Implant

Laser-Lok Technology	p.129 - p.130
Tapered Internal Family	p.131 - p.136
Internal Implants	p.137 - p.138
Single-Stage Implants	p.139 - p.140
Bone Graft & Membranes	p.141 - p.142
Bone Fixation Screw Kit	p.143
Membrane Fixation System	p.143

۲

Implant

Laser-Lok Technology



Laser-Lok Technology

Laser-Lok overview

Laser-Lok microchannels is a proprietary dental implant surface treatment developed from over 20 years of research initiated to create the optimal implant surface. Through this research, the unique Laser-Lok surface has been shown to elicit a biologic response that includes the inhibition of epithelial downgrowth and the attachment of connective tissue (unlike Sharpey fibers). This physical attachment produces a biologic seal around the implant that protects and maintains crestal bone health. The Laser-Lok phenomenon has been shown in post-market studies to be more effective than other implant designs in reducing bone loss.



SEM image at 30X showing the Laser-Lok zone on a BioHorizons implant.





The uniformity of the Laser-Lok microstructure and nanostructure is evident using extreme magnification.

Unique Surface Characteristics

Laser-Lok microchannels is a series of cell-sized circumferential channels that are precisely created using laser ablation technology. This technology produces extremely consistent microchannels that are optimally sized to attach and organize





Human histology shows the apical extent of the junctional epithelium below which there is a supracrestal connective tissue attachment to the Laser-Lok surface.



Polarized lights show the connective tissue is functionally oriented.



Colorized SEM of a dental implant harvested at 6 months post-op shows the connective tissue is physically attached and interdigitated with the Laser-Lok surface.

Different than other surface treatments

Virtually all dental implant surfaces on the market are gritblasted and/or acid-etched. These manufacturing methods create random surfaces that vary from point to point on the implant and alter cell reaction depending on where each cell comes in contact with the surface. While random surfaces have shown higher osseointegration than machined surfaces, only the Laser-Lok surface has been shown using light microscopy, polarized light microscopy and scanning electron microscopy to also be effective for soft tissue attachment.



Handpiece

aser-Lok Technology



Laser-Lok Technology

The clinical advantage

Latest discoveries

The Laser-Lok surface has been shown in several studies to offer a clinical advantage over other implant designs. In a prospective, controlled multi-center study, Laser-Lok implants, when placed alongside identical implants with a traditional surface, were shown at 37 months post-op to reduce bone loss by 70% (or 1.35mm). In a retrospective, private practice study, Laser-Lok implants placed in a variety of site conditions and followed up to 3 years minimized bone loss to 0.46mm. In a prospective, University-based overdenture study, Laser-Lok implants reduced bone loss by 63% versus NobelReplace™ Select.

The establishment of a physical, connective tissue attachment (unlike Sharpey fibers) to

the Laser-Lok surface has generated an en-

tirely new area of research and development: Laser-Lok applied to abutments. This could provide an opportunity to use Laser-Lok abutments to create a biologic seal and Laser-Lok implants to establish superior osseointegration – a solution that offers the best of both worlds. Alternatively, Laser-Lok abutments could support peri-implant health around im-

plants without Laser-Lok. In a recent study, Laser-Lok abutments and standard abut-

ments were randomly placed on implants with

a grit-blasted surface to evaluate the differences. In this proof-of-principle study, a small

band of Laser-Lok microchannels was shown

to inhibit epithelial downgrowth and establish

a connective tissue attachment (unlike Sharpey fibers) similar to Laser-Lok implants. This time, however, the attachment was es-

tablished above the dental implant-abutment connection and even on implants with a machined collar. The resulting crestal bone levels were higher than what was seen with standard abutments and provides some in-

sight into the role soft tissue stability may play

in maintaining crestal bone health.



In a 3-year multicenter perspective study, the Laser-Lok surface showed superior bone maintenance over identical implants without the Laser-Lok surface.



Comparative histologies show the biologic differences between standard abutments and Laser-Lok abutments including changes in epithelial downgrowth, connective tissue and crestal bone health.



Comparative SEM images show the variation in tissue attachment strength on standard and Laser-Lok abutments when a tissue flap is incised vertically and manually lifted using forceps.

