




Developed By P-I Brånemark



○ MT-F  
THE NEXT GENERATION

The image shows a vertical dental implant with a polished metal abutment and a textured titanium body. To its right, three disassembled components are shown: a textured titanium sleeve, a polished metal abutment, and a black plastic cap with a metal base.

**SIMPLE EXPERIENCE FOR EXCEPTIONAL OUTCOMES**  
Enhanced Biological Metrics to unlock immediate replacement potential

# MT-F

## UNIQUENESS

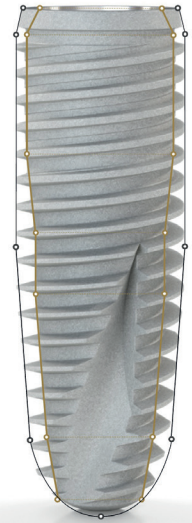
The multiplicity of interpolated core transitions associated with the P-I Conical Drills site preparation, and the gradual evolution of the pronounced depth cutting threads, are responsible for a gentle implant-to-osteotomy engagement in all sections independently.

These unique geometrical combinations provide greater initial contact area with significantly less bone displacement and compression enhancing the Biological Metrics.

↑ ISQ

ITV ↗

RTQ %

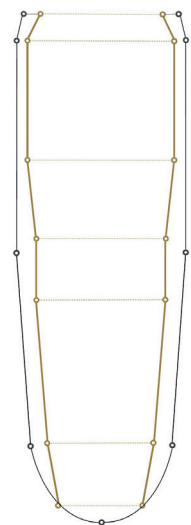


**Less compression • Progressive torque • Greater area**

MT-F displaces significantly less bone volume and achieves similar or higher Insertion Torque Value in all bone densities, exhibiting greater area in comparison to the leading competitive tapered-active implants of similar dimensions. Data on file.

