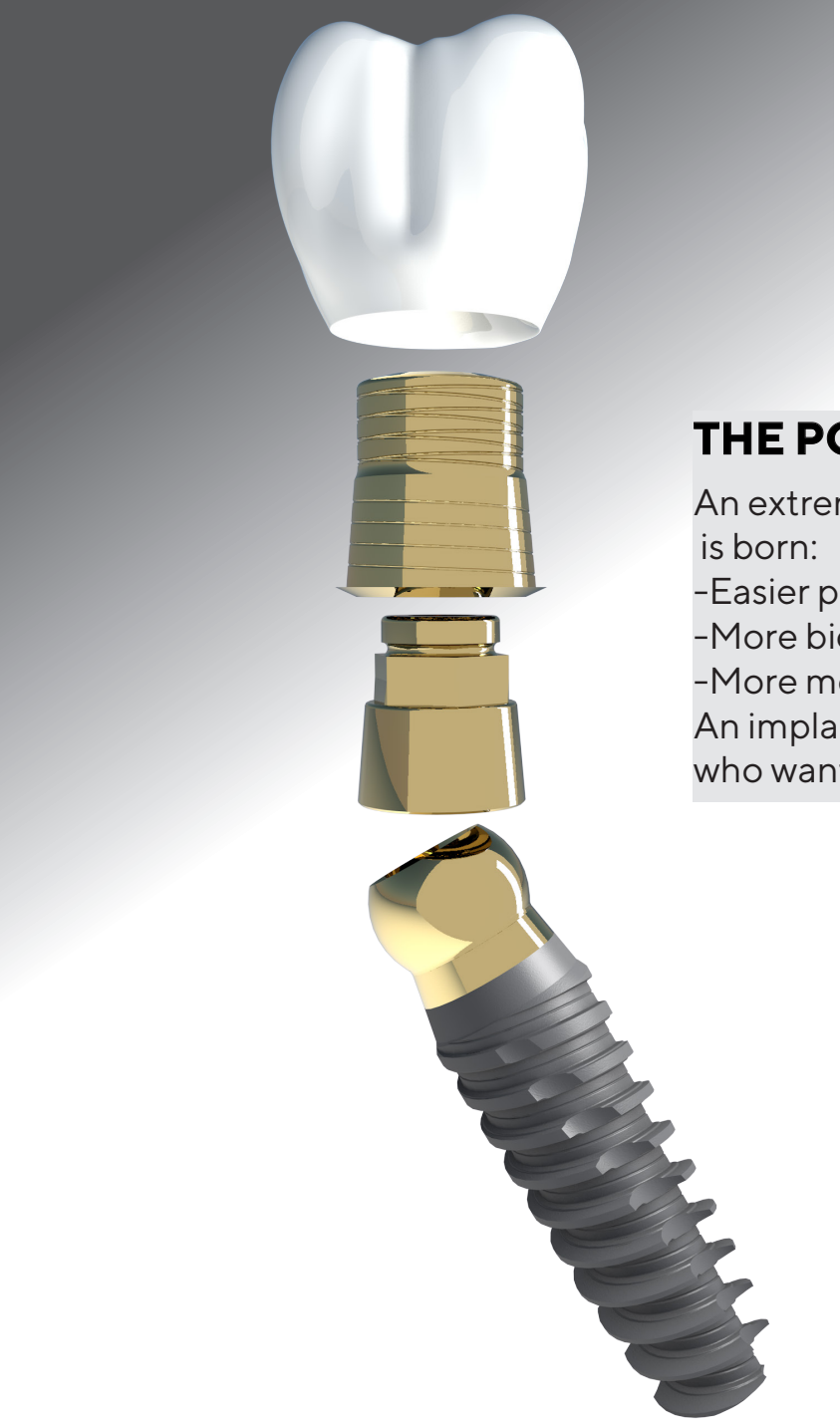
BIONICA®

ORBIT® Easy system concept

Amazing implant system with positional abutment from 0° to 30 ° on 360° of revolution



THE POWER OF CHANGE

An extreme implant system with new technology is born:
-Easier prosthetics
-More biological
-More mechanical resistance
An implant system dedicated to all professionals who want to stretch the limits of possibility

ORBIT® The BIONICA implant system is designed to facilitate daily work.
A design that provides confidence and immediacy, it can be used in all types of bone thanks to the modulation of the milling protocols. It guarantees primary stability in all situations and immediate loading is possible.