Laser-Lok Technology is available on Laser-Lok 3.0, Tapered Internal, Single-stage, Internal implants & abutments



Henry Schein Hong Kong Ltd. Tel: (852) 2541-2290 Fax: (852) 2882-4383







131

۲



Tapered Internal Family *Tapered Plus Implants*

Tapered Internal Family

Platform switching designed to increase soft tissue volume

Laser-Lok[®] zone creates a connective tissue seal and maintains crestal bone



Optimized threadform buttress thread engineered for superior stability over microthreaded implants







Restorative Choices

 \otimes

Comprehensive line of internally hexed prosthetics for a wide variety of site conditions and restorative protocols

Ind

apered Internal Family



Tapered Internal Family *Tapered Plus Implants*

BioHorizons Tapered Plus implants incorporate the highly successful design features of the tapered implant line, offering excellent primary stability, surgical simplicity and tactile feedback. The platform switched Laser-Lok collar provides excellent bone maintenance and soft tissue volume, ideal for esthetically demanding cases.



۲

- Dual affinity Laser-Lok surface provides excellent bone maintenance and soft tissue attachment
- Excellent primary stability from anatomically tapered body
- Compressive bone loading from proprietary buttress threads
- Conical internal hex connection provides a rigid connection and stable biological seal





Laser-Lok collar with Resorbable Blast Texturing (RBT) on implant body. Mount-free for quick placement and maximum site visibility. Comes packaged with a Cover Cap. Titanium Alloy (Ti-6AI-4V ELI).

Body Diameter





area

Implant Length

Ariculating But and But and

Handpied

۲

Tapered Internal Family



Tapered Internal Family *Tapered Internal Implants*

BioHorizons flagship Tapered Internal implants are now available in 5 diameters and 6 lengths, including the new 3.4mm diameter and 18mm lengths. The dual affinity Laser-Lok surface offers flexible implant placement, providing excellent bone maintenance and a stable soft tissue seal. Aggressive buttress threads and anatomically tapered body provide compressive loading and excellent primary stability.

Product information & ordering



	Mount-Free Tapered Internal Implants				
Body Diameter	3.0 mm	3.4 mm	3.8 mm	4.6 mm	5.8 mm
Prosthetic Connection	3.0 mm	3.0 mm	3.5 mm	4.5 mm	5.7 mm
Laser-Lok Zone	2.1 mm	1.8 mm	1.8 mm	1.8 mm	1.8 mm
Apical Diameter	2.0 mm	2.4 mm	2.8 mm	3.1 mm	3.9 mm
7.5 mm Length				TLX4607	TLX5807
9.0 mm Length		TLX3409	TLX3809	TLX4609	TLX5809
10.5 mm Length	TLX3010	TLX3410	TLX3810	TLX4610	TLX5810
12.0 mm Length	TLX3012	TLX3412	TLX3812	TLX4612	TLX5812
15.0 mm Length	TLX3015	TLX3415	TLX3815	TLX4615	TLX5815
18.0 mm Length		TLX3418	TLX3818	TLX4618	

Expanded Laser-Lok zone with no smooth, machined area. Resorbable Blast Texturing (RBT) on implant body. Packaged mount-free for quick placement and maximum site visibility. Comes packaged with a Cover Cap. Titanium Alloy (Ti-6AI-4V ELI).





Laser-Lok surface technology across the entire implant body with no machined collar for faster osseointegration1 and higher bone to implant contact. Ideal for anatomically challenging conditions. Comes packaged with a Cover Cap. Mount-free delivery. Titanium Alloy (Ti-6AI-4V ELI).



Histology of a buttress thread with Laser-Lok showing exceptional bone attachment

Tapered Internal Implants with Laser-Lok Complete



Ariculating But and Abrasives Coc

Handpiece

aboratory

Pedodoniics

۲

Tapered Internal Family



Tapered Internal Family Tapered Tissue Level Implants

Tapered Tissue Level implants feature a transmucosal collar for one stage procedures and Laser-Lok surface technology to inhibit epithelial downgrowth, attach connective tissue and create a biologic seal around the implant. Tapered Tissue Level implants are available in 4 diameters including the only 3mm tissue level implants currently available for tight spaces.





