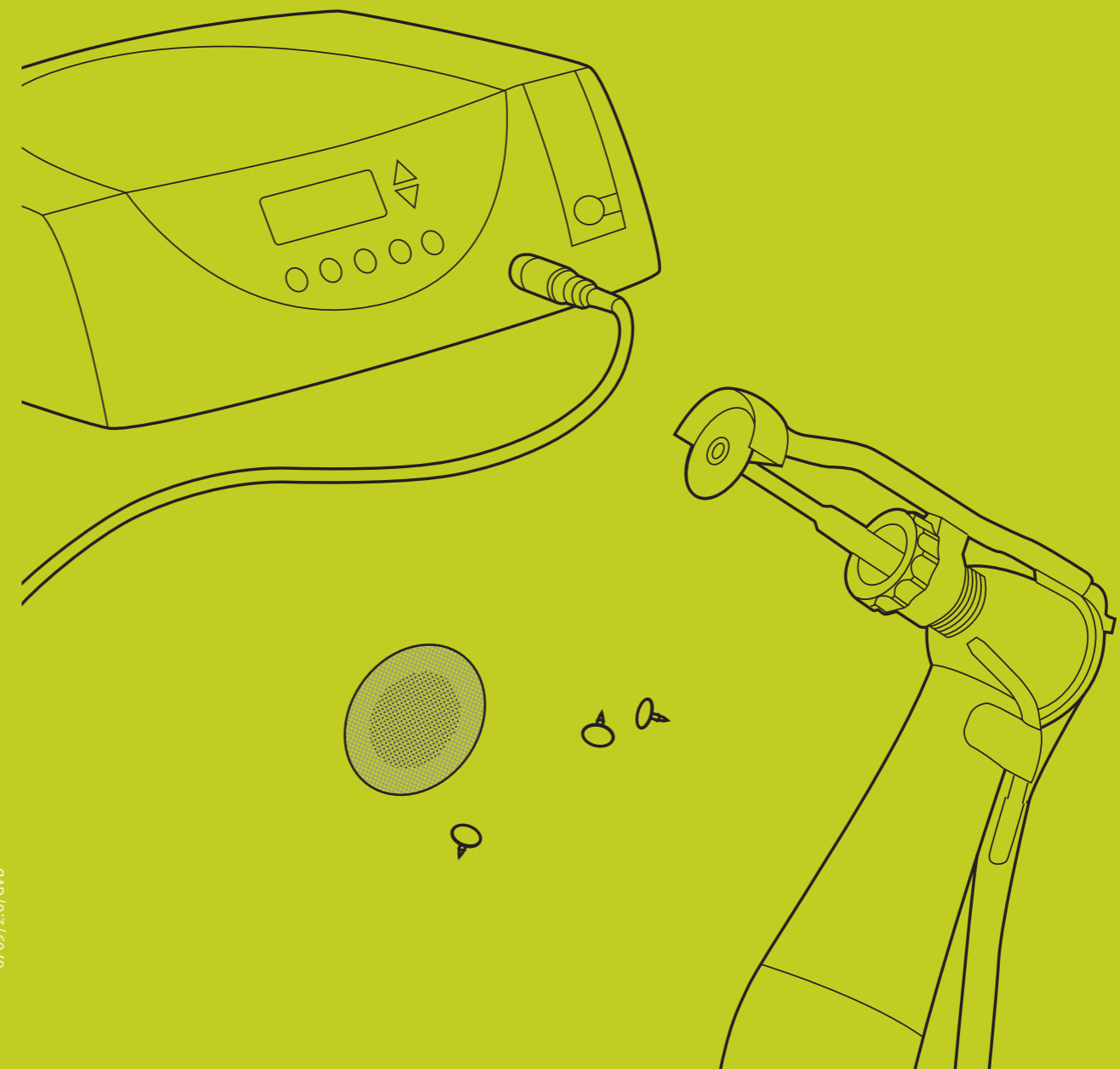


# FRIOS<sup>®</sup> PEPGEN P-15<sup>®</sup>

DENSPLY  
FRIADENT

## Product Catalog



Order no. 6-302017/010

Some products may not be available in all countries.  
Please contact your DENTSPLY Friadent representative to obtain  
up to date information on the product range and on availability.

