Logic™ LGI Features

The numerous innovative design features of the Logic™ implant make it a great choice for a variety of bone conditions. These features ensure that you are optimizing bone and tissue growth on and around the implant. This makes the Logic™ a great choice for immediate load applications or for use in the esthetic zone.

Increased Stability

Logic™ implants are a root-form tapered fixture with high primary stability. The aggressive thread design of the Logic™ implant condenses bone, making it a great choice for immediate load applications. Although the Logic™ is especially adept at condensing soft bone, it can also be used in hard bone with similar results.

Dynamic Positioning

The apex of the Logic™ implant consists of reverse-cutting flutes, which allow clinicians to adjust the orientation of the implant during placement. This is particularly useful in extraction sites.

Optimal Esthetics

The tapered crestal collar of the Logic™ implant and reduced platform size variance optimizes bone and soft tissue growth. This makes the Logic™ implant an ideal selection for the esthetic zone.
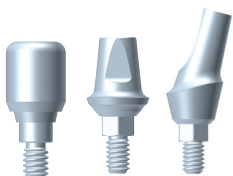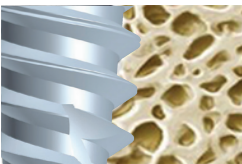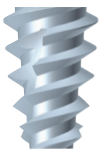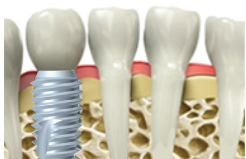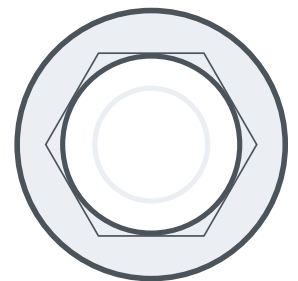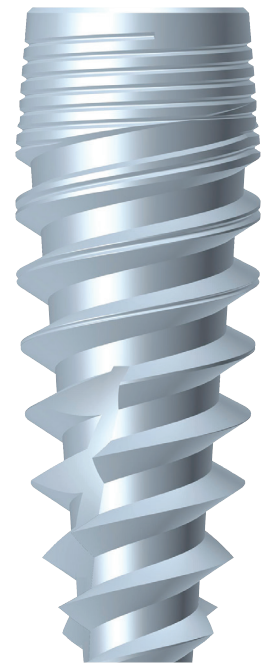
Integrated SLA Surface™

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 Logic™ implant system features a conical internal hex connection. This consists of a hexagonal connection with a tapered conical segment, which helps to seat the prosthetic. This design gives you all of the dynamics of an internal hex connection with the sealing 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 Logic™ implants and prosthetics. This makes the transition to Hi-Tec™ simple and affordable.
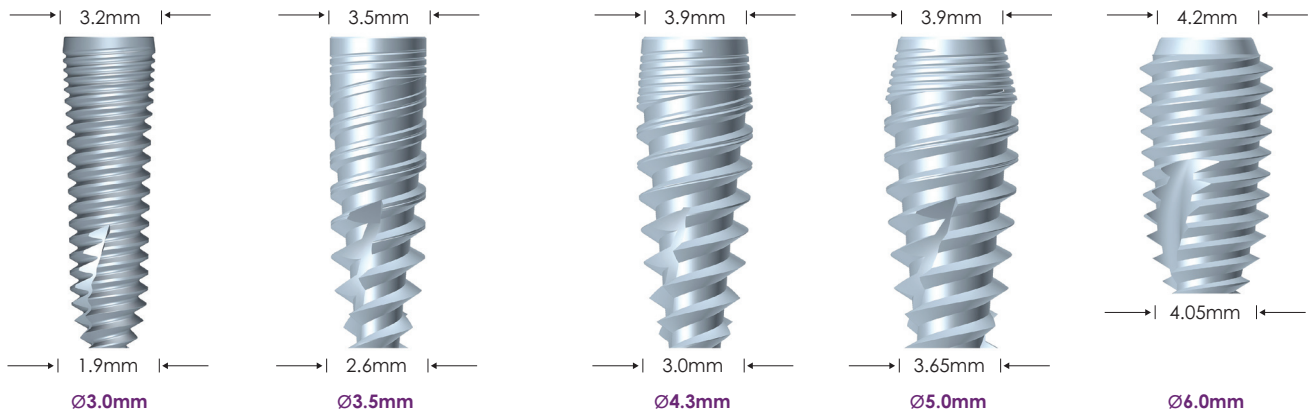
TECHNICAL SPECIFICATIONS

LOGIC™ CONICAL CONNECTION
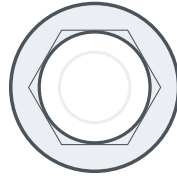
- **Implant Material:** Ti-6Al-4V Titanium Alloy
- **Surface Finish:** SLA Integrated Surface™
- **Implant Collar:** Tapered, Textured Micro-Thread
- **Delivery System:** Available with or without a Placement Mount
- **Implant Placement Torque:** 30-60Ncm
- **Abutment Torque:** (Standard 35Ncm) (Multi-Unit 15Ncm)
- **Prosthetic Screw Type:** .050" (1.25mm) Hexagon
- **Compatibility:** NobelActive® NP (LGI 3.0mm, 3.5mm)
  NobelActive® RP (LGI 4.3mm, 5.0mm, 6.0mm)

*NobelActive is a registered trademark of Nobel Biocare Inc.