Cover Cap. Titanium Alloy (Ti-6AI-4V ELI).



Tapered Internal Family



Tapered Internal Family *Tapered HD Surgical Kit*



Features

- Versatile, removable, hinged lid
- 40% smaller and 40% lighter than other kits
- Easy to disassemble and assemble during cleaning
- Implant staging area for implant vials during surgery
- Use to place Tapered Plus, Tapered Internal, Tapered Tissue Level, Tapered 3.0 and Laser-Lok 3.0
- Empty spare slots for other instrumentation such as stop drills or extended shank drills







The surgical kit features an intuitive color-coded layout that guides the surgeon through the instrument sequence. The drilling section is color-coded by implant diameter. The implant driver section is color-coded by prosthetic connection.



Articulating But and uses Cost

Hendpieces

aboratory

Pedodoniics

۲

Internal Implants

BIOHORIZOUS[®] Internal Implants

Internal dental implants provide maximum surface area through the use of a parallel-walled body and square thread design. It also is available with Laser-Lok microchannels to create a physical, connective tissue attachment (unlike Sharpey fibers) and long-term crestal bone maintenance.

Features

- Proprietary biomechanical thread design maximizes implant surface area
- Most widely used connection in implant dentistry

Delivery Options	Mount-Free 3inOne Abutment
Connection	Internal Hex
Body-Type	Parallel-Wall
Placement	Bone Level
Surface Treatment	RBT Body Optional Laser-Lok Collar
Implant Lengths	9.0mm, 10.5mm, 12.0mm, 15.0mm





Supported by a comprehensive line of internally hexed prosthetics





Internal Implants

Internal Implants

Product information & ordering

Internal implants are available with a 3inOne abutment, surgical cover cap, and abutment screw.		RBT with Laser-Lok	RBT with Laser-Lok	Resorbable Blast Texturing (RBT)
				Carlos Carlos
	Body Diameter x Length	Mount-Free Mount-free implants are packaged without the 3inOne abutment	RBT Surface w/Laser-Lok	RBT Surface
3.5 mm Implants				
11	3.5 mm x 9 mm	PYLX3509	LPYR3509	PYR3509
	3.5 mm x 10.5 mm	PYLX35105	LPYR35105	PYR35105
	3.5 mm x 12 mm	PYLX3512	LPYR3512	PYR3512
	3.5 mm x 15 mm	PYLX3515	LPYR3515	PYR3515
4.0 mm Implants				
-	4.0 mm x 9 mm	PGLX4009	LPGR4009	PGR4009
	4.0 mm x 10.5 mm	PGLX40105	LPGR40105	PGR40105
	4.0 mm x 12 mm	PGLX4012	LPGR4012	PGR4012
	4.0 mm x 15 mm	PGLX4015	LPGR4015	PGR4015
5.0 mm Implants				
e 🐨	5.0 mm x 9 mm	PBLX5009	LPBR5009	PBR5009
	5.0 mm x 10.5 mm	PBLX50105	LPBR50105	PBR50105
	5.0 mm x 12 mm	PBLX5012	LPBR5012	PBR5012
	5.0 mm x 15 mm	PBLX5015	LPBR5015	PBR5015
6.0 mm Implants				
-	6.0 mm x 9 mm	PBLX6009	LPBR6009	PBR6009
	6.0 mm x 10.5 mm	PBLX60105	LPBR60105	PBR60105
	6.0 mm x 12 mm	PBLX6012	LPBR6012	PBR6012
	6.0 mm x 15 mm	PBLX6015	LPBR6015	PBR6015

Surgical Cover Cap

۲

	Size	Packing	Item no.	
T	3.5mm Cover Cap		BH-PYCC	For use during s
1	4.5mm Cover Cap	Each	BH-PGCC	ing. Hand-tighter Hex Driver. Titan
U.	5.7mm Cover Cap		BH-PBCC	cover cap is incl but can also be

For use during submerged surgical healng. Hand-tighten with the .050" (1.25mm) Hex Driver. Titanium Alloy. A surgical cover cap is included with each implant but can also be ordered separately.



