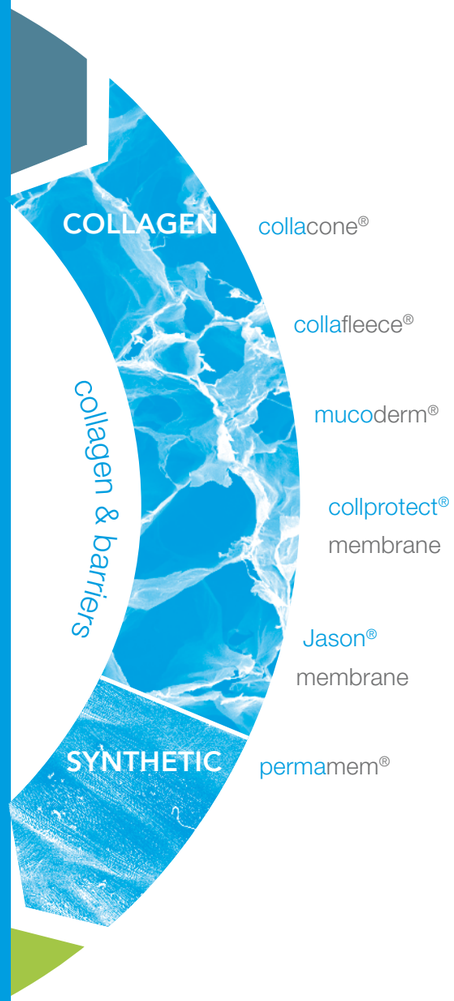
collagen & barriers

Collagen is widely distributed throughout the body, making up approx. 60% of all proteins within the gingival connective tissue. Due to their low antigenicity, animal collagens may be used in humans without causing tissue rejection.

In modern dentistry, collagens are used in the form of collagen sponges for wound protection and to support wound healing, as collagen matrices for soft tissue regeneration and as barrier membranes for Guided Bone and Guided Tissue Regeneration (GBR/GTR).

However, in particular for the regeneration of defects outside the ridge contour, the use of a synthetic, non-resorbable membrane may be indicated, because it offers a higher stability and superior space-maintaining properties compared to resorbable (collagen) membranes. In regenerative dental medicine, synthetic membranes made of polytetrafluoroethylene (PTFE) are the most commonly used non-resorbable barrier membranes.



CLINICAL USE:

– Stabilization of oral wounds and extraction sockets

– Support of local hemostasis

– Soft tissue augmentation

– Closing of extraction sockets

– Barrier membranes for GBR/GTR procedures

Several factors make collagen an optimal biologic material to support tissue regeneration and wound healing.
One important characteristic is the excellent biocompatibility of collagen and its degradation products.

ADVANTAGES
of COLLAGEN-based materials

– Support of hemostasis
– Low antigenicity
– Controlled degradation by specific enzymes
– Chemotactic attraction of regenerative cells

Polytetrafluoroethylene (PTFE) is a synthetic, chemically stable and biologically inert fluoropolymer.
It is able to resist biological (enzymatic) attack, does not stick and is biocompatible.

ADVANTAGES
of a dense PTFE membrane

– Impervious to bacteria due to dense structure
– No need for primary soft tissue closure (indication-dependent)
– Easily removable due to minimal tissue ingrowth into the surface structure
– Supports space maintenance (as compared to collagen membranes)

collagen & barriers

collacone®

COLLAGEN HEMOSTAT (CONE)

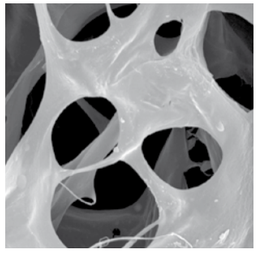
NATURAL COLLAGEN SPONGE FOR THE EXTRACTION SOCKET

collacone® is a wet-stable and moldable cone made of natural collagen, which was specifically developed and designed for the application in fresh extraction sockets.

collacone® supports the stabilization of the formed blood co-agulum in the alveole and helps to control bleeding. Its shape protects the wound area from food and bacteria.
collacone® resorbs within about 2-4 weeks.

PROPERTIES

- Natural collagen cone
- Three-dimensional matrix for cells and tissue ingrowth
- Resorption within 2-4 weeks
- Stabilization of blood clot and efficient local hemostasis
- Maintains integrity in the presence of blood and during application
- Wound protection
- Controlled wound healing process



INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND CMF SURGERY:
Closure of extraction sites / Control and stop of bleeding in extraction socket, minor oral wounds or biopsy sites / Internal sinus lift

collafleece®

RESORBABLE COLLAGEN SPONGE FOR WOUND MANAGEMENT

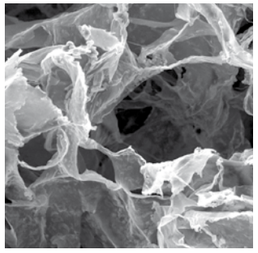
collafleece® is a wet-stable sponge consisting of porcine collagen with highly efficient hemostatic properties.
The natural porous structure supports fast hemostasis and controls natural wound healing.

Owing to its sp ongeous structure, collafleece® resorbs within ~2-4 weeks.

The efficacy of collafleece® is based on the well-known characteristics of collagen.
collafleece® induces a fast clotting reaction, which is particularly helpful when treating hemostatic compromised patients.

