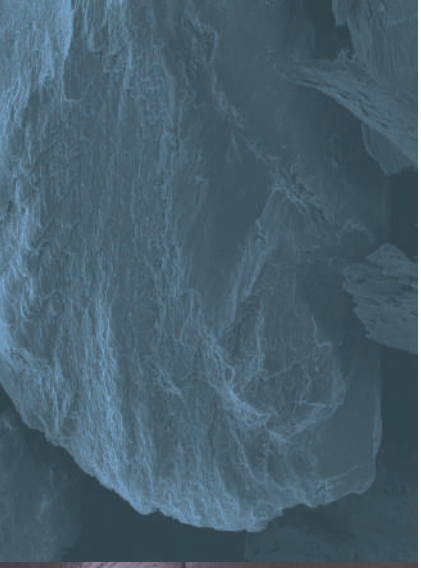
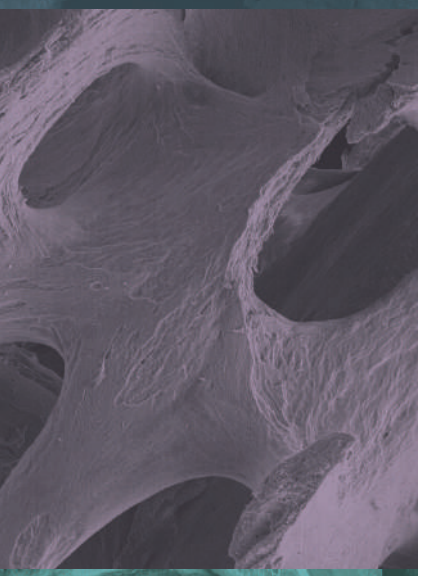
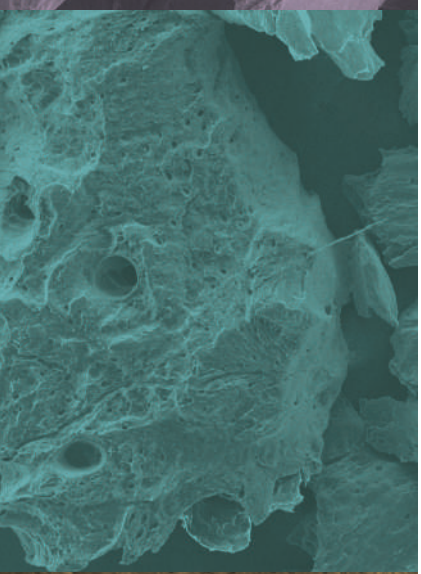
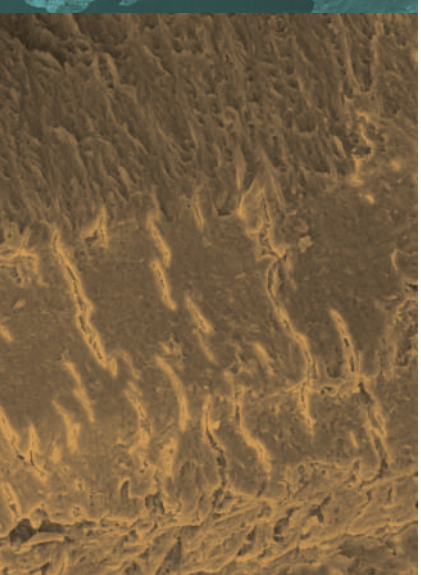








PERIODONTAL

Bone & Skin Allograft Products

SureOss® Family

· SureOss®
Cortical Bone - Powder / Chip

· SureOss® Plus
Cortical Bone with CA - Powder / Chip

· SureOss® Collagen
Cortical Bone with Collagen - Sponge Block

· SureOss® Paste
Cortical Bone Matrix - Paste

· SureOss®-D
Demineralized Cortical Bone - Powder / Chip

OsteOss™ Family

· OsteOss™
Cortical & Cancellous Bone - Powder / Chip

· OsteOss™ Plus
Cortical & Cancellous Bone with CA(Calcium Phosphate) - Powder / Chip

· OsteOss™ Paste
Cortical Bone Matrix with Cancellous Bone - Paste

DBM Products

· SureFuse®
Demineralized Bone Matrix - Gel / Putty

· ExFuse™
Demineralized Bone Matrix with Cancellous Bone - Gel / Putty

· BellaFuse™
Demineralized Bone Matrix - Flexible Sheet

FDBA Products

· CANOSS™
Cancellous Bone - Powder / Chip

· INGROSS™
Cortical & Demineralized Cortical Bone - Powder / Chip

· Genesis™
Cancellous & CorticoCancellous Bone - Block

ADM Product

· SureDerm®
Acellular Dermal Matrix - Sheet

HANS Biomed
HansBiomed Corp.
www.HansBiomed.com

The Global Leader of Bio Engineering

HansBiomed Corp.

Hans R&D Center

HansBiomed Head Office

· Establishment: September 1999
· Primary Manufacturing Goods: Allograft Tissue / Silicone Polymer Medical Devices / Bio Technology
· Location: 807, 55, Seongsuil-ro, Seongdong-gu, Seoul, Korea

· Company Website: http://www.HansBiomed.com

· Family Website: http://www.HansGBR.com (Periodontal)
http://www.BellaGel.net (Breast Implant)
http://www.mintlift.com (Thread Lifting)

HansBiomed Daeduk Institute

· Establishment: June 2002
· Total Area: 11,337 m^2
· Total Floor Area: 2,500 m^2
· Location: 461-37, Jeonmin-dong, Yuseong-gu, Daejeon, Korea

HansBiomed USA Branch Office

· Establishment: March 2011
· Primary Manufacturing Goods: Bone&Skin Products
· Location: 140 Sylvan Ave Suite #204 Englewood Cliffs, NJ 07632, USA

- Dressing room
- Production preparation room
- Raw material storage room
- Air conditioning room
- Bone processing room
- Bone pulverization room
- Primary packaging room
- Freeze-drying control room
- Production room
- Final packaging room
- Storage for final products
- Office & Archive

- Reagent preparation room
- E.O. sterilization room
- Production preparation room
- Storage for sterilizing equipments
- SureDerm production room
- Micronized production room
- Freeze-drying room
- Product packaging room

- Dressing room
- Clean shower C/S
- Production preparation room/raw material storage
- Production room No. 1
- Mandrel storage
- Washing room
- Shell storage/Patch room
- Production room No.2
- Q.C. facilities
- Storage for final products
- Final packaging room

Safety, Trust, Innovation

Hans Achievement

FDA MFDS CE GMP KOSDAQ LISTED COMPANY HITE ISO 13485

HansBiomed Corp. was founded in 1993 with the specialized business project titled

"wound healing and scar prevention".

Thanks to our young researchers' creativity and hard work, we could secure the core technologies that are soon applied to manufacture the cutting-edge medical products.

These products manufactured at the Hans Daeduk R&D Center are being exported to over 25 countries around the world.

Top 5 World-class Product Company

Korea's Largest Tissue Engineering Research Institute

First **FDA** Registered Facility in ASIA

1993 ~ 1999

- Production of burn treatments and compression garment for liposuction surgery
- Cooperative Research Agreement with KAIST on "Acellular Artificial Dermis R&D Project"
- Establishment of Hans Medical Corporation
- Development of human acellular dermal tissue, SureDerm™, first in Asia

2000 ~ 2003

- Completion of the largest tissue engineering facilities in Asia, Hans Daeduk R&D Center
- Quality Management System (ISO30011) certification
- Selected as the "World-class Product Certification Company" by the Ministry of Commerce, Industry and Energy
- "Venture Company Award" Winner given by Department of Health and Human Services
- First Asian human tissue allograft registered to US FDA

Established the First Domestic Tissue Bank

First **KOSDAQ**-Listed biocompany

First **510(K)** Clearance in ASIA

2004 ~ 2008

- Scar prevention and management product "Scar Clinic" launched in Korea
- First human tissue allograft safety management institution approved by the KFDA
- Received the first domestic license from KFDA for the establishment of "Tissue bank"
- As first in Asia, commercialized DBM (Demineralized Bone Matrix) products
  (Product name: SurFuse™-Gel/Putty, ExFuse™-Gel/Putty)
- As first in Asia, registered breast implants at CE
- Korea International Trade Association
  ("Tower of 100 Million Dollars in Export")

2009 ~

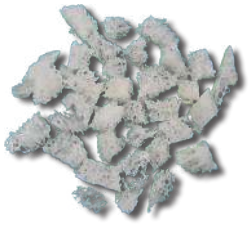
- US FDA 510(k) clearance for "DBM allograft for orthopedic application (SurFuse™, ExFuse™)"
- Establishment of Hans Biomed USA, Inc.
- Winner of 18th Grand Prize of "Business Innovation (Prime Minister citation)"
- Listed in "KOSDAQ" as first in the industry
- Breast implants selected as Next Generation of World Class Product, organized by Ministry of Commerce, Industry and Energy
- "Technology Commercialization Award" organized by Daeduk Special District R&D Head Office
- "Sol-Gel drug supported multiple fractures bone fillers development, Minsister of Knowledge Economy Award" hosted by NanoKorea
- Selected as the "Primary Export Business" by the Small and Medium Business Administration
- Awarded the "Prime Minister Award" for venture companies
- Selected as the "Best technology business enterprise" by Daejeon TechnoPark

Excellent Biocompatibility and Bone Formation

Periodontal Allograft Bone

Cancellous Allograft - FDBA: Freeze Dried Bone Allograft

The structure of Open trabecular of Cancellous particle, like of host bone, contains mineral structure and collagen, so that it accelerates cells to be settled and a bone to be remodeled. Also this product creates ideal environment for fast revascularization and remodeling, as a result, healthy bones can be formed. Osteogenic progenitor cells from new blood vessels are differentiated into Osteoblast and cause a new bone around Trabecular of the grafted bone to be settled, and at the same time Osteoblast absorbs the grafted bone until the grafted bone substitutes with a new bone. This process, creeping substitution, helps to form healthy and strong bone.



