

breCAM

consumables

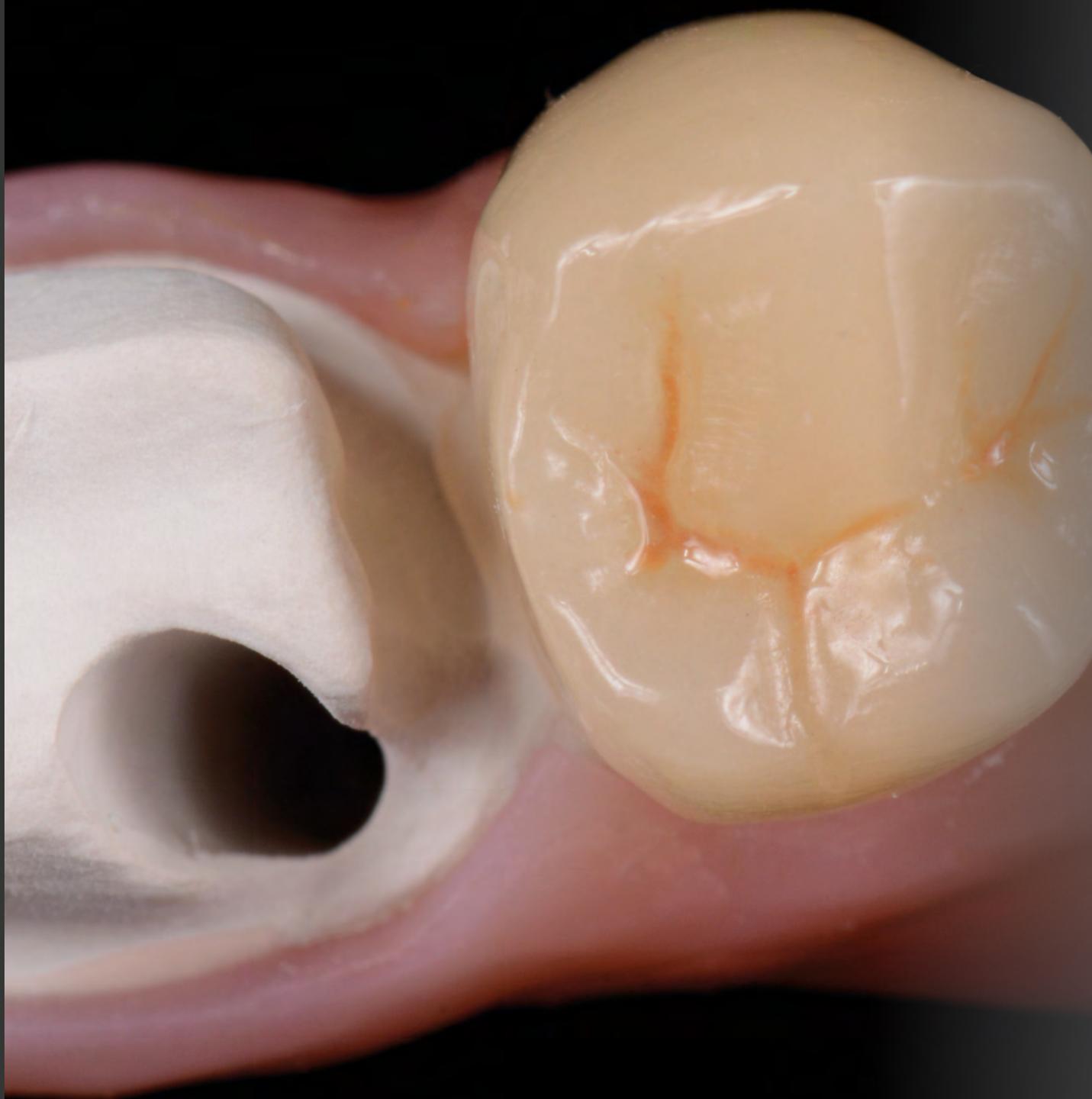
03/2015



caelō

bredent

Image of Lab. Od. Lazetera Antonio - Savona (IT)



breCAM consumables



breCAM consumables – development leads to plastic

Our research and development already led to these materials years ago, completely in line with our mission statement, which incorporates the values "capable, spirit of partnership and innovative". With these high-performance plastics, we have found the innovative way of providing patients with the best possible treatment from the very beginning, whilst simultaneously offering them success-oriented, efficient and capable solutions from a team consisting of a dentist and prosthetist.

STABLE – With breCAM.cast make dimensionally stable and low-stress plastic frames for implementation in the metal framework casting technique.

EFFICIENT – With breCAM.model you complete the digital manufacturing process of making the model to completing the final denture.

SMART – Take advantage of the benefits of the digital world in traditional technology with breCAM.wax.

CLEAN – breCAM.resin enables you to produce safe, biocompatible, aesthetic temporary prostheses that are stable in terms of colour and shape.

UNIVERSAL – With breCAM.multicom you increase the wearing time of the temporary prosthesis to two years and offer even more polished aesthetics.