PROPERTIES

- Highly efficient hemostatic collagen
- Fast resorption (2-4 weeks)
- Easy application
- Maintains integrity even after hydration
- Wound protection/wound healing



INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Minor oral wounds / Biopsy sites / Block and soft tissue harvesting sites / Extraction sockets

mucoderm®

3D-STABLE SOFT TISSUE (COLLAGEN) GRAFT

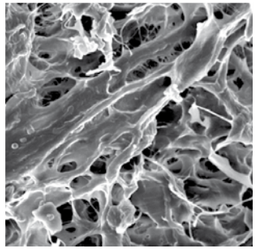
ACELLULAR DERMAL COLLAGEN MATRIX

mucoderm® is a three-dimensional matrix with high tensile strength and volume stability derived from porcine dermis. It consists of collagen type I and III with a natural collagen structure that resembles the human connective tissue. Due to the intensive multi-step purification process, mucoderm® is a safe alternative to autologous soft tissue transplants in a diverse range of soft tissue grafting indications. After implantation mucoderm® is remodeled into patient's own soft tissue.

The native open porous collagen structure make mucoderm® an excellent scaffold for ingrowing blood vessels and cells. Thus, a fast revascularization and tissue integration are facilitated.

PROPERTIES

- Rapid revascularization and tissue integration
- Soft tissue regeneration/augmentation without palatal autograft harvesting
- Complete remodeling into patient's own tissue in ~6-9 months
- Can be easily applied and fixed by sutures
- Can be cut into procedure-specific shape



INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Treatment of gingival recessions / Soft tissue grafting in combination with GBR treatment / Broadening of attached gingiva / Closure of extraction sockets (socket seal technique) / Thickening of periimplant soft tissue

collprotect® membrane

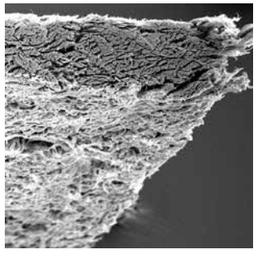
NATIVE COLLAGEN MEMBRANE

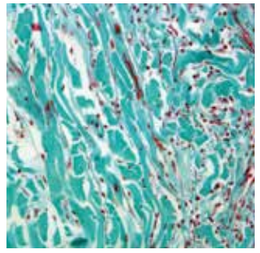
collprotect® membrane is the product of choice for most indications where intermediate stability and easy handling are required.
collprotect® membrane is derived from porcine dermis. The validated and controlled manufacturing process removes all cells and non-collagenous components, while the natural dense but porous collagen structure of the tissue of origin is being preserved. The hemostatic effect of collagen enables early wound stabilization and also supports natural healing.

collprotect® membrane displays very good surface adaptation and shows excellent tissue integration.

PROPERTIES

- Naturally dense but open porous collagen structure
- No artificial cross-linking
- Rough surface for cell adhesion and migration
- Pores facilitate blood vessel ingrowth and angiogenesis
- Controlled resorption
- Natural collagen supports blot clot formation/wound healing
- Easy application dry or wet





INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Protection of the Schneiderian membrane / Sinus lift / Socket preservation / Horizontal ridge augmentation / Fenestration and dehiscence defects / Intraosseous defects (1 to 3 walls) / Furcation defects (class I and II)

Jason® membrane

NATIVE PERICARDIUM MEMBRANE FOR GBR/GTR

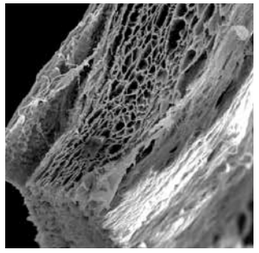
Jason® membrane is a very thin collagen membrane with a naturally long barrier function and with the outstanding characteristics of the native porcine pericardium.

It offers a significant tensile strength and an excellent surface adaptation.

Due to the unique production process, the natural structure and properties of the pericardium are preserved during the extensive cleaning procedure. Therefore, Jason® membrane shows a natural honeycomb-like, multilayered collagen structure with an increased content of collagen type III leading to the remarkable tear resistance and long barrier function of Jason® membrane.

PROPERTIES

- Naturally long barrier function
- Multi-directional strength and tear resistance
- No stickiness after rehydration
- Excellent surface adaptation and reduced risk of swelling
- Easy manipulation, can be applied dry or wet
- Thin membrane



INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Horizontal and vertical augmentation / Ridge reconstruction / Socket and ridge preservation / Sinus lift / Fenestration and dehiscence defects / Intraosseous defects (1 to 3 walls) / Furcation defects (class I and II)

synthetic

permamem®

SYNTHETIC NON-RESORBABLE PTFE MEMBRANE

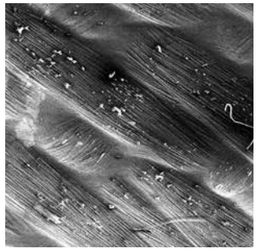
permamem® is a non-resorbable, biologically inert and biocompatible membrane made of high-density polytetra-fluoroethylene (PTFE).

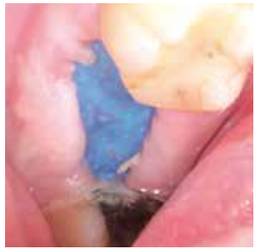
Due to its small pore size the membrane acts as an efficient barrier against bacterial and cellular penetration, and may therefore be left in place for open healing in certain clinical indications, enabling the maintenance of the soft tissue architecture.

The non-surgical removal of the membrane after healing omits the need for big surgical incisions (vertical releasing incisions), thus improving aesthetics.