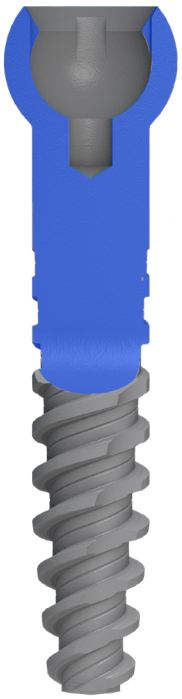
Easier prosthetic:
LEM Abutment positionable from 0° to 30° on 360° of revolution.
The LEM can be paralyzed directly in the oral cavity.
Single connection for all diameters and easy management.
On top of the LEM can have a conometric or screw-retained prostheses.

More biology:
Transgingival implant with a convergent shaped neck that creates more space to allow biological amplitude and hard-soft tissue stability.

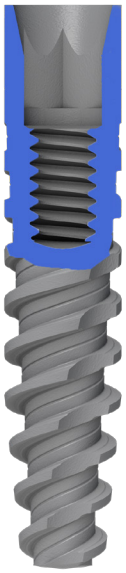
More mechanical resistance:
Not having the implant cavity increases mechanical resistance to an unprecedented level

Packaging

Container completely manufactured in titanium to avoid contamination of the implant with other materials.
The container and it's lid are completely recyclable and protected by a hermetically sealed blister in the box.
The screw-top lid is part of the and can be removed with the purpose screwdriver which separates it with a slight rotatory movement.



Orbit Ø 2.7



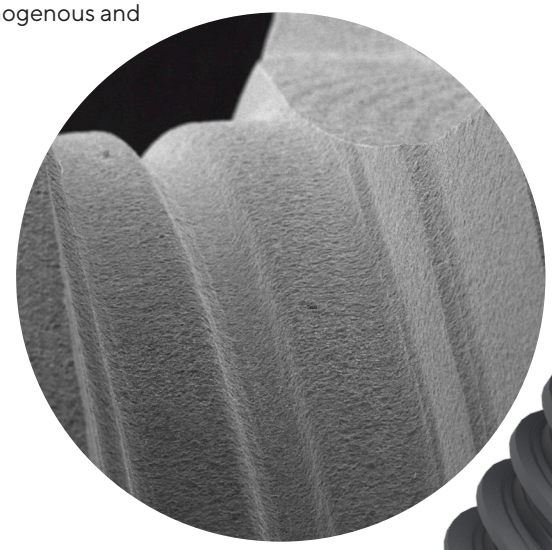
Standard Implant Ø 2.7

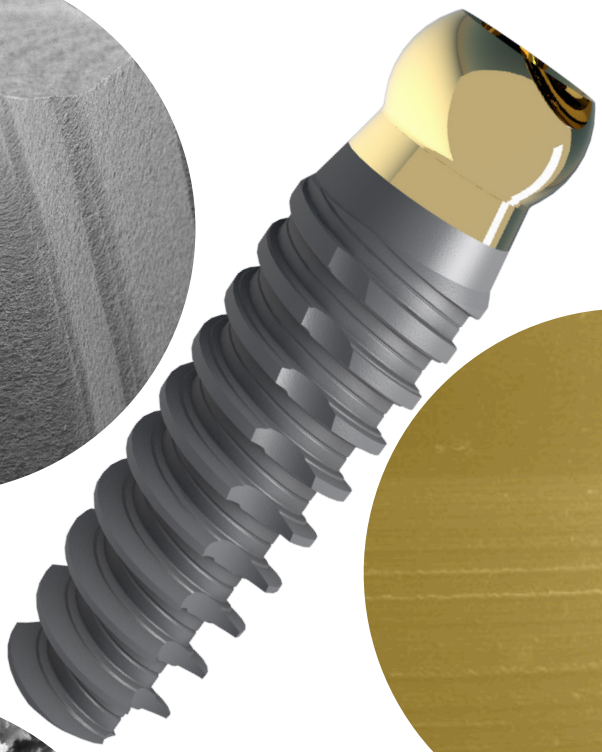
Why is it more resistant ?