Our materials show that there is no longer any reason to merely resort to the traditional materials such as metal, ceramic or zircon for the indications cited. These plastics offer significant benefits in the fields of aesthetics, processing, cost-efficiency, durability and patient acceptance. They offer a win-win situation for both parties in a relationship based on partnership between patients and their care team. Take advantage of our competence in the field of plastics and in digital processing:

DEFINITIVE – With breCAM.HIPC you have a universal genius at your disposal. Whether used as milled veneering or as a monolithic abutment, this material offers you the most elegant solution for a number of indications and for all framework materials (including BioHPP).

PHYSIOLOGICAL – With breCAM.BioHPP you find yourself in the bionic age. The physiological properties of this framework material are only surpassed by nature itself. BioHPP allows patients to forget that they are wearing an abutment as it is just as elastic, light and has the same thermal conductivity as bone.

EFFICIENT – With breCAM.model you complete the digital manufacturing process of making the model to completing the final denture.



STABLE

breCAM.cast

is made of PMMA (100% polymethylmethacrylate) which burns out without residue. The material is ideal for the production of CAD/CAM dental structures for implementation in the metal casting technique.

Due to the relative sensitivity of wax to temperature changes and UV radiation, this material is very stable and leads to low-stress, precise castings.

Machined plastic frames have no thermal stresses within the structure.

- » More accurate metal castings compared to waxed frame works

Dimensions and thermally stable material

- » milled plastic frameworks can be tried onto different models due to its form stability for control purposes, implemented and processed

breCAM.cast may be processed using CAD/CAM Systems problem free

- » wet/dry with fast milling templates

Framework design

According to DIN EN ISO 10477

Shore



> 2800 MPa

Flexural strength



≥ 60 MPa

Density



> 1.1g/cm²

Processing

Metal cutting using mills can be carried out in dry conditions. In the case of HSC mills, single or double-edged tools with large air gaps should be used.

Dry machining
PMMA/composite



Wet machining
PMMA/composite



Dry machining
Thermoplastic/cutter



Order information

These milling blanks are a standard size at Ø 98.5 mm with 10 mm fold.

| Set | Colour | 18 mm |
|-------------|--------|----------------|
| breCAM.cast | blue | REF 540 0220 0 |



EFFICIENT

breCAM.model

is a high-density plastic model for fast cutting production of master models. The material is very homogeneous and behaves very dimensionally stable.

Here, the breCAM.model is very durable and has high edge strength.

breCAM.model is easy to mill wet or dry and can be modified as necessary with a carbide bur.

Due to the high stability of the material, the models produced in this way are also suitable for long-term archiving, as they keep their stable form as opposed to light-curing resins.

High-performance model plastic

- » Very fast processing parameters

Rigid material

- » Perfect for long-term archiving

CAD/CAM processing

- » Always consistent quality, by loss or damage always reproducible from the digital archives

Processing

Metal cutting using mills can be carried out in dry conditions. In the case of HSC mills, single or double-edged tools with large air gaps should be used.

Dry machining
PMMA/composite



Wet machining
PMMA/composite



Dry machining
Thermoplastic/cutter



Order information

These milling blanks are a standard size at Ø 98.5 mm with 10 mm fold.

| Set | Colour | 28 mm |
|--------------|--------|----------------|
| breCAM.model | beige | REF 540 0204 0 |



breCAM.model

SMART

breCAM.wax

breCAM.wax is extremely well-suited to the digital production of fully anatomical or reduced frameworks, inlays, onlays, implant work including large span bridges for cast metal and ceramic press technology.

The cutting preparation of wax cutting blanks in a dental laboratory has the following benefits in comparison with conventional wax dipping and modelling, in

mechanical production of crowns and frameworks for gold casting and ceramic pressing technology

» Cost and time saving

better fit of the gold casting due to tension-free processing

» less reworking, less material loss (gold alloys)

uniform framework designs/connector strengths due to the CAD construction

» more stable frameworks and the same qualities, less reworking and time saving

addition to its homogeneous and virtually tension-free structure: No further thermal treatments by means of fusion or applications, mixing of different wax qualities, no damage due to overheating or impurities.

wide range and reproducibility of desired morphologies and tooth shapes

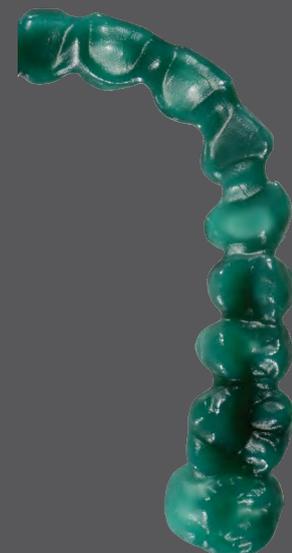
» the same quality and flexibility of work

One-pass processing of wax: impurities and loss of wax properties do not apply

» no material contamination as a result of re-used, impure wax

flexible production

» existing CNC capacities can be exhausted in terms of time



Images: Lab. Od. Lazetera Antonio - Savona (IT)



The breCAM.wax blanks are made from a special milling wax (micro-crystalline hydrocarbon wax with hard paraffin and polyethylene parts), which is very easy to process. The wax has a drying point of 120 °C, possesses slight elasticity, strong edge stability for fast milling speeds and burns without residues. The raw material in the wax blanks is fused in a controlled manner in

industrial processes and subsequently cooled in a defined temperature ramp. This results in an extremely homogeneous and tension-free wax, which ultimately leads to reproducible and equal fits in the practice of metal casting technology.

