces
- High wearing comfort for patients thanks to the low thermal conductivity
- Biocompatible and highly corrosion-resistant thanks to a firmly-adhering passive layer – biocompatibility verified by an independent institute



Product details	
Alloy characteristics	Standard values
Type (ISO 22674)*	3
Density [g/cm³]	8.2
Coefficient of thermal expansion [10-6 K-1] 25-500 °C	13.8
Coefficient of thermal expansion [10 <sup>-6</sup> K <sup>-1</sup> ] 20–600 °C	14.0
Preheating temperature [°C]	900–1000
Casting temperature [°C]	approx. 1450
Melting range [°C]	1250–1310
Modulus of elasticity [GPa]	200
Elongation limit (R <sub>p0.2</sub> ) [MPa]	330
Tensile strength (R <sub>m</sub> ) [MPa]	650
Ductile yield (A <sub>5</sub> ) [%]	45
Vickers hardness (HV10)	180
0 11 1 0/ 1	

### Composition in % by mass

Ni 65 · Cr 22.5 · Mo 9.5 · Nb, Si, Fe, Ce each $< 1$				
Availability	Contents	Presentation	Qty	REF
Wiron® 99	1000 g	pack	1	50225
Wiron® 99	250 g	pack	1	50226
Accessories	Contents	Presentation	Qty	REF
Wiroweld NC NiCr laser wire, free of carbon Ø 0.35 mm	approx. 5.5 m	roll	1	50006
Wiron® soldering rods	6 pieces	pack	1	52625
WGL solder	5 g	pack	1	61079

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center.

\* The various types are shown on page 59

ISO 22674 · ISO 9693-1





Bellavest® SH

### **Bellavest® SH precision investment**

- REF 54252 (page 44)
- A universal investment for crowns and bridges and for pressable or press-on ceramic, speed or conventional heating, also suitable for telescope crowns fabricated using non-precious alloy

## Wiron® light

The non-precious alloy for metal-to-ceramic work, with light oxide

# - beryllium-free

- · Simple casting, easy finishing, reliable working
- The outstanding melting properties of the alloy ensure reliable filling of the mould
- The oxide of Wiron® light is considerably lighter in colour in comparison to conventional NiCr alloys, and can be removed very quickly and easily
- The reduced preheating temperature of 800°C means that a very smooth surface of the cast object is achieved
- Normal cooling with many of the ceramics for time-saving, economical veneering
- The favourable CTE value permits reliable ceramic veneering
- Biocompatible and highly corrosion-resistant thanks to a firmly-adhering passive layer – biocompatibility verified by an independent institute



Product details					
Alloy characteristics	Standard values				
Type (ISO 22674)*	4				
Density [g/cm³]	8.2				
Coefficient of thermal expansion [10 <sup>-6</sup> K <sup>-1</sup> ] 25–500 °C	13.8				
Coefficient of thermal expansion [10-6 K-1] 20-600 °C	14.1				
Preheating temperature [°C]	800				
Casting temperature [°C]	approx. 1350				
Melting range [°C]	1200-1280				
Modulus of elasticity [GPa]	200				
Elongation limit (R <sub>p0.2</sub> ) [MPa]	470				
Tensile strength (R <sub>m</sub> ) [MPa]	880				
Ductile yield (A <sub>5</sub> ) [%]	10				
Vickers hardness (HV10)	260				
Composition in % by mass					
Ni 64.5 · Cr 22.0 · Mo 10.0 · Si 2,1 · Nb, Mn, B each	< 1				
Availability		Contents	Presentation	Qty	REF
Wiron® light		1000 g	pack	1	50270
Wiron® light		250 g	pack	1	50272

Availability	Contents	Presentation	Qty	REF
Wiron® light	1000 g	pack	1	50270
Wiron® light	250 g	pack	1	50272
Accessories	Contents	Presentation	Qty	REF
Wiroweld NC NiCr laser wire, free of carbon	approx. 5.5 m	roll	1	50006
Wiron® soldering rods	6 pieces	pack	1	52625
WGL solder	5 g	pack	1	61079
Diapol Diamond polishing compound	5 g	pack	1	52305
				100 00074 100 0000 1

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center. \* The various types are shown on page 59

ISO 22674 · ISO 9693-1

Wiron® light: To ensure that the ceramic bonds firmly to the metal, it is essential that the bonding surface is trimmed with sharp tungsten carbide cutters. The manufacturer's recommended speed must be adhered to. Following this, the surface must be sandblasted with an abrasive of predefined grit size, such as Korox® 250, at the recommended compressed air pressure of 3–4 bars. It is essential to clean the surface with a steam-cleaner, such as the Triton, or in boiling water.





Complementary product!



### Diapol diamond polishing paste

- REF 52305 (page 102)
- Economical in use: approx. 3 mm of paste is sufficient for a 3-unit bridge

Oxide colour after divesting with Wiron® light

Oxide colour after divesting with traditional NiCr alloy

# Wirocer plus

# Nickel-chrome metal-to-ceramic alloy

- Tried and tested alloy from BEGO inexpensive thanks to an optimised manufacturing process
- Low hardness easy and time-saving finishing
- Normal cooling for economical veneering
- High wearing comfort for the patient thanks to the low thermal conductivity
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute

Product details				
Alloy characteristics		Standard value	es	
Type (ISO 22674)*		3		
Density [g/cm³]		8.2		
Coefficient of thermal expansion [10 <sup>-6</sup> K <sup>-1</sup> ] 25–50	0 °C	13.8		
Coefficient of thermal expansion [10 <sup>-6</sup> K <sup>-1</sup> ] 20–60	0 °C	14,0		
Preheating temperature [°C]		900–950		
Casting temperature [°C]		approx. 1450		
Melting range [°C]		1320-1365		
Modulus of elasticity [GPa]		200		
Elongation limit (R <sub>p0.2</sub> ) [MPa]		340		
Tensile strength (R <sub>m</sub> ) [MPa]		620		
Ductile yield (A <sub>5</sub> ) [%]		50		
Vickers hardness (HV10)		190		
Composition in % by mass				
Ni 65.2 $\cdot$ Cr 22.5 $\cdot$ Mo 9.5 $\cdot$ Nb, Si, Fe, Mn each <	< 1			
Availability	Contents	Presentation	Qty	REF
Wirocer plus	1000 g	pack	1	50080
Accessories	Contents			REF
Wiroweld NC NiCr laser wire, free of carbon, Ø 0.35 mm	5.5 m	roll	1	50006
Wiron® soldering rods	6 pieces	pack	1	52625
WGL solder	5 g	pack	1	61079

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center.

 $^{\star}$  The various types are shown on page 59

ISO 22674 · ISO 9693-1

# Use the helpful BEGO info-media in our download centre at www.bego.com/download-center

- Metal-ceramics brochure, REF 82093
- Partial denture brochure, REF 82068
- Books on partial dentures, see page 85
- Videos (CDs) on casting BEGO alloys using our casting machines Nautilus®, Fornax® and Fundor, REF 82987 at www.bego.com/videoclips

### Wironit® LA

# Specially developed for laser welding

- Wironit® LA wide range of indications for reliable application in the partial denture and combination technique
- Controlled carbon content and the addition of tantalum ensure excellent laser welding properties even in extreme cases
- Low thermal conductivity means high wearing comfort for the patient
- Thanks to the ductile yield of 8 %, clasps can be activated without any problem
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



Product details	
Alloy characteristics	Standard values
Type (ISO 22674)*	5
Density [g/cm³]	8.2
Preheating temperature [°C]	950–1050
Casting temperature [°C]	approx. 1450
Melting range [°C]	1300–1340
Modulus of elasticity [GPa]	220
Elongation limit (R <sub>p0.2</sub> ) [MPa]	640
Tensile strength (R <sub>m</sub> ) [MPa]	940
Ductile yield (A <sub>5</sub> ) [%]	8
Vickers hardness (HV10)	360
Composition in % by mass	

Composition	in %	by	mass

Co 63.5 · Cr 29 · Mo 5 · Si 1.2 · Mn. N. C. Ta each <	Co	63.5 ·	Cr 29 ·	Mo 5	Si 1.2 ·	Mn. N.	C. Ta	each <	1
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Availability	Contents	Presentation	Qty	REF
Wironit® LA	1000 g	pack	1	50100
Accessories	Contents	Presentation	Qty	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm	2 m	roll	1	50003
Ø 0.5 mm	1.5 m	pack	1	50005
Cobalt-chrome solder	5 pieces	pack	1	52520

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center.

\* The various types are shown on page 59

ISO 22674 · ISO 9693-1

Wironit® LA: During wax-up, the casting funnel former must be positioned 10 mm above the highest point of the wax-up, to avoid the risk of defects in the cast object. BEGO partial denture courses at www.bego.com/fortbildung





# WiroFine universal investment

- REF 54345 (page 39)
- A universal investment for all indications in cast partial denture and fixed/ removable work, for gel or silicone duplication, speed or conventional heating

WiroFine

# Wironit® The classic partial denture alloy for clasp partial dentures

- Successful worldwide since 1953 ideally suited for conventional clasp partial dentures
- The reduced Vickers hardness of 350 (HV10) allows easier finishing and polishing
- The clasps can be activated very easily by the dentist
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



Wironit® extra-hard The ideal partial den-

- 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 biocompatibility verified by an independent institute





Product details	
Alloy characteristics	Standard values
Type (ISO 22674)*	5
Density [g/cm³]	8.2
Preheating temperature [°C]	950–1050
Casting temperature [°C]	approx. 1460
Melting range [°C]	1320-1350
Modulus of elasticity [GPa]	211
Elongation limit (R <sub>p0.2</sub> ) [MPa]	600
Tensile strength (R <sub>m</sub> ) [MPa]	880
Ductile yield (A <sub>5</sub> ) [%]	6.2
Vickers hardness (HV10)	350
Composition in % by mass	
Co 64 · Cr 28.6 · Mo 5 · Si 1 · Mn, C each < 1	
Availability	REF
Wironit®, 1 pack = 1000 g	50030
Wironit®, 1 pack = 250 g	50020
Accessories	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm, 1 pack = 2 m	50003
Ø 0.5 mm, 1 pack = 1.5 m	50005
Cobalt-chrome solder, 1 pack = 5 pieces	52520

Product details	
Alloy characteristics	Standard values
Type (ISO 22674)*	5
Density [g/cm³]	8.2
Preheating temperature [°C]	950-1050
Casting temperature [°C]	approx. 1420
Melting range [°C]	1260-1305
Modulus of elasticity [GPa]	225
Elongation limit (R <sub>p0.2</sub> ) [MPa]	625
Tensile strength (R <sub>m</sub> ) [MPa]	910
Ductile yield (A <sub>5</sub> ) [%]	4.1
Vickers hardness (HV10)	375
Composition in % by mass	
Co 63 $\cdot$ Cr 30 $\cdot$ Mo 5 $\cdot$ Si 1.1 $\cdot$ Mn, C jeweils $<$ 3	l
Availability	REF
Wironit® extra-hard, 1 pack = 1000 g	50060
Wironit® extra-hard, 1 pack = 250 g	50050
Accessories	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm, 1 pack = 2 m	50003
Ø 0.5 mm, 1 pack = 1.5 m	50005
Cobalt-chrome solder, 1 pack = 5 pieces	52520

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center.

ISO 22674

ISO 22674

<sup>\*</sup> The various types are shown on page 59

# WIRONIUM® plus

# **Cobalt-chrome partial denture alloy**



### Partial dentures par excellence

- Enhanced version of the top-quality alloy WIRONIUM® can be used universally in the field of combination work and clasp partial dentures
- Problem-free processing using the BEGO partial denture system
- Very low thermal conductivity means high wearing comfort for the patient
- Increased elongation limit and high modulus of elasticity for high resistance to possible deformations caused by masticatory forces
- The high elongation limit minimises the danger of clasp fractures
- Controlled carbon content ensures excellent laser welding properties
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



Product details	
Alloy characteristics	Standard values
Type (ISO 22674)*	5
Density [g/cm³]	8.4
Preheating temperature [°C]	950–1050
Casting temperature [°C]	approx. 1440
Melting range [°C]	1310–1345
Modulus of elasticity [GPa]	220
Elongation limit (R <sub>p0.2</sub> ) [MPa]	700
Tensile strength (R <sub>m</sub> ) [MPa]	1000
Ductile yield (A <sub>5</sub> ) [%]	10
Vickers hardness (HV10)	340
Composition in 9/ by mass	

### Composition in % by mass

Co 62 5	Cr 20 5	Mo 5 Si	Mn Fo To	N C each < 1
(() () / () .	(1/9)	· IVIO : 31	IVIII FE IA	IN CARCIL < I

00 02:0 01 23:0 1110 0 01, 11111, 10, 14, 11, 0 04011 1				
Availability	Contents	Presentation	Qty	REF
WIRONIUM® plus (is only supplied to I.W.C. laboratories)	1000 g	pack	1	50190
Accessories	Contents	Presentation	Qty	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm	2 m	pack	1	50003
Ø 0.5 mm	1.5 m	pack	1	50005
Cobalt-chrome solder	5 pieces	pack	1	52520

A detailed brochure, instructions for use and our biocertificate can be found at www.bego.com/download-center.

\* The various types are shown on page 59

ISO 22674

**WIRONIUM® plus:** With particularly slender partial denture constructions, inaccessible areas should be polished with a handpiece brush to prevent deformations and avoid material reduction at unplanned points on the cast object.