**Manufacturer:**

Friadent GmbH · P. O. Box 71 01 11 · 68221 Mannheim/Germany  
Phone +49 621 4302-1288 · Fax +49 621 47 13 06  
e-mail: info@friadent.de

CE for FRIADENT Class I Devices

CE 0123 for FRIADENT Class II a, II b and III Devices

Manufacturer FRIOS<sup>®</sup> Handpieces, FRIOS<sup>®</sup> Unit S/i:  
W&H Dentalwerk Bürmoos GmbH · 5111 Bürmoos/Austria

CE 0297

Manufacturer OSTEOGRAF<sup>®</sup>/N, PEPGEN P-15<sup>®</sup>:  
DENTSPLY Tulsa Dental Specialities · 5100 East Skelly Drive · Suite 300  
Tulsa, Oklahoma 74135/USA

CE 0086

[www.dentsply-friadent.com](http://www.dentsply-friadent.com)

DENSPLY  
FRIADENT

0709/2.0/GVD



FRIOS® MicroSaw according to Prof. Khoury

**CONTENT**

**FRIOS® –  
 The autogenous way  
 of bone regeneration**

A stable foundation is the basis of a successful implant-supported restoration. In many cases, bone must be reconstructed before implant placement. Missing bone not only makes implant placement difficult or even impossible, but also endangers the long-term success.

DENTSPLY Friadent makes augmentation easy with the wide range of proven products and instruments of the FRIOS® augmentation system and the bone grafting materials FRIOS® Algipore®, PEPGEN P-15® and OSTEOGRAF®/N.

Augmentation with autogenous bone is still considered the gold standard. With the FRIOS® MicroSaw, DENTSPLY Friadent provides a set of products especially developed for this technique that has been in clinical use successfully since many years day by day.

The dentosurgical motor FRIOS® Unit S/i, combined with the FRIOS® Handpieces and Contra-angle Handpieces, is your reliable companion for all cases of implant-surgery whereas the FRIOS® MicroSaw supports you optimally in autogenous augmentation procedures.

**FRIOS® –  
 Discover the difference**

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Information regarding the materials involved in implants, system components and instruments is given in the form of a reference number after every article: FRIADENT® BoneShield®. Page 22 of this catalog presents an overview of the materials and the composition of the materials used.

The pictures in this catalog are for illustration. The size of the illustrated products may deviate from the original product.

DENTSPLY Friadent reserves the right to make any technical changes without prior notice.

### FRIOS® Unit S/i

- Easy user concept, specially designed for implant surgery
- Powerful surgical motor with utmost running smoothness
- User-oriented program sequence with tapping function directly controlled by pushbutton

### FRIOS® Unit S/i

Order no.	Article
90 – 6600	<b>FRIOS® Unit S/i V 220 – 240 AC</b>
90 – 6605	<b>FRIOS® Unit S/i V 110 – 130 AC</b>
Scope of delivery: FRIOS® Unit S/i with surgical motor (cable length 1.8 m), stand for instruments, stand, ON/OFF foot control, mains supply, hose fittings, sterilization protector, set of hose rings (5 pieces), locking pin for surgical motor	



### FRIOS® Handpieces and Contra-angle Handpieces

Order no.	Article
90 – 6720	<b>FRIOS® Contra-angle Handpiece WS-75</b> 20:1, demountable
90 – 6710	<b>FRIOS® Contra-angle Handpiece WI-75</b> 20:1
90 – 5030	<b>FRIOS® Handpiece Straight 1:1</b>
90 – 5050	<b>FRIOS® Handpiece Angled 1:1</b>

### FRIOS® Contra-angle Handpieces WI-75/WS-75

- Patented hexagon clamping system for smooth treatment sequence and less wear of instruments
- Demountable version with 90°-rotatable head for areas that are difficult to access which meets most demanding hygiene requirements

Note for FRIOS® Unit S users:  
Problems of compatibility may occur when using these contra-angle handpieces with the FRIOS® Unit S. Please contact your distributor prior to ordering or initial operation.



