



**BIOMATE**  
Digital Implant Line



— Official partner —

DENTAL**HEXI**



Proudly made in Egypt  
since 2014



# Root Implant System

Designed for Stability. Engineered for Longevity.

Root-form dental implants represent the gold standard in modern implantology, designed to mimic the natural anatomy of the tooth root for optimal load distribution and biological integration.

With a tapered body and advanced thread design, root implants provide excellent primary stability, even in challenging bone conditions (D1–D4), ensuring predictable placement and long-term success.

Modern root implant systems incorporate advanced surface technologies, precise connection geometries, and prosthetic flexibility — enabling clinicians to achieve reliable outcomes in both simple and complex cases.

By combining mechanical strength with biological compatibility, root implant systems have become the preferred solution for achieving consistent, long-lasting clinical results.

## ► About Biomate line

Egyptian Innovation. Clinical Excellence.

Biomate is one of the pioneering Egyptian dental implant systems, established in 2014, developed to provide a high-quality, reliable implant solution aligned with international standards.

From its early development, Biomate introduced innovative designs such as Genius and Pioneer, building a strong foundation based on clinical performance, precision engineering, and continuous improvement.

Today, Biomate stands as a complete root implant system, combining biological stability with mechanical accuracy to deliver predictable and long-term clinical outcomes.

With a Tapered Body Design and advanced SLA Surface Technology, Biomate ensures strong primary stability, fast osseointegration, and preservation of crestal bone.

Its Internal Hex Connection (2.42 mm) with Platform Switching Technology minimizes micro-gaps, enhances soft tissue stability, and supports long-term bone maintenance.

Designed with self-tapping geometry, dual-thread technology, and a unified prosthetic platform, Biomate simplifies surgical procedures while offering high flexibility for restorative solutions.

## ► Implant Packaging

### Implant Mount

Elastic material driver with guaranteed fracture resistance.

cover screw





**Connection Internal Hex**  
connection, without  
micro gaps



**Unique Thread**  
Wider threads in the upper body  
that increase surface area and  
reduce bone stress, then transition  
to sharper threads for self-tapping  
function

#### CORE TECHNICAL FEATURES



**Primary Stability  
& Bone Condensing**



**Advanced Macro & Micro  
Geometry For greater  
primary Stability**



**Biological Integrity & Connection  
Advanced primary Designs**



**Prosthetic Versatility  
For greater primary Stability**



#### OSSEOCRESTAL HEALTH & VERSATILITY

##### Micro Grooves

Integrated Platform Switching and Micro-Grooves prevent bone resorption and preserve crestal health. Unified abutment fit for standard and slim diameters.

##### SLA

Sandblasted with large particles, acid etched.

##### Tapered Body

Increases initial stability in immediate implant cases

#### RAPID OSSEOINTEGRATION & SELF-DRILLING

- Proven SLA surface treatment for faster biological attachment.
- Tapered body and apical blades enable self-drilling insertion, specially in complex scenarios.

## ▶ Surface Treatment

### (S.L.A Surface Treatment)

▶ **Biomate** Implants are made of a “Grade 5” Titanium alloy (Ti6AL4VELI: 90 % Titanium, 6 % Aluminum, 4 % Vanadium), which goes through a special sandblasting and etching process.

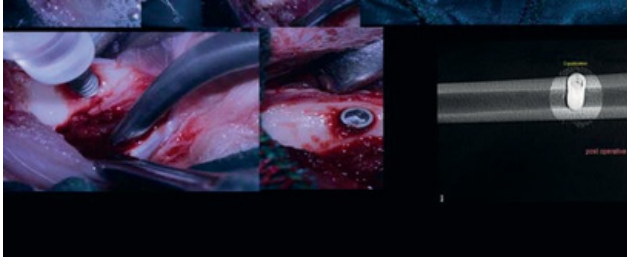
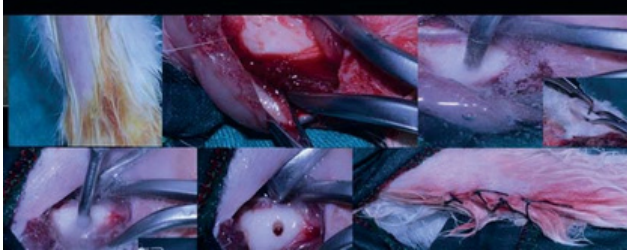
#### ▶ **Benefits**