Cortical Allograft - FDBA: Freeze Dried Bone Allograft

Cortical Bone is a compact type of bone tissue that used for supporting volume of bone for such procedures as sinus lift, ridge augmentation, and socket extraction. It provides fine lamellar structure and is effectively remodeled into natural bone. Absorption of cortical particles proceed with revascularization and enlarge canal space is filled with migrated osteoblasts. Then, healthy and strong bone is formed.

Bone Block Allograft - FDBA: Freeze Dried Bone Allograft

Compared to the particle form of allograft, this block form of bones are ideal for recovering volume of Ridge, which has high absorbability. Cancellous bone parts of allograft are remodeled into a new bone through fast revascularization. In addition, the cortical bone parts provide framework for mechanical strength and forms part of healthy and strong bone by remodeling process, which ultimately facilitates the dental implantation. This block bone allograft eliminates the need of autologous bone extraction and therefore it decreases a possibility of secondary pains and complications from it. This then leads to a shorter period of patient's recovery.

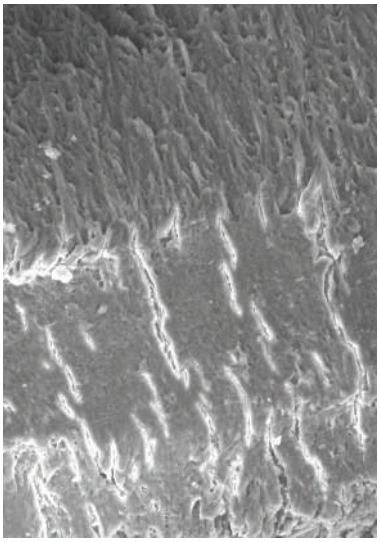
DBM Allograft - Demineralized Bone Matrix

DBM are demineralized bone matrix retaining growth factor and other proteins such as BMP, without lipid and mineral contents, so that it can form healthy and high quality new bone through its osteoinductive and osteoconductive potential. DBM is basically composed of demineralized bone particles and liquid carrier to helps the action of growth factor and to enhance its handling. DFDBA (Demineralized Freeze Dried Bone Allograft) are referred to the bone powder before this mixing process.

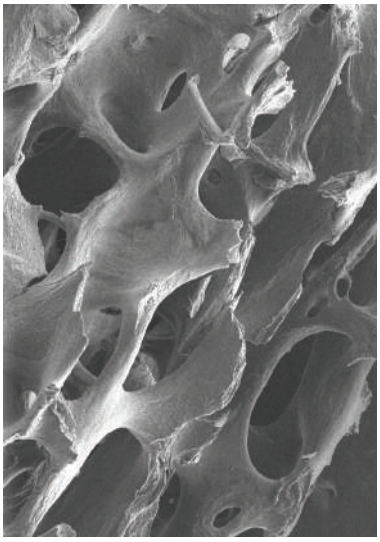
Cortical VS Cancellous Bone

	Cortical Allograft	Cancellous Allograft
Volume enhancement	★★★★☆	★★★☆☆
Space maintenance	★★★★☆	★★★★☆
Density	★★★★☆	★★★☆☆
Osteoconductive	★★★☆☆	★★★★☆
Osteoinductive	★★★☆☆	★★★☆☆

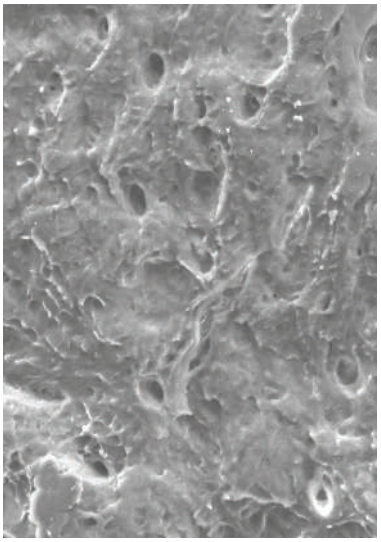
Cross section pictures of bone



Cortical



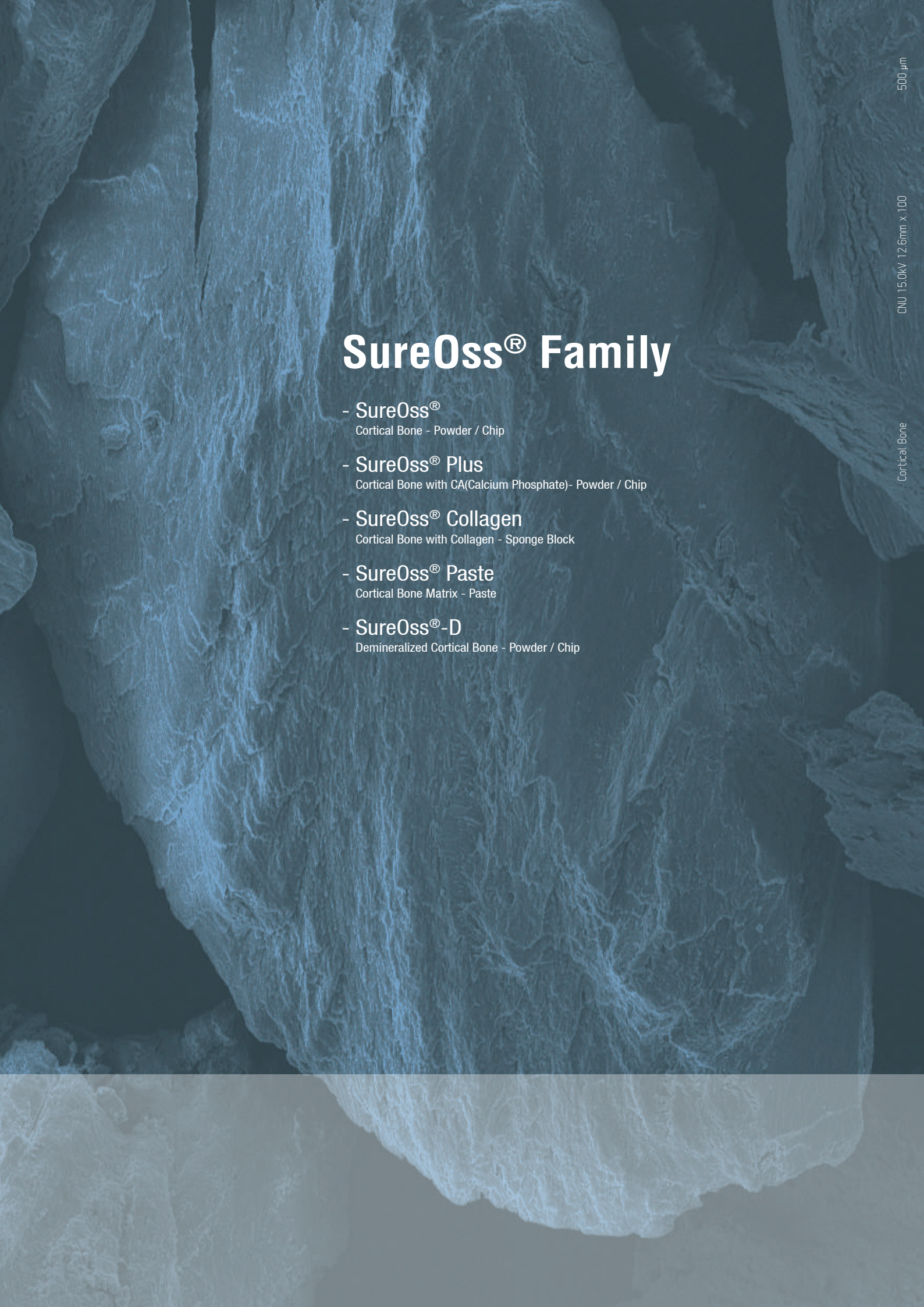
Cancellous



DFDBA
(Demineralized Freeze Dried Bone Allograft)

SureOss® Family

Product	Contents	Type	Size
SureOss® 	Cortical bone (FDBA)	Powder Chip	0.25 cc 0.5 cc 1 cc
SureOss® Plus 	Cortical bone Calcium(HA) CMC	Powder Chip	0.25 cc 0.5 cc 1 cc
SureOss® Collagen 	Cortical bone Collagen	Sponge Bone Block	5 x 5 x 8 mm 8 x 8 x 8 mm
SureOss® Paste 	SemiCortical bone CMC	Paste	0.3 cc 0.5 cc 1 cc
SureOss®- D 	Demineralized Cortical bone (DFDBA)	Powder Chip	0.25 cc 0.5 cc 1 cc



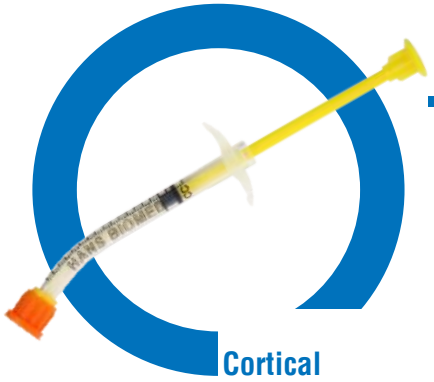
SureOss® Family

- SureOss®
  Cortical Bone - Powder / Chip
- SureOss® Plus
  Cortical Bone with CA(Calcium Phosphate)- Powder / Chip
- SureOss® Collagen
  Cortical Bone with Collagen - Sponge Block
- SureOss® Paste
  Cortical Bone Matrix - Paste
- SureOss®-D
  Demineralized Cortical Bone - Powder / Chip

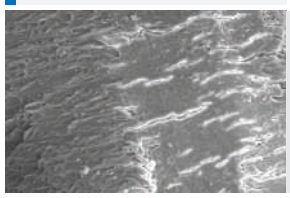
SureOss®

Cortical Bone - Powder and Chip

SureOss® is a Freeze Dried Bone Allograft (FDBA) composed of 100% cortical bone. HansBiomed's Freeze-Dried cortical bone maintains all the growth factors, proteins, and minerals that are related to promoting new bone formation. Since cortical bone is much denser and harder compare to cancellous bone, its mechanical strength provides excellent structural maintenance. SureOss® can be rehydrated with patient's blood or saline solution and is provided in a specially designed syringe for user's convenience.