Articulatino Burandorasives

Handpieces

Laboratory

Redodontics

۲

Single-Stage Implants



Single-Stage Implants

Unlike similar "soft-tissue level" implant designs, the Single-stage dental implant features the BioHorizons power thread with maximum surface area to support the high occlusal forces often seen in the posterior. This gives dentists confidence that their placements will remain secure long-term even with limited ridge height and in softer bone.

Features

- Power thread provides up to 154% greater surface area
- Two body diameters for each platform

Delivery Options
Connection
Body-Type
Placement
Surface Treatment
Implant Lengths

Mount-Free
Internal Hex
Parallel-Wall
Tissue Level
RBT Body Optional Laser-Lok Collar
7.0mm, 9.0mm, 10.5mm, 12.0mm, 15.0mm





Greater flexibility than other "soft tissue" implants



()

Key He



۲

Single-Stage Implants

Single-Stage Implants

Product information & ordering

All Single-stage implants of with a 2mm bealing abute	come packaged	RBT with Laser-Lok	RBT only configura- tions available in lim-
			ited quantities. Please call for availability. RBT Surface Treatme
3.5 mm Implant Body &	3.5 mm Prosthetic Platform		
(The second seco	3.5 mm x 7mm, 3.5 mm platform	LSYR3507	SYR3507
2	3.5 mm x 9 mm, 3.5 mm platform	LSYR3509	SYR3509
	3.5 mm x 10.5 mm, 3.5 mm platform	LSYR35105	SYR35105
	3.5 mm x 12 mm, 3.5 mm platform	LSYR3512	SYR3512
	3.5 mm x 15 mm, 3.5 mm platform	LSYR3515	
4.0 mm Implant Body &	3.5 mm Prosthetic Platform		
(36)	4.0 mm x 7mm, 3.5 mm platform	LSYR4007	SYR4007
	4.0 mm x 9 mm, 3.5 mm platform	LSYR4009	SYR4009
	4.0 mm x 10.5 mm, 3.5 mm platform	LSYR40105	SYR40105
7.	4.0 mm x 12 mm, 3.5 mm platform	LSYR4012	SYR4012
Steel a	4.0 mm x 15 mm, 3.5 mm platform	LSYR4015	
4.0 mm Implant Body &	4.5 mm Prosthetic Platform		
-	4.0 mm x 7mm, 4.5 mm platform	LSGR4007	SGR4007
	4.0 mm x 9 mm, 4.5 mm platform	LSGR4009	SGR4009
	4.0 mm x 10.5 mm, 4.5 mm platform	LSGR40105	SGR40105
	4.0 mm x 12 mm, 4.5 mm platform	LSGR4012	SGR4012
	4.0 mm x 15 mm, 4.5 mm platform	LSGR4015	
5.0 mm Implant Body &	4.5 mm Prosthetic Platform		
	5.0 mm x 7mm, 4.5 mm platform	LSGR5007	SGR5007
	5.0 mm x 9 mm, 4.5 mm platform	LSGR5009	SGR5009
	5.0 mm x 10.5 mm, 4.5 mm platform	LSGR50105	SGR50105
	5.0 mm x 12 mm, 4.5 mm platform	LSGR5012	SGR5012
Pres.	5.0 mm x 15 mm, 4.5 mm platform	LSGR5015	
5.0 mm Implant Body &	5.7 mm Prosthetic Platform		
	5.0 mm x 7mm, 5.7 mm platform	LSBR5007	SBR5007
	5.0 mm x 9 mm, 5.7 mm platform	LSBR5009	SBR5009
	5.0 mm x 10.5 mm, 5.7 mm platform	LSBR50105	SBR50105
	5.0 mm x 12 mm, 5.7 mm platform	LSBR5012	SBR5012
Con Con	5.0 mm x 15 mm, 5.7 mm platform	LSBR5015	
6.0 mm Implant Body &	5.7 mm Prosthetic Platform		
C	6.0 mm x 7mm, 5.7 mm platform	LSBR6007	SBR6007
	6.0 mm x 9 mm, 5.7 mm platform	LSBR6009	SBR6009
	6.0 mm x 10.5 mm, 5.7 mm platform	LSBR60105	SBR60105
	6.0 mm x 12 mm, 5.7 mm platform	LSBR6012	SBR6012
EBROW	6.0 mm x 15 mm, 5.7 mm platform	LSBR6015	



