

CONICAL CONNECTION



Expert™ NPX Features

The Expert™ implant incorporates a semi-aggressive thread design, which allows it to be placed in any bone condition. Self-tapping threads allow the implant to be inserted securely, which results in high primary stability. The Expert™ implant also utilizes a conical connection, which is one of the most stable connections available. These features allow you to place an Expert™ implant anywhere in the mouth with confidence.



Fixture Stability

The semi aggressive self-tapping thread design of the Expert™ implant increases the stability of the fixture by compressing bone as it is inserted. This stye of thread makes the insertion process easy and predictable by creating optimal osteotomy density.



Micro Thread Collar

The collar of the Expert™ implant was designed with micro-threads, which are used to enhance stabilization in crestal bone. This collar is also textured using Hi-Tec's Integrated SLA Surface™ process. This accelerates osseo-integration and ensures a stable connection.



Optimal Esthetics

The platform-limiting design of the Expert^m implant ensures optimal esthetics by creating a ledge which promotes tissue growth on top of the implant. This makes the Expert^m implant a great choice for placement in the esthetic zone.



Integrated SLA Surface™

Through a process of grit blasting and acid etching, Hi-Tec's Integrated SLA Surface™ produces highly osseo-conductive implants. This increases bone to implant surface area, which accelerates and improves osseo-integration.



Stable Connection

The Expert™ implant system features a conical internal hex connection. This consists of a hexagonal connection with a tapered conical collar, which helps to seat the prosthetic. This design gives you all of the advantages of an internal hex connection with the benefits of a morse taper hybrid.

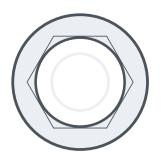


Prosthetic Compatibility

The conical connection is one of the most popular prosthetic options available today. This makes the restoration process easy due to part interchangeability and availability. In many instances, you can use your existing surgical kit to place $\mathsf{Expert}^\mathsf{TM}$ implants and prosthetics. This makes the transition to $\mathsf{Hi}\text{-}\mathsf{Tec}^\mathsf{TM}$ simple and affordable.









TECHNICAL SPECIFICATIONS

CONICAL CONNECTION





- Implant Material: Ti-6Al-4V Titanium Alloy
- Surface Finish: SLA Integrated Surface™
- Implant Collar: Textured Micro-Thread
- Delivery System: Available without a Placement Mount
- Implant Placement Torque: 30-60Ncm
- Abutment Torque: (Standard 35Ncm) (Multi-Unit 15Ncm)
- Prosthetic Screw Type: .050" (1.25mm) Hexagon
- Compatibility: NobelActive® NP (NXP 3.5mm)

NobelActive® RP (NXP 4.3mm, 5.0mm)

*NobelActive is a registered trademark of Nobel Biocare Inc.



Expert [™] Imp	lants D	rill Sequ	ence					
	RB	2.0	2.5	2.8	3.2	4	4. 5	CSD
NPX 3.50	•	•	•	•	1/2			x
	RB	2.0	2.5	2.8	3.2	4	4. 5	CSD
NPX 4.30	•	•	•	•	•	1/2		x
	RB	2.0	2.5	2.8	3.2	4	4. 5	CSD
NPX 5.0	•	•	•	•	•	•	1/2	x
2 = DRILL TO HALF DEPTH	F	F	R	R	ĸ	R	R	ır
C = COUNTERSINK OPTIONAL	- 11	ĺ	- 1	1				- 1
		Ш	Щ	1	Щ	#		#
		H	Ħ	Ħ	H	Ħ	11	y
								ш
	у	Ø	U		Ţ		4	



Logic[™], Implex[™], Expert[™] Implants Conical Connection - Narrow Platform 3.0, 3.5mm