### WiroFine universal investment

- REF 54345 (page 39)
- A universal investment for all indications in cast partial denture and fixed/ removable work, for gel or silicone duplication, speed or conventional heating

WiroFine

# **WIRONIUM®**



# Cobalt-chrome partial denture alloy

- Top-quality alloy, proven worldwide ideally suited for conventional clasp partial dentures
- Excellent flow properties simple processing
- Particularly suitable for laser welding with Wiroweld welding wire thanks to the reduced carbon content
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



# WIRONIUM® extra-hard



# Cobalt-chrome partial denture alloy

- Ideal when an alloy with higher strength and slightly lower ductile yield is required
- Very slender designs possible for high patient comfort
- Reduced carbon content particularly well suited for laser weld-
- Biocompatible and corrosion-resistant biocompatibility verified by an independent institute



Product details	
Alloy characteristics	Standard values
Type (ISO 22674)*	5
Density [g/cm³]	8.4
Preheating temperature [°C]	950-1050
Casting temperature [°C]	approx. 1440
Melting range [°C]	1320-1340
Modulus of elasticity [GPa]	216
Elongation limit (R <sub>p0.2</sub> ) [MPa]	650
Tensile strength (R <sub>m</sub> ) [MPa]	940
Ductile yield (A <sub>5</sub> ) [%]	12
Vickers hardness (HV10)	330
Composition in % by mass	
Co 63 $\cdot$ Cr 29.5 $\cdot$ Mo 5 $\cdot$ Si 1 $\cdot$ Mn, Fe, N, C each	ch < 1
Availability	REF
WIRONIUM®, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)	50065
Accessories	REF
Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm, 1 pack = 2 m	50003
Ø 0.5 mm, 1 pack = 1.5 m	50005
Cobalt-chrome solder, 1 pack = 5 pieces	52520

Alloy characteristicsStandard valuesType (ISO 22674)*5Density [g/cm³]8.4Preheating temperature [°C]950–1050Casting temperature [°C]approx. 1450Melting range [°C] $1330-1350$ Modulus of elasticity [GPa]220Elongation limit ( $R_{p0.2}$ ) [MPa]670Tensile strength ( $R_m$ ) [MPa]970Ductile yield ( $A_5$ ) [%]7.5Vickers hardness (HV10)350Composition in % by massCof1 · Cr 30 · Mo 5 · Mn 2 · Si, Fe, N, C each < 1AvailabilityREFWIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)50175AccessoriesREFWiroweld CoCr laser wire, carbon-free $\emptyset$ 0.35 mm, 1 pack = 2 mm, 1 pack = 2 mm, 5000550003	Product details	
Density [g/cm³] 8.4  Preheating temperature [°C] 950–1050  Casting temperature [°C] approx. 1450  Melting range [°C] 1330–1350  Modulus of elasticity [GPa] 220  Elongation limit $(R_{p0.2})$ [MPa] 670  Tensile strength $(R_m)$ [MPa] 970  Ductile yield $(A_5)$ [%] 7.5  Vickers hardness (HV10) 350  Composition in % by mass  Co 61 · Cr 30 · Mo 5 · Mn 2 · Si, Fe, N, C each < 1  Availability REF  WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories REF  Wiroweld CoCr laser wire, carbon-free $\emptyset$ 0.35 mm, 1 pack = 2 m	Alloy characteristics	Standard values
Preheating temperature [°C] 950–1050  Casting temperature [°C] approx. 1450  Melting range [°C] 1330–1350  Modulus of elasticity [GPa] 220  Elongation limit $(R_{p0.2})$ [MPa] 670  Tensile strength $(R_m)$ [MPa] 970  Ductile yield $(A_5)$ [%] 7.5  Vickers hardness (HV10) 350  Composition in % by mass  Co 61 · Cr 30 · Mo 5 · Mn 2 · Si, Fe, N, C each < 1  Availability REF  WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories REF  Wiroweld CoCr laser wire, carbon-free $\emptyset$ 0.35 mm, 1 pack = 2 m	Type (ISO 22674)*	5
Casting temperature [°C] approx. 1450  Melting range [°C] 1330–1350  Modulus of elasticity [GPa] 220  Elongation limit $(R_{p0.2})$ [MPa] 670  Tensile strength $(R_m)$ [MPa] 970  Ductile yield $(A_5)$ [%] 7.5  Vickers hardness (HV10) 350  Composition in % by mass  Co $61 \cdot \text{Cr } 30 \cdot \text{Mo } 5 \cdot \text{Mn } 2 \cdot \text{Si, Fe, N, C each} < 1$ Availability REF  WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories REF  Wiroweld CoCr laser wire, carbon-free $\emptyset$ 0.35 mm, 1 pack = 2 m	Density [g/cm³]	8.4
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Preheating temperature [°C]	950-1050
$ \begin{array}{c} \text{Modulus of elasticity [GPa]} & 220 \\ \text{Elongation limit } (R_{\text{p0.2}})  [\text{MPa}] & 670 \\ \text{Tensile strength } (R_{\text{m}})  [\text{MPa}] & 970 \\ \text{Ductile yield } (A_5)  [\%] & 7.5 \\ \text{Vickers hardness } (\text{HV10}) & 350 \\ \text{\textbf{Composition in \% by mass}} \\ \text{Co } 61 \cdot \text{Cr } 30 \cdot \text{Mo } 5 \cdot \text{Mn } 2 \cdot \text{Si, Fe, N, C each} < 1 \\ \text{\textbf{Availability}} & \text{\textbf{REF}} \\ \text{WIRONIUM}^{\circ}  \text{extrahart, 1 pack} = 1000  \text{g} \\ \text{(is only supplied to I.W.C. laboratories)} \\ \text{\textbf{Accessories}} & \text{\textbf{REF}} \\ \text{Wiroweld CoCr laser wire, carbon-free} \\ \emptyset  0.35  \text{mm, 1 pack} = 2  \text{m} \\ \end{array} $	Casting temperature [°C]	approx. 1450
Elongation limit $(R_{p0.2})$ [MPa] 670  Tensile strength $(R_m)$ [MPa] 970  Ductile yield $(A_5)$ [%] 7.5  Vickers hardness (HV10) 350  Composition in % by mass  Co 61 · Cr 30 · Mo 5 · Mn 2 · Si, Fe, N, C each < 1  Availability REF  WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories REF  Wiroweld CoCr laser wire, carbon-free $\emptyset$ 0.35 mm, 1 pack = 2 m	Melting range [°C]	1330-1350
Tensile strength ( $R_m$ ) [MPa] 970  Ductile yield ( $A_5$ ) [%] 7.5  Vickers hardness (HV10) 350  Composition in % by mass  Co $61 \cdot Cr \ 30 \cdot Mo \ 5 \cdot Mn \ 2 \cdot Si$ , Fe, N, C each $< 1$ Availability REF  WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories REF  Wiroweld CoCr laser wire, carbon-free $\emptyset \ 0.35 \ mm$ , 1 pack = 2 m	Modulus of elasticity [GPa]	220
$ \begin{array}{c c} Ductile \ yield \ (A_5) \ [\%] & 7.5 \\ \hline Vickers \ hardness \ (HV10) & 350 \\ \hline \textbf{Composition in \% by mass} \\ \hline \textbf{Co } 61 \cdot \textbf{Cr } 30 \cdot \textbf{Mo } 5 \cdot \textbf{Mn } 2 \cdot \textbf{Si}, \textbf{Fe}, \textbf{N}, \textbf{C } \textbf{each} < 1 \\ \hline \textbf{Availability} & \textbf{REF} \\ \hline \textbf{WIRONIUM}^{\otimes} \ \textbf{extrahart}, \ 1 \ \textbf{pack} = 1000 \ \textbf{g} \ (is \ only \ supplied \ to \ I.W.C. \ laboratories)} \\ \hline \textbf{Accessories} & \textbf{REF} \\ \hline \textbf{Wiroweld CoCr } \ laser \ wire, \ carbon-free \ \emptyset \ 0.35 \ mm, \ 1 \ pack = 2 \ m \\ \hline \end{array} $	Elongation limit (R <sub>p0.2</sub> ) [MPa]	670
Vickers hardness (HV10)  Composition in % by mass  Co 61 · Cr 30 · Mo 5 · Mn 2 · Si, Fe, N, C each < 1  Availability  REF  WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories  REF  Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm, 1 pack = 2 m	Tensile strength (R <sub>m</sub> ) [MPa]	970
Composition in % by mass $Co 61 \cdot Cr 30 \cdot Mo 5 \cdot Mn 2 \cdot Si, Fe, N, C each < 1$ AvailabilityREFWIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)50175AccessoriesREFWiroweld CoCr laser wire, carbon-free $\emptyset 0.35 \text{ mm}, 1 \text{ pack} = 2 \text{ m}$ 50003	Ductile yield (A <sub>5</sub> ) [%]	7.5
$ \begin{array}{c cccc} \text{Co } 61 \cdot \text{Cr } 30 \cdot \text{Mo } 5 \cdot \text{Mn } 2 \cdot \text{Si, Fe, N, C each} < 1 \\ \hline \textbf{Availability} & \textbf{REF} \\ \hline \text{WIRONIUM}^{\circledcirc} \text{ extrahart, 1 pack} = 1000 \text{ g} & 50175 \\ \text{(is only supplied to I.W.C. laboratories)} & \textbf{REF} \\ \hline \textbf{Accessories} & \textbf{REF} \\ \hline \text{Wiroweld CoCr laser wire, carbon-free} & 50003 \\ \varnothing \ 0.35 \text{ mm, 1 pack} = 2 \text{ m} \\ \hline \end{array} $	Vickers hardness (HV10)	350
Availability  REF  WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories  REF  Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm, 1 pack = 2 m	Composition in % by mass	
WIRONIUM® extrahart, 1 pack = 1000 g (is only supplied to I.W.C. laboratories)  Accessories  REF  Wiroweld CoCr laser wire, carbon-free Ø 0.35 mm, 1 pack = 2 m	Co 61 · Cr 30 · Mo 5 · Mn 2 · Si, Fe, N, C each $< 1$	
(is only supplied to I.W.C. laboratories)  Accessories  REF  Wiroweld CoCr laser wire, carbon-free 50003  Ø 0.35 mm, 1 pack = 2 m	Availability	REF
Wiroweld CoCr laser wire, carbon-free 50003 Ø 0.35 mm, 1 pack = 2 m		50175
Ø 0.35 mm, 1 pack = 2 m	Accessories	REF
0.0 F 1 1		50003
Ø 0.5 mm, 1 pack = 1.5 m	Ø 0.5 mm, 1 pack = 1.5 m	50005
Cobalt-chrome solder, 1 pack = 5 pieces 52520	Cobalt-chrome solder, 1 pack = 5 pieces	52520

ISO 22674

\* The various types are shown on page 59

ISO 22674

### I.W.C. -

# International WIRONIUM®-Circle



- A symbol that generates confidence
- A worldwide mark of quality
- A quality association of leading dental laboratories

### The philosophy

The INTERNATIONAL WIRONIUM® CIRCLE – or I.W.C. for short – is a worldwide association of leading dental laboratories, which all share a common aim: the production of first-class dental laboratory work using top-quality materials.

#### The alloys

WIRONIUM®, WIRONIUM® plus and WIRONIUM® extra-hard are cobalt-chrome alloys for all aspects of the partial denture technique.

Biocompatibility thanks to selected high-purity alloy components and deformation-resistant prosthetics, which can withstand even extreme masticatory loads. From the clinical viewpoint, the quality of the WIRONIUM® alloys is the basis of perfect solutions — in both technical and aesthetic terms — for an extremely wide variety of cases.



#### The system

The WIRONIUM® alloys are used in a specific and precisely coordinated material chain, in accordance with the successful BEGO partial denture system.

The advantage for you: partial dentures made from WIRONIUM® offers an impressively accurate fit even with slender design and give the patient the certainty of reliable function, wearing comfort and long service life.

#### The know-how

The I.W.C. quality symbol indicates to the dentist that your laboratory is constantly expanding its know-how and employs the latest materials and equipment.

# **Talmi** Dental training metal

- Ideal golden-yellow training metal for inexpensive training or demonstrations
- The mechanical values and working characteristics are comparable with those of a type 2 gold-casting alloy
- Easy to process Talmi can be melted and cast using any casting machine
- Talmi is not intended for medical use and must not be used in the oral cavity

Product details				
Alloy characteristics		Standard value	es	
Density [g/cm³]		8.8		
Preheating temperature [°C]		700		
Casting temperature [°C]		approx. 1200		
Melting range [°C]		860-1010		
Modulus of elasticity [GPa]		95		
Elongation limit (R <sub>p0.2</sub> ) [MPa]		250		
Ductile yield (A <sub>5</sub> ) [%]		50		
Vickers hardness (HV5)		120		
Weichglühen [°C]		750		
10 min, then quenching in water at 20 °C				
Composition in % by mass				
Cu 87 · Sn 12 · Co 1				
Availability	Contents	Presentation	Qty	REF
Talmi	1 g	pack	1	50220
Accessories		Presentation	Qty	REF
Talmi solder 700 °C	3 g	roll	1	50221

## Wironit® clasp wire

· Springy steel design for acrylic work and regulations

#### **Product details** Composition in % by mass Fe 67 · Cr 19 · Ni 10 · Mo 4 Availability Contents Presentation Qty REF round, Ø 0.6 mm 48220 40 m roll 48250 round, Ø 0.7 mm 30 m roll 48280 round, Ø 0.8 mm 20 m roll round, Ø 0.9 mm 10 m roll 48310 round, Ø 1.0 mm 10 m roll 48340 half-round, $0.65 \times 1.30 \text{ mm} = 10 \text{ m}$ 10 m roll 48430 half-round, $0.75 \times 1.50 \text{ mm} = 10 \text{ m}$ 10 m roll 48460

### **BEGO WiroFix**

# Friction element for the combination technique

- Facilitates friction adjustment, especially in the case of non-precious double crown or bar constructions
- Wide range of indications: Double crowns, full and ring telescopes, bars, RS (channel shoulder attachment)
- Ideal in combination with one-piece casting constructions
- Strong retentive force combined with small size
- Friction can be adjusted to two different degrees
- Requires minimal space; can be shortened individually
- Extremely easy processing thanks to ceramic spacers
- Highly durable, but easily replaceable if necessary

BEGO-WiroFix accessories, yellow, plastic

	Presentation	Qty	REF
	set	1	52820
	pack	1	52821
Contents	Presentation	Qty	REF
2 pieces	pack	1	52822
2 pieces	pack	1	52823
2 pieces	pack	1	52824
	2 pieces 2 pieces	pack  Contents Presentation 2 pieces pack 2 pieces pack	pack 1  Contents Presentation Qty 2 pieces pack 1  2 pieces pack 1

2 pieces

pack



52825



# PREHEATING AND CASTING

Today, an optimum casting result is programmable, but it can also be achieved through individual know-how and substantial practical experience. BEGO supports the desired application by means of automatically controlled preheating with Miditherm and programmed casting with Nautilus®. Fornax® and Miditherm are ideal for individual procedures. At the same time, the BEGO system assists you – from model preparation right through to actual casting.