## Less bone displacement

Cutting threads • Pronounced depth in all sections



Increased coronal space

Slightly inward flange

Cortical stability

Micro Patterns

Adaptive bone contact

Interpolated core transitions

Gradual thread evolution

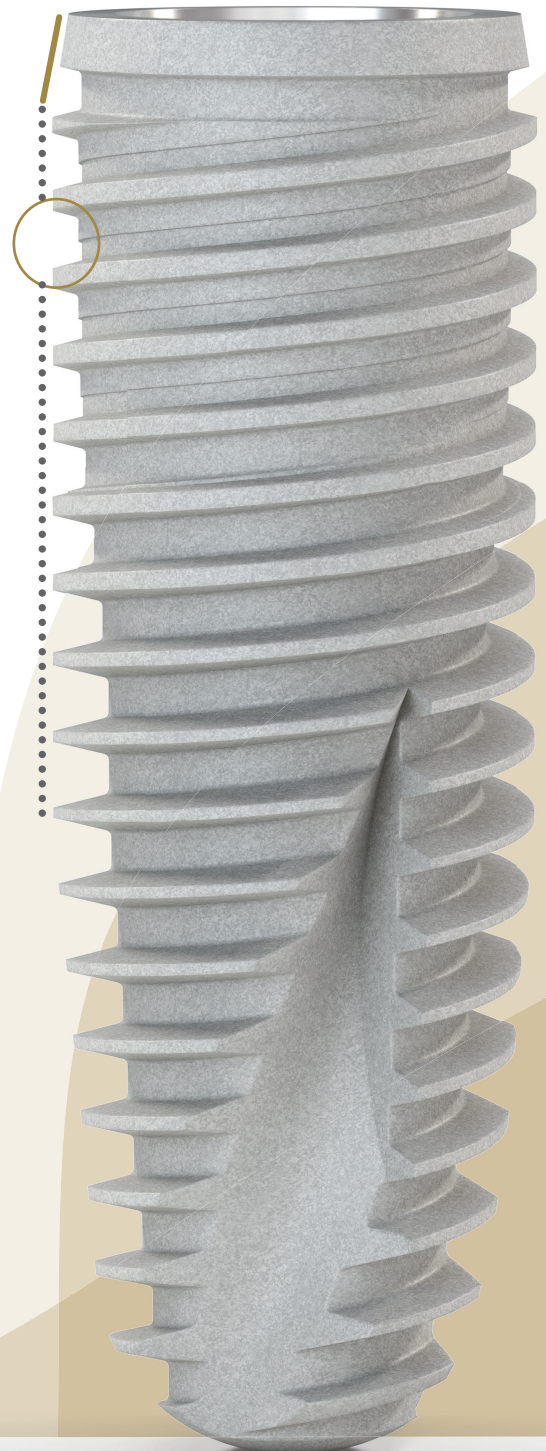
Pronounced depth in all sections

Early engagement

Gentle cutting • Dual thread

Axial insertion control

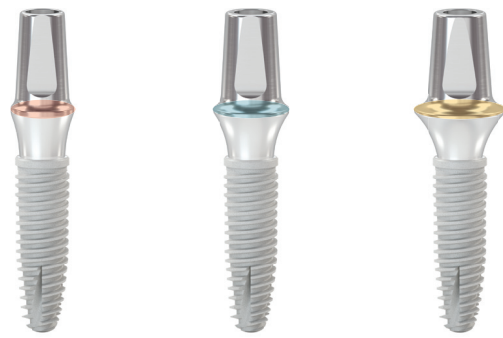
Biological Width positioning



○ MT-F

## One Interface

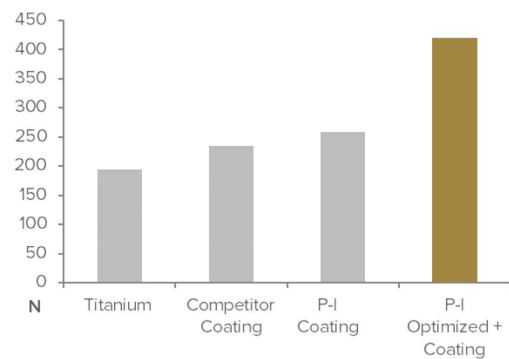
Various prosthetic platforms



## High Pre-Load

Effective sealing

P-I Coating +



## Easy reversibility

Low stress to peri-implant tissues



### Sealing starts at provisionalization

P-I Coating+ is a biocompatible layer that reduces friction and, combined with the MT Screw optimized geometry, provides a substantially higher and homogeneous pre-load, clamping, in comparison to titanium screws and the leading coating at the same tightening torque of 25 Ncm. Data on file. MT Retriever is used to cancel the morse sealing and safely remove Abutments.