Prosthetic Elements

				Cuff		Castable UCLA Abutments Cuff								Cuff
	Item	SKU	Length	Height		Item	SKU	Length	Height		Item	SKU	Length	
	Ball Attachment Analog	BNL	14mm		7	Engaging Plastic Castable Abutment	NL-PCA	7.60mm	1mm		Short Scan Body	NL-SCAN-S	7.6mm	
	Implant Analog	NL-IL	10.7mm			Non-Engaging Plastic Castable Abutment	NL-PCA-R	7.60mm	1mm		Long Scan Body	NL-SCAN-L	9.2 mm	
	Digital Analog	NL-ILD	10mm			Engaging Gold Castable	NL-PGA	10mm			Multi-Unit - Scan Body	MU-SCAN	8.59mm	
	Impression Co	NL-AAT	10.7mm		13	Abutment Multi-Unit Co	mponents	S		Λ	Multi-Unit - Titanium Base	MU-TB	4.5mm	
	Impression Coping	NL-AAT-L	16.5mm){	MU - Closed Tray Impression Coping	MU-AAT	9mm			Digital Analog	NL-ILD	10mm	
	Open Tray Impression Coping	NL-AAI-L	1111116.01		E	MU - Open Tray Impression Coping	MU-AAT-L	13.87mm		-	Engaging T-Base Abutment	NL-PRN	4.5mm	
F	Snap Cap Impression Coping	NL-AST	10.6mm		1	MU - Analog	MU-CL	13.14mm			Non-Engaging	NL-PRN-R	4.5mm	
	Snap Cap	T-PT	10mm		No.	MU - Fixation Screw	MU-FS				T-Base Abutment			
	Titanium Pre	parable A	butmer	nts		MU - Healing Cap	MU-HC	4.71mm			Engaging Screw Retained T-Base	NL-ZTA-T		
	Straight Titanium Abutment	NL-ACA-1.5 NL-ACA-2.5	6.8mm 7.8mm	1.5mm 2.5mm	I	MU - Plastic Castable Sleeve	MU-PC	11.9mm			Abutment	NII ZTA D		
		NL-ACA-3.5 NL-ACA-4.5	8.8mm 9.8mm	3.5mm 4.5mm		MU - Titanium Sleeve	MU-TPC	12.25mm			Non-Engaging Screw Retained T-Base Abutment	NL-ZTA-R		
	Modular NL-ACA-G-1-S Abutment Set NL-ACA-G-2- NL-ACA-G-3-		-SET	1mm 2mm 3mm		MU - Scan Body	MU-SCAN	8.59mm		_	Zest® Locator	Abutmer	nts	
		NL-ACA-G-4-		4mm		MU - Titanium Base	MU-TB	4.5mm			Locator Connical	2069		1mm
	15 Degree Angled Abutment	NL-ANA-15 NL-ANA-15-2.	9.2mm 5 10.4mm	1.55/ 2.8mm 2.6/ 3.8mm		MU - Straight Abutment	NL-MU-1 NL-MU-2 NL-MU-3 NL-MU-4	3mm 4mm 5mm 6mm	1mm 2mm 3mm 4mm		Connection Narrow Platform	2070 2071 2072 2073		2mm 3mm 4mm 5mm
				3.011111	/a	MU - 17 Degree	NL-MU-17	5.2mm	2.1/			2074		6mm
	Zirconia Preparable Abutments				Angled Abutment	NL-MU-17-2	6.2mm	3.5mm 3.1/ 4.5mm		Locator RT-X Connical Connection			1mm 2mm	
	Straight Zirconia Abutment	NL-ZTA	11mm	1.5/ 2.5mm		MU - 30 Degree Angled Abutment	NL-MU-30	4.7mm	1.13/ 3.5mm		Narrow Platform (Includes Male Processing Package)	30506-03 30506-04) 30506-05		3mm 4mm 5mm
	15 Degree Angled Zirconia Abutment	NL-ZTA-15		1.55/ 2.8mm			NL-MU-30-2	5.7mm	2.13/ 4.5mm			30506-06		6mm
	Healing Abut	ments				MU - Zest® Locator Abutment Collar (2-Pack)	8909-2	1.0mm			Locator Male Processing Package	8519-2 8519-10		2-Pac 10-Pa
	Healing Abutment	NL-HC-3 NL-HC-5 NL-HC-F	3mm 5mm 6mm			O-Ball Abutments					Locator Extended Male Processing Package	8540-2 8540-10		2-Pac 10-Pa
	Temporary A					O-Ball Abutment	NL-BBA-2 NL-BBA-4 NL-BBA-6	3.6mm 5.6mm 7.6mm	2mm 4mm 6mm	an an	Locator Replacement Denture Cap Male	8510-4 8510-10		4-Pac 10-Pac
	Straight Peek Nylon		8.2mm	1.5mm		Metal Housing	МН	3.22mm			Assembly			
	Temporary Abutmen 15 Degree Peek Nyloi	n NL-RPA-15	9.2 mm			Nylon Cap - Extra Light Retentio	NC-CLEAR on			<u>M</u>	Locator Female Analog (4mm Diameter)	8530-4 8530-20		4-Pac 20-Pa
1	Temporary Abutmen Engaging Temporary		11mm	2.8mm 0.5mm		Nylon Cap - Light Retention	NC-PINK			0	Locator Female Analog (5mm	8516-4 8516-20		4-Pac 20-Pa
	Abutment					Nylon Cap - Medium Retention	NC-ORANGE			ollo	Diameter)			
L	Non-Engaging Straight Titanium Temporary Abutmen	NL-TA-R t	11mm	0.5mm		Nylon Cap - High Retention	NC-GREEN			T	Locator Impression Coping	8505-4 8505-20		4-Pac 20-Pa