**Accessories**



Order no.	Article
90 – 6620	<b>Suitable for FRIOS® Unit S/i:</b> <b>FRIOS® Unit S/i Surgical Motor</b> (cable length 1.8 m)
90 – 6630	<b>FRIOS® Unit S/i Foot Control ON/OFF</b>
90 – 6430	<b>Suitable for FRIOS® Unit S/i and FRIOS® Unit S:</b> <b>FRIOS® Unit S/i, FRIOS® Unit S, FRIOS® Unit E Mains Supply Europe</b> V 220 – 240 AC
90 – 6431	<b>FRIOS® Unit S/i, FRIOS® Unit S, FRIOS® Unit E Mains Supply USA, CAN, J</b> V 110 – 130 AC
90 – 6432	<b>FRIOS® Unit S/i, FRIOS® Unit S, FRIOS® Unit E Mains Supply UK, IRL</b> V 220 – 240 AC
90 – 6432	<b>FRIOS® Unit S/i, FRIOS® Unit S, FRIOS® Unit E Mains Supply AUS, NZ</b> V 220 – 240 AC
90 – 5044	<b>Adapter Hoses for FRIOS® Contra-angle Handpieces</b> (2 pieces)
90 – 5042	<b>Internal Irrigation Tube for FRIOS® Contra-angle Handpiece 20:1</b>
90 – 5043	<b>Internal Irrigation Tube, long</b> (for Drill Extension)
90 – 6055	<b>FRIOS® Unit O-Ring for Surgical Motor</b>

**Coolant Hoses**

Order no.	Article
90 – 5005	<b>FRIOS® ISU Coolant Hose universal</b> (5 pieces), also suitable for ASU
90 – 6440	<b>FRIOS® Unit S Coolant Hose</b> (motor cable 1.8 m/5 pieces), also suitable for FRIOS® Unit S/i and W+H implantmed
90 – 6441	<b>FRIOS® Unit S Coolant Hose</b> (motor cable 3.5 m/3 pieces), also suitable for FRIOS® Unit S/i and W+H implantmed
90 – 6542	<b>FRIOS® Unit E Coolant Hose</b> (motor cable 1.8 m/5 pieces), with Luer-Lock connection for three-way stopcock
90 – 6543	<b>FRIOS® Unit E Coolant Hose</b> (motor cable 3.5 m/3 pieces), with Luer-Lock connection for three-way stopcock

**Accessories**

Order no.	Article
90 – 6442	<b>Suitable for all FRIOS® Surgical Units:</b> <b>FRIOS® Unit S, FRIOS® Unit E Sterile Cover Foil</b> for Surgical Motor (10 pieces)
90 – 6443	<b>FRIOS® Unit S Set Hose Rings</b> (5 pieces)
90 – 6444	<b>FRIOS® Unit S, FRIOS® Unit E Sterilization Protector</b>
90 – 6449	<b>FRIOS® Unit S, FRIOS® Unit E Fuse 1.25 A slow-blow</b>
90 – 6410	<b>Suitable for FRIOS® Unit S:</b> <b>FRIOS® Unit S Surgical Motor</b> (cable length 1.8 m)
90 – 6411	<b>FRIOS® Unit S Surgical Motor</b> (cable length 3.5 m)
90 – 6412	<b>FRIOS® Unit S, FRIOS® Unit E Stand for Instruments</b>
90 – 6416	<b>FRIOS® Unit S, FRIOS® Unit E Stand for Irrigation Bag</b>
90 – 6445	<b>FRIOS® Unit S, FRIOS® Unit E Locking Pin for Surgical Motor</b>

For availability of further spare parts and accessories for FRIOS® Unit S/i, FRIOS® Unit S and FRIOS® Unit E please contact your DENTSPLY Friadent distributor.