### Fornax® T

The compact casting machine with induction melting device and integrated power cooling

- Compact benchtop casting machine with very high-performance induction heating guarantees short melting cycles, minimises oxidation and thus facilitates subsequent finishing
- Compact dimensions and design give the new Fornax® T a very small footprint
- Integrated power cooling provides for over 50 casts in a row, even with high ambient temperatures with moulds made of phosphate-bonded investment materials
- High output reserves with low power consumption of just 16 amps
- Casting temperature of up to 1550 °C: ideal for all commercially available dental alloys (except titanium)
- The user-friendly operating panel provides information on all parameters and gives quick and easy access to all major functions
- Very quick adjustment to different casting mould sizes by means of a simple mechanism ensures fast working



**New: Now with Product details** integrated power Technical data

Height	460 mm	cooling /
Height with cover open	990 mm	
Width	650 mm	
Depth	630 mm	
Depth with cover open	690 mm	
Rated voltage	230 VAC, 50/60 Hz	
Special voltage	200-240 VAC, 50/60 HZ	
Current consumption	approx. 16 A	
Induction melting power	3.6 kVA, 65 kHz	
Weight	80 kg	
Scape of delivery	Contents	Presentation Oty PFF

Weight	80 kg				
Scope of delivery		Contents	Presentation	Qty	REF
Fornax® T 230 VAC, 50/60 Hz			piece	1	26425
Ceramic melting crucible		6 pieces	pack	1	52482
Graphite inserts		6 pieces	pack	1	52454
Ceramic inserts for ceramic melting crucible		6 pieces	pack	1	52455
Base socket mould former size 3, 6 and 9		1 piece each	pack	1	
Accessories		Contents	Presentation	Qty	REF
Base socket mould formers, size 3		4 pieces	set	1	52627
Base socket mould formers, size 6		4 pieces	set	1	52628
Base socket mould formers, size 9		4 pieces	set	1	52629
Mould tongs, 64 cm long			piece	1	11599
Mould tongs, 55 cm long			piece	1	39754

A detailed brochure can be found at www.bego.com/download-center.

Fornax® service box for 4 crucibles and 1 set of tongs

Wiromelt melting power (non-precious)

Auromelt HF melting powder



80 g

65 g



piece

dispenser

### Fornax® crucible

• REF 52482 (page 79)

25337

52526

52525

and crucible inserts

Fornax® crucible

### Nautilus® T

Compact, benchtop vacuum pressure-casting machine with integrated power cooling and high-performance induction heating

- High-performance induction heating guarantees short melting cycles, minimises oxidation and thus facilitates subsequent finishing
- Large touch display with intuitive menu navigation for convenient and easy operation
- Integrated power cooling provides for over 50 casts in a row, even with high ambient temperatures with moulds made of phosphate-bonded investment materials
- Integrated cooling saves water and helps to protect the environment
- Compact dimensions and design give the Nautilus® T a very small footprint
- Suitable for all commercially available precious-metal and nonprecious alloys (excluding titanium)
- Eco mode switches off all unnecessary components in idle mode and reduces operating costs

With integrated power cooling and eco mode











Complementary product!

### Nautilus® crucibles

- REF 52488 (page 77)
- corresponding crucible handles and crucible inserts

Compressed air tank

Mould tongs

Nautilus® crucible

Product details	_				
Technical data					
Height	420 mm				
Height with cover open	520 mm				
Width	600 mm				
Depth	670 mm				
Rated voltage	230 VAC, 50/60 Hz				
Power at rated voltage of 230 VAC	16 A				
Compressed air connection (Connection thread 1/4")	at least 5 bar (0.5 [M	IPa])			
Air consumption	approx. 100 l/min				
Weight	approx. 63 kg				
Scope of delivery		Contents	Presentation	Qty	REF
Nautilus® T, 230 VAC, 50/60 Hz			piece	1	26420
Ceramic crucibles (each made of 2 halves)		4 pieces	pack	1	52488
Plastic handles for ceramic crucibles		2 pieces	pack	1	52436
Ceramic handles for ceramic crucibles		2 pieces	pack	1	52467
Graphite ingots		2 pieces	pack	1	
Glass carbon cylinder			pack	1	
Forceps			piece	1	30002
Mould holder plate, ceramic			piece	1	30259
Mould holder (ceramic) for sizes 1 and 9			piece	1	12257
Mould holder (ceramic) for sizes 3 and 6			piece	1	13362
Mould holder plate (metal grid) for partial denture (25 r	mm high)		piece	1	37618
Mould holder plate (metal grid) for partial denture (15 r	mm high)		piece	1	10073
Base socket mould formers, sizes 3, 6 and 9		1 piece each	pack	1	
Partial denture funnel former			piece	1	
Accessories		Contents	Presentation	Qty	REF
Compressed air tank with wall bracket					16260
Mould tongs, 55 cm long				1	39754
Base socket mould formers, size 3		4 pieces	set	1	52627
Base socket mould formers, size 6		4 pieces	set	1	52628
Base socket mould formers, size 9		4 pieces	set	1	52629
Partial denture funnel formers		10 pieces	pack	1	52066
Wiromelt melting power (non-precious)		80 g	tin	1	52526
Auromelt HF melting powder		65 g	dispenser	1	52525

## Nautilus® CC plus

## Intelligent casting with data interface

- Automatic casting for consistent, reproducible results every single time
- Casting point recognition ensures that the cast objects are filled at the temperature recommended by the alloy manufacturer
- High-performance induction heating guarantees short melting cycles, minimises oxidation and thus facilitates subsequent finishing
- Proven quality assurance: Nautilus® CC plus saves up to 1,000 casting logs
- Large colour touch display with intuitive menu navigation for convenient and easy operation
- Integrated power cooling provides for over 50 casts in a row, even with high ambient temperatures with moulds made of phosphate-bonded investment materials
- Integrated cooling saves water and helps to protect the environment
- Suitable for all commercially available precious-metal and nonprecious alloys (excluding titanium)
- Compact dimensions and design give the Nautilus® CC plus a very small footprint
- Eco mode switches off all unnecessary components in idle mode and reduces operating costs









Complementary product!

#### Nautilus® crucibles

- REF 52488 (page 77)
- corresponding crucible handles and crucible inserts

Compressed air tank

Mould tongs

Nautilus® crucible



## Nautilus® CC plus

The Nautilus® casting crucible principle enables the liquidus temperature to be exceeded by less than with other casting systems because the melt flows from the hot region of the crucible directly into the casting mould below.

Product details					
Technical data					
Height	420 mm				
Height with optical waveguide	650 mm				
Width	600 mm				
Depth	670 mm				
Rated voltage	230 VAC, 50/60 Hz				
Power at rated voltage of 230 V	16 A				
Compressed air connection (Connection thread 1/4")	at least 5 bar (0.5 [N	1Pa])			
Air consumtion	approx. 100 l/min				
Weight	approx. 64 kg				
Scope of delivery		Contents	Presentation	Qty	REF
Nautilus CC plus, 230 V, 50/60 Hz			piece	1	26415
Ceramic crucibles (each made of 2 halves)		4 pieces	pack	1	52488
Plastic handles for ceramic crucibles		2 pieces	pack	1	52436
Ceramic handles for ceramic crucibles		2 pieces	pack	1	52467
Graphite ingots		2 pieces	pack	1	
Glass carbon cylinder			pack	1	
Forceps			piece	1	30002
Mould holder plate, ceramic			piece	1	30259
Mould holder (ceramic) for sizes 1 and 9			piece	1	12257
Mould holder (ceramic) for sizes 3 and 6			piece	1	13362
Mould holder plate (metal grid) for partial denture (25 r	mm high)		piece	1	37618
Mould holder plate (metal grid) for partial denture (15 r	mm high)		piece	1	10073
Base socket mould formers, sizes 3, 6 and 9		1 piece each	pack	1	
Partial denture funnel former			piece	1	
Accessories		Contents	Presentation	Qty	REF
Compressed air tank with wall bracket			piece	1	16260
Printer for casting logs (for previous version of unit)			pack	1	16267
Mould tongs, 55 cm long			piece	1	39754
Base socket mould formers, size 3		4 pieces	set	1	52627
Base socket mould formers, size 6		4 pieces	set	1	52628
Base socket mould formers, size 9		4 pieces	set	1	52629
Partial denture funnel formers		10 pieces	pack	1	52066
Wiromelt melting power (non-precious)		80 g	tin	1	52526
Auromelt HF melting powder		65 g	dispenser	1	52525

A detailed brochure can be found at www.bego.com/download-center.



With the BEGO vacuum pressure casting method, the alloy quantity can be limited to the volume of the cast object, including the feed sprues and connecting channels plus reservoir. As a rule, no casting cone is required.

#### Miditherm 100/200 MP

Microprocessor-controlled preheating furnaces for crowns,

bridges and partial dentures

- The right preheating furnace in the right size for every requirement
- Monitoring of the temperature using a microprocessor in combination with a precision thermocouple ensures that there are no miscasts due to the casting rings being at the incorrect temperature
- Four-zone heating, with a max. temperature of 1,100 °C, guarantees uniform heating of the casting rings and consistent results during casting
- The heating elements are embedded in robust industrial ceramic for increased reliability and a long service life
- Maximum capacity of the mould chamber:

100 MP: 9 x size 3 mould

4 x BEGO large mould former, blue

200 MP: 32 x size 3 mould

9 x BEGO large mould former, blue

 Flexible programming with 4 programmable holding stages per programme, infinitely variable selection of the heat rate from 1-9 °C/Min and 1 speed programme reliably covers all applications in CrCo and crown and bridge work



Product details					
Technical data	Miditherm 100 MP	Miditherm 20	0 MP	Regulus	
Height	480 mm	600 mm		600 mm	
Width	350 mm	470 mm		160 mm	
Depth	420 mm	550 mm		140 mm	
Mould chamber Height	100 mm	110 mm			
Mould chamber Width	150 mm	200 mm			
Mould chamber Depth	170 mm	250 mm			
Rated voltage	200-240 VAC, 50/60 Hz	200–240 VA	C, 50/60 Hz	220–240	VAC, 50/60 Hz
Power at rated voltage of 230 VAC	1,600 VA	2,700 VA			
Temperature	max. 1,150 °C	max. 1,150 °	С		
Weight	approx. 28 kg	approx. 56 kg	7	3.4 kg	
Availability			Presentation	Qty	REF
Miditherm 100 MP with ceramic base	plate		piece	1	26150
Miditherm 200 MP with ceramic base	plate		piece	1	26155
Accessories		Contents	Presentation	Qty	REF
Ceramic base plate for Miditherm 100			piece	1	34954
Ceramic base plate for Miditherm 200			piece	1	13984
Thermocouple for Miditherm 100/200		2 pieces	pack	1	14087
Extraction pipe for Miditherm 100/200	), short		piece	1	35544
Spare heating mould for Miditherm 10	0		piece	1	34956
Spare heating mould for Miditherm 20	0		piece	1	13985
Regulus furnace extraction system			piece	1	25750







Miditherm 100 MP

Regulus furnace extraction system

## Nautilus® ceramic crucible FC made from an innovative special ceramic

- The design of the Nautilus® FC ceramic crucible is protected as a three-dimensional mark
- The crucible is composed of the innovative development of a high-temperature-resistant special ceramic, which offers many advantages over conventional crucible ceramics
- The extremely homogeneous structure of the ceramic contributes to its consistently reproducible accuracy of fabrication
- Extraordinarily smooth ceramic surfaces facilitate the discharge of the melt
- The high thermal shock resistance guarantees the long useful life of the Nautilus® FC ceramic crucible

Product details				
Availability	Contents	Presentation	Qty	REF
Nautilus® FC ceramic crucible	4 pieces	pack	1	52488

## Plastic handles for Nautilus® ceramic crucibles

## **Ceramic handles for Nautilus® ceramic crucibles**

Product details				
Availability	Contents	Presentation	Qty	REF
Ceramic handles for Nautilus® ceramic melting crucibles, especially if using graphit- or glass carbon cylinder. Can also be used for the casting of partial denture- and non-precious alloys	2 pieces	pack	1	52467

## **Graphite cylinder for Nautilus® ceramic crucibles**

• For Nautilus® T/CC/CC plus

Product details				
Availability	Contents	Presentation	Qty	REF
Graphite ingot	6 pieces	pack	1	52468

## Glass carbon cylinder for Nautilus® ceramic crucibles

- For Nautilus® T/CC/CC plus
- For melting precious-metal alloys, including those with a high palladium content

Product details				
Availability	Contents	Presentation	Qty	REF
Glass carbon cylinder	4 pieces	pack	1	52473

#### BEGO ceramic crucibles for Fornax® and Nautilus®

With the BEGO ceramic crucibles for Fornax® and Nautilus® BEGO is setting the most exacting standards.