Conical Connection Surgical Kit



Bone Taps

L-BT-3.5 - Bone Tap for LGI - 3.5mm, Wrench

L-BT-4.3 - Bone Tap for LGI - 4.3mm, Wrench

L-BT-5.0 - Bone Tap for LGI - 5.0mm, Wrench

L-BT-6.0 - Bone Tap for LGI - 6.0mm, Wrench

V-BT-3.5 - Bone Tap for MPI - 3.5mm, Latch

V-BT-4.3 - Bone Tap for MPI - 4.3mm, Latch

V-BT-5.0 - Bone Tap for MPI - 5.0mm, Latch

Burs & Drills

RB-2.0 Round Bur

NX-LD-20T - 2.0mm Lindeman Bur

NX-TLD-20T - 2.0mm Lance Drill

CSD - Implant Countersink

PD200L16C - 2.0mm Carbide Implant Drill

TD250L16C - 2.5mm Carbide Implant Drill

TD280L16C - 2.8mm Carbide Implant Drill TD320L16C - 3.2mm Carbide Implant Drill

TD365L16C - 3.65mm Carbide Implant Drill

TD400L16C - 4.0mm Carbide Implant Drill

TD430L16C - 4.3mm Carbide Implant Drill

TD450L16C - 4.5mm Carbide Implant Drill

TD520L16C - 5.2mm Carbide Implant Drill

TD550L16C - 5.5mm Carbide Implant Drill

Implant Mount Tools

LIT-C - Implant Mount Tool for Handpiece

LIT-S - Short Implant Mount Tool for Ratchet

LIT-M - Medium Implant Mount Tool for Ratchet

LIT-L - Long Implant Mount Tool for Ratchet

Prosthetic Drivers

L-1.25 - Long Prosthetic Driver for Handpiece

S-1.25 - Short Prosthetic Driver for Handpiece 🗜

SHT-S - Short Prosthetic Driver for Ratchet

SHT-L - Long Prosthetic Driver for Ratchet

DENT-1.25 - Handheld Prosthetic Driver



Bone Taps

SL-LIT-L - Long Implant Driver for SL - Ratchet

NL-FT-S - Short Implant Driver for NL - Handpiece

NL-FT-L - Long Implant Driver for NL - Handpiece

SL-FT-S - Short Implant Driver for SL - Handpiece

SL-FT-L - Long Implant Driver for SL - Handpiece



MU-IT - Hex Tool for Multi-Unit Abutments

MU-IT-Q - Square Tool for Multi-Unit Abutments

RAD - Hex to Square Adapter

ART - Hex/Square to FT Adapter

LS - Square to Latch Adapter

HR - Hex Ratchet

HR-S - Square Ratchet

HR-TW - Hex Torque Wrench

HSD - Hex Straight Driver Handle

VS - Titanium Vessel for Mount Removal

PT - Paralleling Tool

MU-AH - Multi-Unit Angulation Holder



NL-LIT-S - Short Implant Driver for NL - Ratchet

steel that withstands long-term sterilization.

The conical connection surgical kit is entirely customizable to your preferences. This kit is compatible with Hi-Tec™ Logic™, Implex™, and Expert™ implants. It houses all of the insertion tools, drivers, and drills necessary for implant surgery. This kit is convenient and easily organized with detailed labels and categories for each instrument. It is a fully autoclavable kit made of surgical stainless

NI -LIT-L - Long Implant Driver for NL - Ratchet

SL-LIT-S - Short Implant Driver for SL - Ratchet













































Integrated Surface™ Characteristics

Hi-Tec Implant's™ Integrated Surface™ is an SLA macro/micro implant surface, which is applied to the implant by large grit blasting, followed by a process of acid treatments. This results in a porous osseo-conductive surface that is an ideal platform for cell attachment. This process increases implant to bone contact and facilitates bone formation and superior osseo-integration.

Macro Surface

A macro surface is achieved by blasting the implant with 60 micron large grit particles that create pores 10-30 microns wide. The topography of the surface is 10 microns from peak to valley. This significantly increases the implant surface area and the retention on the implant. The macro pores contribute to initial stability, shortened healing time, and provide ultimate load bearing capacity.

Micro Surface

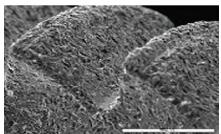
The micro-texture is created by chemical processes and is characterized by micro grooves of 0.503 microns. The micro voids are osseo-conductive and facilitate bone formation for faster osseo-integration and mechanical interlock between the bone and the implant.

Surface Composition

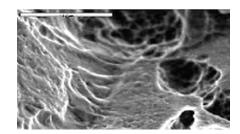
Surface composition analyzed by scanning electron microscopy presents a titanium oxide surface layer with a composition of 50% oxygen at the surface. Auger Spectron spectroscopy demonstrates that the depth of the titanium oxide layer is 200 angstroms.