+ Cortical Bone



- Excellent space maintenance
- Provides lamellar structure that remodels to natural bone
- Indicated for sinus grafting, socket extraction, and ridge augmentation

Powder

Chip

Characteristics

- 100% freeze dried cortical bone
- Cortical structure remodels to host bone
- Osteoconductive and Osteoinductive ability
- Curved syringe for easy use
- Excellent Biocompatibility

Specification

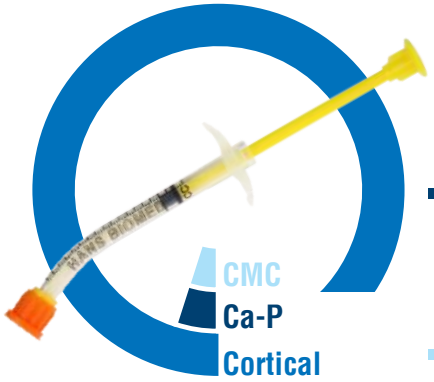
Product	Cat No.	Size	Particle Size	Type	Contents
SureOss®	SOP025	0.25 cc	200~850 μm	Powder	Cortical bone
	SOP050	0.5 cc			
	SOP100	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
SureOss®	SOC025	0.25 cc	850~1.500 μm	Chip	Cortical bone
	SOC050	0.5 cc			
	SOC100	1 cc			

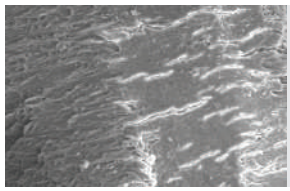
SureOss® *Plus*

Cortical Bone with CA - Powder and Chip

SureOss® Plus is composed of SureOss® (Cortical bone), CA (Calcium Phosphate), and CMC (Carboxymethyl Cellulose) powder. CA is structurally and chemically similar to human bone and is produced as a powder type to maximize its exposure. Osteoclasts resorb CA like host bone and degrade rapidly, which releases the minerals necessary for osteoblast to build new bone. So CA reinforces the osteoconduction and furthers the bone regeneration. When hydrated, CMC powder provides just right viscosity to prevent the product from scattering. SureOss® Plus can be rehydrated with patient's blood or saline solution and is provided in a specially designed syringe for user's convenience.

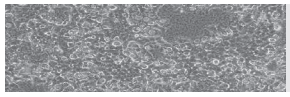


+ Cortical Bone



- Excellent space maintenance
- Provides lamellar structure that remodels to natural bone
- Indicated for sinus grafting, socket extraction, and ridge augmentation

+ Calcium Phosphate



- Increase bone regeneration ability

+ CMC

- Prevent the product loss
- Patent for promoting bone regeneration (Patent#: 2007-0004352)

Characteristics

Powder

Chip

- The amount of cortical bone in SureOss Plus is same as that of SureOss® (same weight)
- CA(calcium phosphate) for improved bone regeneration
- CMC attains a suitable viscosity after rehydration for user's convenience
- Curved syringe for easy use
- Excellent biocompatibility

Specification

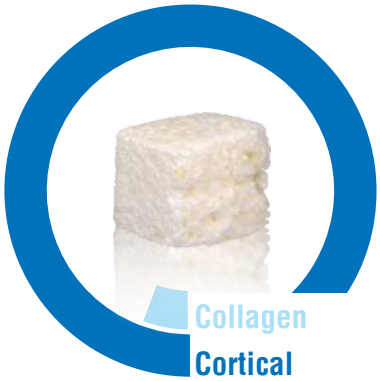
Product	Cat No.	Size	Particle Size	Type	Contents
SureOss® Plus	NSOP025	0.25 cc	200~850 μm	Powder	Cortical bone Calcium CMC
	NSOP050	0.5 cc			
	NSOP100	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
SureOss® Plus	NSOC025	0.25 cc	850~1.500 μm	Chip	Cortical bone Calcium CMC
	NSOC050	0.5 cc			
	NSOC100	1 cc			

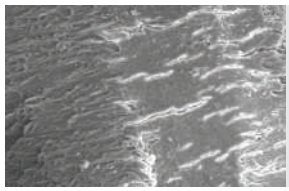
SureOss® *Collagen*

Cortical Bone with Collagen - Sponge Bone Block

SureOss® Collagen is a composed of SureOss® powder and collagen, which is engineered and processed into a block type. The bone particles are joined by collagen and form 3D lattice structure which is essential in new bone formation. The osteoconductive ability is enhanced by the SureOss® collagen's pore size and its absorbability. SureOss® Collagen is absorbable because it has the optimum pore size for the host bone cells to penetrate and to promote new bone growth. SureOss® Collagen also has a hemostatic characteristic due to collagen being a hemostatic agent. The spongy bone becomes soft and compressible when rehydrated with saline or blood so it can easily be placed in deficit areas.

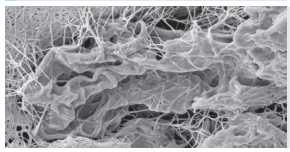


Cortical Bone

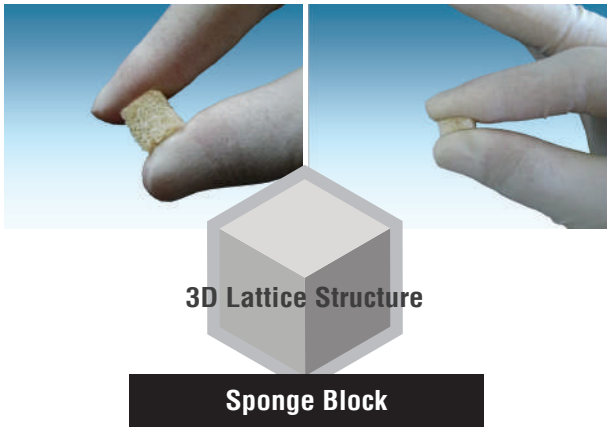


- Excellent space maintenance
- Provides lamellar structure that remodels to natural bone
- Indicated for sinus grafting, socket extraction, and ridge augmentation

Collagen



- Provides Flexible 3D lattice structure
- Hemostatic effect



Characteristics

- Easy to handle viscosity that prevents particle loss
- Becomes softer and more compressible with rehydration
- Optimized pore size for host tissue infiltration
- Excellent aesthetic effect
- For a small wound, it can be used alone without membrane

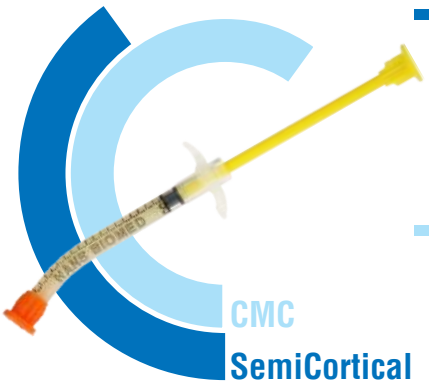
Specification

Product	Cat No.	Size	Type	Contents
SureOss® Collagen	SOCB05	5 x 5 x 8 mm	Sponge Bone Block	Cortical bone Collagen
	SOCB08	8 x 8 x 8 mm		

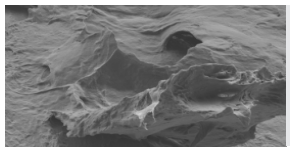
SureOss® *Paste*

Cortical Bone Matrix - Paste

SureOss® Paste is a bone graft material composed of partially demineralized cortical bone and CMC. Demineralized surface of the semi cortical bone is not compact but rather porous which leads to faster fusion with host bone cells. The semi cortical bone is the next generation of bone graft material that has osteoinductive ability like DBM and durability like cortical bone. CMC provides high viscosity that SureOss® Paste is moldable at the time of implantation.



+ SemiCortical Bone



- Excellent volume maintenance with active growth factors
- Porous demineralized surface

+ CMC

- Provide viscosity to enhance convenience
- Patent for Composite of Bone-Regeneration (Apply #: 2007-0004352)

Paste

Characteristics

- Both Osteoconductive and Osteoinductive
- Moldable due to high viscosity attained from CMC contents
- No need of rehydration
- Curved syringe for easy use
- Excellent biocompatibility

Before demineralization (FDBA)	Partially demineralized (SemiCortical Bone)	Complete demineralization (DBM)
High Osteoconduction	High Osteoconduction + High Osteoinduction	High osteoinduction
SureOss®	SureOss® Paste	SureFuse™

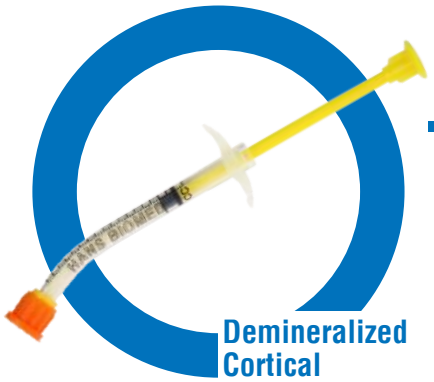
Specification

Product	Cat No.	Size	Particle Size	Type	Contents
SureOss® Paste	SOPM030	0.3 cc	200~850 μm	Paste	SemiCortical bone CMC
	SOPM050	0.5 cc			
	SOPM100	1 cc			

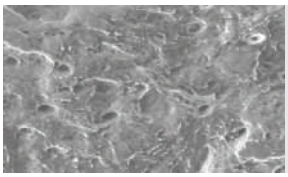
SureOss®- D

Demineralized Cortical Bone - Powder and Chip

SureOss®-D is a Demineralized Freeze Dried Bone Allograft (DFDBA) composed of 100% demineralized cortical bone. Demineralization increases the osteoinductive ability because growth factors such as BMP becomes viable and induce mesenchymal cells to differentiate into osteoblast. HansBiomed's lyophilization technology made it possible to increase the shelf life DFDBA such as SureOss®-D so it can be stored for a long period of time. SureOss®-D can be rehydrated with patient's blood or saline solution and is provided in a specially designed syringe for user's convenience.