An innovative method of manufacture for high-temperature-resistant crucibles, developed in scientific collaboration, permits:

- an extremely homogeneous material structure
- consistently reproducible accuracy of fabrication
- extraordinarily smooth ceramic surface, which facilitates discharge of the melt
- high thermal shock resistance, which ensures a long useful life
- The new material is even resilient enough to withstand aggressive alloys

When calculating the cost per casting, the useful life of the crucible must be taken into account in addition to its purchase price. The BEGO ceramic crucibles for Fornax® and Nautilus® set a new benchmark for cost-efficient casting. To make sure that you only purchase genuine BEGO crucibles, check that they have an extremely smooth surface and bear the engraved BEGO logo.

## Fornax® ceramic crucibles FC made from special ceramic

- With the BEGO ceramic crucible for Fornax®, BEGO is setting the most exacting standards.
- An innovative method of manufacture for high-temperature-resistant crucibles, developed in scientific collaboration, permits an extremely homogeneous material structure which facilitates a consistently reproducible accuracy of fabrication
- An extraordinarily smooth surface on the inside of the ceramic crucible facilitates the discharge of the melt
- The high thermal shock resistance of the new material guarantees a long useful life
- The new material is even resilient enough to withstand aggressive alloys

roduct details				
vailability	Contents	Presentation	Qty	REF
ornax® FC ceramic crucible	6 pieces	pack	1	52482

## **Graphite inserts for Fornax® ceramic crucibles**

Product details				
Availability	Contents	Presentation	Qty	REF
Graphite inserts	6 pieces	pack	1	52454

## **Ceramic inserts for Fornax® ceramic melting crucibles**

Product details				
Availability	Contents	Presentation	Qty	REF
Ceramic inserts	6 pieces	pack	1	52455

## **Lolipot** Crucible engobe for Fornax®- and Nautilus® ceramic crucibles

• This prolongs the life of the crucible and reduces casting residues in the melting crucible

Product details				
Availability	Contents	Presentation	Qty	REF
Lolipot (pressure pulverizer)	100 ml	bottle	1	52477

## **Ceramic crucibles for torche melting**

• The melting crucibles are made of special ceramic material and have a long service life through a high heat change resistance

Product details					
Availability	Contents	Presentation	Qty	REF	
Melting crucible, shallow trough, for cobalt-chrome partial denture alloys and non-precious alloys that can be used with Fundor, Fundor T, Castor and Pollux with double centrifugal arm	6 piece	pack	1	52426	For partial and non-precious alloys
Melting crucible, deep trough, for precious-metal alloys that can be used with Fundor, Fundor T, Castor and Pollux with double centrifugal arm	6 pieces	pack	1	52425	For precious alloys

## **Auromelt HF Melting powder**

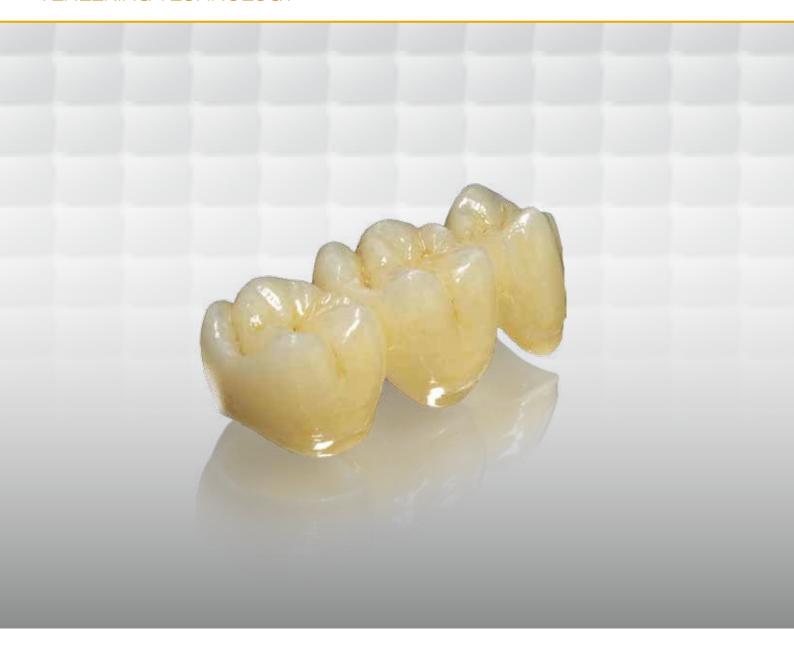
- Suitable for all melting processes of precious-metal and non-precious alloys
- It prevents oxide formation, even at low melting temperatures, and facilitates recognition of the correct moment for casting

Product details				
Availability	Contents	Presentation	Qty	REF
Auromelt HF (dispenser)	65 g	tin	1	52525

# Wiromelt Melting powder

- For melting Wiron® and Wirobond® alloys in Nautilus® and other casting units
- Prevents the formation of oxide and facilitates the detection of the correct casting moment

Availability	Contents	Presentation	Qty	REF
Viromelt (dispenser)	80 g	tin	1	52526



# VENEERING TECHNOLOGY

Recreating the aesthetics of natural teeth poses a considerable challenge for any dental technician. BeCe® Zirkon ceramic is ideal for expertly creating customised, all-ceramic objects quickly and economically. All 16 Vita shades can be reproduced in a very short time and with consistent quality.

#### BeCe® StainArt KIT ZIRKON

- Elegantly simple colouring of pressable and layered veneering ceramic as well as fully anatomical CAD/CAM restorations
- Optimal application properties with clear-cut shade selection using the classic A–D shade system ensures accurate control of the desired basic shade
- The range of shades is rounded off with a coordinated system of fluorescent stains for achieving customised colour effects and characterisations

#### Indication

- Ceramics with a CTE in the range of  $8.5 10.5 \times 10^{-6} \text{ K}^{-1} (25-500^{\circ}\text{C})$
- Temperature range of 780°C–840°C
- All-ceramic crowns and bridges made with BeCe® CAD Zirkon+ and BeCe® CAD Zirkon HT+
- Press-to-metal crowns and bridges made with BeCe® PRESS Z
- Schweiger's dentine core crowns made with BeCe® CAD Zirkon+ and BeCe® CAD Zirkon HT+
- All-ceramic crowns and bridges made with IPS e.max\*



Product details				
Availability	Contents	Presentation	Qty	REF
BeCe® PRESS StainArt Kit ZIRKON		Kit	1	70057
Stain flour. Powder Z Shade A	4 g			70555
Stain fluor. Powder Z Shade B	4 g			70556
Stain fluor. Powder Z Shade C	4 g			70557
Stain fluor. Powder Z Shade D	4 g			70558
Stain fluor. Powder orange	4 g			70511
Stain fluor. Powder pretty-brown	4 g			70513
Stain fluor. Powder white	4 g			70515
Stain fluor. Powder violet	4 g			70510
Stain fluor. Powder blue	4 g			70518
Stain fluor. Powder black	4 g			70514
Stain fluor. Powder full-orange	4 g			70512
Stain fluor. Powder sand	4 g			70516
Glaze Powder Z	3 g			70542
Liquid Stain/Glaze Z	25 ml			70172

Recommendation for use	
Stain	Indication
Stain fluor. Powder Z orange	Application preferably in the cervical or palatal regions, characterisation in the occlusal area, adjustment to changes in natural teeth caused by ageing
Stain fluor. Powder Z pretty-brown	For reproducing obvious 'age marks', such as discolourations and hairline cracks etc.
Stain fluor. Powder Z white	For lightening and reproducing enamel opacities etc.
Stain fluor. Powder Z violet	For increasing the translucent depth effect and for insertion in the interdental area
Stain fluor. Powder Z blue	For increasing the blue opalescence/translucency
Stain fluor. Powder Z black	For changing the greyscale value to reproduce the illusion of spatial depth and to create highly transparent enamel parts
Stain fluor. Powder Z full-orange	For use preferably in cervical or palatal regions, characterisation in the occlusal area
Stain fluor. Powder Z sand	Tinted white for characterisation of incisal margins, cusp tips and for areas where space is limited

<sup>\*</sup> This symbol is a commercial designation/registered trademark of a company which is not part of the BEGO company group.

#### BeCe® Incisal KIT ZIRKON

- For individual design of the incisal portion on milled frames made from zirconium dioxide
- Coordinated assortment of individual materials for the fast and economical creation of layering with a unique characterisation in the incisal area
- In particular, combining BeCe® Incisal Kit Zirkon with the BeCe® CAD Zirkon milled dentine core base offers reproducible colour and shape results with a significantly reduced layer build-up

#### Indication

- Zirconium dioxide ceramics with a CTE in the range of 10.5 x 10<sup>-6</sup> K<sup>-1</sup> (25–500 °C)
- All-ceramic BeCe® CAD Zirkon HT+ and BeCe® CAD Zirkon+ constructions without incisal portions, overlayered with BeCe® PRESS Z individual materials
- Single tooth and bridge restorations (up to 2 pontics between two abutment teeth)

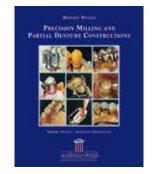


Product details				
Availability	Contents	Presentation	Qty	REF
BeCe® Incisal KIT ZIRKON		Kit	1	70058
Liner N	4 g			70165
Liquid Liner Z	25 ml			70170
Liquid Modelling Z	25 ml			70174
Z Enamel 1	20 g			70590
Z Enamel 2	20 g			70591
Z Enamel 3	20 g			70592
Z Enemal 4	20 g			70593
Z Transpa clear	20 g			70585
Z Transpa orange	20 g			70580
Z Transpa amber	20 g			70581
Z Transper blue	20 g			70582
Z Transpa grey	20 g			70583
Z Opal Incisal 1	20 g			70575
Z Opal Incisal 2	20 g			70576
Modifier orange	4 g			70595
Modifier white	4 g			70597

## **Precision Milling and Partial Denture Constructions**

## **Modern Design – Efficient Production**

- Manual for dental laboratories and dental practices geared to prosthodontics
- Ideal for preparing the Master Dental Technician exam
- Practice-oriented guide and reference book
- · Partial denture restoration with telescope constructions and clasp-anchored tooth replacement
- Systematic planning and designing
- Efficient dental production
- Various stages of restoration with partial denture techniques
- Clear step-by-step presentation of important procedures
- Historical retrospect
- Appendix with information on materials
- Many practical tips for users
- Processing errors and their consequences
- Author: Henning Wulfes

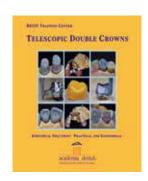


Product details	
Form	
280 pages · Size 210 x 260 mm · approx. 1000 colour illustrations · Hardcov	ver
Availability	REF
German edition	88894
English edition	88895
Russian edition	88896

## **Telescopic Double Crowns**

#### **Individual Solutions – Practical and Economical**

- Manual for dental laboratories and dental practices
- Ideal for familiarization with the subject of telescopic double crowns
- Practice-oriented guide and reference book
- Detailed information regarding planning and designing
- · Efficient dental manufacturing
- Clear step-by-step presentation of important procedures
- Troubleshooting and error prevention
- Many practical tips for users
- Author: Team of authors of BEGO Training Center and academia dental



Product details	
Form	
92 pages · Size 210 x 260 mm · approx. 270 colour illustrations · Hardcover	
Availability	REF
German edition	sold out
English edition	88876
Russian edition	88875



# **BLASTING AND EXTRACTION**

Blasting of cast objects is not a favourite job for many dental technicians.

But complete removal of all oxide and investment material is essential for castings of the highest quality. The BEGO blasting materials Korox® and Perlablast® meet every requirement. When used in the BEGO blasting units, they provide the ideal preparation for subsequent surface finishing.

## **Protempomatic plus**

## Fully automatic sandblaster for up to 6 cast partial denture frameworks simultaneously

#### Efficient, quick, cost-effective

- The integrated aim point in the nozzle enables exact positioning of the workpiece in the abrasive flow for quick, effective sandblasting
- Efficient use of blasting material emphasises the cost-effective sandblasting
- LED lighting in the blasting chamber has a service life of up to ten times longer than conventional lamps
- The swivel nozzle enables the unit to be used as an automatic or manual sandblaster for maximum application options in the laboratory
- The initial position of the nozzle can be magnetically locked for accurately setting the optimal nozzle angle during automatic and manual sandblasting to ensure the best possible sandblasting performance
- The viewing glass is locked in position by a magnetic switch: When it is opened, sandblasting is discontinued: for maximum operational safety
- The basket is easily removed for increased comfort during manual sandblasting
- Protempomatic can also be supplied without the filter module for connecting to a central extraction



Product details				
Technical data				
Height	540 mm			
Width	400 mm			
Depth	410 mm			
Rated voltage	230 VAC (plus), 50/60 Hz, 100-240 VAC (Z	), 50/60 Hz		
Power at rated voltage of 230 VAC	1,225 W (plus), 25 W (Z)			
Compressed air connection	4-6 bar (0.4-0.6 [MPa]), 1/4"			
Air consumption	approx. 120 I/min			
Capacity	8 kg			
Weight excl. blasting material	32 kg (plus), 20 kg (Z)			
Availability		Presentation	Qty	REF
Protempomatic plus incl. filter module, with 1 1 safety filter bag, 1 suction hose with hand tul		piece	1	26390

10 (-1// 10 (-	-/			
Availability		Presentation	Qty	REF
Protempomatic plus incl. filter module, with 1 Class H filter, 1 safety filter bag, 1 suction hose with hand tube		piece	1	26390
Protempomatic Z for connection to the central extraction system		piece	1	26360
Accessories	Contents	Presentation	Qty	REF
Class H Filter		piece	1	18346
Filter bag	5 pieces	pack	1	18347
Hansa nozzle		piece	1	12136
Turntable, compl.		piece	1	12276
Replacement panel		piece	1	18354
Korox® 250 special corundum blasting material	8 kg	canister	1	46014
Korox® 250 special corundum blasting material large pack	20 kg	tub	1	54300
Korox® 110 special corundum blasting material	8 kg	canister	1	46044
Korox® 110 special corundum blasting material large pack	20 kg	tub	1	54299
Protective curtain		piece	1	18284
Rubber sleeves	4 pieces	pack	1	18358