**Chip Cards**

Order no.	Article
90 – 6561	<b>FRIOS® Unit E INI-Chip Card Surgery</b>
90 – 6562	<b>FRIOS® Unit E INI-Chip Card Prosthetics</b>
90 – 6563	<b>FRIOS® Unit E INI-Chip Card XIVE®</b>
90 – 6570	<b>FRIOS® Unit E DOC-Chip Card</b> (3 pieces)

## FRIOS® MicroSaw – Sets

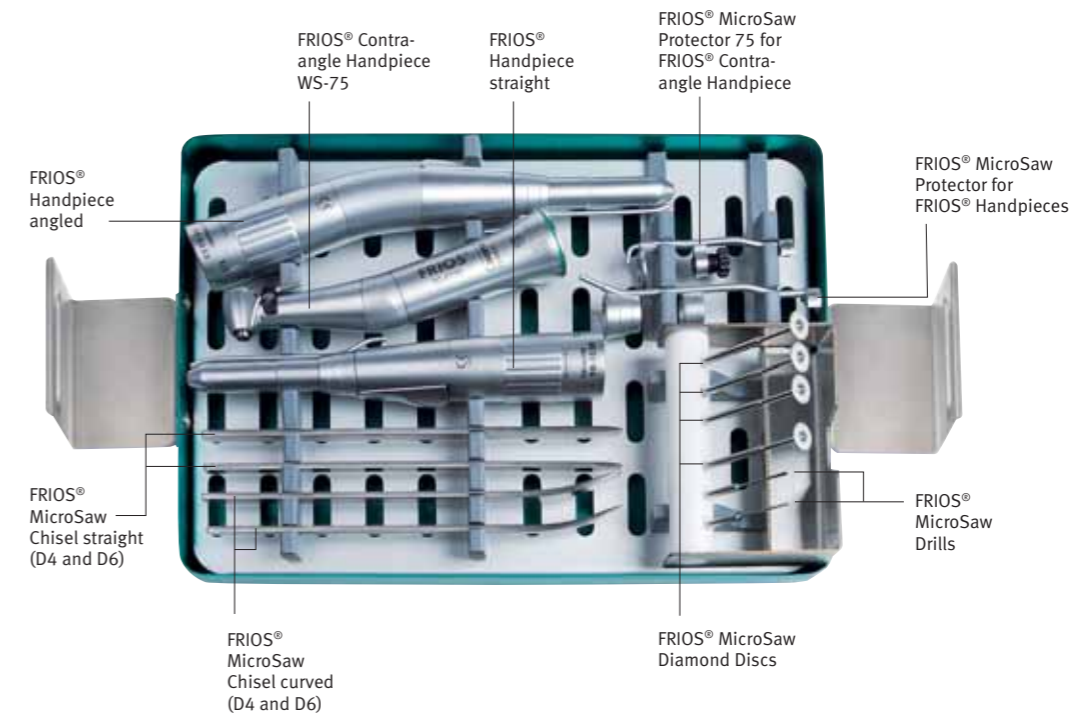
**FRIOS® MicroSaw according to Prof. Khoury**

- For smooth and bone-preserving preparation of bone blocks and access windows
- Precise with only 0.25 mm thin micro screw disc
- Atraumatic with adjustable soft-tissue protector and direct irrigation of the saw blade

Order no.	Article
90 – 6741	FRIOS® MicroSaw ExpertSet WI-75
90 – 6742	FRIOS® MicroSaw ExpertSet WS-75
90 – 6751	FRIOS® MicroSaw StarterSet WI-75
90 – 6752	FRIOS® MicroSaw StarterSet WS-75

### FRIOS® MicroSaw – Sets

Content	FRIOS® MicroSaw ExpertSet WI-75 90 – 6741	FRIOS® MicroSaw ExpertSet WS-75 90 – 6742	FRIOS® MicroSaw StarterSet WI-75 90 – 6751	FRIOS® MicroSaw StarterSet WS-75 90 – 6752
FRIOS® Contra-angle Handpiece WI-75	■		■	
FRIOS® Contra-angle Handpiece WS-75, demountable		■		■
FRIOS® Handpiece, straight	■	■		
FRIOS® Handpiece, angled	■	■		
FRIOS® MicroSaw Protector 75	■	■	■	■
FRIOS® MicroSaw Protector for Handpiece	■	■	■	■
FRIOS® MicroSaw Diamond Discs (4 pieces)	■	■	■	■
FRIOS® MicroSaw Drills (2 pieces)	■	■	■	■
FRIOS® Chisel straight (D4 and D 6)	■	■	■	■
FRIOS® Chisel curved (D4 and D 6)	■	■	■	■