+ DFDBA(Cortical)



- Demineralized cortical bone matrix without lipid or mineral components.
- Growth factors, such as BMP, help bone regeneration through osteoinduction.

Powder

Chip

Characteristics

- 100% Demineralized Cortical Bone Allograft
- Powerful Osteoinductive ability
- Increased shelf life
- Curved syringe for easy use
- Excellent biocompatibility

Specification

Product	Cat No.	Size	Particle Size	Type	Contents
SureOss®-D	DSOP025	0.25 cc	200~850 μm	Powder	Demineralized Cortical bone
	DSOP050	0.5 cc			
	DSOP100	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
SureOss®-D	DSOC025	0.25 cc	850~1.500 μm	Chip	Demineralized Cortical bone
	DSOC050	0.5 cc			
	DSOC100	1 cc			

Implantology, Periodontology, Membrane

Various Indication

Implantological Indications
- Extraction Site
- Ridge Preservation
- Sinus Floor Elevation
- Socket Preservation
- Wall Defect
- Torus
- Fenestration Defect
- Dehiscence Defect

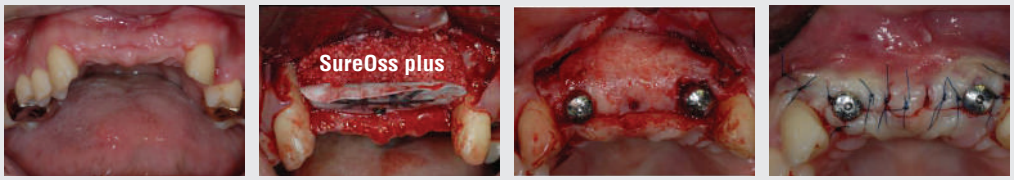
Periodontal Indications
- Periodontal Augmentation
- Exposed Implant
- Periodontal Defect
- Esthetic Augmentation
- Cysts
- Tumors

Membrane
- Gingiva Augmentation
- Membrane for GBR
- Open Membrane Tech
- Gingiva Aug & Open Membrane

Extraction Site

SureOss®

Ridge Preservation

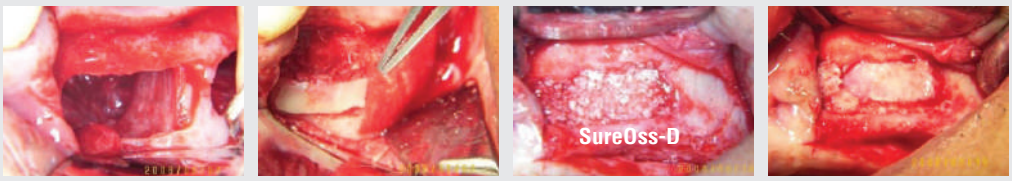


SureOss® plus

Sinus Elevation

SureOss® paste

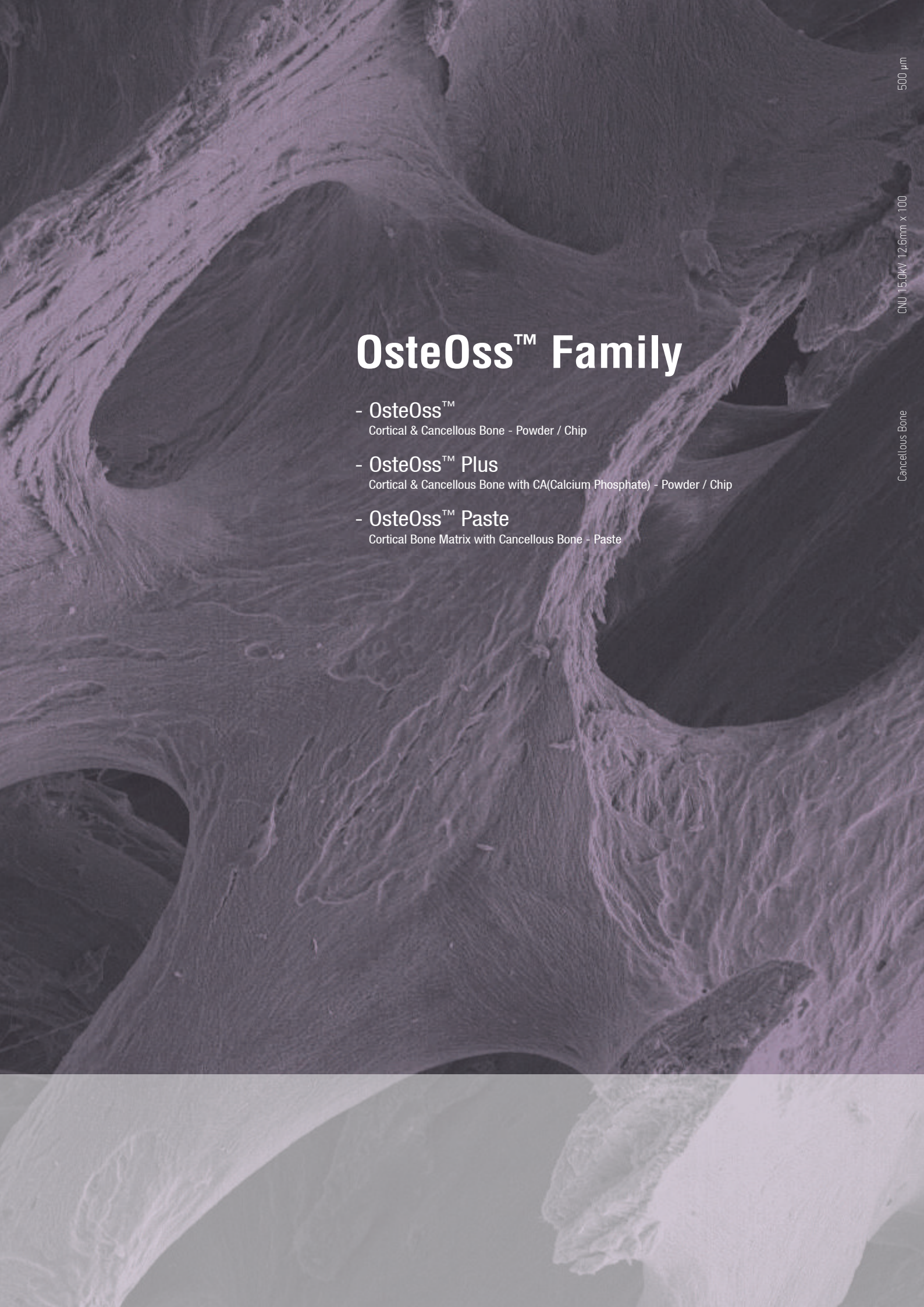
Sinus Elevation



SureOss® –D

OsteOss™ Family

Product	Contents	Type	Size
OsteOss™ 	Cortical bone Cancellous bone (FDBA)	Powder Chip	0.25 cc 0.5 cc 1 cc
OsteOss™ Plus 	Cortical bone Cancellous bone Calcium(HA) CMC	Powder Chip	0.25 cc 0.5 cc 1 cc
OsteOss™ Paste 	SemiCortical bone Cancellous bone CMC	Paste	0.3 cc 0.5 cc 1 cc



OsteOss™ Family

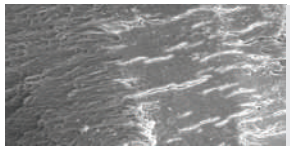
- OsteOss™
  Cortical & Cancellous Bone - Powder / Chip
- OsteOss™ Plus
  Cortical & Cancellous Bone with CA(Calcium Phosphate) - Powder / Chip
- OsteOss™ Paste
  Cortical Bone Matrix with Cancellous Bone - Paste

OsteOss™

Cortical & Cancellous Bone - Powder and Chip

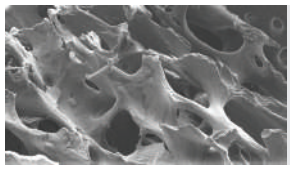
OsteOss™ is a Freeze Dried Bone Allograft (FDBA) composed of cortical and cancellous bone. Optimized porosity of cancellous bone provides the optimal scaffold for bone tissue to migrate and promote intercellular bone growth. The compactness of the cortical bone is excellent at maintaining structural support as new bone formation occurs. OsteOss™ can be rehydrated with patient's blood or saline solution and is provided in a specially designed syringe for user's convenience

+ Cortical Bone



- Excellent at space maintenance
- Provides lamellar structure that remodels to natural bone
- Indicated for sinus grafting, socket extraction, and ridge augmentation

+ Cancellous Bone



- Open trabecular structure comprised of interconnected pores
- Ideal structure for bone cell infiltration

Powder

Chip

Characteristics

- 100% Freeze Dried Bone Allograft (FDBA)
- Great Osteoinductive and Osteoconductive ability
- Curved syringe for easy use
- Excellent Biocompatibility

Specification

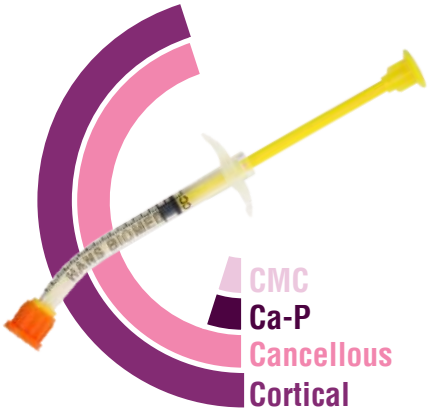
Product	Cat No.	Size	Particle Size	Type	Contents
OsteOss™	CCP025	0.25 cc	200~850 μm	Powder	Cortical bone Cancellous bone
	CCP050	0.5 cc			
	CCP100	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
OsteOss™	CCC025	0.25 cc	850~1.500 μm	Chip	Cortical bone Cancellous bone
	CCC050	0.5 cc			
	CCC100	1 cc			

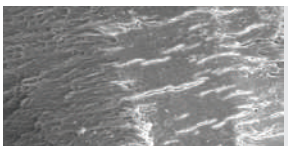
OsteOss™ Plus

Cortical & Cancellous Bone with CA - Powder and Chip

OsteOss™ Plus is composed of cortical bone, cancellous bone, CA (Calcium Phosphate), and CMC (Carboxymethyl Cellulose) powder. CA is structurally and chemically similar to human bone and is produced as a powder type to maximize its exposure. Osteoclasts resorb CA like host bone and degrade rapidly, which releases the minerals for osteoblast to build new bone. Porosity of cancellous bone provides the optimal scaffold for bone cells to settle, and hardness of cortical bone supports the mechanical structure. When hydrated, CMC powder provides just right viscosity to prevent the product from scattering.