Indication



Metal casting



Press ceramics
BioHPP *for2press*



Wax-up

Order information

These milling blanks are a standard size at 98 x 20 mm

| | Item | 20 mm |
|------------|------|----------------|
| breCAM.wax | 2 | REF 510 0092 1 |



breCAM.wax

CLEAN

breCAM.resin

The basis of this thermoplastic production process is an industrial polymerisation process for producing a high-purity PMMA. Only this production process can convert all MMA into PMMA with a theoretic level of purity of up to 99.9%. Residual by-products of this reaction (<0.1%) are not cell-toxic and are therefore harmless. The PMMA acquired from this procedure is subsequently fused directly using heat with no additional MMA and injected as a blank.

The disadvantage of the otherwise frequent chemoplastic procedure: If both PMMA and MMA (powder/liquid) components are mixed, a chain reaction is triggered by the initiator, which generates free radicals. These radicals allow the MMA to be bonded

The beneficial material properties of a thermoplastic PMMA are:

- a higher homogeneity of the thermoplastic PMMA
- » lower susceptibility to plaque
- » the restoration is more durable
- » fewer patient recalls

longer molecular chains, higher levels of stability

- » Better long-term stability and resistance leads to fewer repairs and a higher level of customer acceptance.

to the powder-form PMMA and therefore trigger the formation of long-chain polymers. Unfortunately, unbound radicals (residual monomers MMA) remain in the chemoplast during chemical polymerisation. These and the polymerisation initiators, inhibitors and benzoyl peroxides are substances that trigger allergies, which are responsible for triggering material intolerances.

causes fewer allergies, high-purity PMMA

- » high biocompatibility
- » Customers with requirements for increased biocompatibility can be treated more safely.



Images: Lab. Od. Lazetera Antonio - Savona (IT)



breCAM.resin

Indication



Permanent dental prosthesis



Crowns & Bridges



Try-ins

Therapy



Braces



Table tops

Processing



Framework



Can be veneered



Monolithic



Metal-free

Securing



Temporary cement

Framework design

Minimum wall strength
(unveneered)



> 1,00 occlusal
0.6 mm cervical

Pontics



max. 1

Front teeth
Ø Connector



> 10 mm²

Side teeth
Ø Connector



> 15 mm²

Material properties

According to DIN EN ISO 10477

E-modulus



≥ 2800 MPa

Flexural strength



≥ 100 MPa

Water solubility



≤ 0.6 µg/mm³

Water absorption



≤ 24 µg/mm³

Residual monomer



≤ 0.24 %

Wearing time



up to 6 months

breCAM.resin



CLEAN

Processing

Thermoplastic materials generally place high demands on expert metal cutting in dry machining due to their sensitivity to heat and therefore the associated risk of deformities. Special cutters and adapted milling templates with a reduced cutting speed must definitely be

used here. No special adjustments or processing properties need to be observed in favoured wet machining with standard milling templates and PMMA mills.

Rough machining (Ø 2 mm)
19,000 U/min – Feed of 15 mm/s – Delivery 0.5 mm

Smooth machining (Ø 1 mm)
25,000 U/min – Feed 25 mm/s

Dry machining
PMMA/composite



Wet machining
PMMA/composite



Dry machining
Thermoplastic/cutter



Order information

These milling blanks are a standard size at Ø 98.5 mm with 10 mm fold.

| | 16 mm | 20 mm | 24 mm |
|--------------------------|----------------|----------------|----------------|
| breCAM.resin A | REF 540 0201 0 | REF 540 0201 1 | REF 540 0201 2 |
| breCAM.resin B | REF 540 0201 3 | REF 540 0201 4 | REF 540 0201 5 |
| breCAM.resin C | REF 540 0201 6 | REF 540 0201 7 | REF 540 0201 8 |
| breCAM.resin transparent | REF 540 0201 9 | REF 540 0202 0 | REF 540 0202 1 |



UNIVERSAL

breCAM.multiCOM

The polychrome composite is suitable for a dental prosthesis with a wearing time of up to two years. It is manufactured based on polymethylmethacrylate and has been offset with >20% ceramic fillers in order to increase the strength. Here, the inorganic filler (ceramic particle) has been integrated in the plastic matrix of the organic PMMA. This results in

A 2-year wearing time is optimal for the temporary abutment within the scope of surgical procedures and longer regeneration phases.

- » The restoration does not need to be exchanged after 6 months, which leads to optimum healing results.
- » Cost and time saving for both the patient and the dentist

polychromatic colouration

- » highly aesthetic temporary dental prosthesis with low material costs
- » high level of customer acceptance, especially in the field of front tooth restoration

monolithic abutment

- » polychromatic colouration in only one manufacturing process

optimised material properties in the field of strength, abrasion properties and for dry or wet metal cutting. The multichromatic layering of breCAM.multiCOM gives the dental prosthesis a natural colour gradient.

- » considerable savings of various veneer materials and additional work stages

can be used universally

- » monolithic or as a polychromatic temporary veneer plastic
- » A number of different indications can be covered with a single material.

ceramic filler

- » By its chemical definition, breCAM.multiCOM is a composite.
- » It possesses improved milling properties and optimum abrasion properties.