Biological  
Width



Double  
Sealing

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System stability

**In clinical use for 15+ years • Superior biomechanics • Double Sealing**

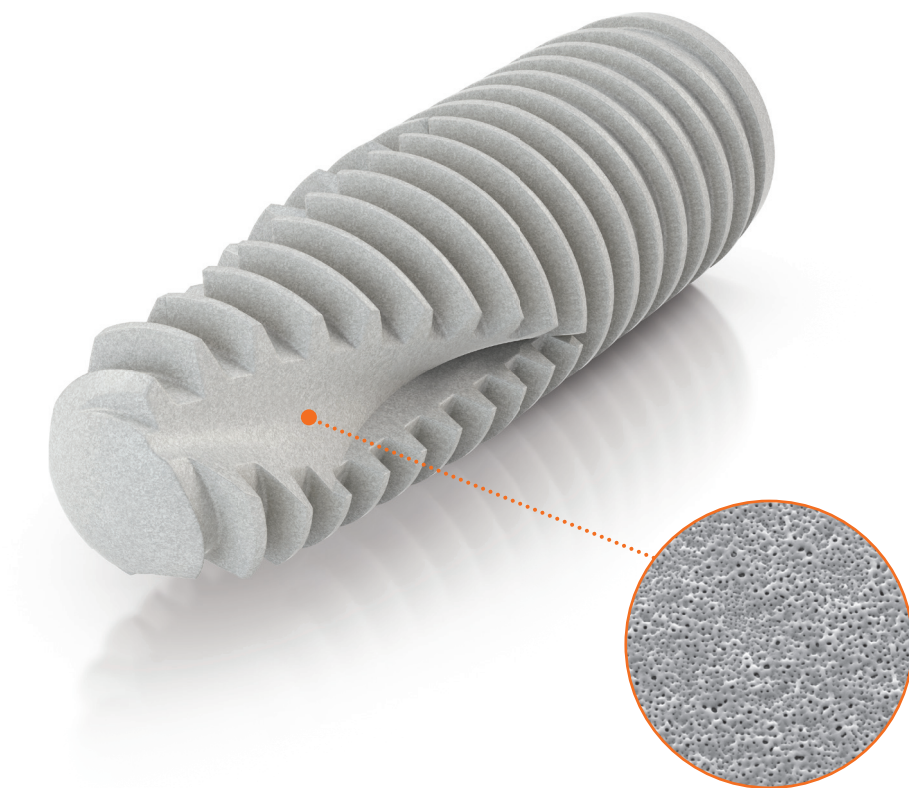
The P-I Morse Taper is an original technology. Highlighting 8.5° x 2 conical indexed, 3mm long, the P-I MT Interface offers a high torsional yield and fatigue strength as compared to other leading systems and was even adopted by a global leader. The MT-F Ø 3.3 Implant can withstand static load of approximately 600N. Data on file.

The high-preload Double Sealing mechanism has easy prosthetic reversibility, seals the Abutment on the MT Interface and the MT Screw on the Abutment, stabilizing the system, minimizing micromovement and microleakage in comparison to certain leading systems under simulated occlusal stress. The Double Sealing is an important hypothesis for the clinical consideration of MT-F Implant placement observing Biological Width principles.

# Strong Osseointegration

REDUCTION OF BIOFILM INFECTIONS

BIOACTIVE



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 **OSPOL**  
SURFACE

## Improved bone response

In comparison to rougher oxidized and blasted surfaces

## Less bacterial adhesion

Equivalent to turned surfaces • Minimally rough

## Chemically enhanced

Anodized • Bioactive ions

CP **Ti**  
grade 4

Anodized  
+  
Chemistry

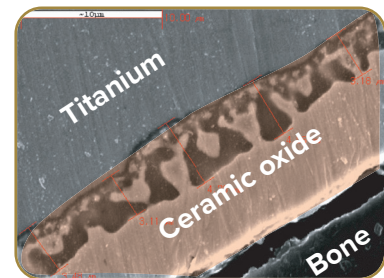
**ZERO**  
—  
Aluminum  
Acid

Widely documented  
Evolution of moderately rough surfaces

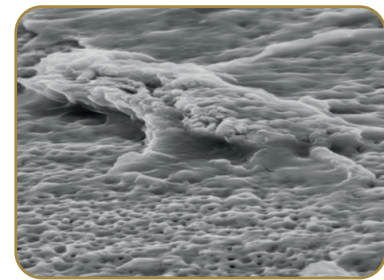


Direct and early  
response

Oxide, micropores and crystal structures  
greatly influence bone response



Biochemical bond,  
bone in-growth  
and mechanical  
interlocking



Courtesy of : YT Sul, A. Wennerberg,  
T. Albrektsson

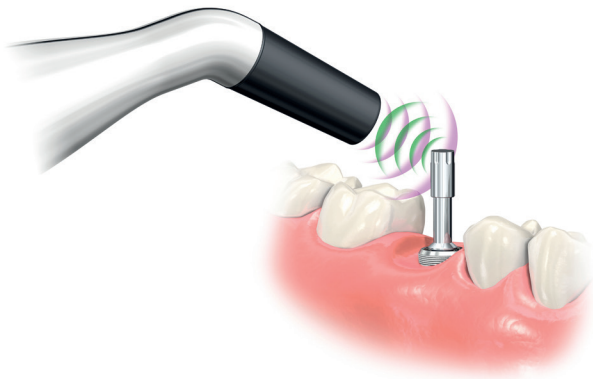
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**Surface chemistry, anodic oxidation and ion  
incorporation, enhance Osseointegration and  
compensate for minimal roughness**