FRIOS® MicroSaw ExpertSet WS-75



**FRIOS® Hand- and Contra-angle Handpieces:**  
Order information see page 4

**FRIOS® Unit S/i:**  
Order information see page 4

**FRIOS® MicroSaw – Single Articles**

Order no.	Article
 90 – 6730	<b>FRIOS® MicroSaw Protector for Contra-angle Handpieces:</b> <b>FRIOS® MicroSaw Protector 75</b> for FRIOS® Contra-angle Handpiece WI-75 (order no. 90 – 6710) and FRIOS® Contra-angle Handpiece WS-75, demountable (order no. 90 – 6720)
 90 – 5031	<b>FRIOS® MicroSaw Protector for Handpieces:</b> <b>FRIOS® MicroSaw Protector for Handpiece angled/straight</b>
90 – 5041	<b>Suitable for FRIOS® Unit S:</b> <b>FRIOS® MicroSaw Protector for Contra-angle Handpiece 975</b> Suitable only for FRIOS® Contra-angle Handpiece 975 (order no. 90 – 5040)

**FRIOS® MicroSaw – Single Articles**

Order no.	Article
90 – 5086	<b>FRIOS® MicroSaw Drills and Diamond Discs</b> 6 pieces – 2 drills, 4 discs (for single use)
90 – 5046	<b>FRIOS® MicroSaw Drills<sup>6</sup></b> 2 pieces for single use
90 – 5045	<b>FRIOS® MicroSaw Diamond Discs<sup>6</sup></b> 4 pieces for single use
90 – 5037 90 – 5038	<b>FRIOS® MicroSaw Chisel<sup>6</sup></b> straight (D 4 and D 6) curved (D 4 and D 6)



straight (D 4 and D 6),  
central and lateral view



curved (D 4 and D 6),  
central and lateral view



## FRIOS® Trephines

### FRIOS® Trephines

- Trephines for preparation of autogenous bone cones
- Bone Stud Remover for easy removal of the bone pieces

### FRIOS® Trephines, Diameter:

	inner	outer
D 3.1	2.0 mm	3.1 mm
D 3.5	2.4 mm	3.5 mm

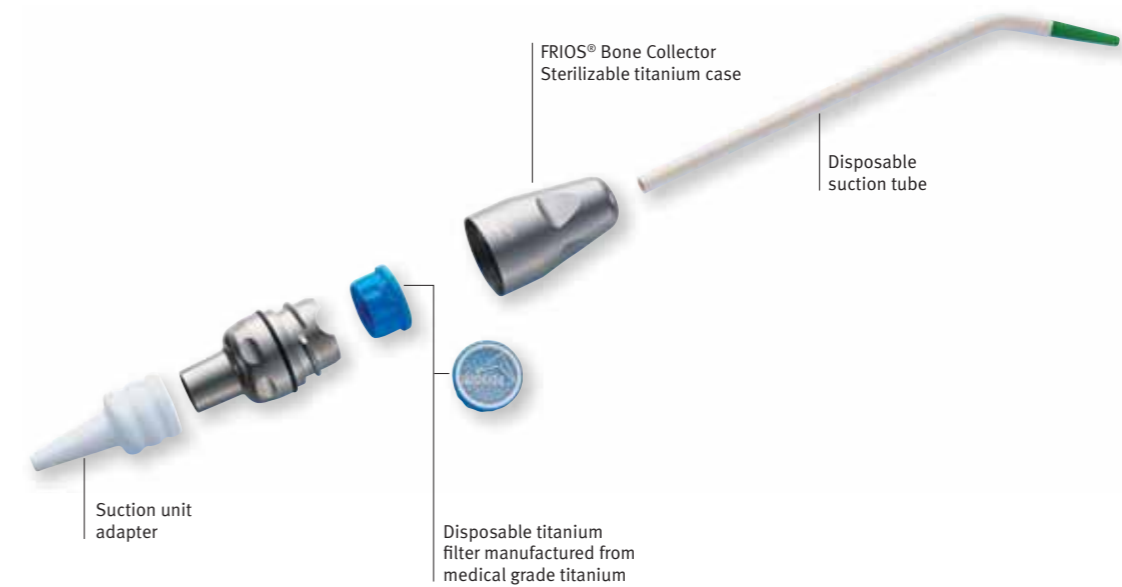
	Order no.	Article
	51 - 4091	FRIOS® Trephine for Bone Removal <sup>6</sup> D 3.1
	51 - 4092	D 3.5
	51 - 4093	FRIOS® Bone Stud Remover <sup>6</sup>