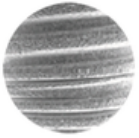
- Bone strengthening due to early Implant contact
- Increased stability
- Shortened healing phase
- Higher predictability of the healing process

#### ▶ **Corundum Sandblasting and Acid Etching of the implant surface**

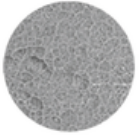
- Sandblasting creates a macro surface of
- Double thermal acid etching process creates structures
- Material forms a hydrophilic titanium oxide layer

## ▶ Preclinical Validation

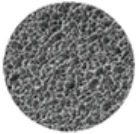




The surface benefit from a micro sandblasting.



Microscopic view of the implant surface after acid treatment.



Confirmation of the efficiency of acid treatment by scanning electron microscopy.

▶ **"Grade 5" Titanium alloy (Ti6AL4VELI: 90 % Titanium, 6 % Aluminum, 4 % Vanadium)**

## Product Evolution History

2014



Pioneer

2016



Genius

2020



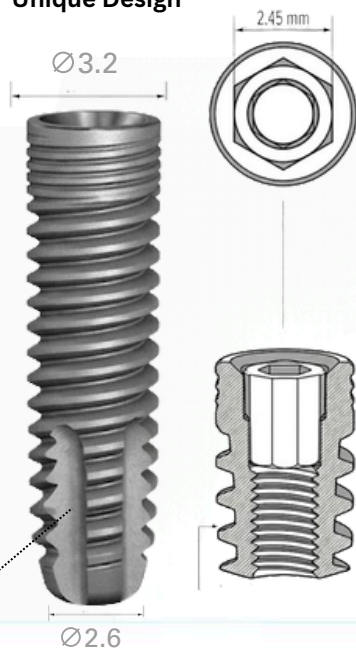
biomate

## ► Biomate Ø3.2

Surface treatment  
S.L.A

Lenght	Code
8	im3208
10	im3210
11.5	im32115
13	im3213
16	im3216

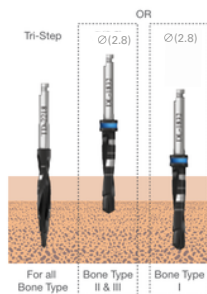
Unique Design



Four Apical Groove

### ► Drill Sequence

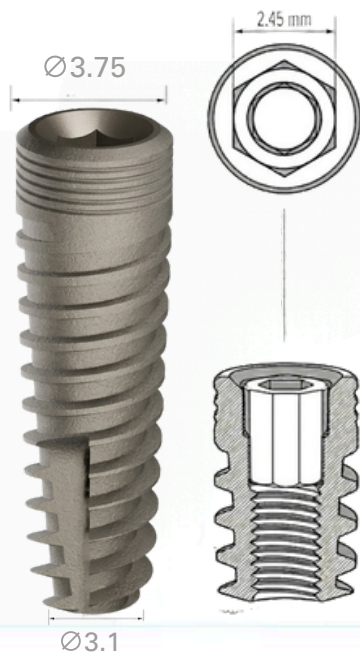
BONE TYPE D-IV	BONE TYPE D-II & III	BONE TYPE D-I
1. Tri-Step*	1. Tri-Step* 2. (2.8)	1. Tri-Step* 2. (2.8)