Narrow Platform	Narrow Platform	Standard Platform	Standard Platform	Standard Platform
3.0	**3.5**	**4.3**	**5.0**	**6.0**
	6.0mm	6.0mm	6.0mm	6.0mm
8.5mm	8.5mm	8.5mm	8.5mm	8.5mm
10.0mm	10.0mm	10.0mm	10.0mm	10.0mm
11.5mm	11.5mm	11.5mm	11.5mm	11.5mm
13.0mm	13.0mm	13.0mm	13.0mm	
16.0mm	16.0mm	16.0mm	16.0mm	

3.2mm	3.5mm	3.9mm	3.9mm	4.2mm
1.9mm	2.6mm	3.0mm	3.65mm	4.05mm
Ø3.0mm	Ø3.5mm	Ø4.3mm	Ø5.0mm	Ø6.0mm

Logic™ Implants Drill Sequence

		RB	2.0	2.5	2.8	3.2	3.65	4	4.3	4.5	5.2	5.5	CSD
LGI 3.0	SOFT BONE	•	•	•	•								X
	HARD BONE	•	•	•	½								
LGI 3.5	SOFT BONE	•	•	•	•								X
	HARD BONE	•	•	•	•	½							
LGI 4.3	SOFT BONE	•	•	•	•	•	½						X
	HARD BONE	•	•	•	•	•	•	½					
LGI 5.0	SOFT BONE	•	•	•	•	•	•	•	½				X
	HARD BONE	•	•	•	•	•	•	•	•	½			
LGI 6.0	SOFT BONE	•	•	•	•	•	•	•	•	•	•		X
	HARD BONE	•	•	•	•	•	•			•		½	

½ = DRILL TO HALF DEPTH
X = COUNTERSINK OPTIONAL

HI-TEC IMPLANTS™

Logic™, Implex™, Expert™ Implants
Conical Connection - Standard Platform 4.3, 5.0, 6.0mm

Analogs

Item	SKU	Length	Cuff Height
Ball Attachment Analog	BNL	14mm	
Implant Analog	SL-IL	10.7mm	
Digital Analog	SL-ILD	10mm	

Impression Copings

Item	SKU	Length	Cuff Height
Closed Tray Impression Coping	SL-AAT	11.6mm	
Open Tray Impression Coping	SL-AAT-L	17.8mm	
Snap Cap Impression Coping	SL-AST	15mm	
Snap Cap	T-PT	10mm	

Titanium Preparable Abutments

Item	SKU	Length	Cuff Height
Straight Titanium Abutment	SL-ACA-1.5	6.8mm	1.5mm
	SL-ACA-2.5	7.8mm	2.5mm
	SL-ACA-3.5	8.8mm	3.5mm
	SL-ACA-4.5	9.8mm	4.5mm
Modular Abutment Set	SL-ACA-G-1-SET		1mm
	SL-ACA-G-2-SET		2mm
	SL-ACA-G-3-SET		3mm
	SL-ACA-G-4-SET		4mm
15 Degree Angled Abutment	SL-ANA-15	9.3mm	1.55/2.8mm
	SL-ANA-15-2.5	10.5mm	2.8/4.0mm

Zirconia Preparable Abutments

Item	SKU	Length	Cuff Height
Straight Zirconia Abutment	SL-ZTA	11mm	1.5/2.5mm
15 Degree Angled Zirconia Abutment	SL-ZTA-15	9.3mm	1.55/2.8mm

Healing Abutments

Item	SKU	Length	Cuff Height
Healing Abutment	SL-HC-3	3mm	
	SL-HC-5	5mm	
	SL-HC-F	6mm	

Temporary Abutments

Item	SKU	Length	Cuff Height
Straight Peek Nylon Temporary Abutment	SL-RPA	8.5mm	1.5mm
15 Degree Peek Nylon Temporary Abutment	SL-RPA-15	9.3mm	1.55/2.8mm
Engaging Temporary Abutment	SL-TA	11mm	0.5mm
Non-Engaging Straight Titanium Temporary Abutment	SL-TA-R	11mm	0.5mm

Castable UCLA Abutments

Item	SKU	Length	Cuff Height
Engaging Plastic Castable Abutment	SL-PCA	7.60mm	1mm
Non-Engaging Plastic Castable Abutment	SL-PCA-R	7.60mm	1mm
Engaging Gold Castable Abutment	SL-PGA	10mm	