Predictable Performance

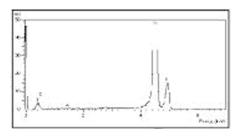
SLA technology has a long history of proven effectiveness as one of the most documented surfaces in dental technology. Hi-Tec Implant's™ Integrated Surface™ has extensive healing potential, which results in accelerated osseo-integration. This makes the healing process more predictable for both you and your patient.



SEM SCANNING ELECTRON MICROSCOPE x 100



SEM SCANNING ELECTRON MICROSCOPE x 5000



SURFACE COMPOSITION BY SEM



Implant Packaging





Mounted (Figure 1.)

Mounted Implants

Most Hi-Tec Implants™ are available with an initial placement mount (Figure 1.). This mount is used to carry the implant to the surgical site. It should not be used for full placement of the implant, as it is designed only for the delivery of the implant to the osteotomy. After lightly threading the implant into the osteotomy, remove the mount with a 1.25mm (0.50") hexagonal driver. Once the mount is removed, use an implant insertion tool (specific to the implant being used) to drive the implant into the osteotomy. Following the implant placement, the mount can then be reattached to the implant and used as a closed tray impression coping. Remove the mount with a 1.25mm (0.50") hexagonal driver after taking the impression. After completing the impression, the provided cover screw can then be secured. This first stage cover screw is used to seal the connection of the implant. The cover screw can be secured and removed using the same 1.25mm (0.50") hexagonal driver. All drivers and insertion tools are provided in the surgical kit or can be purchased separately.

Non-Mounted Implants

Alternatively, some Hi-Tec Implants™ are offered without an initial placement mount for ease of placement. Instead of being packaged in a sterile plastic carrier, mountless Hi-Tec Implants™ are supplied in a sealed titanium vial (Figure 2.). The vial's material is designed to protect the implant's surface, ensuring optimal osseointegration. The lid of the vial contains a first stage healing screw, which can be used to cover and seal the connection of the implant. Placement of a mountless implant is easy, simply secure the corresponding insertion tool into the connection of the implant and carry it to the osteotomy. Then use the insertion tool to securely place the fixture into the osteotomy. After placing the implant, the first stage cover screw can be secured using the 1.25mm (0.50") hexagonal driver. The drivers and insertion tools are provided in the surgical kit or can be purchased separately.



(Figure 2.)



Hi-Tec Implants™ meets and exceeds the highest standards in the field of medical devices: the main approvals, besides many others, are:

FDA APPROVAL: Center for Devices and Radiological Health in the US FDA (Food and Drug Administration) Since 1994.

CE MARK – After demonstrating compliance with Annex II of Medical Devices Directive 93/42/EEC, entitles us to use CE Marketing on our products.

ISO 13485: 2003 – An international standard for quality management of medical devices, Hi-Tec Implants LTD™ meets the requirements of ISO 13485 : 2003 for the design, manufacturing and inspection of dental implants and accessories.

ISO 9001: 2000 - Certifies that Hi-Tec Implants LTD[™] demonstrates compliance of our quality system to meet the requirements of ISO 9001: 2000 (an international standard for quality management system).

Health Canada Medical Device License and CMDCAS ISO 13485: 2003 Accredited Since 2005.

Trademark Acknowledgment

A.B Dental[™] is a trademark of A.B Dental Devices Ltd.

ACE Infinity™ and TRI-CAM™ are trademarks of ACE Surgical Supplies Co.

Adin[™] and Toureg[™] and CloseFit[™] are trademarks of Adin Dental Implant Systems Ltd.

Biohorizons® is a registered trademark of Biohorizons Inc.

Blue Sky Bio™ and BioMax NP™ are registered trademarks of Blue Sky Bio.

Hahn™ is a registered trademark of Prismatic Dentalcraft Inc.

Implant Direct[™], InterActive[™], Swishactive[™], and Legacy[™] are trademarks of Implant Direct

Locator® is a registered trademark of Zest IP Holdings

MIS™ and 7™ and C4™ are trademarks of MIS Implants Technologies LTD

Nobel[™] is a trademark of Nobel Biocare Services AG

NobelActive® is a registered trademark of Nobel Biocare Services AG

NobelBiocare™ is a registered trademark of the Nobel Biocare Services AG

NobelReplace® is a registered trademark of the Nobel Biocare Services AG

Replace Select Services AG is a trademark of Nobel Biocare Services AG

RePLANT™ is a trademark of Implant Direct

Screw-Vent® is a registered trademark of Zimmer Dental Inc.

Southern Implants®, Co-Axis® and TriNex®, are registered trademarks of Southern Implants

Strauman® is a registered trademark of Institut Straumann AG

Tissue Level™ is a trademark of Institut Straumann AG

Zest® is a registered trademark of Zest IP Holdings

Zimmer® is a registered trademark of Zimmer Group