## ► Biomate Ø3.75

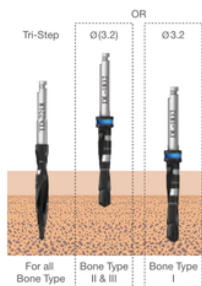
Surface treatment  
S.L.A

Length	Code
6	im3706
8	im3708
10	im3710
11.5	im37115
13	im3713
16	im3716



### ► Drill Sequence

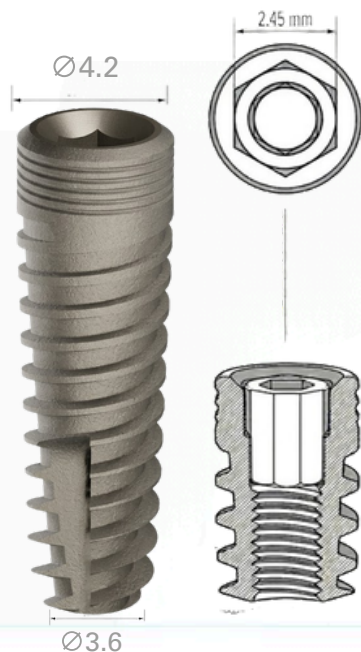
BONE TYPE D-IV	BONE TYPE D-II & III	BONE TYPE D-I
1. Tri-Step*	1. Tri-Step* 2. (3.2)	1. Tri-Step* 2. 3.2



## ► Biomate Ø4.2

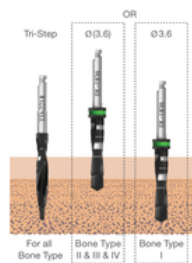
Surface treatment  
S.L.A

Lenght	Code
6	im4206
8	im4208
10	im4210
11.5	im42115
13	im4213
16	im4216



### ► Drill Sequence

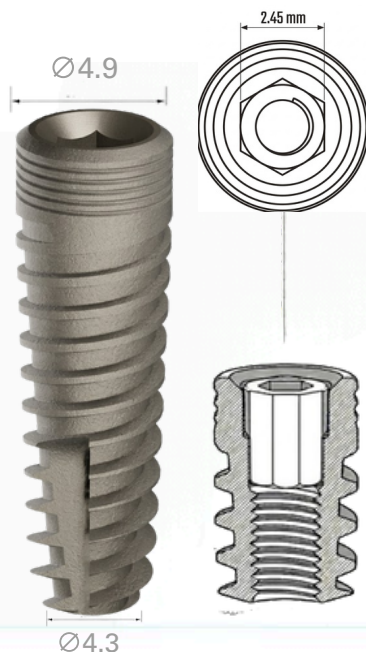
BONE TYPE D-IV	BONE TYPE D-II & III	BONE TYPE D-I
1. Tri-Step* 2. (3.6)	1. Tri-Step* 2. (3.6)	1. Tri-Step* 2. 3.6



## ► Biomate Ø4.9

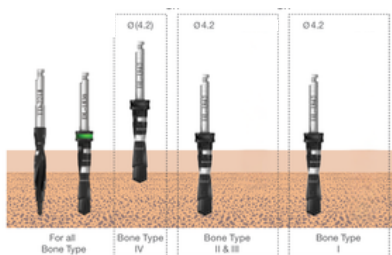
Surface treatment  
S.L.A

Length	Code
6	im4906
8	im4908
10	im4910
11.5	im49115
13	im4913
16	im4916



### ► Drill Sequence

BONE TYPE D-IV	BONE TYPE D-II & III	BONE TYPE D-I
1. Tri-Step*	1. Tri-Step*	1. Tri-Step*
2. 3.6	2. 3.6	2. 3.6
3. (4.2)	3. 4.2	3. 4.2



# SLIMmate Implant

## ► Slimmate Implant

- The SLIMmate Implant with a 2.78 mm diameter is a perfect choice for narrow ridges or the aesthetic zone, especially in the anterior area.
- Due to its reduced diameter, it cannot be placed on the same platform as the Standard Line.

### Platform & Prosthetic Options

- Our platform offers a full prosthetic line, including:
  - Multi Unit Abutments
  - Overdenture Abutments
  - Transfers
  - Analog

This allows clinicians to restore all treatment options efficiently using the SLIMmate Implant.

### Clinical Advantage

- With the SLIMmate Implant, you can effectively manage even the most challenging cases in the anterior aesthetic zone, providing reliable and predictable results.