## FRIOS® BoneCollector

	Order no.	Article
	59 - 9010	FRIOS® BoneCollector (with Tray)
		FRIOS® BoneCollector Adapter <sup>23</sup>
	59 - 9014 59 - 9013	straight conical
		FRIOS® BoneCollector Titanium Filter <sup>1/22</sup>
	59 - 9011 59 - 9015	1 piece (for single use) 5 pieces (for single use)
	59 - 9024	FRIOS® BoneCollector Surgical Aspirator Tip 20 pieces

### FRIOS® BoneCollector

- For harvesting vital bone chips during implant site preparation in only one surgical procedure
- Sterilizable titanium case, suction tip and titanium filter are disposable



**FRIOS® Algipore®**

- Purely plant-derived bone regeneration material harvested from ocean algae with close analogy to the hydroxyapatite of human bone
- Enhanced bone formation with inter-connecting pores and rough surface
- Maintains volume due to slow resorption of the material
- Three grain sizes available for indication-specific use



**FRIOS® Algipore®**

Order no.	Article
	<b>FRIOS® Algipore®<sup>31</sup></b>
31 – 0104	0.3 – 0.5 mm grain size (for filling in defects up to 0.5 cm <sup>3</sup> ) 1 x 0.5 ml
31 – 0214	0.5 – 1.0 mm grain size (for augmentation of lateral defects up to 1.0 cm <sup>3</sup> ) 1 x 1.0 ml
31 – 0224	0.5 – 1.0 mm grain size (for augmentation of lateral defects up to 1.0 cm <sup>3</sup> ) 1 x 2.0 ml
31 – 0312	1.0 – 2.0 mm grain size (for augmentation following sinus graft from 1.0 cm <sup>3</sup> ) 1 x 1.0 ml
31 – 0324	1.0 – 2.0 mm grain size (for augmentation following sinus graft from 1.0 cm <sup>3</sup> ) 1 x 2.0 ml

**PEPGEN P-15®**

Order no.	Article
	<b>PEPGEN P-15®</b>
33 – 0201	4 x 1.0 gr / 250 – 420 microns
33 – 0205	2 x 1.0 gr / 250 – 420 microns
33 – 0300	<b>PEPGEN P-15® Flow</b> in application syringe (sterile) 4 x 0.5 cc



**PEPGEN P-15®**

- Peptide-enhanced natural hydroxyapatite that initiates and accelerates natural bone regeneration
- Available in particulate form and, as PEPGEN P-15® Flow in a ready to use gel matrix in sterile application syringes

**OSTEOGRAF®**

Order no.	Article
33 – 0101	<b>OSTEOGRAF®/N-300</b> 4 x 1.0 gr / 250 – 420 microns
33 – 0111	<b>OSTEOGRAF®/N-700</b> 4 x 1.0 gr / 420 – 1000 microns
33 – 0000	<b>OSTEOGRAF® Application Syringe</b> empty (sterile, 4 pieces)





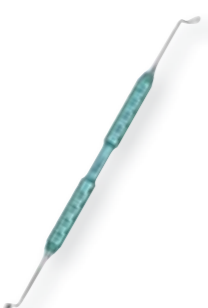








**OSTEOGRAF®/N**

- Natural hydroxyapatite that initiates and accelerates natural bone regeneration

The patented application syringe can be used for all particle sizes of PEPGEN P-15® and OSTEOGRAF®/N in vials.