OSPOL Surface was developed in the Gothenburg University, Sweden, and is documented in several publications. In continual evolution since 2000 and in clinical use for over 15 years, the OSPOL Surface is a modern technology for a rapid and strong bone response. Less prone to bacterial adhesion, it is a pioneer technology for chemical modification of thin anodized, oxidized, ion incorporation of smoother implants surfaces.

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## Higher [ISQ] for chemically- modified Surface

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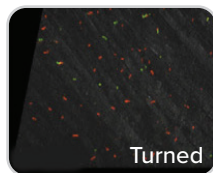
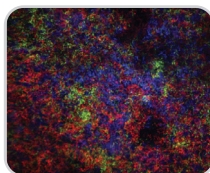
OSPOL Surface modification method achieves faster secondary Implant Stability Quotient [ISQ] measured by Resonance Frequency Analysis [RFA] indicating potential for shorter healing periods.

## Less bacterial adhesion and biofilm formation

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**BIOACTIVE**

! OSPOL Surface is easier to clean than rougher surfaces and its bioactivity reduces biofilm formation.



The bacterial adhesion is similar to turned, machined surfaces.

(!) Some conditions, whether combined or not, represent contraindications, limitations and risks, relative and absolute, for the treatment of patients with implants. There are several risk factors in Osseointegration widely described in literature. [ISQ] is a critical factor to clinically monitor Osseointegration. Data from pre-clinical studies.

# One Kit

Surgical & Prosthetic



Stainless Steel

BIOSAFETY

# Easy, simplified installation

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Maximum of 3  
low speed steps



(!) Except for MT-F Ø 4.8 Implant, 3 or 4 low speed steps are used. See Surgical Sequence.

# Conical Drills



Less friction. Less trauma

Constant apical conical angle • 3 cutting areas

Corrosion protection

Wear resistance • Diamond Like Carbon

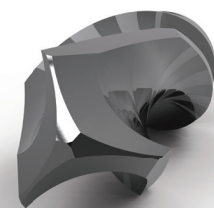
State-of-the-art performance

Special P-I design • Swiss

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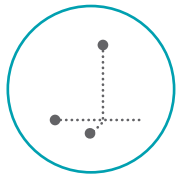
## Exceptional cutting performance

P-I Conical Drills' performance in dense bone, at the highest recommended rotation, without gradual diameter increments and applying constant feeding, present a very low friction coefficient range of 2 to 10 Ncm. Data on file.