## **EasyBlast**

## For the perfect view during finishing

- Integrated LED lighting in the pencil blaster for an optimal view with no shadows when finishing, even intracoronally
- For the thorough removal of investment materials and oxides in order to avoid undesirable biological reactions with the patient
- LED technology enables the detection of cracks in the ceramic during blasting – providing the earliest possible quality assurance and avoiding complaints at a later date
- LED lighting in the blasting chamber has a service life of up to ten times longer than conventional lamps
- The EasyBlast can be upgraded to a 4-chamber blasting unit by adding 2 further blasting modules you save the costs of buying a further unit
- In combination with the LED lighting, an intelligent colour coding system on the tanks and in the blasting chamber makes it impossible to mix up the blasting media



EasyBlast - easy to operate, versatile and ergonomic

	_	_	_	_
·				
/ max.				
bar (0.3-0.6 [MPa]), 1/4"				
ox. 60 I/min				
nm				
out additional tanks: 10.9 kg	/ with 2 addition	al tanks 13.9 kg		
		Presentation	Qty	REF
luminated pencil blasters replaceable nozzles for diffe	erent sizes of	piece	1	26385
luminated pencil blasters		piece	1	26386
luminated pencil blasters		piece	1	26387
nd 2 pencil blasters without	t LED lighting	piece	1	26375
d 3 pencil blasters without I	_ED lighting	piece	1	26376
d 4 pencil blasters without I	_ED lighting	piece	1	26377
·	Contents	Presentation	Qty	REF
		piece	1	18350
		piece	1	18130
		piece	1	18390
		piece	1	17787
	2 pieces	pack	1	14550
erlablast <sup>®</sup> micro (50 µm)	2 pieces	pack	1	14549
<u> </u>	2 pieces	pack	1	14548
·		pack	1	14547
	8 ka	canister	1	46014
	O Ng			
pack			1	54300
pack	20 kg	tub		
	20 kg 8 kg		1	54300 46044 54299
pack	20 kg 8 kg 20 kg	tub canister tub	1 1 1	46044 54299
pack	20 kg 8 kg 20 kg 8 kg	tub canister tub canister	1 1 1 1	46044 54299 46062
	20 kg 8 kg 20 kg 8 kg 20 kg	tub canister tub canister tub	1 1 1 1	46044 54299 46062 54298
pack	20 kg 8 kg 20 kg 8 kg 20 kg 8 kg	tub canister tub canister tub canister tub canister	1 1 1 1 1	46044 54299 46062 54298 46036
pack ack	20 kg 8 kg 20 kg 8 kg 20 kg 8 kg 8 kg	tub canister tub canister tub canister tub canister canister	1 1 1 1 1 1	46044 54299 46062 54298 46036 46043
pack	20 kg 8 kg 20 kg 8 kg 20 kg 8 kg 8 kg 20 kg	tub canister tub canister tub canister tub canister canister tub	1 1 1 1 1 1 1 1	46044 54299 46062 54298 46036 46043 54301
pack ack	20 kg 8 kg 20 kg 8 kg 20 kg 8 kg 8 kg	tub canister tub canister tub canister tub canister canister	1 1 1 1 1 1	46044 54299 46062 54298 46036 46043
	ox. 60 l/min out additional tanks: 10.9 kg luminated pencil blasters replaceable nozzles for diffe luminated pencil blasters luminated pencil blasters and 2 pencil blasters without d 3 pencil blasters without le	mm  '505 mm  -240 VAC, 50/60 Hz  / max. bar (0.3–0.6 [MPa]), 1/4"  ox. 60 I/min  out additional tanks: 10.9 kg / with 2 addition  luminated pencil blasters replaceable nozzles for different sizes of  luminated pencil blasters luminated pencil blasters and 2 pencil blasters without LED lighting and 3 pencil blasters without LED lighting and 4 pencil blasters without LED lighting Contents  2 pieces  erlablast* micro (50 μm) 2 pieces  erlablast* micro (50 μm) 2 pieces	mm  2505 mm  240 VAC, 50/60 Hz  / max. bar (0.3–0.6 [MPa]), 1/4"  ox. 60 I/min  mm  out additional tanks: 10.9 kg / with 2 additional tanks 13.9 kg  Presentation  luminated pencil blasters replaceable nozzles for different sizes of  luminated pencil blasters  piece  luminated pencil blasters  piece  d 2 pencil blasters without LED lighting  piece d 3 pencil blasters without LED lighting  piece  d 4 pencil blasters without LED lighting  piece  Contents  Presentation  piece  piece	mm  505 mm  -240 VAC, 50/60 Hz  / max. bar (0.3–0.6 [MPa]), 1/4"  ox. 60 l/min  mm  out additional tanks: 10.9 kg / with 2 additional tanks 13.9 kg  Presentation Qty  Iluminated pencil blasters replaceable nozzles for different sizes of  Iluminated pencil blasters piece 1  Iluminated pencil blasters piece 1  Iluminated pencil blasters piece 1  Iluminated pencil blasters without LED lighting piece 1  d 3 pencil blasters without LED lighting piece 1  d 4 pencil blasters without LED lighting piece 1  Contents Presentation Qty  piece 1  piece 1

## **Duostar plus**

# Multifunctional combination of a fine blasting and recycling sandblaster unit

#### The all-rounder in your laboratory

- Integrated LED lighting in the pencil blaster for an optimal view with no shadows when finishing, even intracoronally
- For the thorough removal of investment materials and oxides in order to avoid undesirable biological reactions with the patient
- LED lighting in the blasting chamber has a service life of up to ten times longer than conventional lamps for economical working and reduced maintenance costs
- Combines the properties of 2 units in the smallest of spaces and offers the advantages of both a fine blasting unit and a recycling sand-blaster unit. This makes Duostar an ideal, economical investment, also for small and medium-sized laboratories
- Duostar is also available without a filter module, for connecting to the central extraction system



Product details							
Technical data							
Height	590 mm	590 mm					
Width	400 mm						
Depth	420 mm						
Rated voltage	230 VAC (plus), 50/60 Hz, 1	100-240 VAC (Z	), 50/60 Hz				
Power at rated voltage of 230 VAC	1,225 W (plus), 25 W (Z)						
Compressed air connection	4-6 bar (0.4-0.6 [MPa]), 1/	4"					
Air consumption	approx. 120 I/min						
Capacity recirculation system	8 kg						
Capacity pencil blaster	700 g per container						
Weight excl. blasting material	35 kg (plus), 23 kg (Z)						
Availability			Presentation	Qty	REF		
Duostar plus incl. initial filling, microblast n 2 microblaster handpiece nozzle with LED li incl. filter module with 1 Class H filter, 1 sa	ghting x 1.2 mm / 0.8 mm,	,	piece	1	26395		
Duostar Z for connection to the central extra	action system		piece	1	26365		
Accessories		Contents	Presentation	Qty	REF		
Class H Filter			piece	1	18346		
Filter bag		5 pieces	pack	1	18347		
Hansa nozzle			piece	1	12136		
Replacement panel			piece	1	17787		
Fine blasting nozzle, Ø 1.2 mm, for Korox $^{\circ}$ 25 Korox $^{\circ}$ 110 and Perlablast $^{\circ}$ (125 $\mu$ m)	0,	2 pieces	pack	1	14550		
Fine blasting nozzle, Ø 0.8 mm, for Korox® 5	50 and Perlablast micro (50 μm)	2 pieces	pack	1	14549		
Fine blasting nozzle, Ø 0.6 mm, for Korox® 5	50 and Perlablast micro (50 μm)	2 pieces	pack	1	14548		
Fine blasting nozzle, Ø 0.4 mm for Korox® 2	25		pack	1	14547		
Korox® 250 special corundum blasting mate	rial	8 kg / 20 kg	canister / tub	1	46014 / 54300		
Korox® 110 special corundum blasting mate	rial	8 kg / 20 kg	canister / tub	1	46044 / 54299		
Korox® 50 special corundum blasting materi	ial	8 kg / 20 kg	canister / tub	1	46062 / 54298		
Korox® 25 special corundum blasting materi	ial	8 kg	canister	1	46036		
Perlablast® – 125 μm – blast-polishing mate	erial	8 kg / 20 kg	canister / tub		46043 / 54301		
Perlablast® micro – 50 μm – blast-polishing	material	8 kg / 20 kg	canister / tub		46092 / 54302		
Mesh panel guard			piece	1	18350		

## **Korostar plus**

## The ideal blasting unit for manual, economical blasting

#### Robust and powerful

- The ergonomic design allows a relaxed working position and great manual freedom for comfortable working
- Low-maintenance and economical thanks to the use of many hardwearing components
- Reliable even under maximum load
- The injector nozzle ensures optimised proportion of blasting material in the compressed air flow of the blasting material circulating system
- Large charging flap and well illuminated blasting chamber
- LED lighting in the blasting chamber has a service life of up to ten times longer than conventional lamps and reduces maintenance costs
- Korostar is also available without a filter module, for connecting to the central extraction system



Product details					
Technical data		·			
Height	540 mm				
Width	400 mm				
Depth	410 mm				
Rated voltage	230 VAC (plus), 50/60 Hz	z, 100–240 VAC (Z),	50/60 Hz		
Power at rated voltage of 230 VAC	1,225 W (plus), 25 W (Z)				
Compressed air connection	4-6 bar (0.4-0.6 [MPa]),	1/4"			
Air consumption	approx. 120 I/min				
Capacity	8 kg				
Weight excl. blasting material	30 kg (plus), 18 kg (Z)				
Availability			Presentation	Qty	REF
Korostar plus incl. filter module with 1 C 1 suction tube with hand pipe	ass H filter element, 1 safety filter	er bag,	piece	1	26400
Korostar Z for connection to the central e	xtraction system		piece	1	26370
Accessories		Contents	Presentation	Qty	REF
Class H filter element			piece	1	18346
Filter bag		5 pieces	pack	1	18347
Replacement blasting nozzle			piece	1	12136
Replacement panel			piece	1	17787
Mesh panel guard			piece	1	18350
Rubber collars		4 pieces	pack	1	18358
Korox® 250 special corundum blasting m	aterial	8 kg	canister	1	46014
Korox® 250 special corundum blasting m	aterial large pack	20 kg	tub	1	54300
Korox® 110 special corundum blasting m	aterial	8 kg	canister	1	46044
Korox® 110 special corundum blasting m	aterial large pack	20 kg	tub	1	54299

#### **Filtermodul**

## For the highest level of occupational safety

#### The highest level of occupational safety

- Approved for working with hazardous dusts
- Complies with the highest protection class H (this means that every unit is checked to assure the H classification)
- Efficiently protects you from carcinogenic dusts

#### **Economical**

- The automatic switch-on function is ideal for using the Filtermodul in direct combination with the blasting units
- The module is automatically switched on and off by the activation and deactivation of the blasting unit
- Reduces power consumption, lowers costs and protects the environment

#### **Push & Clean function**

- For constantly high suction, even with an increasingly full filter bag
- Enables rapid and effective filter cleaning at the touch of a button



Product details					
Technical data					
Height	595 mm				
Width	383 mm				
Length	455 mm				
Rated voltage	220-240 VAC, 50/60 Hz				
Power at rated voltage of 230 VAC	1,200 W				
Weight	10.5 kg				
Availability			Presentation	Qty	REF
Filter module complete with 1 Class H filter, 1 safety filter bag, 1 suction hose with hand tube			piece	1	26380
Accessories		Contents	Presentation	Qty	REF
Class H Filter			piece	1	18346
Safety filter bag		5 pieces	pack	1	18347

#### **Korox**®

## Special corundum blasting material made from 99.6 % aluminium oxide

- Alpha corundum with high hardness
- It remains sharp-edged until completely worn
- Efficacy and ease of use are reflected in its impressive compatibility with the BEGO recycling sandblasters such as Duostar or Protempomatic
- When used in pencil sandblasters, Korox® 250 not only removes investment material residues and oxides efficiently, but is also ideal for optimal surface conditioning of non-precious alloys prior to ceramic firing
- The high purity of Korox means there is no risk of contamination of the alloy surface
- Korox® complies with the regulations of occupational safety institutes

Product details					
Availability	Contents	Presentation	Qty	REF	
Korox <sup>®</sup> 250 (250 μm)	8 kg	canister	1	46014	
Korox® 250 (250 μm) large pack	20 kg	tub	1	54300	
Korox® 110 (110 μm)	8 kg	canister	1	46044	Korox®
Korox® 110 (110 μm) large pack	20 kg	tub	1	54299	
Korox <sup>®</sup> 50 (50 μm)	8 kg	canister	1	46062	: Elx Ely
Korox® 50 (50 μm) large pack	20 kg	tub	1	54298	
Korox <sup>®</sup> 25 (25 μm)	8 kg	canister	1	46036	

#### Perlablast®

## Blasting material for blast polishing

- It consists of tiny, lead-free beads of soda glass which produce an even silky lustre
- The controlled size and shape of the beads make for a high level of usability and therefore efficient, economical working.
- No metal is lost because the surface is compressed and not abraded
- No finishing is necessary on the surfaces which are not intended for polishing
- It can be used for all standard crown and bridge alloys to give the occlusal surfaces a matt finish

Product details				
Availability	Contents	Presentation	Qty	REF
Perlablast® (125 μm)	8 kg	canister	1	46043
Perlablast® (125 μm) large pack	20 kg	tub	1	54301
Perlablast® micro (50 μm)	8 kg	canister	1	46092
Perlablast® micro (50 μm) large pack	20 kg	tub	1	54302



# SURFACE TREATMENT

Surface finishing is an important step in the fabrication of a prosthesis.