PROPERTIES

- 100% synthetic PTFE barrier membrane
- Ultra-thin (~0.08 mm)
- Impervious to bacteria due to dense structure
- Easily removable due to minimal tissue ingrowth into the surface structure
- No need for primary soft tissue closure (indication-dependent)
- Either side may be placed towards the defect site
- Easy recovery thanks to blue color
- Rounded edges for minimal tissue trauma





INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Socket and ridge preservation (open healing) / Horizontal and vertical augmentation / Fenestration and dehiscence defects / Intraosseous defects (1 to 3 walls) / Furcation defects (class I and II)

collagen

collacone®

Art.-No.	Shape	Dimension	Content
511112		~16 mm height, width on top ~11 mm, bottom width ~7 mm	12 pieces (single sterile units)

collafleece®

Art.-No.	Size	Content
512212	20 × 20 mm	12 pieces (single sterile units)

mucoderm®

Art.-No.	Size	Content
701520	15 × 20 mm	1 matrix
702030	20 × 30 mm	1 matrix
703040	30 × 40 mm	1 matrix
710210	Ø 10 mm	1 punch

Bundle collacone® max and mucoderm® soft tissue punch

Art.-No.	Content
257110	1 x collacone® max 1 x mucoderm® soft tissue punch (Ø 10 mm)

Jason® membrane

Art.-No.	Size	Content
681520	15 × 20 mm	1 membrane
682030	20 × 30 mm	1 membrane
683040	30 × 40 mm	1 membrane

collprotect® membrane

Art.-No.	Size	Content
601520	15 x 20 mm	1 membrane
602030	20 x 30 mm	1 membrane
603040	30 x 40 mm	1 membrane

synthetic

permamem®

Art.-No.	Size	Content
801520	15 x 20 mm	1 membrane
802030	20 x 30 mm	1 membrane
803040	30 x 40 mm	1 membrane

instruments

titan pin set

FOR MEMBRANE FIXATION

DURING THE APPLICATION OF MODERN GBR AND GTR TECHNIQUES, BARRIER MEMBRANES ARE INDISPENSABLE TO ACHIEVE RELIABLE RESULTS.

By fixation of the barrier membrane to the local bone, the application of the particulate bone regeneration material as well as the coverage of the augmentation site by the barrier membrane can be significantly simplified.

Using the one-piece applicator, titan pins can easily be taken up from the dispenser and applied to the fixation site.

PROPERTIES

- Applicator with utterly comfortable grip-ergonomics for easy uptake of titan pins
- Functional design
- Dispenser with single-hand control for safe and easy opening
- Titan pins suitable for resorbable and non-resorbable membranes

Product Specifications

Art.-No.	Content
440000	titan pin set
	1 × applicator
	1 × dispenser for 15 titan pins
	1 × titan pins 3 mm (10 pieces)
440310	titan pins 3 mm (10 pieces)

All parts are delivered unsterile and need to be sterilized before use.

„Courses and congresses organized by botiss always offer a beneficial mix of relevant topics, internationally renowned speakers and a friendly atmosphere with a balanced ratio of science and practice (so, something for everyone).

education

A key aspect of these events is the wide range of workshops, which allows the participants to directly apply the learned concepts.“

Prof. Dr. Adrian Kasaj

botiss **ACADEMY**

botiss biomaterials aims to set new standards and drive innovations. To achieve this, we particularly dedicate our efforts to the organization of advanced high-quality training programs. **botiss ACADEMY** offers various course formats worldwide with a focus on a variety of topics such as implantology, periodontology and soft tissue regeneration. The success of this approach attracts internationally renowned experts, who share and discuss their clinical and scientific results.

> 70
on-demand
Webinars

www.botiss-campus.com

bone & tissue days

Our innovative **CONGRESS CONCEPT** „bone & tissue days“ focuses on dental hard and soft tissue regeneration and is characterized by a combination of theoretical clinical-scientific lectures and practice-oriented workshops.
Within the last years the bone & tissue days have become a major platform for the discussion of current innovations and concepts in dental tissue regeneration.

www.boneandtissue.com

since 2012
45
bone & tissue days
in 28 countries

botiss:

bone & **tiss**ue
regeneration

Development / Production / Distribution

www.botiss-dental.com

We all know – no single bone graft or soft tissue biomaterial can suit all medical needs, biological situations and indications. Factors, such as indication, age, hygiene, biotype, bone height and treatment plan, require a sophisticated approach with different, coordinated products.

TO HELP ACHIEVE THE BEST RESULTS POSSIBLE, WE OFFER YOU

the botiss regeneration system.

Our diverse portfolio includes all long-term proven biological materials (e.g., bovine, synthetic, allografts, collagen, granules, blocks, membranes and soft tissue matrices), which can be used in various combinations for each specific indication. All products are manufactured according to the highest quality standards.

RESEARCH

As a future-oriented company, botiss biomaterials invests substantially in cutting-edge research such as **STEM CELLS AND GROWTH FACTORS.**

We are convinced that the investigation of the interaction between biomaterials and stem cells and/or signaling proteins may pave the way for new approaches to develop innovative technologies and products. With the help of our worldwide collaborators from prominent research centers and key opinion leaders botiss has become a pioneer for clinical solutions in the field of tissue regeneration. Our innovative technologies are founded on longstanding academic and industrial research and testing.

clinical and scientific collaboration with

~ 75

universities and research institutions around the world

DEVELOPMENT

We develop new, innovative and patient-tailored materials and aim to optimize established products. To achieve this, we work closely with developers, researchers and clinicians worldwide with a main focus on their experience in everyday practice. These clinical and scientific collaborations have been established with around 75 universities and research institutions around the world.