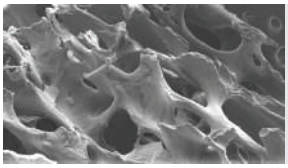


Cortical Bone



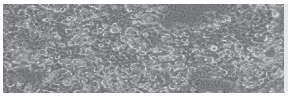
- Excellent space maintenance
- Provides lamellar structure that remodels to natural bone
- Indicated for sinus grafting, socket extraction, and ridge augmentation

Cancellous Bone



- Open trabecular structure comprised of interconnected pores
- Ideal structure for bone cell infiltration

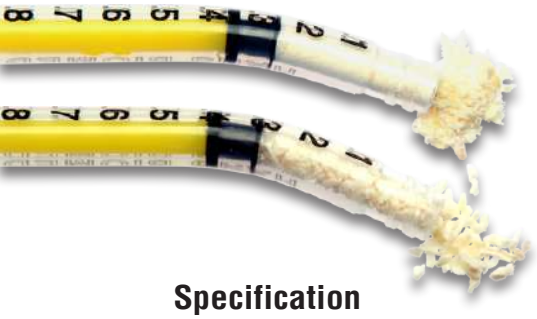
Calcium Phosphate



- Increase bone regeneration ability

CMC

- Provide viscosity to enhance convenience
- Patent for Composite of Bone-Regeneration (Patent#: 2007-0004352)



Powder

Chip

Characteristics

- CA(calcium phosphate) for improved bone regeneration
- Optimized porosity for cell migration
- Cortical structure remodels to host bone
- CMC to attain a suitable viscosity after rehydration for user's convenience

Specification

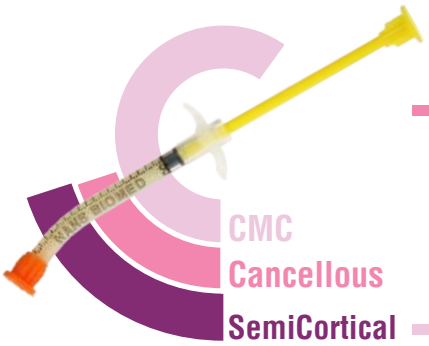
Product	Cat No.	Size	Particle Size	Type	Contents
OsteOss™ Plus	N00P025	0.25 cc	200~850 μm	Powder	Cortical bone Cancellous bone Calcium CMC
	N00P050	0.5 cc			
	N00P100	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
OsteOss™ Plus	N00C025	0.25 cc	850~1.500 μm	Chip	Cortical bone Cancellous bone Calcium CMC
	N00C050	0.5 cc			
	N00C100	1 cc			

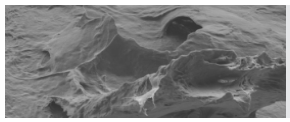
OsteOss™ Paste

Cortical Bone Matrix with Cancellous Bone - Paste

OsteOss™ Paste is bone graft material composed of partially demineralized cortical bone, cancellous bone and CMC. Demineralized surface of the semi cortical bone is not compact but rather porous. Also the porosity of cancellous bone provide optimal scaffold for bone cell infiltration. Being partially demineralized, growth factors such as bmp promote mesenchymal cell amplification and differentiation. CMC provides high viscosity so OsteOss™ Paste is moldable at the time of use.

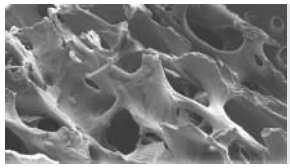


+ SemiCortical Bone



- Excellent volume maintenance with active growth factors
- Porous demineralized surface

+ Cancellous Bone



- Open trabecular structure comprised of interconnected pores
- Ideal structure for bone cells to infiltrate

+ CMC

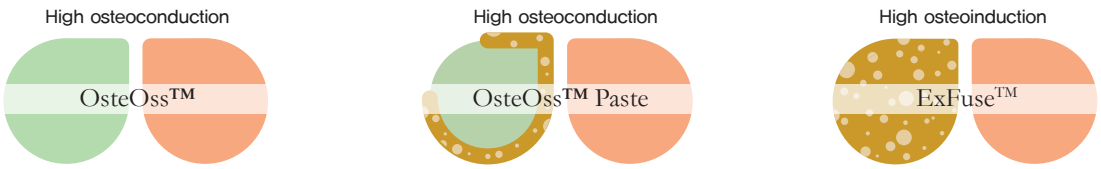
- Provide viscosity to enhance convenience
- Patent for Composite of Bone-Regeneration (Patent#: 2007-0004352)

Paste

Characteristics

- Osteoinduction with growth factors
- Structurally more durable than DBM
- Moldable due to high viscosity attained from CMC contents
- No need for rehydration
- Curved syringe for easy use

Before demineralization (FDBA) → Partially demineralization (SemiCortical Bone) → Complete demineralization (DBM)



Specification

Product	Cat No.	Size	Particle Size	Type	Contents
OsteOss™ Paste	00P0030	0.3 cc	200~850 μm	Paste	SemiCortical bone Cancellous bone CMC
	00P0050	0.5 cc			
	00P0100	1 cc			

Implantology, Periodontology, Membrane

Various Indication

Implantological Indications
- Extraction Site
- Ridge Preservation
- Sinus Floor Elevation
- Socket Preservation
- Wall Defect
- Torus
- Fenestration Defect
- Dehiscence Defect

Periodontal Indications
- Periodontal Augmentation
- Exposed Implant
- Periodontal Defect
- Esthetic Augmentation
- Cysts
- Tumors

Membrane
- Gingiva Augmentation
- Membrane for GBR
- Open Membrane Tech
- Gingiva Aug & Open Membrane

Periodontal Augmentation

OsteOss™

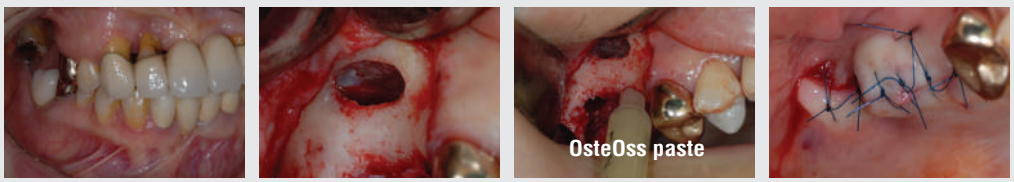
Torus

OsteOss™

Exposed Implant

OsteOss™ Plus

Sinus Floor Elevation



OsteOss™ Paste

DBM Products

Product	Contents	Type	Size
SureFuse® II 	DFDBA CMC	Gel Putty	0.3 cc 0.5 cc 1 cc
ExFuse™ II 	DFDBA Cancellous bone CMC	Gel Putty	0.3 cc 0.5 cc 1 cc
BellaFuse™ 	**DBM Flex** DFDBA Gelatin	Flexible Sheet	10 x 20 x 2.5 mm 15 x 40 x 2.5 mm 20 x 20 x 2.5 mm 20 x 40 x 2.5 mm
	DBM+Cortical Flex DFDBA Cortical bone Gelatin		

FDBA Products

Product	Contents	Type	Size
CANOSS™ 	Cancellous	Powder/ Chip	0.25 cc 0.5 cc 1 cc
INGROSS™ 	DFDBA Cortial bone	Powder/ Chip	0.25 cc 0.5 cc 1 cc
Genesis™ 	Cancellous bone	Block	10 x 10 x 5 mm 10 x 10 x 10 mm 10 x 20 x 10 mm
	CorticoCancellous bone		6 x 6 x 10 mm 6 x 12 x 12 mm 6 x 12 x 20 mm 7 x 7 x 10 mm

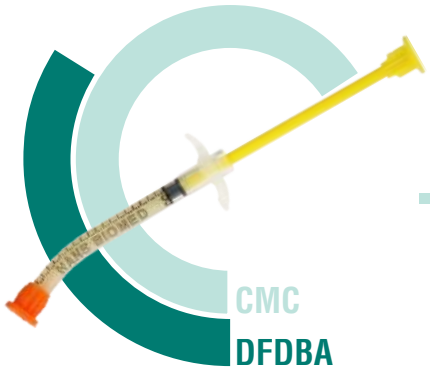
DBM Products

- SureFuse®
  Demineralized Bone Matrix - Gel / Putty
- ExFuse™
  Demineralized Bone Matrix with Cancellous Bone - Gel / Putty
- BellaFuse™
  Demineralized Bone Matrix - Flexible Sheet

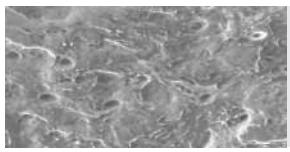
SureFuse® II

Demineralized Bone Matrix - Gel and Putty

SureFuse® is a bone graft substitute composed of Demineralized Bone Matrix and a CarboxyMethyl Cellulose (CMC) carrier. It is available in Gel or Putty type and is ready for implantation without rehydration. DBM content is a very osteoinductive because it has the natural growth factors that promote new bone formation by differentiating mesenchymal cells to osteoblasts. Both gel and putty is malleable and viscous so it can fit into any shape of bone defect.