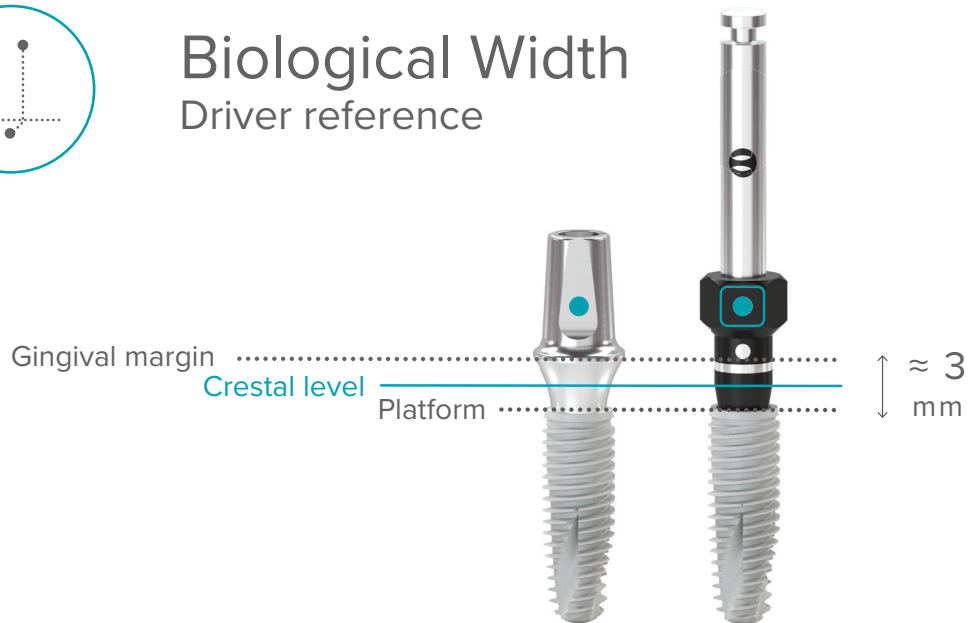


# Insertion Driver

Handpiece • Manual • Torque Wrench



## Biological Width Driver reference







(!) The horizontal Implant Insertion Driver's mark is at approximately 3 mm and serves as a Biological Width vertical reference for Implant platform positioning when completely covered by the lowest point of the soft tissue, the gingival margin. Implant Insertion Driver dots and upper hexagon are indexed to the Implant's hexagonal index. When used with Torque Wrench, the upper hexagonal portion of the Implant Insertion Driver should be entirely connected to the hexagon of the Driver Adapter.



● MT-F  
Implants

 **MT-F**  
Implants

Platform Ø	3.3	3.5	3.9	4.6
<b>h</b>				
18		172319		
15	172297	172302	172384	
13	172296	172301	172383	172306
11.5	172295	172300	172382	172305
10	172294	172299	172381	172304
8.5	172293	172298	172380	172303
7		172318	172379	172321
6		172317	172378	172320
<b>Implant Ø</b>	 3.3	 3.75	 4.1	 4.8

 **OSPOL**  
SURFACE


(!) Same Interface in all Platform Ø including narrow and short implants.

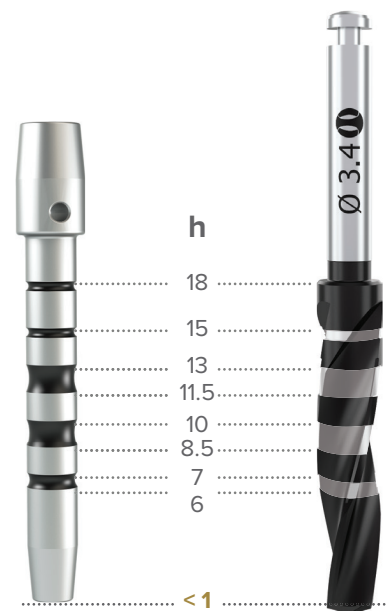


# ○ MT-F SURGICAL SEQUENCE





- 
rpm
**600 - 1,200**  
Lowest possible rpm
- 
ITV
**≤ 70 Ncm**  
Insertion Torque Value
- 
Full Length
Prepare at planned  
full length of Implant position
- 
In-Out
Coordinated in-and-out movement  
of Conical Drills
- 
Irrigation
Constant irrigation to the insertion  
margin of Conical Drills



(!) Drills are less than 1 mm longer than Drill marks

## SURGICAL SEQUENCE



3.3

Drill	2.2	2.8	3.4
	✓	S ↓ N	D ↓



3.75

Drill	2.2	2.8	3.4
	✓	S	N ↓ D



4.1

Drill	2.2	2.8	3.4	3.8
	✓	S	N ..... D	



4.8

Drill	2.2	2.8	3.8	4.6
	✓	✓	S	N ↓ D

Bone Density

**S** Soft    **N** Normal    **D** Dense



(!) Consult Instructions for Use. The subsequent Conical Drill, in terms of diameter, should be considered with a drilling depth of 6 mm, in order to not exceed 70 Ncm of insertion torque value. The use of Dense Drills (15 – 50 rpm) can also be considered to lower the insertion torque value.