During more than 1100 educational events since 2015, we have been in constant contact with users and key opinion leaders. These collaborations are vital – they help us to detect trends in the field of tissue regeneration early, facilitate the development of new materials and optimize already established products.

> 3.000.000

patients treated worldwide in 2018

www.botiss.com

botiss biomaterials

IS AN INNOVATIVE, CLINICALLY AND SCIENTIFICALLY DRIVEN, BIOTECH COMPANY WITH HEAD OFFICE IN BERLIN.

Since the foundation of botiss biomaterials in 2009, we have become a leading developer, manufacturer and marketer of biomaterials for oral tissue regeneration.

Our comprehensive range of high-quality, clinically proven solutions includes membranes for guided bone and tissue regeneration, matrices for soft tissue reconstruction, as well as a full range of bovine, allogeneic and synthetic bone substitute materials.

The products from our indication-based portfolio are used worldwide in **over 100 countries** and are supported by both clinical studies and many years of clinical experience.

botiss stands for constant innovations and an education/science-based cooperation with leading institutions and clinicians.

35%

out of 110 botiss employees
are scientists.

PATIENT SAFETY, EASE OF USE, RELIABLE TREATMENT RESULTS – THESE ARE YOUR AND OUR FIRST PRIORITIES.

Innovation.
Regeneration.
Aesthetics.

Our Slogan – our Vision.

This is the driving force that leads us to a continuous development of new materials and the optimization of established products.
botiss biomaterials invests in the development of innovative therapeutic concepts, patient-tailored products and regenerative measures to offer the best possible treatment options.
Unique innovations, high-quality education, the close cooperation with practitioners and international research institutes continuously expand our product portfolio and help to improve the treatment options for users and patients. In order to achieve this, botiss biomaterials acts as a link between developers, researchers and clinicians, with a key focus on the everyday-practice experience.

PATIENT-TAILORED PRODUCTS + THERAPEUTIC CONCEPTS

WE PROUDLY WELCOME YOU

TO THE

botiss regeneration system community.

WE INVITE YOU

TO SHARE **YOUR EXPERIENCES AND SUGGESTIONS** WITH US.

YOUR FEEDBACK CAN HELP TO FURTHER IMPROVE OUR PRODUCTS

OR DEVELOP NEW PRODUCT CONCEPTS.

THINK SYSTEM.

HIGH STANDARDS /
MEDICAL DEVICES /
PHARMACEUTICAL PRODUCTS /

WE ARE MANUFACTURER

All botiss products are manufactured under the strictest quality controls, keeping our biomaterials at the highest quality standards.

As legal manufacturer of medical devices according to Medical Device Directive (93/42/EEC) and Pharmaceutical Entrepreneur according to section 4, subsection 18 of the German Medicinal Products Act (AMG) botiss has implemented a quality management system conforming to DIN ISO 13485 and Good Manufacturing Practices (GMP).

The products of the botiss regeneration system have proven their success in terms of safety, efficacy, and reliability in a multitude of preclinical and clinical studies and, most importantly, in the daily clinical practice, with hundreds of thousands of patients treated worldwide.

Production sites

We produce innovative regenerative biomaterials based on collagen, allogenic, xenogenic and synthetic materials for a wide range of dental surgical applications.
botiss products offer outstanding biological reliability and performance allowing for a successful treatment outcome.

OUR PRODUCTION SITES ARE LOCATED IN KREMS (AT), SHEFFIELD (UK), DIEBURG (DE) AND NEUSTADT-GLEWE (DE).
BOTISS REGULARLY PERFORMS QUALITY CONTROL AUDITS ON ALL SITES

QM system

In order to achieve consistent quality, botiss maintains a QM system in accordance with DIN EN ISO 13485, Council Directive 93/42/EEC concerning Medical Devices, ISO 13485 (CMDCAS [Canadian Medical Devices Conformity Assessment System] and TCP [Taiwan Technical Cooperation Program]), the CMDR (Canadian Medical Device Regulation) and the PAA (Pharmaceutical Affairs Act). As part of this QM system, all actions necessary to achieve our high quality standards are defined and implemented, taking the valid statutory regulations into account.

www.botiss.com

Development / Production / Distribution

We all know – no single bone graft or soft tissue biomaterial can suit all medical needs, biological situations and indications. Factors such as indication, age, hygiene, biotype, bone height and treatment plan, require a sophisticated approach with different, coordinated products.

TO HELP ACHIEVE THE BEST RESULTS POSSIBLE, WE OFFER YOU

the botiss regeneration system.

Our diverse portfolio includes all long-term proven biological materials (e.g., bovine, synthetic, allografts, collagen, granules, blocks, membranes and soft tissue matrices), which can be used in various combinations for each specific indication. All products are manufactured according to the highest quality standards.

www.botiss-dental.com

botiss:

bone & **tiss**ue
regeneration

This indication matrix assists you with **clinical cases, videos, treatment recommendations and handling tips** in dental bone and tissue regeneration.