Images: Lab. Od. Lazetera Antonio - Savona (IT)

breCAM.multiCOM

UNIVERSAL

Indication



Permanent dental prosthesis



Crowns & Bridges



Implant-supported

Therapy



Braces



Table tops

Processing



Can be veneered



Monolithic



Metal-free

Securing



Temporary cement

Framework design

Minimum wall strength (unveneered)



> 1.00 occlusal
0.6 mm cervical

Pontics



max. 1

Front teeth
Ø Connector



> 10 mm²

Side teeth
Ø Connector



> 15 mm²

Material properties

According to DIN EN ISO 10477

E-modulus



≥ 2200 MPa

Flexural strength



≥ 100 MPa

Water solubility



≥ 8 µg/mm³

Water absorption



≤ 20 µg/mm³

Residual monomer



≤ 0.7 %

Wearing time



up to 2 years



Processing

breCAM.multiCOM is generally suitable for both dry and wet machining. Composites are slightly harder to process due to their ceramic part.

This should be taken into consideration/adjusted by selecting a suitable milling template.

Dry machining
PMMA/composite



Wet machining
PMMA/composite



Dry machining
Thermoplastic/cutter



Order information

These milling blanks are a standard size at Ø 98 mm with 10 mm fold:

| | Colour | 16 mm | 20 mm |
|------------------|--------|----------------|----------------|
| bre.CAM.multiCOM | A1 | REF 540 0301 0 | REF 540 0301 5 |
| bre.CAM.multiCOM | A2 | REF 540 0302 0 | REF 540 0302 5 |
| bre.CAM.multiCOM | A3 | REF 540 0303 0 | REF 540 0303 5 |
| bre.CAM.multiCOM | A3,5 | REF 540 0304 0 | REF 540 0304 5 |
| bre.CAM.multiCOM | B2 | REF 540 0306 0 | REF 540 0306 5 |



These milling blanks are suitable for processing in ZZ systems with a diameter of Ø 95 mm:

| | | | |
|------------------|------|----------------|----------------|
| bre.CAM.multiCOM | A1 | REF 540 0311 0 | REF 540 0311 5 |
| bre.CAM.multiCOM | A2 | REF 540 0312 0 | REF 540 0312 5 |
| bre.CAM.multiCOM | A3 | REF 540 0313 0 | REF 540 0313 5 |
| bre.CAM.multiCOM | A3,5 | REF 540 0314 0 | REF 540 0314 5 |
| bre.CAM.multiCOM | B2 | REF 540 0316 0 | REF 540 0316 5 |



These milling blanks are suitable for processing in AG systems with a diameter of Ø 84,5 mm:

| | | | |
|------------------|------|---|----------------|
| bre.CAM.multiCOM | A1 | - | REF 540 0321 5 |
| bre.CAM.multiCOM | A2 | - | REF 540 0322 5 |
| bre.CAM.multiCOM | A3 | - | REF 540 0323 5 |
| bre.CAM.multiCOM | A3,5 | - | REF 540 0324 5 |
| bre.CAM.multiCOM | B2 | - | REF 540 0326 5 |



breCAM.multiCOM

DEFINITIVE

breCAM.HIPC

HIPC: technical "High Impact Polymer Composite" for long-term dental prostheses. breCAM.HIPC is an amorphic, cross-linked composite and therefore offers definitely higher physical values than conventional PMMA. Manufacturing is carried out under pressure and in heated conditions similar to prefabricated teeth made from plastic at approximately 120 °C and 250 bars of pressure. Avoiding the use

for a long-term dental prosthesis – HIPC has already been tested in vivo and approved for over 7 years

- » clinically-proven material
- » Safety in use and indications

plaque-resistant

- » Excellent gingiva compatibility and resistance to discolourations lead to a higher level of patient acceptance.

universal & economical, removable & fixed, monolithic & can be veneered

- » The most diverse indications can be covered with a single material.
- » Costs can be saved and the system diversity and processing techniques can be minimised in the laboratory.

of dental glass and light-curing plastic ensures a high level of colour retention and plaque resistance (comparable with direct ceramic veneers or press ceramics).

HIPC originates from the development of the visio.lign system and corresponds to novo.lign veneers in chemical terms, with this material being extremely well-suited for a long-term dental prosthesis.

high level of strength/long-term stability

- » As a high-performance polymer, HIPC does not lose its strength in comparison with ceramic, ceramic "ages".
- » Material reliability and long-term stability of breCAM.HIPC leads to fewer complaints and repairs.

the material is more aesthetic, translucent and opalescent

- » excellent colour effect with minimally invasive forms of restoration
- » Complicated cases with a lack of space can be neatly resolved with HIPC.