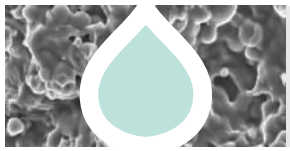


DFDBA

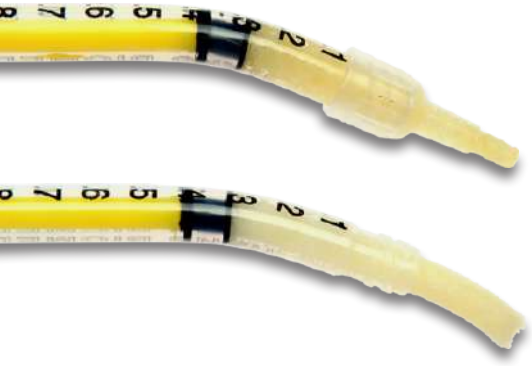


- Demineralized cortical bone matrix without lipid or mineral components.
- Growth factors, such as BMP, help bone regeneration through osteoinduction.

CMC



- Provide viscosity to enhance convenience
- Patent for Composite of Bone-Regeneration (Patent#: 2007-0004352)



Gel

Putty

Characteristics

- High DBM contents
- Growth factor including BMPs
- Can be Implanted directly
- Ease of use by high viscosity
- No need of rehydration.

Specification

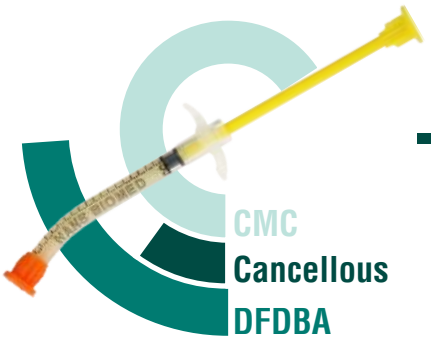
Product	Cat No.	Size	Particle Size	Type	Contents
SureFuse®	SG03	0.3 cc	200~850 μm	Gel	DFDBA CMC
	SG05	0.5 cc			
	SG1	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
SureFuse®	SP03	0.3 cc	200~850 μm	Putty	DFDBA CMC
	SP05	0.5 cc			
	SP1	1 cc			

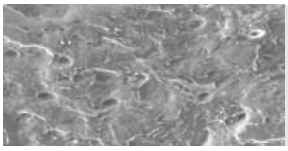
ExFuse™ II

Demineralized Bone Matrix with Cancellous Bone - Gel and Putty

ExFuse™ Gel and Putty is a bone graft substitute composed of Demineralized Bone Matrix and CarboxyMethyl Cellulose (CMC) carrier with additional cancellous bone powder. It is available in Gel or Putty type and is ready for implantation without rehydration. Cancellous bone has the optimum interconnected pores for cellular attachment and invasion that stimulates bone and vascular growth. The natural growth factors in DFDBA promote new bone formation by cell amplification and differentiation. Both gel and putty are malleable and viscous so it can fit into any shape of bone defect.

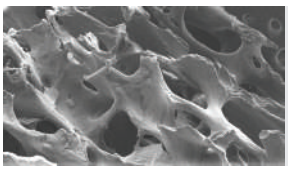


+ DFDBA



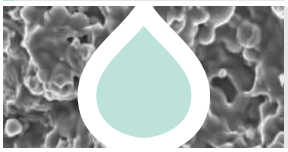
- Demineralized cortical bone matrix without lipid or mineral components.
- Growth factors, such as bmp, help bone regeneration through osteoinduction.

+ Cancellous Bone

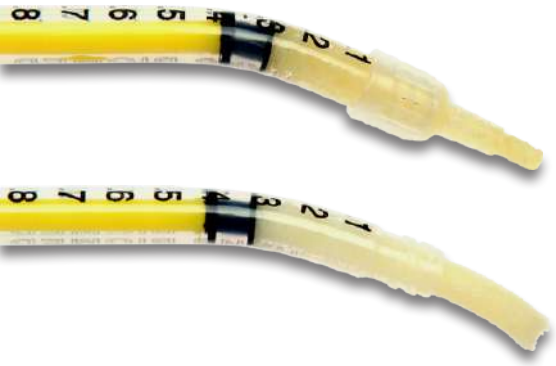


- Open trabecular structure comprised of interconnected pores
- Ideal structure for bone cells to infiltrate

+ CMC



- Provide viscosity to enhance convenience
- Patent for Composite of Bone-Regeneration (Patent#: 2007-0004352)



Gel

Putty

Characteristics

- High DBM contents
- Optimum pore size provides accessibility
- Active growth factors including BMPs
- Can be Implanted directly
- Moldable at the time of use
- Biocompatible carrier

Specification

Product	Cat No.	Size	Particle Size	Type	Contents
ExFuse™	EG03	0.3 cc	200~850 μm	Gel	DFDBA Cancellous bone CMC
	EG05	0.5 cc			
	EG1	1 cc			

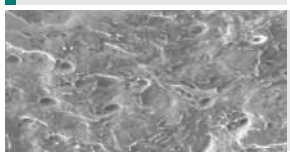
Product	Cat No.	Size	Particle Size	Type	Contents
ExFuse™	EP03	0.3 cc	200~850 μm	Putty	DFDBA Cancellous bone CMC
	EP05	0.5 cc			
	EP1	1 cc			

BellaFuse™

Demineralized Bone Matrix - Flexible Sheet

BellaFuse™ Sheet is a flexible bone sheet composed of DFDBA and gelatin. Gelatin is a very biocompatible agent that maintains the shape and enhances flexibility of BellaFuse. The gelatin content gets slowly absorbed by the host tissue which provides a durable scaffold that leaves a higher DFDBA content over 50%. BellaFuse is irrigation resistant and easily cut into desirable shape for multiple indications.

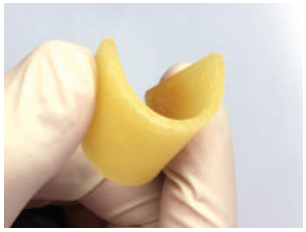
DFDBA



- Demineralized cortical bone matrix without lipid or mineral components.
- Growth factors including BMPs helps bone regeneration through osteoinduction.

Gelatin

- Enhances flexibility for user's convenience
- Slow absorbing biocompatible agent
- Water resistant



Flexible Sheet

Characteristics

- High DFDBA contents over 50%
- Active growth factors including BMPs
- Ready for direct implantation
- Irrigation resistant
- Excellent biocompatibility

Specification

Product	Cat No.	Size	Type	Contents
BellaFuse™ DBM Flex	DBF12	10 x 20 x 2.5 mm	Flexible Sheet	DFDBA Gelatin
	DBF14	10 x 40 x 2.5 mm		
	DBF22	20 x 20 x 2.5 mm		
	DBF24	20 x 40 x 2.5 mm		

Product	Cat No.	Size	Type	Contents
BellaFuse™ Cortical + DBM Flex	CDBF12	10 x 20 x 2.5 mm	Flexible Sheet	DFDBA Cortical bone Gelatin
	CDBF14	10 x 40 x 2.5 mm		
	CDBF22	20 x 20 x 2.5 mm		
	CDBF24	20 x 40 x 2.5 mm		

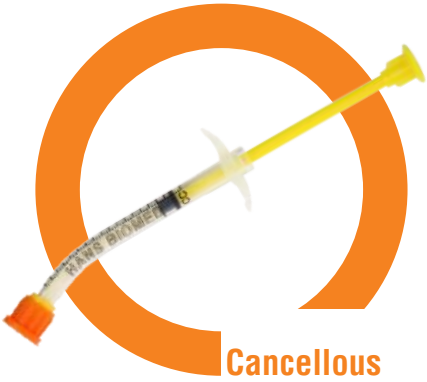
FDBA Products

- CANOSS™
  Cancellous Bone - Powder / Chip
- INGROSS™
  Cortical & DFDBA - Powder / Chip
- Genesis™
  Cancellous & CorticoCancellous Bone - Block

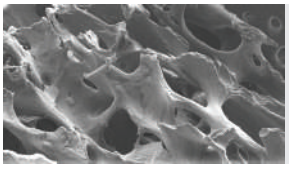
CANOSS™

Cancellous Bone - Powder and Chip

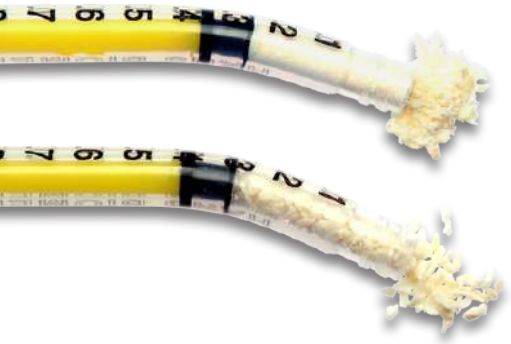
CANOSS™ is a Freeze Dried Bone Allograft (FDBA) composed of 100% cancellous bone. 100% Freeze-Dried cancellous bone maintains all the growth factors, proteins, and minerals that are related to promoting new bone formation. Interconnected pore structure of cancellous bone allows cells to migrate into the graft and encourages cellular ingrowth. Minerals and collagens directly promote bone remodeling and revascularization. CANOSS™ can be rehydrated with patient's blood or saline solution and is provided in a specially designed syringe for user's convenience.