THINK SYSTEM.

soft tissue

GBR with slowly resorbable membrane

Peri-implant soft tissue thickening

Natural hea

cerabone®

CLINICAL SUCCESS
with the right
REGENERATION CONCEPT

hard tissue

Socket preservation – delayed implantation

maxgraft® corti

Lateral sinus lift – two stage

maxgraft® bonebuilder

Recession coverage

mucoderm®

maxgraft® bonebuilder concept

If you want to share your clinical cases with the scientific community, you can contribute to the indication matrix. Send your cases to info@botiss.com.

www.indication-matrix.com

cortico trimmer

FOR THE ADAPTATION OF CORTICAL BONE PLATES

USED WITH THE SHELL TECHNIQUE

instruments

For bone augmentation with the shell technique the precise adaptation of the bone plates is essential. The cortico trimmer is an excellent tool for trimming and drilling allogenic or autologous bone plates.

PROPERTIES

- Functional design with scales on two sides
- High quality surgical titanium
- Safe and precise alignment

Product-Specifications

Art.-No.	Content
34000	cortico trimmer 1 x

All parts are delivered unsterile and need to be sterilized before use.

bonering fix

FOR BONE RING HANDLING

THE PERFECT INSTRUMENT FOR EASY AND SAFE HANDLING, ADJUSTMENT AND POSITIONING OF ALLOGENIC AND AUTOLOGOUS BONE RINGS.

Product-Specifications

Art.-No.	Content
33010	bonering fix 1 x

All parts are delivered unsterile and need to be sterilized before use.

maxgraft® bonering surgical kit

WITH THIS SURGICAL KIT, BOTISS BIOMATERIALS PROVIDES ALL NECESSARY INSTRUMENTS TO APPLY THE MAXGRAFT® BONERING TECHNIQUE.

The kit includes two convenient sizes of trephines, which precisely match the maxgraft® bonering diameters. The planators allow the paving of the local bone to create a congruent and fresh contact surface at the recipient site. The diamond disc and the diamond tulip can be used to shape maxgraft® bonering which allows for an excellent adjustment to the local bone and for an improved soft tissue healing. Altogether, these instruments allow optimal adaptation of the recipient site, as well as the maxgraft® bonering itself.

Product-Specifications

Art.-No.	Content
33000	maxgraft® bonering surgical kit 1 x trephine 7 mm 1 x trephine 6 mm 1 x planator 7 mm 1 x planator 6 mm

composit

collacone® max

FLEXIBLE CONE FOR SOCKET PRESERVATION

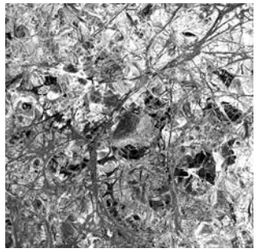
collacone® max is composed of synthetic granules and porcine collagen fibres and was especially developed for the socket.

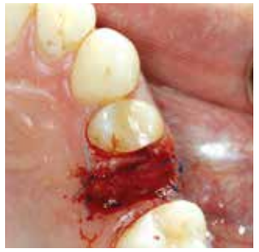
The combination of collagen and bone substitute material allows for excellent handling: The flexible cone can be easily formed and inserted into the void of the extraction socket.

When used in an early implantation collacone® max may be applied as a temporary void filler and as a protective medium in the extraction socket. In case of a delayed implantation collacone® max assists the new bone formation as a regenerative material. Following application the cone is slowly resorbed and replaced by new bone.

PROPERTIES AND ADVANTAGES

- Form-fitted cone shape for an easy application
- Adapts to the defect contours
- Maintains space and avoids soft tissue collapse
- Reduces the need for subsequent augmentative procedures
- Improves the aesthetic outcome of the final prosthesis





INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:

Socket and ridge preservation / Intraosseous defects / Peri-implant defects / Defects after root resection, apicoectomy and cystectomy

maxresorb® inject

INNOVATIVE SYNTHETIC INJECTABLE BONE PASTE

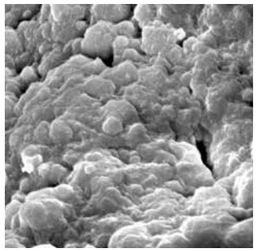
maxresorb® inject is a highly innovative, injectable and non-hardening bone graft paste. The unique pasty material is composed of a water-based gel with nano-hydroxyapatite particles and biphasic maxresorb® granules (composed of 60% HA and 40% β-TCP). The active nano-HA particles provide a large surface promoting cell-biomaterial-interaction. This leads to a fast cellular resorption and fast new bone formation, while the included maxresorb® granules support the volume maintenance. maxresorb® inject is gradually replaced by mature new bone.

EASY HANDLING

The viscous paste allows perfect molding, fitting and complete bonding to the surrounding bone surface of the defect.
The syringe allows direct and easy application to the defect site.

PROPERTIES

- Non-hardening bone paste
- 100% synthetic, safe and resorbable
- Easy handling
- Ready to use
- Viscous and moldable
- Optimal adaptation to surface contours
- Active HA nanoparticles
- Contains maxresorb® granules (60% HA/40% β-TCP)



INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Sinus lift / Intraosseous defects / Socket preservation / Osseous defects / Furcation defects

maxgraft® cancellous granules

Art.-No.	Particle Size	Content
30005	< 2.0 mm	1 x 0.5 ml
30010	< 2.0 mm	1 x 1.0 ml
30020	< 2.0 mm	1 x 2.0 ml
30040	< 2.0 mm	1 x 4.0 ml

maxgraft® cortico-cancellous granules

Art.-No.	Particle Size	Content
31005	< 2.0 mm	1 x 0.5 ml
31010	< 2.0 mm	1 x 1.0 ml
31020	< 2.0 mm	1 x 2.0 ml
31040	< 2.0 mm	1 x 4.0 ml

maxgraft® blocks

Art.-No.	Dimension	Content
31111	uni-cortical, 10 x 10 x 10 mm	1 x block
31112	uni-cortical, 20 x 10 x 10 mm	1 x block
32111	cancellous, 10 x 10 x 10 mm	1 x block
32112	cancellous, 20 x 10 x 10 mm	1 x block

maxgraft® bonering 3.3

(Height 10 mm, recommended for implant diameters of 3.3 - 3.6 mm)