The appropriate fine grinding stones and devices such as the Paraskop® M milling unit, the BeCe® Air Zirkon turbine or the Triton SLA steam blaster have been tried and tested in practice for many years. For partial dentures, the Eltropol 300 electrolytic polishing unit and Wirolyt polishing liquid are a guarantee of good results.

#### **Triton SLA**

## Wet and dry steam cleaner

#### Environmentally sound, intensive and versatile

- High-performance unit with "wet" and "dry steam" setting
- Fixed water connection with interconnected BEGO full demineralising cartridge effectively minimises calcification of the unit
- Steam pressure of approx. 3 bar for gentle but thorough cleaning
- High degree of safety through fixed connections consisting of copper tubing
- Corrosion-resistant housing made of special steel and plastic
- The insulation of the spray gun prevents the handpiece from heating up, thus ensuring maximum comfort even during longer periods of use
- Water flow switch cuts off the water supply immediately should leakages occur and prevents water damage in the laboratory



Product details					
Technical data					
Height	540 mm				
Width	380 mm				
Depth	280 mm				
Rated voltage	200-240 VAC, 50/60 Hz				
Special voltage	100-120 VAC, 50/60 Hz				
Power at rated voltage of 230 VAC	1.5 kW				
Boiler temperature at 3 bar	133 °C				
Steam pressure	3±0.2 bar (approx. 0.3 [MPa])				
Boiler capacity	2.9				
Water connection	3/4", 4-6 bar				
Weight	13 kg				
Availability			Presentation	Qty	REF
Triton SLA with full demineralisation cart	ridge, ring spanner incl.		piece	1	26005
Accessories		Contents	Presentation	Qty	REF
Full demineralisation cartridge with 2 ins	erts and ring spanner		piece	1	37600
Inserts for cartridge		2 pieces	set	1	37602
Calex descaler for steam cleaner		1 litre	bottle	1	52125
Durox replacement one-way resin		6 litre	tub	1	52121
Ring spanner			piece	1	11044

## Paraskop® M

## Multifunctional milling unit

- Milling and drilling wax and metal and machining zirconium dioxide with the optionally-available BEGO laboratory turbine
- Powerful, maintenance-free, brushless milling spindle with very long service life
- Vibration-free running of the spindle ensures optimum concentricity
- Continuously variable speed control up to 50,000 rpm, anti-clockwise rotation up to 30,000 rpm for all conventional applications in milling work
- Offset-free and fast positioning of the model table thanks to electromagnetic locking
- The cold-light LEDs offer maximum light yield without heating the wax-up, and a service life ten times longer than conventional lamps



#### BeCe® Air Zirkon

## Laboratory turbine

- The large 2 litre water tank is unique on the market and facilitates efficient working over a long period of time without refilling
- The integrated ceramic water filter removes dirt and dust particles from the water and prevents damage to the rotor
- The damping function reduces the sound level for increased comfort and pleasant working









Collection tray Splash chamber Zirconium abrasives set 2°

Technical data				
Height	approx. 488–570 mm			
Width	290 mm			
Depth	310 mm			
Rated voltage	200-240 VAC, 50/60 Hz			
Special voltage	100-120 VAC, 50/60 Hz			
Rated power of milling spindle	260 W			
RPM	approx. 1,000-50,000 U/min			
Anti-clockwise	up to 30,000 U/min			
Weight	8.9 kg			
Scope of delivery		Presentation	Qty	REF
	ndle, surveying head, model table and LED lamp, witch, chuck key, cleaning brush and 2 spare fuse		1	26340
Paraskop® M complete set with milling unit, collection container for Paraskop®	unit, laboratory turbine BeCe® Air Zirkon with con M and splash cabin for ceramic work	trol set	1	26350
Accessories	Conten	ts Presentation	Qty	REF
Milling set 2.35 mm		set	1	43470
Zirconium abrasives 2°	4 piece	s set	1	43510
Collet chuck 2.35 mm with bit stop		piece	1	31722
Collet chuck 3 mm with bit stop		piece	1	31721
Dust protection cover		piece	1	32746
Refill holder		piece	1	22163
Graphite refills		pack	1	22150
Measurement set according to Ney	10 pied	ces set	1	22160
Model table		piece	1	18110
Laboratory turbine		piece	1	26345
Water collection bowl for Paraskop® M		piece	1	18082
Splash cabin for trimming ceramics		piece	1	18083
Compressed air coupling set		piece	1	18115
Product details BeCe® Air Zirkon			-	-
Technical data				
Height	260 mm			
Width	260 mm			
Depth	240 mm			
RPM	max. 320,000 U/min			
Operating pressure	1.0-3.2 bar			
Scope of delivery		Presentation	Qty	REF

A detailed brochure can be found at www.bego.com/download-center.

Laboratory turbine BeCe® Air Zirkon with control unit (2 L water tank) and connection set

26345

1

piece

## **Separating discs for separating sprues**

- 1 BEGO separating discs for cutting off sprues safely and slicing through ceramic and metal, leaving only a narrow gap
- 2 SecuDisc separating discs are very safe and long-lasting due to the glass fibre mesh laid-in on both sides. This also saves working time and material. The 22 x 0.2 mm SecuDisc cuts precious alloys very economically

Product details					
Availability	Contents	Presentation	Qty	REF	
BEGO Separating discs     Ø 25 x 0.5 mm	100 pieces	pack	1	43040	
Ø 35 x 0.8 mm	100 pieces	pack	1	43020	2
For ceramics: Ø 22 x 0.3 mm	100 pieces	pack	1	43060	
2 SecuDisc Separating discs, Ø 22 x 0.2 mm	20 pieces	pack	1	54810	
Ø 25 x 0.3 mm	20 pieces	pack	1	54809	
Ø 38 x 0.5 mm	20 pieces	pack	1	54808	

## **Rough grinding stones**

• Ceramically bonded, for rough grinding large areas

Product details				
Availability	Contents	Presentation	Qty	REF
Rough grinding stones, Shank size 2.35 mm	12 pieces	pack	1	43110

## Fine-grain grinding stones with a high cutting capacity

- Fine grit stones are used for efficient grinding of dental alloys. Shank size 2.35 mm recommended rpm 30,000 to 50,000 min<sup>-1</sup>
- The figures of the ISO No. denotes the largest diameter of the active section in 1/10 mm

Contents Presentatio	n <b>Q</b> ty	REF			[2]	U
100 pieces pack	1	43160				
100 pieces pack	1	43180	SEE		W	100
100 pieces pack	1	43200	1100	200		
100 piecse pack	1	43280				
			H	H2	<b>H3</b>	<b>H</b>
	100 pieces pack  100 pieces pack  100 pieces pack	100 pieces         pack         1           100 pieces         pack         1           100 pieces         pack         1	100 pieces       pack       1       43160         100 pieces       pack       1       43180         100 pieces       pack       1       43200	100 pieces pack 1 43160  100 pieces pack 1 43180  100 pieces pack 1 43200  100 piecse pack 1 43280	100 pieces pack 1 43160  100 pieces pack 1 43180  100 pieces pack 1 43200 100 piecse pack 1 43280	100 pieces pack 1 43160  100 pieces pack 1 43180  100 pieces pack 1 43200  100 piecse pack 1 43280

#### **Perforated discs**

- They are particularly resistant
- · Perforated discs are highly resistant and are used for effective removal of sprue ends on the castings after separation
- The large circumference of the perforated discs optimize the cutting capacity

Product details				
Availability	Contents	Presentation	Qty	REF
Perforated discs Ø 22 x 3 mm	100 pieces	pack	1	43100
Perforated discs Ø 34 x 3 mm	100 pieces	pack	1	43080

#### **WiroFlex**

## Rubber polishing wheels

- Very thin and extremely flexible, they can be used for all dental alloys
- Especially well-suited for the partial denture technique, for finishing areas that are difficult to access as well as for crown and bridge work for example, for interdental work because they conform very closely to the shape to be rubber-polished

Product details				
Availability	Contents	Presentation	Qty	REF
WiroFlex Ø 22 x 1.2 mm	100 pieces	pack	1	43311

## Rubber polishers for pre-polishing alloy surfaces

• For pre-polishing the surfaces of precious and non-precious castings which can then be high-lustre polished to a deep, lasting lustre

Product details				
Availability	Contents	Presentation	Qty	REF
Rubber polishing wheels, Ø 22 x 3.5 mm				
green	100 pieces	pack	1	43310
black	100 pieces	pack	1	43330
Rubber polishing tips, Ø 6.5 x 24 mm				
green	100 pieces	pack	1	43350
black	100 pieces	pack	1	43370
Knife-edge rubber polishing wheels, Ø 15.5 mm				
green	100 pieces	pack	1	43390
black	100 pieces	pack	1	43410

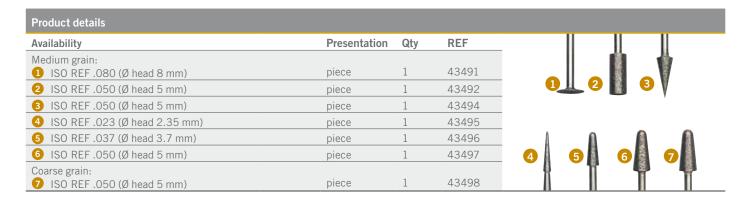
## **BEGO** brilliant shine silicone polishers

- · Specially designed for the quick, reliable and gentle processing of zirconium dioxide and veneering ceramics
- For smoothing and polishing ground contact points
- For removing or as a complement to incomplete glaze firings
- Perfectly coordinated to the processing of BeCe® CAD Zirkon+, BeCe® CAD Zirkon HT+ and BeCe® CAD Zirkon XH

Product details					
Availability	Shaft diameter	Optimum speed	Contents	REF	
• Set: points + discs Ø 14 mm	2.35 mm	6,000-10,000 rpm	6 pcs	54853	, , , , , , , , , , , , , , , , , , ,
• Points	2.35 mm	6,000-15,000 rpm	3 pcs	54852	
• Discs Ø 22 mm	2.35 mm	6,000-10,000 rpm	3 pcs	54851	<u> </u>

## **Diamond grinding stones sintered**

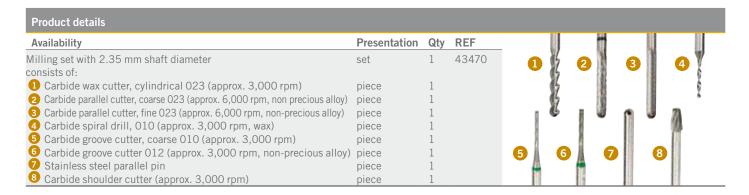
- Diamond rotary instruments have a high cutting capacity and considerably longer service life compared with ceramic bonded fine grit stones
- The figures of the ISO No. denotes the largest diameter of the active section in 1/10 mm, 2.35 mm shaft diameter



## Milling set

## Standard milling set for combined restorations

- The milling set includes the most important cutter geometries for creating telescopic crowns, bars and stress distribution arms
- For recommended rotational speeds, please see table



## Zirconium abrasives set for the water-cooled laboratory turbine of the Paraskop® M

- The set comprises abrasives with exactly coordinated surface structure for processing primary crowns or stress distribution arms made from zirconium dioxide
- Used in the water-cooled laboratory turbine BeCe® Air Zirkon, they produce optimal surfaces in four steps
- The recommended rotational speed for optimal surface finishing is 160,000 rpm

Product details				
Availability	Presentation	Qty	REF	Set Ref. No. 43510
Zirconium abrasives set	set	1	43510	DECO TO THE PLANT OF THE PARTY

## Polishing point holder mandrels

- Particularly tough polishing point holders for all areas of dental laboratory work
- Shaft diameter 2.35 mm

Product details  Availability	Contents	Presentation	Qty	REF
Polishing tip holders, cylindrical	12 pieces	pack	1	52300
Mandrels	12 pieces	pack	1	52290

## Polishing compounds for dry polishing

- These compounds are wax-bonded and enable clean and practically dust-free work
- They do not contain any harmful quartz

Product details				
Availability	Contents	Presentation	Qty	REF
Rough and final polish, for cobalt-chrome, blue, approx. 1.33 kg	6 pieces	pack	1	52310
Final polish for metal and acrylic, white, approx. 1.4 kg	6 pieces	pack	1	52311

## Steribim® super

## High-performance polishing compound for acrylic dentures with germicidal effect

- Formaldehyde-free, biodegradable, toxicologically safe
- Special additives have a germicidal effect
- Kind to the skin
- No unpleasant odour
- Quartz-free no danger of silicosis
- Excellent polishing performance down to the last gram low residual roughness
- Smooth consistency
- Bactericidal effect

Product details					
Availability	Contents	Presentation	Qty	REF	
Steribim® super	10 kg	tub	1	54283	Serbini saper  10 - 8  10 - 1

## **Diapol**

## Diamond polishing compound for special applications

- Improved Diapol formulation for optimal polishing results
- Easy to apply, excellent distribution over the surface combined with minimal consumption
- Diapol polishes even the hardest alloys and ceramics and is ideal for precious metals
- Ideal for polishing ceramic abutments or if a glaze firing is no longer possible
- Economical application: approx. 3 mm of compound is sufficient for a 3-unit bridge

Availability	Contents	Presentation	Qty	REF	_
Diapol (syringe)	5 g	syringe	1	52305	

## Eltropol 300

- Automatic recommendation of polishing time for different sizes of framework prevents unnecessary reduction of material
- Innovative heating concept quickly brings the unit up to operating temperature
- Major time saving thanks to simultaneous polishing of two Co-Cr partial denture bases
- User-friendly operating panel with display and soft keys
- Indicator to show when the solution in the polishing bath is due to be changed ensures consistent polishing quality
- Simplified emptying directly into the canister via the drainage device, without coming into contact with the acid
- Uniform movement of the polishing bath ensures outstanding polishing results
- Supplementary cathode for frameworks ensures uniform polishing, even with frameworks which have a deep palate
- The automatic current stabilisation also supports uniform polishing



Product details	
Technical data	
Height	452 mm
Width	400 mm
Depth	275 mm
Rated voltage	110/240 VAC, 50/60 Hz
Special voltage	see rated voltage
Max. power consuption	200 W
Polishing current	max. 10 A
Capacity of tub/bowl	2 litre
Weight	10 kg

		REF
piece	1	26310
s Presentation	Qty	REF
set	1	31175
set	1	17000
set	1	36445
s set	1	14651
piece	1	17001
bottle	1	52460
	s Presentation set set set set set set piece	Presentation         Qty           set         1           set         1           s set         1           s set         1           piece         1

A detailed brochure can be found at www.bego.com/download-center.