Images: Lab. Od. Lazetera Antonio - Savona (IT)



Indication



Permanent dental prosthesis



Removable dental prosthesis



Crowns & Bridges



Secondary bridge



Primary telescope



Secondary telescope



Implant-supported



Tertiary framework



Inlay/Onlay/Veneer

Therapy



Gingival management



Braces



Table tops



Pressure-absorbing

Processing



Framework



Can be veneered



Monolithic



Metal-free

Securing



Lasting adhesion



Temporary cement



Implant-supported temporary adhesive



Implant-supported temporary cement

Framework design

Minimum wall strength (unveneered)



≥ 0.7 occlusal
 ≥ 1.0 mm cervical
 implant-supported ≥ 1 mm

Pontics



max. 2

Front teeth
 Ø Connector



≥ 9 mm²

Side teeth
 Ø Connector



≥ 12 mm²

breCAM.HIPC

DEFINITIVE

Material properties

According to DIN EN ISO 10477

| E-modulus | Flexural strength | Water solubility | Water absorption | Residual monomer | Wearing time |
|---|---|---|--|---|---|
|  |  |  |  |  |  |
| > 2200 MPa | ≥ 120 MPa | ≤ 0.3 µg/mm ³ | ≤ 16 µg/mm ³ | < 0.5% | permanent |

Processing

Metal cutting using mills can be carried out in dry conditions. In the case of HSC mills, single or double-edged tools with large air gaps should be used.

Dry machining
PMMA/composite



Wet machining
PMMA/composite



Dry machining
Thermoplastic/cutter



Order information

These milling blanks are a standard size at Ø 98.5 mm with 10 mm fold.



| | Colour | 20 mm | 16 mm | 20 mm | 20 mm |
|--------------|--------|----------------|----------------|----------------|----------------|
| breCAM.HIPC | bleach | REF 5400339 8 | REF 540 0341 8 | REF 540 0345 8 | REF 540 0343 8 |
| bre.CAM.HIPC | A1 | REF 540 0339 9 | REF 540 0341 9 | REF 540 0345 9 | REF 540 0343 9 |
| bre.CAM.HIPC | A2 | REF 540 0340 0 | REF 540 0342 0 | REF 540 0346 0 | REF 540 0344 0 |
| bre.CAM.HIPC | A3 | REF 540 0340 1 | REF 540 0342 1 | REF 540 0346 1 | REF 540 0344 1 |
| bre.CAM.HIPC | A3,5 | REF 540 0340 2 | REF 540 0342 2 | REF 540 0346 2 | REF 540 0344 2 |
| bre.CAM.HIPC | A4 | REF 540 0340 3 | REF 540 0342 3 | REF 540 0346 3 | REF 540 0344 3 |
| bre.CAM.HIPC | B2 | REF 540 0340 4 | REF 540 0342 4 | REF 540 0346 4 | REF 540 0344 4 |
| bre.CAM.HIPC | B3 | REF 540 0340 5 | REF 540 0342 5 | REF 540 0346 5 | REF 540 0345 5 |
| bre.CAM.HIPC | C2 | REF 540 0340 6 | REF 540 0342 6 | REF 540 0346 6 | REF 540 0344 6 |
| bre.CAM.HIPC | C3 | REF 540 0340 7 | REF 540 0342 7 | REF 540 0346 7 | REF 540 0344 7 |
| bre.CAM.HIPC | D2 | REF 540 0340 8 | REF 540 0342 8 | REF 540 0346 8 | REF 540 0344 8 |
| bre.CAM.HIPC | D3 | REF 540 0340 9 | REF 540 0342 9 | REF 540 0346 9 | REF 540 0344 9 |
| bre.CAM.HIPC | clear | REF 540 0341 0 | REF 540 0343 0 | REF 540 0347 0 | REF 540 0345 0 |

PHYSIOLOGICAL

breCAM.BioHPP

BioHPP is a partly crystalline poly ether ether ketone (PEEK) that is strengthened using ceramic. The bonding forces of the polymer chains are more effective if the chains are aligned in parallel. Areas like this are known as crystalline.

The main component of breCAM.BioHPP has been successfully implemented in implantology in human medicine for 30 years already (for 20 years as an intervertebral disc, hip joint prostheses).

The improvement with ceramic fillers enabled the material properties to be significantly improved once more (strength, abrasion properties, ability to be veneered) and has therefore been adjusted and optimised especially to suit the requirements and uses in dental medicine.



Images: Lab. Od. Lazetera Antonio - Savona (IT)

for long-term use

- » BioHPP is the new reference for a permanent dental prosthesis.

anti-allergens

- » metal-, oxide- and monomer-free
- » no allergic reactions or discolourations of the gingiva known to date
- » The perfect solution for those with allergies.

light/similar to bone

- » optimal biocompatibility and integration in the jaw

no galvanic effect

- » no oxidation or metal taste

off-peak effect

- » BioHPP can reduce compression and torsion caused by chewing and can partly compensate for this. This results in a periodontic effect and an increase in wearing comfort.

heat conduction properties similar to teeth

- » comfortable feeling when worn
- » no difference in perception with regard to warm/cold meals

Red-white look

- » The white material colour is in keeping with the tooth substance and does not show dark gingival edges in the case of possible resorption of the surrounding soft tissue.

low abrasion properties

- » BioHPP as a monolithic dental prosthesis protects the remaining residual teeth due to its low abrasive potential.

universal material

- » The broadest range of indications can be covered with this material: monolithic, can be veneered, fixed, removable, fricative, as prostheses - brace bases