+ Cancellous Bone



- Open trabecular structure comprised of interconnected pores
- Ideal structure for bone cells to infiltrate



Powder

Chip

Characteristics

- 100% Cancellous Bone Allograft
- Optimized porosity for cell migration
- Mineral and collagen promote cell regeneration
- Curved syringe for easy use
- Excellent Biocompatibility

Specification

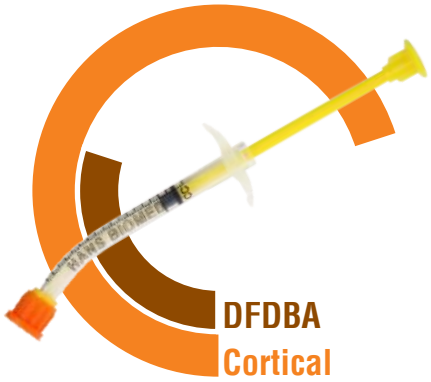
Product	Cat No.	Size	Particle Size	Type	Contents
CANOSS™	CAP025	0.25 cc	200~850 μm	Powder	Cancellous bone
	CAP050	0.5 cc			
	CAP100	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
CANOSS™	CAC025	0.25 cc	850~1.500 μm	Chip	Cancellous bone
	CAC050	0.5 cc			
	CAC100	1 cc			

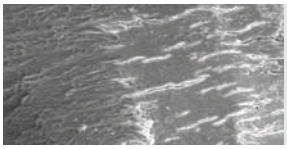
INGROSS™

Cortical Bone & DFDBA - Powder and Chip

INGROSS™ is composed mainly of cortical bone with DFDBA. Since 100% freeze dried cortical bone is the main component, INGROSS™ is osteoconductive like SureOss® that provides a strong structural support. INGROSS™ also has a great osteoinductive ability because growth factors in DFDBA stimulate new bone formation. INGROSS™ can be rehydrated with patient's blood or saline solution and is provided in a specially designed syringe for user's convenience.

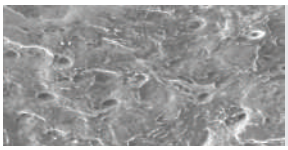


+ Cortical Bone



- Excellent space maintenance
- Provides lamellar structure that remodels to natural bone
- Indicated for sinus grafting, socket extraction, and ridge augmentation

+ DFDBA



- Demineralized cortical bone matrix without lipid or mineral components.
- Growth factors, such as bmp, helps bone regeneration through osteoinduction.

Powder

Chip

Characteristics

- Great volume maintenance
- SureOss® characteristics with enhanced osteoinductive ability.
- Curved syringe for easy use
- Excellent biocompatibility

Specification

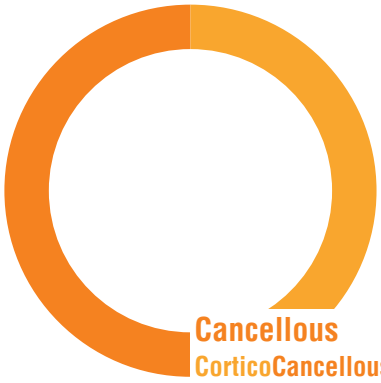
Product	Cat No.	Size	Particle Size	Type	Contents
INGROSS™	CDP025	0.25 cc	200~850 μm	Powder	Cortical bone DFDBA
	CDP050	0.5 cc			
	CDP100	1 cc			

Product	Cat No.	Size	Particle Size	Type	Contents
INGROSS™	CDC025	0.25 cc	850~1.500 μm	Chip	Cortical bone DFDBA
	CDC050	0.5 cc			
	CDC100	1 cc			

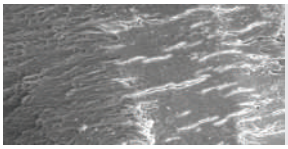
Genesis™

Cancellous & CorticoCancellous Bone - Block

Genesis™ is a Freeze Dried Bone Allograft (FDBA) bone block. There are two types of Genesis™: corticocancellous, and cancellous. 3D lattice structure of Genesis delivers great volume maintenance and excellent osteoconductive property. The interconnected pores of cancellous bone provides the optimal scaffold for bone tissue to migrate and promote intercellular bone growth. As 100% CorticoCancellous allograft, Genesis™ is durable and compressible, that can easily be applied to large defect directly.

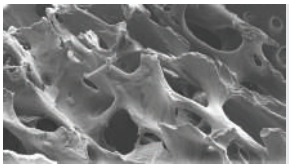


+ Cortical Bone

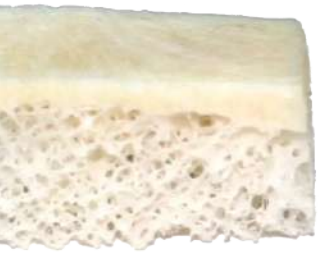


- Excellent space maintenance
- Provides lamellar structure that remodels to natural bone
- Indicated for sinus grafting, socket extraction, and ridge augmentation

+ Cancellous Bone



- Open trabecular structure comprised of interconnected pores
- Ideal structure for bone cells to infiltrate



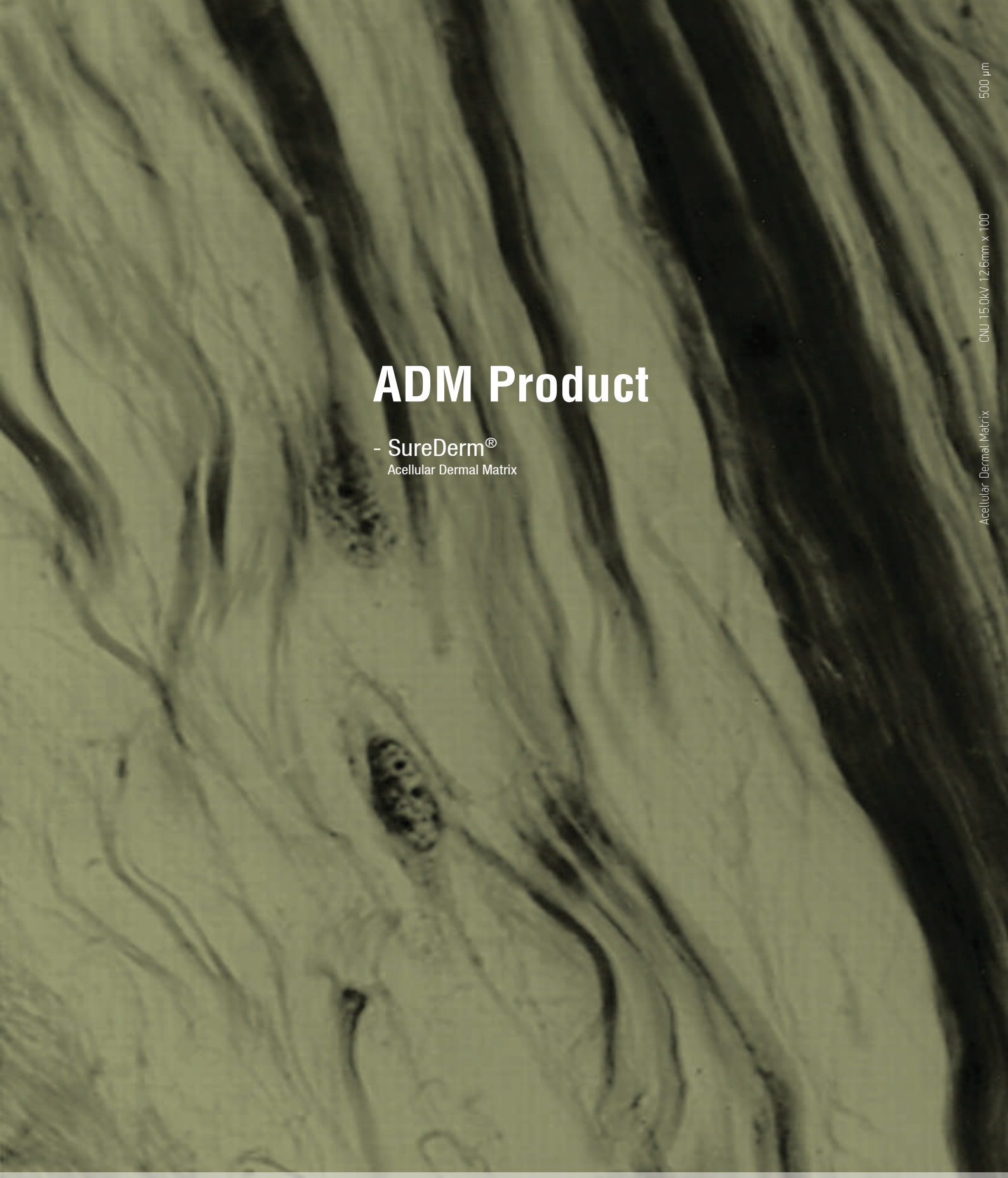
Characteristics

- 100% Freeze Dried Bone Allograft bone block
- Optimal scaffold with 3D lattice structure
- Durable osteoconductive structure
- Ready for large defect area implantation
- Excellent Biocompatibility

Specification

Product	Cat No.	Size	Type	Contents
Genesis™	CAB05	10 x 10 x 5 mm	Block	Cancellous bone
	CAB10	10 x 10 x 10 mm		
	CAB20	10 x 10 x 20 mm		

Product	Cat No.	Size	Type	Contents
Genesis™	CCB06	6 x 6 x 10 mm	Block	CorticoCancellous bone
	CCB12	6 x 12 x 12 mm		
	CCB20	6 x 12 x 20 mm		
	CCB17	7 x 7 x 10 mm		



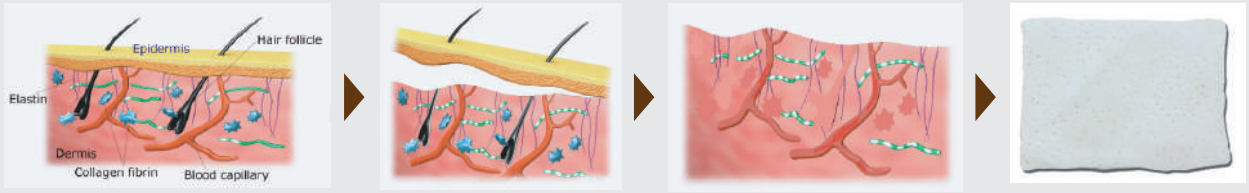
ADM Product

- SureDerm®
  Acellular Dermal Matrix

SureDerm®

Acellular Dermal Matrix

SureDerm® is a sterile, Acellular Dermal Matrix (ADM) derived from human skin tissue. After removal of the epidermis layer, the cells in the dermis layer are eliminated to avoid any immune rejection. The collagen and elastin architecture of the dermis layer is maintained so it provides a structural support for skin defects in cases like gingiva reconstruction. The Acellular Dermal Matrix becomes patient's own tissue by cell migration and blood vessel regeneration.