## Wirolyt

## **Electrolytic polishing liquid**

- Liquid for electrolytic polishing of cobalt-chrome alloys
- Wirolyt is equally suited for Eltropol and polishing units of other manufacturers and enhances their performance and efficiency



# JOINTING TECHNOLOGY/SOLDERING

When it comes to jointing, laser welding is the standard technology. BEGO has continuously expanded its expertise in this technology. Yet soldering still has an important role to play. For this method of jointing, the product range includes essential accessories such as BEGO solders and fluxes.

## LaserStar T plus

## The compact power laser from BEGO

- Compact and powerful, with user-friendly features
- Precision welding ensured by controllable welding energy with pulse time, charging voltage and focus adjustment
- Ergonomic design and positioning of the controls directly in the field of vision for convenient and fatigue-free working
- Simple operation with a large colour touch display and intuitive menu navigation
- Pulse shaping for high-strength stress- and crack-free joints
- Eco mode switches off all unnecessary components in idle mode and reduces operating costs
- The external Ventus extraction unit efficiently removes welding fumes from the welding chamber, ensuring maximum safety at the workplace







Ventus

Product details					
Technical data					
Laser type	Nd: YAG				
Wavelength	1064 nm				
Pulse energy	60 joules				
Pulse length	0.3-50 ms				
Rated power	60 W				
Pulse peak output	max. 8 KW				
Spot diameter	0.2 mm to 2.6 mm				
Pulse frequency	Single pulse, 1–50 Hz				
Pulse shapes	4 fixed, 12 variable available				
Microscope	4H Jena with TrueView function	16x (visible magn	ification)		
Aiming device	Reticle in microscope				
Welding parameters	can be set both inside and outs	ide the welding ch	amber		
Inert gas nozzles for argon	1 flexible, 1 fixed				
Illumination of welding chamber	LED ring light, adjustable				
Welding fume extraction	Integrated connection for an ext	ternal extraction sy	stem, such as BEG	O Ventus	
Water/air cooling	with ion filter, integrated				
Power supply	230 VAC/50 Hz, 1 phase, 13 A	or 110 VAC/60 Hz	z; 1 phase, 15 A		
Weight	approx. 60 kg				
Height	460 mm				
Width	540 mm				
Depth	690 mm				
Availability			Presentation	Qty	REF
LaserStar T plus			piece	1	26405
Accessories		Contents	Presentation	Qty	REF
Hand rests, height-adjustable		2 pieces	set	1	15650
Pressure regulator for argon inert gas			piece	1	13380
Lifting table			piece	1	15649
Technical data Ventus Filter system					
Line voltage	200-240 VAC, 50/60 Hz				
Rated power	140 W				
Flow rate	59–120 m³/h				
Sound level	47-53 dB(A)				
Dimensions (H x W x D)	512 x 320 x 310 mm				
Weight	21 kg				
Availability			Presentation	Qty	REF
Ventus filter system for LaserStar T plus			piece	1	26205

A detailed brochure can be found at www.bego.com/download-center.



# LaserStar T plus

Optimal strength within a joint is achieved by 80% overlapping of the individual welding spots. Thus, the weld root of the preceding welding spot is partially melted again and filled with molten metal.

# **Additional materials for laser welding**

Product details				
Availability	Composition in % by mass	Thickness/mm	Quantity	REF
Wiroweld (CoCrMo, C-free)	Co 63.5 · Cr 29 · Mo 5.5 · Si 1 · Mn 1	0.35	2 m	50003
Wiroweld (CoCrMo, C-free)	Co 63.5 · Cr 29 · Mo 5.5 · Si 1 · Mn 1	0.5	1.5 m	50005
Wiroweld NC (NiCrMo, C-free)	Ni 63.8 · Cr 22.1 · Mo 9.1 · Nb 3 · Si 1 · Fe 1	0.35	approx. 5.5 m	50006
Titandraht Grade 2	Ti 100	0.35	approx. 5 m	50008
AuroLloyd® KF wire	Au 55 · Ag 29.2 · Pd 10 · In 3.5 · Zn 1.2 · Sn 1 · Ru	0.35	approx. 5 g	61153
BegoCer® G wire	Au 51.5 · Pd 38.4 · In 8.7 · Ga 1.3 · Ru	0.35	approx. 5 g	61164
BegoPal® 300 wire	Pd 75.4 · In 6.3 · Ag 6.2 · Au 6 · Ga 6 · Ru	0.35	approx. 5 g	61165
BegoStar® ECO wire	Pd 51.9 · Ag 23 · Au 15 · In 6 · Sn 4 · Ru	0.35	approx. 5 g	61171
Bio PlatinLloyd® wire	Au 75.1 · Ag 14.8 · Pt 7.8 · Zn 1.8 · Rh · Mn · Mg	0.35	approx. 5 g	61161
Bio PontoStar® wire	Au 87 · Pt 10.6 · Zn 1.5 · In · Rh · Mn · Ta	0.35	approx. 5 g	61157
Bio PontoStar® XL wire	Au 86 · Pt 11.5 · Zn 1.6 · Fe · Rh · In	0.35	approx. 5 g	61167
ECO d'OR wire	Ag 40.5 · Au 38.1 · Pd 13.0 · In 8.0 · Mn · Ta	0.35	approx. 5 g	61170
InLloyd® 100 wire	Au 78.1 · Ag 15.5 · Pt 3.9 · Zn 2.4 · Ir	0.35	approx. 5 g	61163
PlatinLloyd® 100 wire	Au 72 · Ag 13.7 · Cu 9.8 · Pt 3.5 · Zn · Ir	0.35	approx. 5 g	61152
PlatinLloyd® KF wire	Au 72.8 · Ag 16.1 · Pd 5.7 · Zn 3 · Pt 2 · Mn · Rh	0.35	approx. 5 g	61158
PlatinLloyd® M wire	Au 70 · Ag 11.7 · Cu 10 · Pt 5 · Zn 1.9 · Pd 1 · In · Re	0.35	approx. 5 g	61155
PontoLloyd® G wire	Au 84.1 · Pt 8.3 · Pd 4.8 · In 2.7 · Ta	0.35	approx. 5 g	61166
PontoLloyd® L wire	Au 75 · Pd 17.9 · Ag 3 · In 2.5 · Sn 1.5 · Re	0.35	approx. 5 g	61169
PontoLloyd® P wire	Au 77.5 · Pt 9.9 · Pd 8.9 · In 1.4 · Ag 1 · Sn · Fe · Cu · Ir	0.35	approx. 5 g	61154
Pontonorm wire	Au 73.8 · Ag 9.2 · Pt 9.0 · Cu 4.4 · Zn 2.0 · In 1.5 · Ir	0.35	approx. 5 g	61172
PontoRex® G wire	Au 70 · Ag 13.2 · Pt 9.4 · Cu 3 · Zn 2 · In 1.9 · Rh · Ir	0.35	approx. 5 g	61151
PontoStar® G wire	Au 85.6 · Pt 11.4 · In 2.3 · Fe · Rh	0.35	approx. 5 g	61150

# **Thermostop**

# **Heat protection paste**

- Contains no asbestos
- Is used to cover the acrylic base when soldering has to be carried out close to it
- The acrylic parts do not have to be removed even when soldering is difficult

Product details					
Availability	Contents	Presentation	Qty	REF	20 miles
Thermostop	140 g	tin	1	52540	Thermostop  Thermostop  Thermostop  The state of the stat

## **Minoxyd Flux**

- For soldering precious-metal alloys and precious to cobalt-chrome or nickel-chrome
- It saves intermediate soldering and provides strong joints that hold up even under great stress and strain
- Minoxyd is also used for soldering metal-to-ceramic alloys in the furnace after firing the ceramic

Product details				
Availability	Contents	Presentation	Qty	REF
Minoxyd	80 g	bottle	1	52530

## Instructions on use

Thickened flux should be replaced. Adding water impairs the antioxidising effect.

Flux applied to the area of the joint must be dried slowly to avoid bubble formation and associated oxidation when the bubbles burst.

# High-quality dental solders – perfectly coordinated with BEGO alloys

- Reliable soldering process and outstanding adhesion because the working temperature is geared to the respective alloy
- High strength ensures protection against fractures at the joints
- The special composition of the BEGO solders guarantees an easy flowability for the finest joining work

Solders													
Solder	REF	BEGO colour code	Compo (x = <		6 by mass	S					Other (< 1 %)	Melting range	Working temperature [°C]
			Au	Pt	Pd	Ag	Cu	Sn	Zn	In			
BEGO Gold-Lot I	61017	2	72,0	1,9	1,0	8,0	7,0	_	10,0	Х	Re	740-790	810
BEGO Gold-Lot II	61043	3	73,0	1,9	_	10,0	3,0	_	12,0	Х	Re	700–730	765
BEGO LFC-Lot I	61119	4	60,0	Х	_	34,2	_	Х	4,5	_	Ir	880-930	930
BegoStar® Lot	61081	8	55,0	_	10,0	34,0	_	_	_	1,0	-	1070-1100	1125
Bio PlatinLloyd®-Lot before firing	61108	3	90,7	2,0	-	-	-	-	7,2	-	Ir	820–860	870
Bio PlatinLloyd®-Lot after firing	61109	6	68,5	1,6	-	13,8	-	-	16,0	-	lr	680–700	710
Gold-EWL®-Lot I	61066	8	12,0	_	16,0	51,0	15,0	2,4	3,5	Х	_	830-875	910
PontoLloyd®-Lot	61074	7	75,8	_	5,9	17,0	Х	Х	_	Х	Re · Fe	1030-1085	1120
PontoRex®-Lot before firing	61038	2	76,0	2,9	-	10,0	6,0	-	5,0	-	lr	860–880	880
PontoRex®-Lot after firing	61039	2	72,5	Х	-	10,0	3,0	-	11,9	2,0	Ir	670–700	710
PontoStar®-G-Lot	61045	2	64,0	Х	_	34,9	_	_	_	Х	Rh	1000-1015	1030
Pre-flux U Goldlot with integrated flux	61028	2	73,0	-	-	9,5	12,5	1,9	3,0	Х	_	740–790	810

## Wirobond® solder

# Soldering rods for Wirobond® alloys

Product details					
Characteristics					
Melting range		1100–1150 °C	)		
Soldering temperature		1180 °C			
Flux		Minoxyd			
Composition in % by mass					
Co 60.5 · Cr 28.5 · Si 4.5 · Mo 3 · Fe 1.5 · B 1.5 ·	С				
Availability	Contents	Presentation	Qty	REF	
Wirobond® solder (triangular) ▲	8 pieces	pack	1	52622	

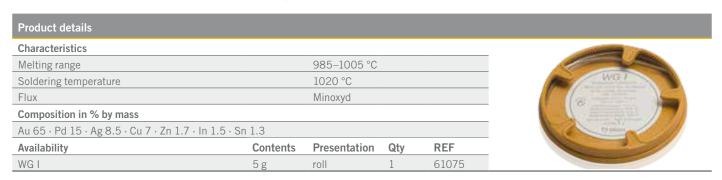
# Wiron® solder Soldering rods for all BEGO nickel-chrome alloys

Product details				
Characteristics				
Melting range		1020–1150 °C	0	
Soldering temperature		1165 °C		
Flux		Minoxyd		
Composition in % by mass				
Ni 66 · Cr 19 · Mo 5.5 · Fe 5 · Si 3.5 · B				
Availability	Contents	Presentation	Qty	REF
Wiron® solder (round)	6 pieces	pack	1	52625

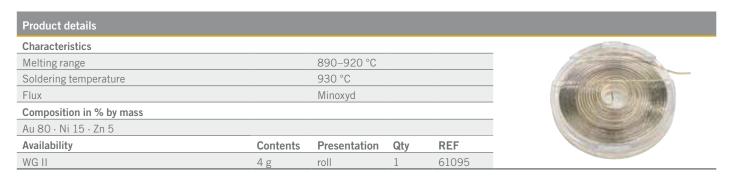
## **Cobalt-chrome solder Soldering rods for all cobalt-chrome partial denture alloys**

#### **Product details** Characteristics 1100-1150 °C Melting range Soldering temperature 1180 °C Minoxyd Flux Composition in % by mass Co 61 · Cr 28.5 · Mo 3.5 · Si 4 · Fe 1.5 · B · C **Availability REF** Contents Presentation Cobalt-chrome solder (half-round) 5 pieces pack 52520

# WG I White gold solder for BEGO cobalt-chrome and BEGO nickel-chrome alloys, not suitable for metal-to-ceramic applications



# WG II White gold solder for BEGO cobalt-chrome partial denture alloys



# WGL White gold solder for furnace soldering after firing BEGO cobalt-chrome and BEGO nickel-chrome metal-to-ceramic alloys

Product details				
Characteristics				
Melting range		730-770 °C		
Soldering temperature		860 °C		
Flux		Minoxyd		
Composition in % by mass				
Au 65 · Zn 13.9 · Ag 13 · Ni 6 · Cu 2 · In				
Availability	Contents	Presentation	Qty	REF
WGL	5 g	pack	1	61079