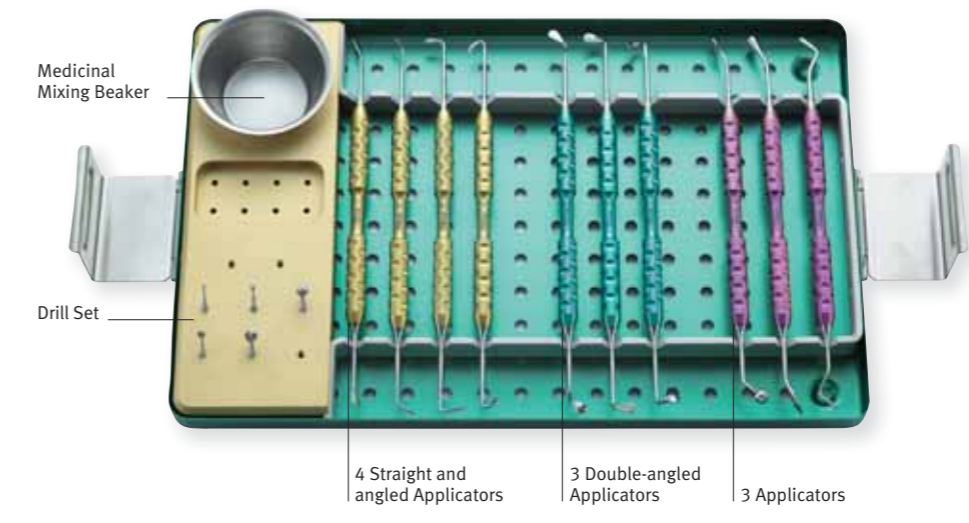
**FRIOS® SinusSet – Single Articles**

	Order no.	Article
	59 – 7951	<b>FRIOS® Sinus Instrument No. 1<sup>4/6</sup></b> Straight applicator
	59 – 7952	<b>FRIOS® Sinus Instrument No. 2<sup>4/6</sup></b> Angled applicator 120°
	59 – 7953	<b>FRIOS® Sinus Instrument No. 3<sup>4/6</sup></b> Angled applicator 90°
	59 – 7954	<b>FRIOS® Sinus Instrument No. 4<sup>4/6</sup></b> Angled applicator 60°
	59 – 7955	<b>FRIOS® Sinus Instrument No. 5<sup>4/6</sup></b> Double-angled applicator 90°/120°
	59 – 7956	<b>FRIOS® Sinus Instrument No. 6<sup>4/6</sup></b> Double-angled applicator 90°/90°
	59 – 7957	<b>FRIOS® Sinus Instrument No. 7<sup>4/6</sup></b> Double-angled applicator 90°/60°
	59 – 7958	<b>FRIOS® Sinus Instrument No. 8<sup>4/6</sup></b> Applicator (ball/spoon)
	59 – 7959	<b>FRIOS® Sinus Instrument No. 9<sup>4/6</sup></b> Applicator (spoon/tip)
	59 – 7960	<b>FRIOS® Sinus Instrument No. 10<sup>4/6</sup></b> Applicator (cone/cylinder)
	59 – 8003	<b>Drill Set for FRIOS® SinusSet<sup>6</sup></b>

**FRIOS® SinusSet**

Order no.	Article
59 – 8000	<b>FRIOS® SinusSet</b>  Content: Drill Set, 10 Applicators, Medicinal mixing beaker Tray

- FRIOS® SinusSet**
- For all preparation steps of the open sinus lift
  - Drill Set for lateral preparation of access window
  - Elevators for mobilization of the sinus mucous membrane
  - Stable mixing beaker and applicators for the application of grafting material



## FRIOS® FixationSet

- For precise positioning of FRIOS® membrane tacks
- Set of seating instruments straight and angled designed for the membrane tacks
- Drilling and positioning tool for utmost precision
- Disposable micro drills for pre-drilling in very dense bone