Multi-Unit Components

Item	SKU	Length	Cuff Height
MU - Closed Tray Impression Coping	MU-AAT	9mm	
MU - Open Tray Impression Coping	MU-AAT-L	13.87mm	
MU - Analog	MU-CL	13.14mm	
MU - Fixation Screw	MU-FS		
MU - Healing Cap	MU-HC	4.71mm	
MU - Plastic Castable Sleeve	MU-PC	11.9mm	
MU - Titanium Sleeve	MU-TPC	12.25mm	
MU - Scan Body	MU-SCAN	8.59mm	
MU - Titanium Base	MU-TB	4.5mm	
MU - Straight Abutment	SL-MU-1	3mm	1mm
	SL-MU-2	4mm	2mm
	SL-MU-3	5mm	3mm
	SL-MU-4	6mm	4mm
MU - 17 Degree Angled Abutment	SL-MU-17	5.2mm	2.1/2.5mm
	SL-MU-17-2	6.2mm	3.1/4.5mm
MU - 30 Degree Angled Abutment	SL-MU-30	5.3mm	1.7/4.07mm
	SL-MU-30-2	5.7mm	2.13/4.5mm
MU - Zest® Locator Abutment Collar (2-Pack)	8909-2	1.0mm	

O-Ball Abutments

Item	SKU	Length	Cuff Height
O-Ball Abutment	SL-BBA-2	5.5mm	2mm
	SL-BBA-4	7.5mm	4mm
	SL-BBA-6	9.5mm	6mm
Metal Housing	MH	3.22mm	
Nylon Cap - Extra Light Retention	NC-CLEAR		
Nylon Cap - Light Retention	NC-PINK		
Nylon Cap - Medium Retention	NC-ORANGE		
Nylon Cap - High Retention	NC-GREEN		

CAD/CAM Custom Prosthetics

Item	SKU	Length	Cuff Height
Short Scan Body	SL-SCAN-S	8.5mm	
Long Scan Body	SL-SCAN-L	9.6mm	
Multi-Unit - Scan Body	MU-SCAN	8.59mm	
Multi-Unit - Titanium Base	MU-TB	4.5mm	
Digital Analog	SL-ILD	10mm	
Engaging T-Base Abutment	SL-PRN	4.5mm	
Non-Engaging T-Base Abutment	SL-PRN-R	4.5mm	
Engaging Screw Retained T-Base Abutment	SL-ZTA-T		
Non-Engaging Screw Retained T-Base Abutment	SL-ZTA-R		

Zest® Locator Abutments

Item	SKU	Length	Cuff Height
Locator Connical Connection Standard Platform	2075		1mm
	2076		2mm
	2077		3mm
	2078		4mm
	2079		5mm
	2080		6mm
Locator RT-X Connical Connection Standard Platform (Includes Male Processing Package)	30507-01		1mm
	30507-02		2mm
	30507-03		3mm
	30507-04		4mm
	30507-05		5mm
	30507-06		6mm
Locator Male Processing Package	8519-2		2-Pack
	8519-10		10-Pack
Locator Extended Male Processing Package	8540-2		2-Pack
	8540-10		10-Pack
Locator Replacement Denture Cap Male Assembly	8510-4		4-Pack
	8510-10		10-Pack
Locator Female Analog (4mm Diameter)	8530-4		4-Pack
	8530-20		20-Pack
Locator Female Analog (5mm Diameter)	8516-4		4-Pack
	8516-20		20-Pack
Locator Impression Coping	8505-4		4-Pack
	8505-20		20-Pack

Conical Connection Surgical Kit

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 steel that withstands long-term sterilization.

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

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

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

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

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

Ratchets & Attachments

DL - Drill Extension

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

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.
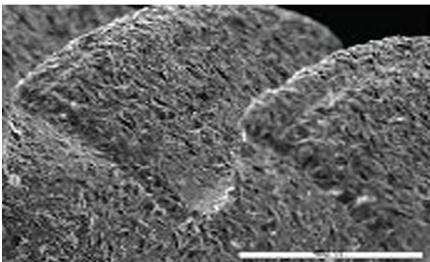
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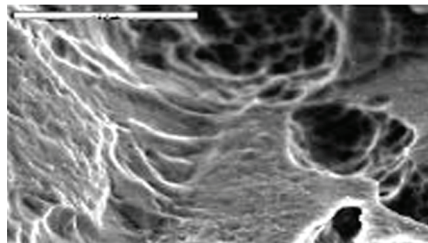
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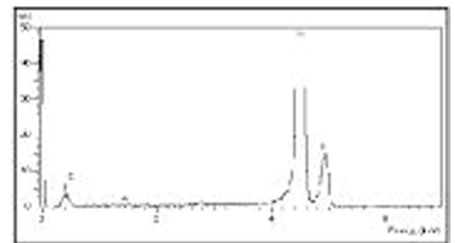
SURFACE COMPOSITION BY SEM

Implant Packaging

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.

Mounted
(Figure 1.)
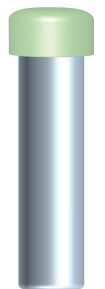
Mountless
(Figure 2.)

HI-TEC IMPLANTS™

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.

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