PHYSIOLOGICAL

Indication



Permanent dental prosthesis



Removable dental prosthesis



Crowns & Bridges



Secondary bridge



Primary telescope



Secondary telescope



Implant-supported



Tertiary framework



Implant-supported bridge



Prosthesis

Therapy



Braces



Pressure-absorbing

Processing



Framework



Can be veneered



Monolithic



Metal-free

Securing



Lasting adhesive



Temporary cement



Implant-supported temporary adhesive

Framework design

Minimum wall strength (unveneered)



≥ 0.7 occlusal
≥ 1.0 mm cervical

Pontics



max. 2

Front teeth
Ø Connector

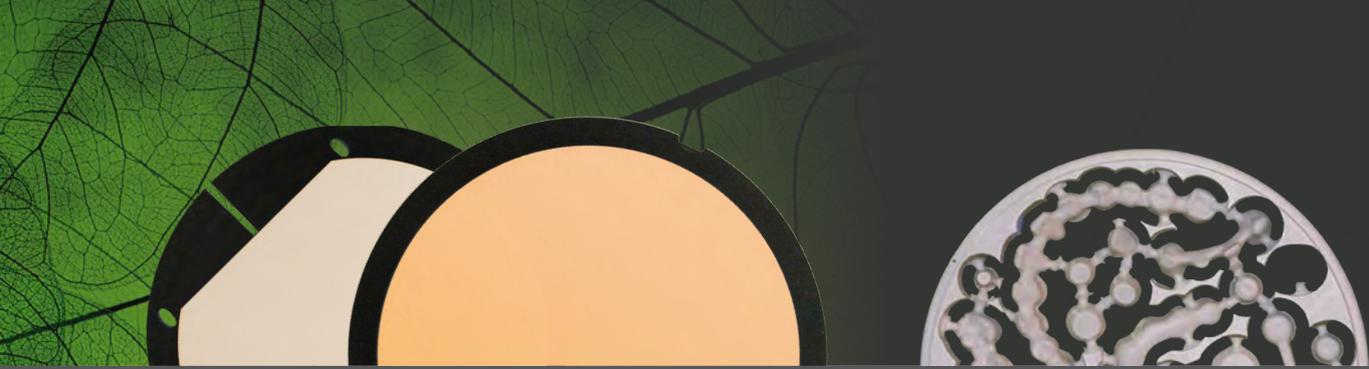


≥ 9 mm²

Side teeth
Ø Connector



≥ 12 mm²



breCAM.BioHPP

Thermoplastic materials (BioHPP) generally place high demands on the expert metal cutting in dry machining due to their sensitivity to heat and therefore the associated risk of deformities. Special cutters and adapted milling templates with a reduced cutting speed must be used here. No special adjustments or

processing properties need to be observed in favoured wet machining with standard PMMA milling templates. The patented cutter "breCAM.cutter" is recommended for special dry and wet machining of this material, with which thermoplastic materials (BioHPP) can be either dry machined or wet machined.

Material properties

According to DIN EN ISO 10477

E-modulus



> 4550 MPa

Flexural strength



> 180 MPa

Water solubility



< 0.3 µg/mm³

Water absorption



< 6.5 µg/mm³

Wearing time



permanent
> 7 years

Processing

Dry machining
PMMA/composite



Wet machining
PMMA/composite



Dry machining
Thermoplastic/cutter



Rough machining (Ø 2 mm)
19,000 U/min – Feed of 15 mm/s – Delivery 0.5 mm

Smooth machining (Ø 1 mm)
25,000 U/min – Feed 25 mm/s

Order information

These milling blanks are a standard size at Ø 98,5 mm with 10 mm fold:

| | 12 mm | 16 mm | 20 mm | 24 mm | 25 mm |
|------------------------------|----------------|----------------|----------------|----------------|-------|
| breCAM.BioHPP | REF 540 0202 9 | REF 540 0203 0 | REF 540 0203 1 | REF 540 0203 2 | x |
| breCAM.BioHPP dentin-shade 2 | REF 540 0206 9 | REF 540 0207 0 | REF 540 0207 1 | REF 540 0207 2 | x |

These milling blanks are suitable for processing in ZZ systems with a diameter of Ø 95 mm:

| | | | | | |
|------------------------------|----------------|---|----------------|---|----------------|
| breCAM.BioHPP | REF 540 0208 9 | x | REF 540 0209 1 | x | REF 540 0209 2 |
| breCAM.BioHPP dentin-shade 2 | REF 540 0209 9 | x | REF 540 0210 1 | x | REF 540 0210 2 |

These milling blanks are suitable for processing in AG systems with a diameter of Ø 84,5 mm:

| | | | | | |
|------------------------------|---|---|----------------|---|---|
| breCAM.BioHPP | x | x | REF 540 0211 1 | x | x |
| breCAM.BioHPP dentin-shade 2 | x | x | REF 540 0212 1 | x | x |



breCAM.BioHPP

PHYSIOLOGICAL

BioHPP elegance prefab

The world's first individual physiological Hybridabutment

By using BioHPP it is now possible to produce an individual hybrid abutment with physiological properties. The ductile properties of BioHPP and the associated OFF-PEAK effect, a similar effect comparable to the Periodontium, there is a unique wearing comfort that metallic and or ceramic abutments cannot deliver.