## FRIOS® FixationSet – Single Articles

Order no.	Article
59 – 9033	<b>FRIOS® Holder for Membrane Tacks</b>
59 – 9035	<b>FRIOS® Disposable Drill<sup>6</sup> for Membrane Tacks</b> (pilot drill)
59 – 9036	<b>FRIOS® Drilling and Positioning Tool<sup>6</sup> for Membrane Tacks</b>
59 – 9037	<b>FRIOS® Drilling and Positioning Tool<sup>6</sup> for Membrane Tacks, Working Part<sup>6</sup></b>
59 – 9034	<b>FRIOS® Seating Instrument<sup>6</sup> for Membrane Tacks</b> straight
59 – 9040	<b>FRIOS® Seating Instrument<sup>6</sup> for Membrane Tacks</b> angled
59 – 9039	<b>FRIOS® Seating Instrument<sup>6</sup> for Membrane Tacks, Working Part<sup>6</sup></b> straight
59 – 9041	<b>FRIOS® Seating Instrument<sup>6</sup> for Membrane Tacks, Working Part<sup>6</sup></b> angled
59 – 9042	<b>FRIOS® Universal Handle for Drilling and Positioning Tool and Seating Instrument<sup>6</sup></b>

## FRIOS® FixationSet

Order no.	Article
59 – 9044	<b>FRIOS® FixationSet</b>
	Content:
	8 x 6 <b>FRIOS® Membrane Tacks</b> (sterile, in dispensers)
	6 <b>Disposable Drills for FRIOS® Membrane Tacks</b>
	1 <b>FRIOS® Seating Instrument for Membrane Tacks, straight</b>
	1 <b>FRIOS® Seating Instrument for Membrane Tacks, angled</b>
	1 <b>Working Part for FRIOS® Seating Instrument for Membrane Tacks, straight</b>
	1 <b>Working Part for FRIOS® Seating Instrument for Membrane Tacks, angled</b>
	1 <b>FRIOS® Drilling and Positioning Tool for Membrane Tacks</b>
	1 <b>Implant Mallet</b>
	1 <b>FRIOS® Holder for Membrane Tacks</b>
	1 <b>FRIOS® Surgical Tray for FixationSet</b>



**FRIOS® Membrane Tacks**

- FRIOS® Membrane Tacks**
- For perfect fixation of membranes
  - Biocompatible, manufactured from titanium alloy and gammasterilized
  - For use with all resorbable and non-resorbable membranes
  - FRIOS® FixationSet for placement of the tacks

Order no.	Article
59 – 9029	<b>FRIOS® Clinic Set Membrane Tacks<sup>4</sup></b> (3 x 6 tacks, sterile) with Working Part for FRIOS® Seating Instrument, straight
59 – 9030	<b>FRIOS® Multi-Pack Membrane Tacks<sup>4</sup></b> (6 tacks, sterile)



**CD-ROMs for Presentations**

Order no.	Article
66 – 3019	<b>FRIOS®/PEPGEN P-15® Picture CD</b>
66 – 1036	<b>DENTSPLY Friadent Picture CD</b>
66 – 1038	<b>Picture CD for Internet, all systems</b>

**FRIOS® BoneShields**

- FRIOS® BoneShields**
- Membranes made from form-fit medical grade titanium for highest mechanical stability and three-dimensional shape
  - Laser perforation for good diffusion of oxygen and migration of defense cells
  - Fixation with FRIOS® Membrane Tacks

Order no.	Article
	<b>FRIOS® BoneShield<sup>1</sup> (sterile)</b>
59 – 7010	oval 20/15 mm
59 – 7020	oval 24/20 mm
59 – 7110	triangular 16/14 mm
59 – 7120	triangular 21/17 mm
59 – 7200	implant fixed
59 – 7300	rectangular 33/25 mm



Pictures in actual size

**Metals**

Type	Index	Composition
Titanium	1	Ti grade 1
Titanium	2	Ti grade 2
Titanium	3	Ti grade 4
Titanium	4	Ti6Al4V
Stainless steel	6	Surgical steel

**Plastics**

Type	Index
Polystyrene	22
Polytetrafluoroethylene	23

**Ceramics**

Type	Index	Composition
Hydroxyapatite	31	$\text{Ca}_5(\text{PO}_4)_3\text{OH}$