Art.-No.	Dimension	Content
33160	cancellous ring, Ø 6 mm	1 x
33170	cancellous ring, Ø 7 mm	1 x

maxgraft® bonering 4.1

(Height 10 mm, recommended for implant diameters of 4.1 mm)

Art.-No.	Dimension	Content
33174	cancellous ring, Ø 7 mm	1 x

maxgraft® bonebuilder

Art.-No.		Content
PMIa	Individual planning and production of a bone transplant max. dimensions 23 × 13 × 13 mm	1 x
PMIa2	additional block(s) for the same patient	1 x

maxgraft® bonebuilder dummy

Art.-No.		Content
32100	Individual 3D-printed model of the patient's defect and the plastic bonebuilder block (for demonstration purposes)	1 x

maxgraft® cortico

Art.-No.	Dimension	Content
31251	cortical strut, 25 x 10 x 1 mm	1 x
31253	cortical strut, 25 x 10 x 1 mm	3 x 1

maxresorb® granules

Art.-No.	Particle Size	Content
20005	0.5 - 1.0 mm (S)	1 x 0.5 ml
20010	0.5 - 1.0 mm (S)	1 x 1.0 ml
20105	0.8 - 1.5 mm (L)	1 x 0.5 ml
20120	0.8 - 1.5 mm (L)	1 x 2.0 ml

maxresorb® blocks

Art.-No.	Dimension	Content
21211	20 × 10 × 10 mm	1 x block
21221	20 × 20 × 10 mm	1 x block

maxresorb® inject

Art.-No.	Unit	Content
22005	1 × syringe	1 × 0.5 ml
22010	1 × syringe	1 × 1.0 ml
22025	1 × syringe	1 × 2.5 ml

cerabone® granules

Art.-No.	Particle Size	Content
1510	0.5 - 1.0 mm	1 × 0.5 ml
1511	0.5 - 1.0 mm	1 × 1.0 ml
1512	0.5 - 1.0 mm	1 × 2.0 ml
1515	0.5 - 1.0 mm	1 × 5.0 ml
1520	1.0 - 2.0 mm	1 × 0.5 ml
1521	1.0 - 2.0 mm	1 × 1.0 ml
1522	1.0 - 2.0 mm	1 × 2.0 ml
1525	1.0 - 2.0 mm	1 × 5.0 ml

cerabone® block

collacone® max

Art.-No.	Shape	Dimension	Content
250001		height ~16 mm, width on top ~11 mm, bottom width ~7 mm	1 cone

Bundle collacone® max and mucoderm® soft tissue punch

Art.-No.	Content
257110	1 x collacone® max 1 x mucoderm® soft tissue punch (Ø 10 mm)

synthetics

maxresorb®

INNOVATIVE BI-PHASIC CALCIUM PHOSPHATE

maxresorb® is a reliable, 100% synthetic and therefore safe bone graft substitute with excellent handling characteristics and controlled resorption properties.

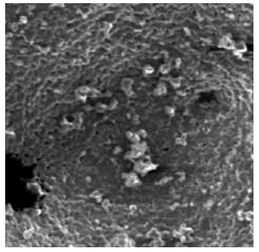
The ideal homogenous, bi-phasic composition of 60% hydroxyapatite (HA) and 40% beta-tricalcium phosphate (β-TCP) results in the controlled resorption behavior of maxresorb®.

While the fast resorption of β-TCP continuously increases the porosity of the material promoting tissue integration by allowing ingrowth of cells and blood vessels, the HA component provides volume stability for an extended time period.

The osteoconductivity of maxresorb® is achieved by a matrix of interconnected pores and a very high porosity of approx. 80%, with pore sizes ranging from 100-1000 µm.

PROPERTIES

- Bi-phasic homogenous composition
- 100% synthetic and safe
- Controlled resorption/remodeling
- Rough and hydrophilic surface
- High interconnected porosity
- 60% HA/40% beta-TCP
- Osteoconductive



INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Sinus lift / Ridge augmentation / Intraosseous defects / Socket preservation / Osseous defects / Furcation defects

maxgraft® bonebuilder

CUSTOMIZED ALLOGENIC BONE BLOCK

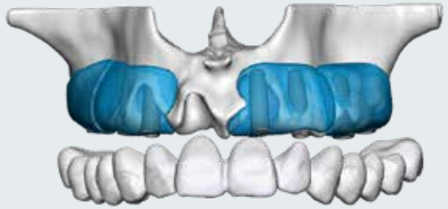
maxgraft® bonebuilder is individually adjusted to the bone defect: The three-dimensional precision fit is planned by using the latest 3D-CAD/CAM technology, therefore maxgraft® bonebuilder can be implanted with maximum precision in a minimum of time.

The maxgraft® bonebuilder enables complex horizontal and vertical augmentation without the necessity of harvesting autologous bone.

Patient comfort and satisfaction is considerably increased due to the reduced operation time and pain, improved wound healing and the good aesthetic result.