Henry Schein Hong Kong Ltd. Tel: (852) 2541-2290 Fax: (852) 2882-4383

Bone Graft & Membranes



Bone Graft & Membranes Bone Grafting Options: MinerOss[®] X Family of Xenografts

Available in a variety of options, MinerOss[®] X is an anorganic bovine bone mineral matrix that is physically and chemically comparable to the mineral structure of human bone. The MinerOss[®] X family of xenografts^{*} can be used in a wide variety of grafting applications.



Applications include:

- Ridge and sinus augmentation
- Extraction socket grafting
- Infrabony periodontal defects
- Grafting for implant placement

MinerOss® X Collagen

MinerOss[®] X Collagen is a combination of 95% anorganic cancellous bovine bone and approximately 5% bovine collagen. This block form allows for convenience during placement and an ideal solution for many applications.

MinerOss® X Syringe

MinerOss[®] X Syringe is cancellous particulate preloaded into a delivery syringe to assist with optimal placement at the defect site.

MinerOss® X Particulate

MinerOss[®] X Particulate is available in either cancellous or cortical form. The complex trabecular architecture and natural consistency allow for ideal bone formation at the defect site.



* Family of xenograft-derived bone graft matrices.

Handpiece

aboratory

Bedodontics

Ind

Bone Graft & Membranes



Bone Graft & Membranes Dental Membranes: Mem-Lok[®] Resorbable Collagen Membrane (RCM)

Mem-Lok[®] RCM is engineered from highly purified type I collagen to provide an increased resorption period and ensure optimal bone regeneration. Clinicians can be confident that Mem-Lok[®] RCM will serve as an effective barrier membrane for bone regeneration.



Features

- Predictable resorption period of 26-38 weeks
- Macromolecular pore size permeability that permits the exchange of essential nutrients during healing
- Adapts easily to various bony defects

Applications include:

- Extraction sockets
- Sinus augmentation sinus window
- Ridge preservation
- Bone augmentation around implants
- Bony defects
- Peri-implant bone defect around implants





Dense membrane allows for increased mechanical strength

20mm x 30mm



30mm x 40mm

Product information & ordering

Volume	Packing	Item no.
Resorbable Collagen Membrane 15 mm x 20mm	Each	BH-RCM-ML1520
Resorbable Collagen Membrane 20 mm x 30mm		BH-RCM-ML2030
Resorbable Collagen Membrane 30 mm x 40mm		BH-RCM-ML3040



Implant _

Articulating But and Abrasives Cosmetics

Handbiece

Laboratory

۲

Bone Fixation Screw Kit



Bone Fixation Screw Kit

Indicated for use in fixation of cortical onlay grafts and meshes and for membrane tenting used in Guided Bone Regeneration. The kit is compact and conveniently organized for efficient retrieval of instruments and screws. It includes cortical bone drills for both latch-type and friction-grip handpieces.

Item no.

BH-160-900

Bone Fixation Screw Kit

Conte	ent
- Flexible micro mes	h

- Screwdriver body
- Comprehensive instrument set
- Autoclavable screw block with lid
- 24 screws:
 - (6) 1.4mm x 8.0mm micro screws
 (6) 1.4mm x 10.0mm micro screws
 (6) 2.0mm x 10.0mm mini screws
 (6) 2.0mm x 12.0mm mini screws



Membrane Fixation System

Membrane Fixation System



- The AutoTac[®] System Kit is used to secure membranes with the push of a button
- The efficient "no touch" tack system with a convenient one-handed delivery mechanism effectively fixates membranes

Content	Packing	Item no.
 Sterilization Tray Autoclavable Tack Cassette (pre-loaded with 21 titanium tacks) Dressing Pliers, Utility Pick-Up Delivery Handle AutoTac[®] delivery handle Autoclavable tack cassette (tacks not included) Titanium tacks with cassette (pack of 21) Titanium tack vial (pack of 5) Dressing pliers, utility pick-up 	Kit	BH-400-270



()