## Slimat biomate Ø2.78

Lenght	Code
10	SL2810
11.5	SL2811.5
13	SL2813
16	im49116










## ▶ Cement Restoration

	• Straight Abutment (no finish line) Ø4.5 / L 7mm	imsb7
	• Straight Abutment (no finish line) Ø4.5/ L 9 mm	imsb9
	• Straight Abutment (no finish line) Ø4.5 / L11 mm	imsb11
	• Straight Abutment (no finish line) Ø4.5/ L13 mm	imsb13
	• Angeled Abutment (no finish line) 15°-10 mm	imab1510
	• Angeled Abutment (no finish line) 25°-10 mm	imab2510
	• Castable Abutment Hex	imcahex3
	• Castable Abutment Non-Hex	imcanhex3

## ▶ Healing Abutment

	• Healing Abutment Ø 4.5 L5	imhab45L5
	• Healing Abutment Ø4.5 L7	imhab45L7
	• Healing Abutment Ø5 L4	imhab55L4
	• Healing Abutment Ø5 L6	imhab55L6
	• Healing Abutment slim Ø3.8 L5	imlhab55L5

## ► Impression Coping



- cover screw standered
- cover screw slim
- Open Transfer 9mm
- Closed Transfer
- Analog

imcs  
slimcs  
imcitr  
imcutr9  
imana

## ► MUA Solutions

Use 1.2 Screw Driver  
For ANG./STR. M.U



- Straight M.U G.H 1mm
- Straight M.U G.H 2mm
- Straight M.U G.H 3mm
- Straight M.U G.H 4mm
- Angeled Abutment 17°/G.H 1 mm
- Angeled Abutment 17°/G.H 2 mm
- Angeled Abutment 17°/G.H 3 mm
- Angeled Abutment 30°+/G.H 1mm
- Angeled Abutment 30°+/G.H 2mm
- Angeled Abutment 30°+/G.H 3mm
- M.U Healing

immu1  
immu2  
immu3  
immu4  
imamu1701  
imamu1702  
imamu1703  
imamu3001  
imamu3002  
imamu3003  
muh

1.2



## ► MUA Accessories



- MUA Screw retained

muscrew



- MUA Titanium Temporary Cylinder

mutemp



- MUA TI-Base

mutb2



- MUA Transfer

immutr



- MUA Analog

immuan

## ► Removable attachment



- Ball Abutment G.H 1.5

imbsg1.5



- Ball Abutment G.H 3

imbsg3



- Ball Cap titanium

imbssp

## ► SLimmune Accessories



- Slimmate Ball & Socket Abutment sLbs



- Slimmate MUA Abutment sLmus



- Slimmate Slim Abutment  $\varnothing 3/L12$  sLab312



- Slimmate Transfer sLtr312



- Slimmate Analog sLan312

## ► Tools



- Torque Screw Driver 1.25



- Torque Screw Driver 1.2



- Torque Implant Driver 2.5



- Torque Implant Driver 2.4



- Marker drill



- Lancet 1.5



- Drill extender



**▶ Digital workflow**



- Scan Body 7mm
- Scan Body 9mm

SM07

SM09



- MUA Scan Body

MUSP



- Ti-Base Hexed G.H 0.5mm
- Ti-Base Hexed G.H 1.5 mm
- Ti-Base Hexed G.H 2.5 mm

TB4500

TB4515

TB452.5



- Ti-Base Non-Hexed G.H 0.5mm
- Ti-Base Non-Hexed G.H 1.5mm
- Ti-Base Non-Hexed G.H 3mm

TB4500N

TB4515N

TB452.5N



- Digital Analog

IMPDIAN



- MUA Digital Analog

MUDIEN

► **Surgical KIT**

**Surgical KIT content:**

- Lancet Drill
- Drills (2.0/2.5/2.8/3.2/3.65/4.2/5.2)
- Implant Driver 2.4 Long
- Implant Driver 2.4 Short
- Screw Driver 1.25 Long
- Screw Driver 1.20 Short
- Machined Implant Driver 2.42
- Machined Screw Driver 1.25
- Parallel Pins
- Torque Ranch 70N