PROPERTIES

- Processed human allograft from selected living donors, undergoing a hip replacement (processing: C⁺TBA, Krems, Austria)
- Natural mineralized collagen
- Maximum size: 23 x 13 x 13 mm
- Fast graft incorporation and complete remodeling potential
- No donor site morbidity
- 5-6 months healing-/integration time
- 5 years shelf life at room temperature
- Safe and sterile



INDICATIONS: IMPLANTOLOGY, ORAL AND CMF SURGERY:

Horizontal and vertical augmentation / Extensive bone defects / Atrophic maxilla and mandibula

maxgraft® cortico

ALLOGENIC BONE PLATES FOR THE SHELL TECHNIQUE

maxgraft® cortico is a prefabricated cortical bone plate from human donor bone designed for the shell technique.The concept of the shell technique is the preparation of a biological container which creates the necessary space for the full incorporation of the particulated bone graft material.

maxgraft® cortico can be used as a substitute for autologous bone plates. It was developed to circumvent donor site morbidity and to prevent the time consuming harvesting and splitting of autologous bone blocks.

PROPERTIES

- Processed human allograft from selected organ and tissue donors (processing: C⁺TBA, Krems, Austria)
- Bone augmentation without autograft harvesting
- Reduced surgical time
- Established concept
- 5-6 months healing-/integration time
- No donor site morbidity
- 5 years shelf life at room temperature
- Safe and sterile

INDICATIONS: IMPLANTOLOGY AND ORAL AND CMF SURGERY:

Vertical augmentation / Horizontal augmentation / Complex three-dimensional augmentations / Single tooth gaps / Fenestration defects

maxgraft®

PROCESSED HUMAN ALLOGRAFT

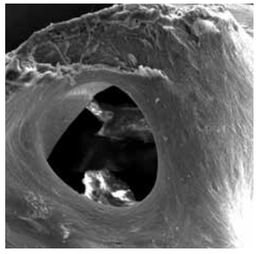
maxgraft® is a safe bone graft material derived from human donor bone. The excellent biological regeneration capability allows for reliable clinical outcomes.

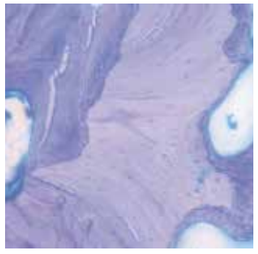
maxgraft® is available in form of purely cancellous or cortico-cancellous granules and blocks. The cancellous structure allows a fast regeneration of vital bone tissue, while the cortico-cancellous products ensure more volume stability, e.g. in case of augmentations outside the contour.

The complex and validated production process ensures the safety of maxgraft® and preserves the advantages of human bone grafts. The contained collagen promotes a fast integration, healing and flexibility of the implant.

PROPERTIES

- Natural mineralized collagen
- Preserved biomechanical properties
- Osteoconductive properties supporting natural and controlled tissue remodeling
- Bone augmentation without autograft harvesting
- No donor site morbidity
- 5 years shelf life at room temperature
- Safe and sterile





INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:

GRANULES: Localized augmentation of the ridge for future implant placement / Reconstruction of the ridge for prosthetic therapy / Filling of osseous defects, such as extraction sockets / Elevation of maxillary sinus floor / Repair of intrabony periodontal defects /

BLOCKS: A highly effective alternative to traditional block grafting / Ridge augmentation

maxgraft® bonering

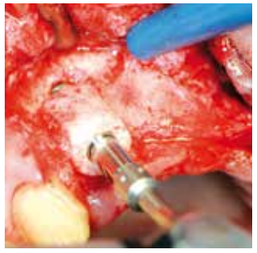
SIMULTANEOUS IMPLANT PLACEMENT AND BONE AUGMENTATION

The maxgraft® bonering is a prefabricated cancellous ring from human donor bone. maxgraft® bonering allows immediate implant placement and bone augmentation in one step.
Hence the bone ring technique requires no second surgical procedure for dental implant placement. It shortens the treatment time about several months and therefore increases patient acceptance.

Due to a multiple step purification process maxgraft® bonering is safe and the advantages of human bone are preserved. The naturally contained collagen is responsible for fast integration, healing and flexibility of the ring.

PROPERTIES

- Natural mineralized collagen
- One step procedure – simultaneous bone augmentation and implant placement
- Reduced treatment time (by several months)
- High patient acceptance
- Bone augmentation without autograft harvesting
- Reduced surgical time
- No donor site morbidity
- 5 years shelf life at room temperature
- Safe and sterile



INDICATIONS: IMPLANTOLOGY, ORAL AND CMF SURGERY:

Vertical augmentation (3D defects with low-grade horizontal augmentation) / Single tooth gap / Edentulous space / Sinus floor elevation (4 mm - 1 mm residual bone height)

allo**grafts**

THE **ALLOTEC® PROCESS**

is a complex but gentle process with volatile agents only. After thorough manual cleaning and shaping of the bone tissue, multiple chemical treatments follow, involving different solvents and oxidative treatment. Afterwards, the tissue is dehydrated by freeze-drying and finally gamma-irradiated after packaging, ensuring pharmaceutical sterility. The ALLOTEC® process has been proven to eliminate potential pathogens, without destroying the natural bone structure.

Thus, C⁺TBA allografts exhibit excellent biocompatibility and outstanding handling properties.

QUALITY OF LIFE

The Cells⁺Tissuebank Austria (C⁺TBA), located in Austria is one of the leading European tissue banks, specialized in the processing of living donor tissue. Almost the whole amount of the bone allografts have been actively donated from patients receiving total hip replacement surgeries for the purpose of providing safe and highly efficient bone grafts for other patients.
Only maxgraft® cortico and maxgraft® blocks cortico-cancellous are derived from multi-organ donors in Austria.