A		Blasting units	87–91
Adapta deep–drawing system	36	Blocking-out wax	26
Aroma occlusal wax	33	Blow-off nozzle	17
Aurofilm wetting agent	37	Books	85
AuroLloyd® KF	14	Border strip, wax	30
AuroLloyd® KF wire	107	С	
Auromelt HF	81	Casting machine – Nautilus® CC plus	74-75
В		Casting machine – Nautilus® T	72-73
Bar profiles, wax	29	Casting units	71–75
Base socket mould former	53	Casting wax, stippled + smooth	27
BeCe® Air Zirkon	96	Castogel® and Castogel® mint duplicating gel	22
BeCe® Incisal KIT ZIRKON	84	Ceramic crucible	77–80
BeCe® StainArt KIT ZIRKON	83	Ceramic handles	75, 77–80
BEGO investment materials	54	Ceramic inserts for Fornax® crucibles	79
BEGO modelling wax	37	Cervical wax	35
BEGO mould former	56	Clasp profiles, wax	31
BEGO WiroFix friction element	69	Clasp wire – Wironit®	69
BegoCer® G	12	Cobalt-chrome metal-to-ceramic alloys – Wirobond®	59-60
BegoCer® G wire	107	Cobalt-chrome partial denture alloys	66–67
BegoForm stump material	49	Cobalt-chrome solder	110
BegoPal® 300	12	CoCr solder	110
BegoPal® 300 wire	107	Combi duplicating flask	22, 56
BegoPal® S	13	Compressed air tank for Nautilus® T/CC plus	72-75
BegoSol® mixing liquids	49	Corundum blasting unit – Duostar plus	90
BegoStar® Eco wire	107	Corundum blasting unit – Korostar plus	91
BegoStone plus super-hard plaster	18	Corundum blasting unit – Protempomatic plus	87
BellaStar XL crown and bridge investment material	47	Cradle for Fornax®	71
Bellasun crown and bridge investment material	48	Crown wax	34
Bellatherm solder investment material	50	Crucible engobe, Lolipot	80
Bellavest® DR	46	Crucibles	72–75, 77–80
Bellavest® SH crown and bridge investment material	44	Cutters, carbide	100
Bellavest® T crown and bridge investment material	48	Cutting discs	98-99
Benchtop casting machine – Fornax® T	71	D	
Benchtop pressure casting unit – Nautilus® T	72	Deep drawing system – Adapta	36
Bio PlatinLloyd®	14	Diamond grinding stones, sintered	100
Bio PlatinLloyd <sup>®</sup> wire	107	Diamond polishing compound	102
Bio PontoStar® wire	107	Diapol	102
Bio PontoStar® XL	11	Dipping hardeners – Durol and Durol E	24
Bio PontoStar® XL wire	107	Dipping wax	35
Blasting and extraction	86–93	Disposable plunger	91
Blasting material	93	Disposable resin – Durox	95
Blasting material – Korox® (special corundum)	93	Duostar plus	90
Blasting material – Perlablast®	93	Duostar Z	90
		·	

Duplicating and hardening	19–24	Hollow sticks	32
Duplicating flask system – Wirosil®	24	I .	
Duplicating flasks, aluminium and combination	22, 24, 56	Inlay strips for moulds, fleecy	53
Duplicating gels – Castogel®, Wirodouble® and WiroGel® M	21 + 22	InLloyd® 100 wire	107
Duplicating silicone – Wirosil®	23	Investing	38–56
Duplicating unit – Gelovit 200	20	Investment materials	49–54
Durofluid modelling spray	24	Iso 8 insulating material	18
Durol dipping hardener	24	Isocera	37
Durol E ecological dipping hardener	24	IWC - International WIRONIUM® Circle	68
Durox replacement disposable resin	95	J	
E		Jointing technology/soldering	104–110
EasyBlast blasting unit	88–89	K	
ECO d'OR	13	Korostar plus	91
ECO d'OR wire	107	Korostar Z	91
Electrolytic polishing unit – Eltropol	103	Korox® special corundum blasting material	93
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Eltropol electrolytic polishing units	103	LaserStar T plus laser welding unit	109–106
Extraction pipe for Miditherm	76	Lifting table for LaserStar	106
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Filler materials for laser welding	107	Mandrels	101
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Filter system – Ventus	105–106	Measuring instruments	17
Fine grinding stones	98	Melting powder – Auromelt HF	81
Fleecy inlay strips (for moulds)	93	Melting powder – Wiromelt	81
Fluxes	108	Metal mould rings	53
Fornax® cradle	71	Metal-to-ceramic alloys – Wirobond® + Wiron®	58–62
Fornax® crucible	79	Miditherm MP preheating furnaces	76
Fornax® FC ceramic crucible	79	Milling set	100
Fornax® graphite inserts	79	Milling unit – Paraskop® M	96
Fornax® T – benchtop induction casting machine	71	Milling wax	34
Friction element – WiroFix	69	Minoxyd flux	108
Funnel former	56	Mixing bowls for Motova	52
Furnace suction extraction unit – Regulus	76	Mixing liquids – BegoSol®	49
G		Model base former	17
Gelovit 200 duplicating unit	20	Modelling knife – Rapidi	36
Glass carbon cylinder	78	Modelling spray – Durofluid	24
Graphite ingots	73 + 75	Modelling wax – FC	34
Graphite inserts	79	Modelling wax starter set	29
Grinding stones	98–100	Modelling/wax-ups	28-38
Н		Mould former	96
Hardener (for spraying) – Durofluid	24	Mould rings, metal	53
Heat protection paste – Thermostop	107	Mould system, rapid ringless	52
			-

Mould tongs	71, 73–75	Protempomatic plus	87
		Protempomatic Z	87
Nautilus® CC plus automatic vacuum pressure casting unit	72	R	
Nautilus® ceramic crucible	77	Rapid Ringless System	52
Nautilus® funnel former	73	Rapid Wax System	33
Nautilus® T benchtop vacuum pressure casting machine	72	Rapidi modelling knife	36
Ney measuring set	17	Regulus furnace extraction unit	76
Nickel-chrome metal-to-ceramic alloy – Wirocer plus	63	Retentions, wax	30
Nickel-chrome metal-to-ceramic alloy – Wiron®	61–62	Ring base – SecuPRESS	51
Non-precious alloys	57–69	Ring system – SecuPRESS	51
Non-precious double-crown technique – Book	85	Rough grinding stone	89
0		Rubber polishers	99
Occlusal wax	33	S	
P		ScanBlock	35
Paraskop® M milling unit	96	ScanWax	35
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Perlablast® blast-polishing material	93	SecuDisc cutting discs	98
Plaster – BegoStone plus	18	SecuPRESS ring base	51
Plastic handles	73, 75, 77	SecuPRESS ring system	51
Plastic sticks / hollow sticks	32	Silicone, duplicating – Wirosil®	23
PlatinLloyd® 100	14	Silicone polishers	100
PlatinLloyd® G wire	107	Sintered diamonds (grinding stones)	100
PlatinLloyd® KF wire	107	Solder investment material – Bellatherm®	50
PlatinLloyd® M wire	107	Solder, white gold	110
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Polishing compound – Diapol	102	Soldering rods, CoCr	110
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Polishing liquid – Wirolyt	103	Specialised literature	85
Polishing point holders	101	Stabilisation inserts – (Wirosil®)	24
PontoLloyd® G	11	Stainless steel wire – Wironit®	69
PontoLloyd® L wire	107	Stains – BeCe® Zirkon Press	83–84
PontoLloyd® P wire	107	Steam cleaner – Triton SLA	95
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Preheating and casting	70–81	Telescopic Double Crowns – Book	85
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Preparation wax	26	Titanium wire	107
Pressure regulator for LaserStar	106	Triton SLA steam cleaner	99
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U	
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Vacuum pressure casting unit – Nautilus® CC plus	72–73
Vacuum pressure casting unit – Nautilus® T	74–75
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Wirobond® SG	60
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Wirocer plus nickel-chrome metal-to-ceramic alloy	63
Wirodouble® duplicating gel	22
WiroFast partial denture investment material	42
WiroFine partial denture investment material	39

WiroFix friction element	69
WiroFlex rubber polishing wheels	99
WiroGel® M duplicating gel	21
WiroGel® C duplicating gel	21
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# Milestones from a company history dating back 125 years









#### 1890

"In the beginning there was gold" – Dr. h.c. Wilhelm Herbst founds the Bremer Goldschlägerei

#### 1910

Foundation of the dental laboratory

#### 1945

Reconstruction of the company premises after World War II

#### 1953

Market launch of the partial denture alloy WIRONIT®

#### 1976

Opening of the BEGO TRAINING CENTER

## 1990

Foundation of BEGO Semados GmbH & Co. KG (today: BEGO Implant Systems GmbH & Co. KG)

#### 1993

Market launch of the BEGO Semados® S-Line

### 1994

Move of the headquarter into the new building in the technology park at the University of Bremen

## 2000

Foundation of FutureDent GmbH (today: BEGO Medical GmbH)

#### 200

Launch of the Selective Laser Melting in the dental market

#### 201

Opening of the new high-tech CAD/CAM production center in Bremen

#### 2015

Market launch of the BEGO 3D printing system

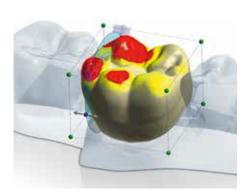
## Solutions from a single source



## Conventional solutions

BEGO Bremer Goldschlägerei GmbH & Co. KG specialises in the development and distribution of precious-metal and non-precious dental alloys as well as devices, materials and services for the production of high-quality restorations.

The product range also includes ceramics for further processing in dental laboratories. Since its foundation, BEGO, now in its fifth generation, has fulfilled its goal of providing dental laboratories with innovative and cost-effective products and services for optimal patient care.



## **Digital solutions**

BEGO Medical GmbH specialises in digital processes and is the CAD/CAM technology pioneer in the dental industry. The company is the inventor and patent holder of the selective laser melting (SLM) procedure for dentistry. All-round process expertise and maximum freedom of choice when it comes to materials ensure unparalleled quality for a very wide range of indications.

In its high-tech production centre at its headquarters in Bremen, BEGO produces frames, abutments, crowns and bridges on the basis of virtual models with state-of-the-art laser and milling technology, currently using four different procedures: SLM, High Speed Cutting (HSC), CAD/Cast® and Rapid Prototyping.



## **Dental solutions**

BEGO Implant Systems GmbH & Co. KG has been developing and manufacturing indication-aligned dental implants and accessories for the implant-based treatment of patients all over the world since 1990.

Thanks to the innovative 3D implant design, modern implantology system abutments, a reliable biomaterial system and functionally optimised guided surgery, the dental implants "Made by BEGO" guarantee planned and reproducible results. They incorporate leading-edge technology at a fair price and offer the perfect combination of safety, durability, aesthetics and reliability.

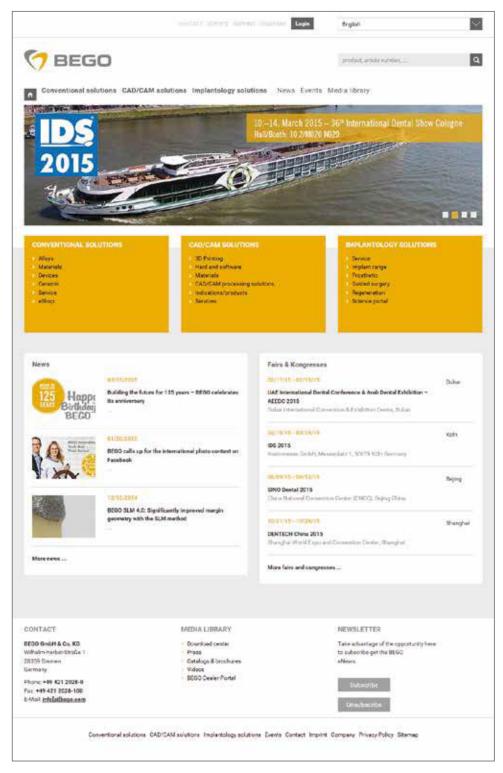


## BEGO TRAINING CENTER

An international and experienced team of trainers provides practical know-how on subjects such as CAD/CAM and classic prosthetic dentistry in courses which are tailored to the various needs of newcomers and old hands alike.

The company's own course concepts form a demanding program for seminars and practical sessions which help interested dental technicians to become even more successful.

# Further information around our solution variety can be found at www.bego.com



Always up to date and informed personally – the BEGO newsletter Register here www.newsletter.bego.com





# The patient-oriented dental practice Marketing strategies – practice management

### The guide for dentists

This guide for dentists, practice staff in managerial positions and those starting up describes the modern patient- and service-oriented dental practice. It provides ideas and tips on how to optimise practice processes.

#### Strategic positioning as the key to success

Success is not based solely on dental treatments. A fitting marketing philosophy, structured approach and a business concept are all important when establishing and consolidating one's position in this demanding field. Success only comes to those who recognise developments early on, embrace changes and continually develop their expertise.



#### Contents

- Proposals for positioning and structuring
- Prevention-oriented concepts and valuable stimuli for making changes
- Creative suggestions for marketing strategies
- Practical tools for organisation and time management
- Important notes on patient consultations
- Helpful tips on stress-free employee management
- New approaches for enhancing motivation and commitment
- Text modules for customised patient information
- Supplementary check lists and overviews

Product details	
Book	
320 pages • 210 x 260 mm • more than 6	00 colour illustrations • hardback
Availability	
German	REF 88910
English	REF 88911
Russian	REF 88912
Spanish	RFF 88913

## Guarantee

Whether given verbally, in writing or through practical instructions, our process-related data and recommendations are based upon our own experience and trials and can only be considered as standard values.

Our products are constantly subject to further development. We therefore reserve the right to modify the design and composition at any time.

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