Physiological restorations; by the Periodontium similar shock absorption (OFF-PEAK) the load input is delayed and damped over time to the implant.

- » High wear and chewing comfort, lower Implant failure due to overloading

Homogeneous, gap-free material bond of titanium grade 4/BioHPP having the best mechanical and biological properties.

- » No aging/fatigue of adhesive bond
lack of adhesive/adhesive gap
- » Security against germs

The thermoplastic integrated titanium base here combines homogeneously and free of gaps with the BioHPP.

BioHPP elegance prefabs are indicated for restorations with an angulation of up to 20° to the implant axis.

With this solution it is possible for the first time to produce individual, permanent abutments of the leading implant systems in your own laboratory using soft machining and exploiting the full value of the CAD/CAM system.

The BioHPP SKY elegance prefab abutment is suitable for immediate loading

- » Immediate definitive restoration, no trauma to gingival tissue, shorter regeneration phase

Gingival Management with BioHPP

- » Using a carbide bur it is possible to modify BioHPP, when necessarily orally, if gingival contouring is subsequently required. A subsequent Intraoral scan without removing the abutments is possible.

Advantages of BioHPP restorations

- » Maximum customizability
- » Unbeatable convenient processing
- » Cuts like dentin, also intraorally
- » NO chipping

- » Conserving the antagonists
- » Optimal Osseointegration
- » Optimal gingival management
- » Longevity of the restoration

- » Natural oral feeling
- » Natural chewing sensation
- » Natural aesthetics
- » Prevents CMD

- » Allows immediate restoration
- » Allows one time treatment
- » Analog or digital workflow
- » Laboratory and chair side solutions





Processing

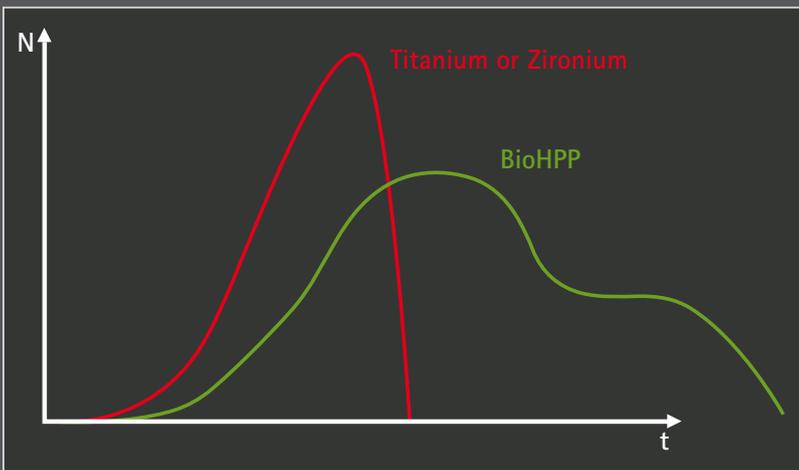
The BioHPP elegance prefab can be processed dry or wet on many milling systems for example with Roland/imes.icore/Datron and other systems.

Please refer to the recommended machining parameters and special tools.

External Milling Centers can be found at www.caelo-dental.net

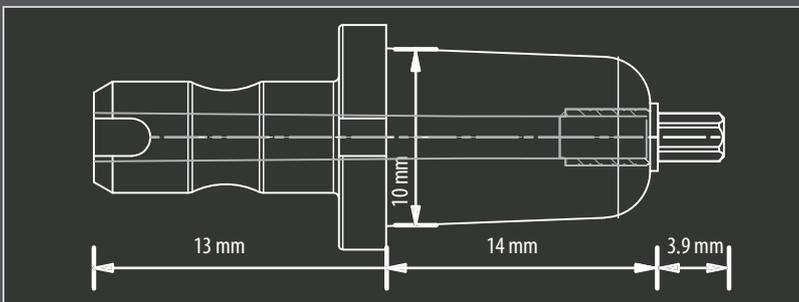
Shock Absorption

The OFF-PEAK property significantly dampens chewing force peaks compared to titanium, zirconium or ceramic.



The forces acting on healing bone is in contrast to previous materials remained in its natural context, so that will help curtail (resorbtion/ Athrophierung) and osseointegration can be initiated - the optimal basis for the

long-term bone preservation. At the same time BioHPPs damping characteristic, prevents chipping.



Order information

| Set | 3 pieces | 6 pieces | 9 pieces | 12 pieces |
|--|----------------|----------------|----------------|----------------|
| BioHPP elegance prefab for bredent SKY | REF 540 OEPO 3 | REF 540 OEPO 6 | REF 540 OEPO 9 | REF 540 OEP1 2 |

BioHPP elegance prefab



breCAM.cutter

The breCAM.cutter has been specially developed for dry machining of thermoplastic materials (PMMA / PEEK / Wax) in CNC milling machines.