▶ Fully GUIDED Surgical KIT

**ATOMICA**



## GUIDED DRILLS

ATOMICA

Drill Diameter	Available Lengths (mm)
2.2	L7-L9- L11-L13-L15-L18



Drill Diameter	Available Lengths (mm)
2.8	L7-L9- L11-L13-L15-L18



Drill Diameter	Available Lengths (mm)
3.5	L7-L9- L11-L13-L15-L18



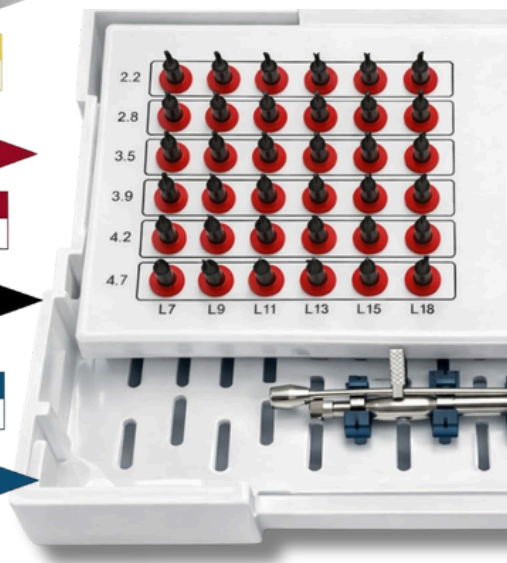
Drill Diameter	Available Lengths (mm)
3.9	L7-L9- L11-L13-L15-L18



Drill Diameter	Available Lengths (mm)
4.2	L7-L9- L11-L13-L15-L18



Drill Diameter	Available Lengths (mm)
4.7	L7-L9- L11-L13-L15-L18





Drill extender

Marker drill

Lancet 1.5

Fixation PIN

2.4

2.5

Torque Implant Driver

2.4

2.5

Guided Implant Driver

1.2

1.25

Guided Screw Driver

ø4

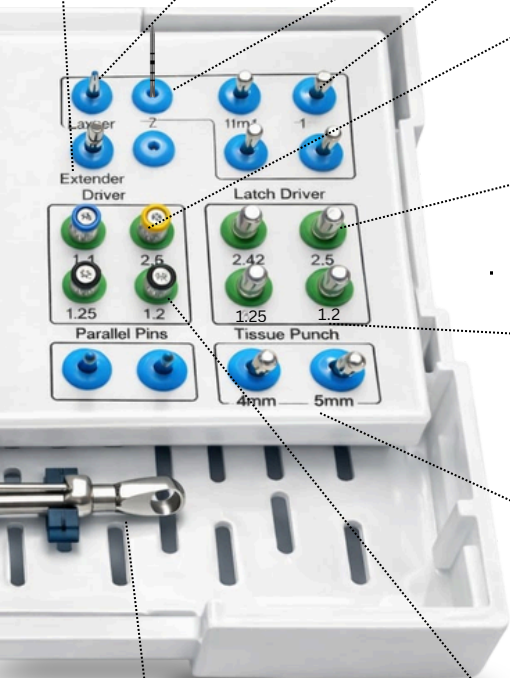
ø5

Tissue Punche

1.25

1.2

Torque Screw Driver



Torque Ranch

## ► Guided Sleeves

ATOMICA

- Sleeve height 5.0 mm
- Sleeve offset 9.0 mm
- One sleeve system
- Inner diameter 5.1 $\varnothing$
- Outer diameter 5.9 $\varnothing$



DENTAL **NON** **HEX** |   
**SOLUTIONS!**



**Solid  
abutment**



**MUA**



**Healing cap**



**Ball and  
socket**



**FOR ANY IMPLANT SYSTEM !**



Official partner

DENTALHEX | 



 [www.Dentalhex.com](http://www.Dentalhex.com)