The joint effort of tissue donors, orthopaedic surgeons and all employees at C⁺TBA has one aim: Provide quality of life for the patients!

xenograft

cerabone®

THE NATURAL BOVINE BONE SUBSTITUTE

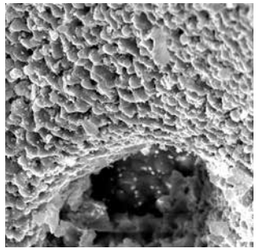
cerabone® is a highly reliable, long-term stable and particularly safe bone substitute and therefore the material of choice for a high number of dentists. To date, more than 1.000.000 patients have been successfully treated with cerabone® in more than 90 countries.

The three-dimensional pore network allows a fast penetration and adsorption of blood and serum proteins. The strongly hydrophilic surface of cerabone® facilitates the uptake of blood or physiological saline solution and supports optimal moldability and contouring.

The **HIGH TEMPERATURE TREATMENT OF CERABONE® AT >1200°C** reliably removes all organic components and prions, making it a particularly safe bone substitute.

PROPERTIES

- Natural bovine bone substitute with high long-term volume stability
- 100% pure biologic bone apatite
- Highest possible safety due to high temperature treatment
- Osteoconductive scaffold with interconnected pores
- Rough surface favouring optimal cell adhesion and blood absorption
- Easy handling



INDICATIONS: IMPLANTOLOGY, PERIODONTOLOGY AND ORAL AND CMF SURGERY:
Sinus lift / Horizontal and vertical augmentation / Ridge preservation / Peri-implant defects / Socket preservation / Bone defect augmentation / Periodontal intrabony defects / Furcation defects (class I and II)

THE USE OF BONE GRAFT MATERIALS

Bone graft materials are applied to replace and regenerate bone matrix loss due to tooth extraction, cystectomy or bone atrophy following loss of teeth or inflammatory processes. For the filling of bone defects, the patient‘s own (autologous) bone is considered the „gold standard“, because of its biological activity due to vital cells and growth factors. However, the harvesting of autologous bone requires a second surgical site associated with an additional bony defect and potential donor site morbidity.
In addition, the quantity of autologous bone is limited. Due to continued development, bone graft materials provide a reliable and safe alternative to autologous bone grafts in various indications. Clinicians can choose between a variety of different bone graft materials and augmentation techniques.

DISTINCTIVE PROPERTIES
of the three groups of bone grafting materials

XENOGRAFT (Bovine bone)
- Osseous cellular integration
- Long-term volume stability

ALLOGRAFTS (Human donor bone)
- Fast integration
- High remodeling potential

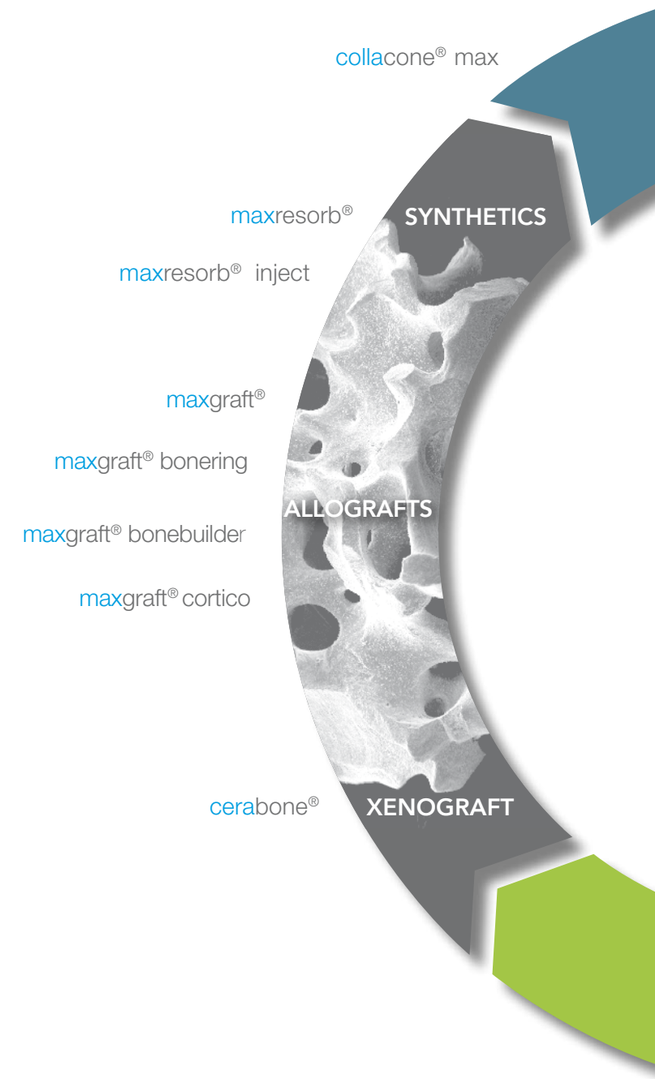
SYNTHETICS (Biphasic calcium phosphates)
- Controlled cellular resorption

BOTISS BONE GRAFTING MATERIALS ARE CLASSIFIED INTO THREE GROUPS ACCORDING TO **THEIR ORIGIN**

XENOGENIC
Bone from a different species (animals)

ALLOGENIC
Bone from human donors (multi-organ donors or femoral heads of living donors)

SYNTHETIC
Calcium phosphate ceramics



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bone substitutes