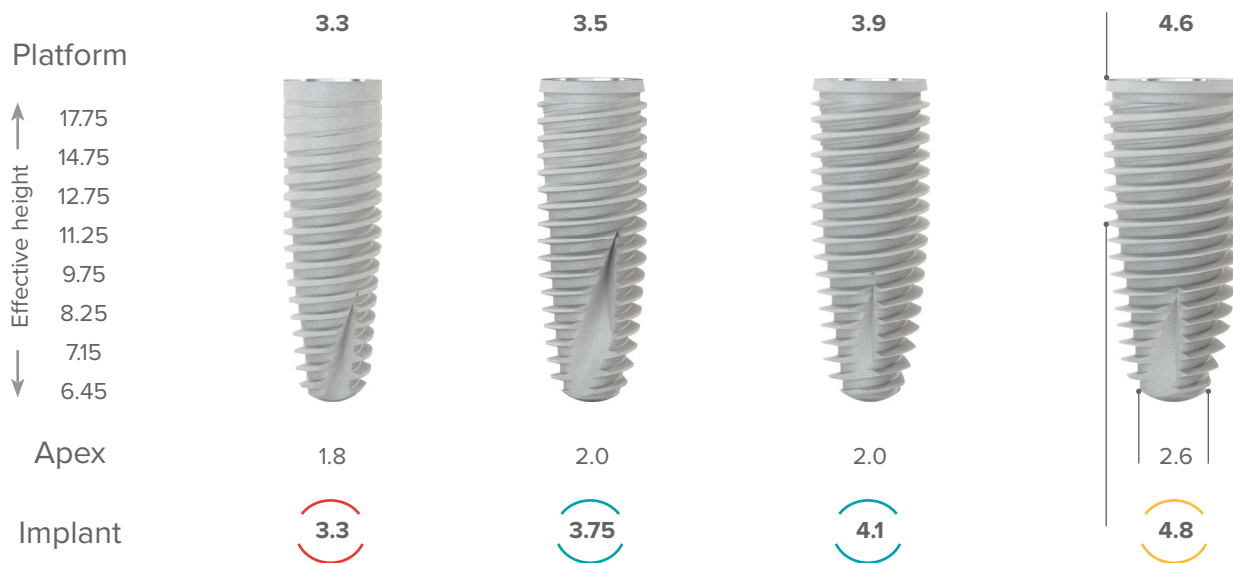
Ⓞ Guided Surgery Drills consider a [9mm] offset and, when used with Drill stops, allow for limiting the total length of osteotomy with the objective of providing predetermined Drill length and orientation through the surgical guide.

# One interface

for all Implant dimensions



## Dimensions



(!) Consult Instructions for Use. Images are for illustrative purposes only. Measurements in millimeters.

# Prosthetic Overview

Screw-Retained    Cement-Retained    Screw • Cemented    Over    **D** DIGITAL



Prosthetic Platforms



Narrow



Regular



Wide

**D** DIGITAL

3shape  | **exocad**

Link C post has Dentsply Sirona, Cerec dimensions.  
Direct Geometries over Implant and Conical Abutment available.




(!) One Screw and Prosthetic Driver Ø 1.2 for all Abutments, except straight Conical Abutment and Locator®. All P-I Components are supplied with the respective screw.



Developed By P-I Brånemark

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[pibranemark.com](http://pibranemark.com)

 SIC invent Sweden AB  
Stora Åvägen 21  
43634 Askim, Sweden

 2460

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SIC invent Group