General Human Skin | De–epidermal | Acellular | SureDerm®

Characteristics

- Applicable without skin test
- Ready for implantation directly
- No discomfort after engraftment
- Becomes patient's own skin
- Elastic, Durable and Biocompatible

Specification

Product	Cat No.	Size	Thickness	Application
SureDerm® (10 Series)	G102002	10 x 20 mm	0.25~0.59 mm	Membrane Gingiva
	G102004	10 x 40 mm		
	G102104	20 x 20 mm		
	G102008	20 x 40 mm		
SureDerm® (20 Series)	G202002	10 x 20 mm	0.60~0.99 mm	Membrane Gingiva
	G202004	10 x 40 mm		
	G202104	20 x 20 mm		
	G202008	20 x 40 mm		
SureDerm® (30 Series)	G302002	10 x 20 mm	1.00~1.39 mm	Membrane Gingiva Augmentation
	G302004	10 x 40 mm		
	G302104	20 x 20 mm		
	G302008	20 x 40 mm		

Easier, Safer

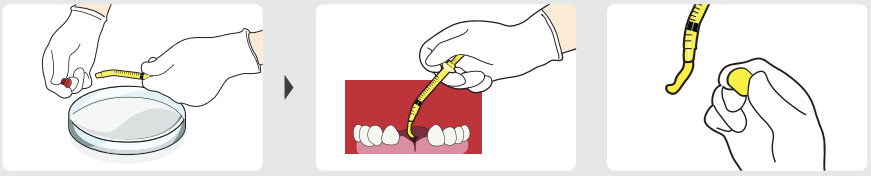
Easy Mixing and Handling

Injectable Curved Syringe Type

Particle – SureOss®, SureOss® Plus, OsteOss™ , OsteOss™ Plus, CANOSS™ , INGROSS™

Injecting product onto the treatment site after rehydration in patient blood or saline.

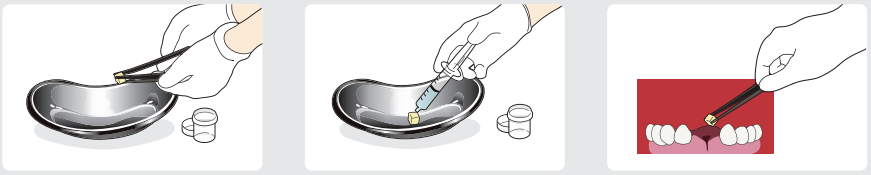
Paste – SureFuse®, ExFuse™ , SureOss® Paste, OsteOss™ Paste



Injecting products without rehydration. Shaping the Putty type product into a desired form before implantation.

Space Maintanance Block Type

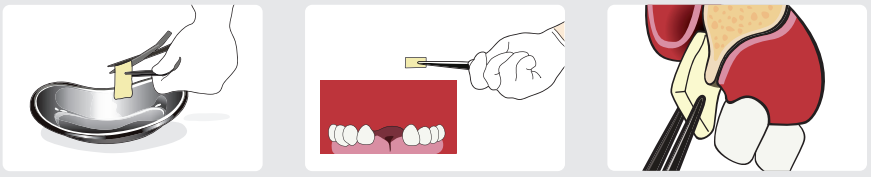
SureOss® Collagen, Genesis™



manipulating of shape into desired form and size. then injecting in defect area after rehydration in patient blood or saline.

Flexible Sheet Type

BellaFuse™



implant in the treatment site with desired shape with rehydration.

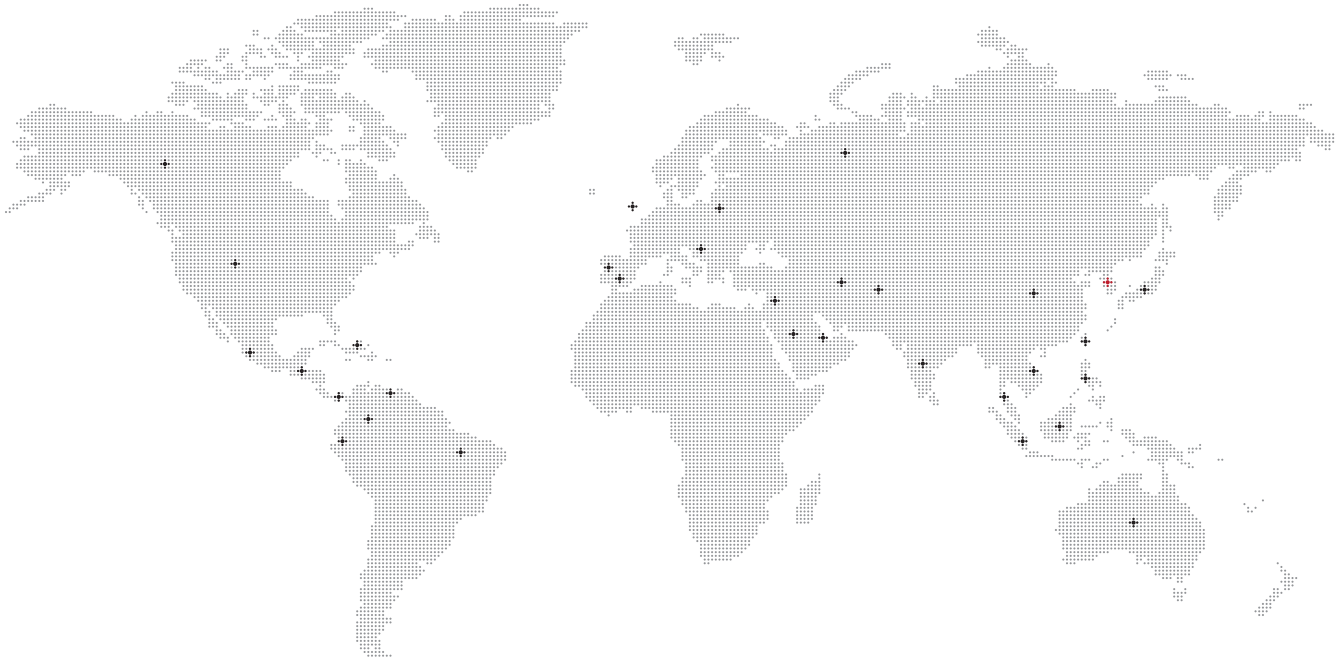
HansBiomed Corp.

Allograft Tissue

	Product	Composition	Commercially available forms	Characteristics
SureOss Family	SureOss® 	Cortical bone	Powder Chip	Osteoconduction Biocompatibility Osteoinduction
	SureOss® *Plus* 	Cortical bone Calcium bone CMC	Powder Chip	
	SureOss® *Collagen* 	Cortical bone Collagen	Block	
	SureOss® *Paste* 	Cortical bone CMC	Paste	
	SureOss®-D 	Demineralized Cortical bone	Powder Chip	
OsteOss Family	*OsteOss*™ 	Cortical bone Cancellous bone	Powder Chip	
	OsteOss™ *Plus* 	Cortical bone Cancellous bone Calcium CMC	Powder Chip	
	OsteOss™ *Paste* 	Cortical bone Cancellous bone CMC	Paste	
DBM Products	SureFuse® II 	DFDBA CMC	Gel Putty	
	ExFuse™ II 	DFDBA Cancellous bone CMC	Gel Putty	
	BellaFuse™ 	DFDBA Gelatin	Sheet	
DFDBA Products	CANOSS™ 	Cancellous bone	Powder Chip	
	INGROSS™ 	Cortical bone DFDBA	Powder Chip	
	Genesis™ 	Cancellous bone	Block	
		CorticoCancellous bone		
ADM	SureDerm® 	Acellular Dermal Matrix	Sheet	Biocompatibility

Distributors around the globe

Partner with Us



QUICK RESPONSE FOR YOUR MARKET NEEDS

HansBiomed Corp., as the first tissue bank listed in KOSDAQ, develops and produces a variety of human tissue allograft products. We have received American Association of Tissue Banks (AATB) accreditation and US FDA 510(k) clearance to ensure the safety and quality of our products, and to ultimately provide you with only the safe and high quality allograft products.

Please do not miss this opportunity to meet best products and services by becoming our partner.

Should you have any questions or inquiries, please do not hesitate to contact us.

We will be more than happy to respond to any of your questions.

HansBiomed Corp.
www.hansbiomed.com

HansBiomed Corp.
807, 55, Seongsuil-ro, Seongdong-gu, Seoul, Korea
T. +82-2-466-2266 F. +82-2-463-1554

HansBiomed Daeduck Institute
64, Yuseong-daero 1628beon-gil, Yuseong-gu, Daejeon, Korea
T. +82-42-478-9001 F. +82-42-478-9006

www.HansBiomed.com www.HansGBR.com www.BellaGel.net www.MintLift.com

Rev.5 201501