Technical specifications of the breCAM.cutter:

Dry machining
PMMA/composite



Wet machining
PMMA/composite



Dry machining
Thermoplastic/cutter



Thanks to a special cutting geometry, it is also possible to take thermoplastic materials, which have properties which allow them to spread quickly and clog up the tool, and mill them without water cooling.

| REF | Machine type | Type | Shaft diameter | Working area diameter | Total length | Working area length with release |
|-----------|--|-------------|----------------|-----------------------|--------------|----------------------------------|
| breCAMX47 | Wieland, Imes Icore, Coritec, 340i, 450i, 440i | Radius mill | 3.0 | 1.0 | 38.2 | 15.0 |
| breCAMX48 | Wieland, Imes Icore, Coritec, 340i, 450i, 440i | Radius mill | 3.0 | 2.0 | 38.2 | 15.0 |
| breCAMX49 | 3M Espe, LAVA Form System 400, 500, Charly Robot | Radius mill | 3.0 | 1.0 | 38.0 | 15.0 |
| breCAMX50 | 3M Espe, LAVA Form System 400, 500, Charly Robot | Radius mill | 3.0 | 2.0 | 38.0 | 15.0 |
| breCAMX53 | Roland DWX 40, DWX 50, Calidia, TDS, DMG U-Serie, Yenadent, Orgien | Radius mill | 4.0 | 1.0 | 50.0 | 15.0 |
| breCAMX54 | Roland DWX 40, DWX 50, Calidia, TDS, DMG U-Serie, Yenadent, Orgien | Radius mill | 4.0 | 2.0 | 50.0 | 15.0 |
| breCAMX67 | VHF, FinoCAM, Jeneric Pentron, Schütz, Trendgold | Radius mill | 3.0 | 1.0 | 34.0 | 15.0 |
| breCAMX69 | VHF, FinoCAM, Jeneric Pentron, Schütz, Trendgold | Radius mill | 3.0 | 2.0 | 34.0 | 15.0 |
| breCAMY28 | breCAM.cutter Ceramill mill | Radius mill | 3.0 | 0.6 | 47 | 15.0 |
| breCAMY32 | breCAM.cutter Ceramill mill | Radius mill | 3.0 | 1.0 | 47 | 15.0 |
| breCAMY31 | breCAM.cutter Ceramill mill | Radius mill | 3.0 | 2.5 | 47 | 15.0 |
| breCAMY55 | breCAM.cutter Coritec mill | Radius mill | 6.0 | 0.6 | 45 | 15.0 |
| breCAMY57 | breCAM.cutter Coritec mill | Radius mill | 6.0 | 1.0 | 45 | 15.0 |
| breCAMY34 | breCAM.cutter Coritec mill | Radius mill | 6.0 | 2.5 | 45 | 15.0 |
| breCAMY53 | breCAM.cutter Zirkonzahn mill | Radius mill | 3.0 | 0.6 | 57 | 15.0 |
| breCAMY05 | breCAM.cutter Zirkonzahn mill | Radius mill | 3.0 | 1.0 | 57 | 15.0 |
| breCAMY07 | breCAM.cutter Zirkonzahn mill | Radius mill | 3.0 | 2.0 | 57 | 15.0 |
| breCAMY22 | breCAM.cutter Cercon mill | Radius mill | 3.5 | 1.0 | 50 | 15.0 |
| breCAMY24 | breCAM.cutter Cercon mill | Radius mill | 3.5 | 2.0 | 50 | 15.0 |
| breCAMY26 | breCAM.cutter Cercon mill | Radius mill | 3.5 | 3.0 | 50 | 15.0 |
| breCAMY77 | breCAM.cutter WIELAND T1 | Radius mill | 3.4 | 2.4 | 50 | 24.5 |
| breCAMY75 | breCAM.cutter WIELAND T1 | Radius mill | 3.4 | 1.0 | 50 | 13.5 |
| breCAMY73 | breCAM.cutter WIELAND T1 | Radius mill | 3.4 | 0.6 | 50 | 26.5 |



breCAM.cutter templates

The recommended milling templates are developed further on a continuous basis.
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for up-to-date information and any possible amendments.

| | | wax | resin/colour | resin/transpa | multiCOM | HIPC | BioHPP |
|---|----------|--------|--------------|---------------|----------|--------|--------|
|  Feed (mm/sec) | ∅ 2 mm | 20 | 15 | 15 | 18 | 18 | 15 |
| | ≤ 1 mm | 19 | 22 | 22 | 22 | 22 | 19 |
|  Lateral feed (mm/sec) | ≥ ∅ 2 mm | 11 | 7 | 7 | 9 | 9 | 7 |
| | ≤ ∅ 1 mm | 11 | 11 | 11 | 11 | 11 | 11 |
|  Rotational speed (RMP) | ≥ ∅ 2 mm | 16.000 | 19.000 | 13.000 | 19.000 | 19.000 | 18.000 |
| | ≤ ∅ 1 mm | 22.000 | 22.000 | 22.000 | 24.000 | 24.000 | 20.000 |
|  Delivery Z (mm) | ≥ ∅ 2 mm | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.40 |
| | ≤ ∅ 1 mm | 0 | 0 | 0 | 0 | 0.5 | 0 |
|  Offset (mm) | ≥ ∅ 2 mm | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| | ≤ ∅ 1 mm | 0 | 0 | 0 | 0 | 0.5 | 0 |
|  Path intersection (%) | ≥ ∅ 2 mm | 50 % | 50 % | 50 % | 50 % | 50 % | 50 % |
|  Path distance (mm) | ≥ ∅ 1 mm | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |

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