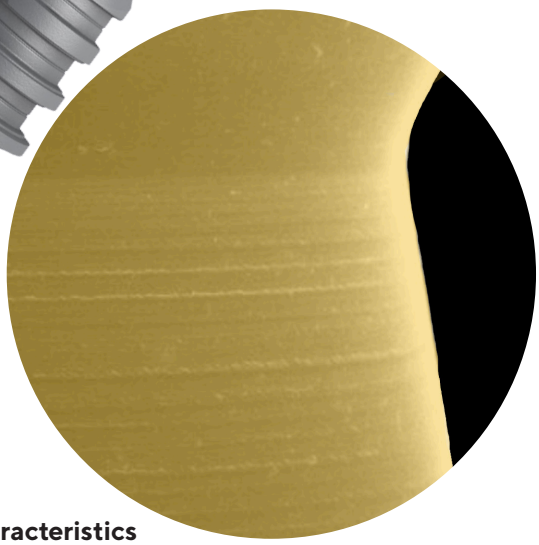
In the picture you see the structural difference between ORBIT Ø 2.7 mm diameter on the left and a common dental implant Ø 2.7 mm with an internal connection to the right.
ORBIT has a solid implant body while other implants by necessity have a cavity to house the various abutments which weakens the sides.
As a result of this connection system the Orbit range starts with a diameter of 2.4mm with a superior mechanical resistance to the current biphasic implant systems.

TiDAE Surface treatment

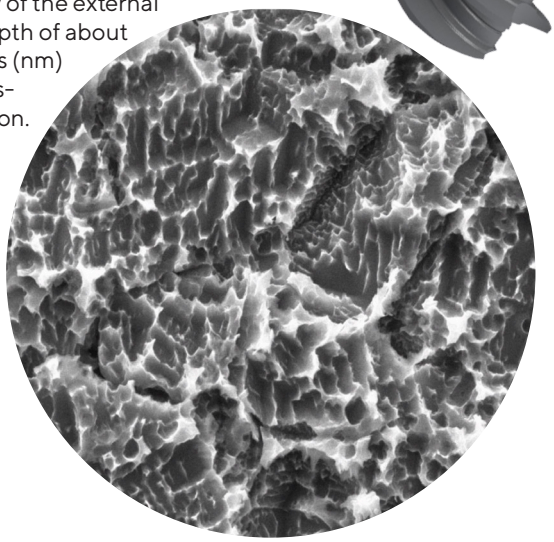
TiDAE Surface
The superficial treatment used for the endo-osseous part of the implant is based on Double Acid Etching. The final clean with glow discharge plasma leaves the surface homogenous and without residue.







Superficial topography
This technique allows the ability to get a topography of the external layers to a depth of about 8 nanometres (nm) for optimal os-seo-integration.



Characteristics of the anodised coronal portion
The coronal part of the ORBIT implant undergoes a process of anodization to give it a gold colour which is aestehically advantageous. This layer, naturally present on each titanium component, when exposed to the atmosphere is created by oxygen on the titanium. It usually measured about 3-4 nm and is transparent. The growth of this layer until a thickness comparable to the wavelength of light causes optical phenomena. Depending on the thickness of this layer, the optical effect creates defined colours without needing additional materials or coverings.

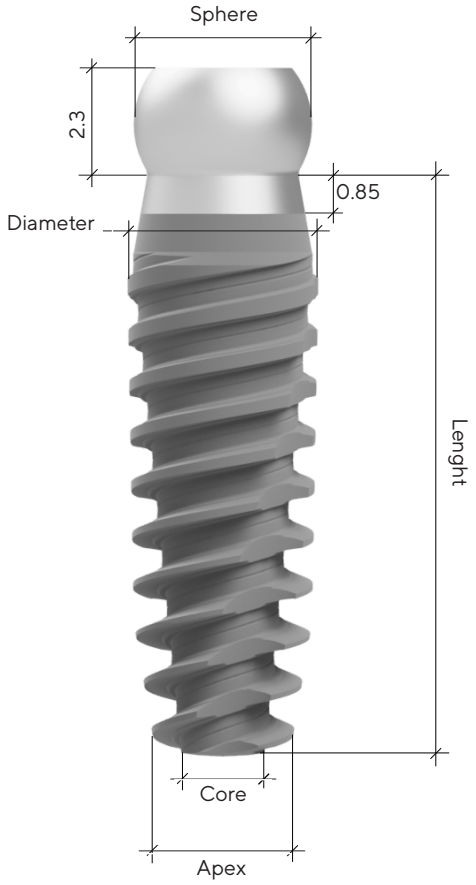
POLITECNICO MILANO

Static and dynamic loading tests in according to ISO 14801

ORBIT passed the static mechanical strength test with an average load of 1322 N.

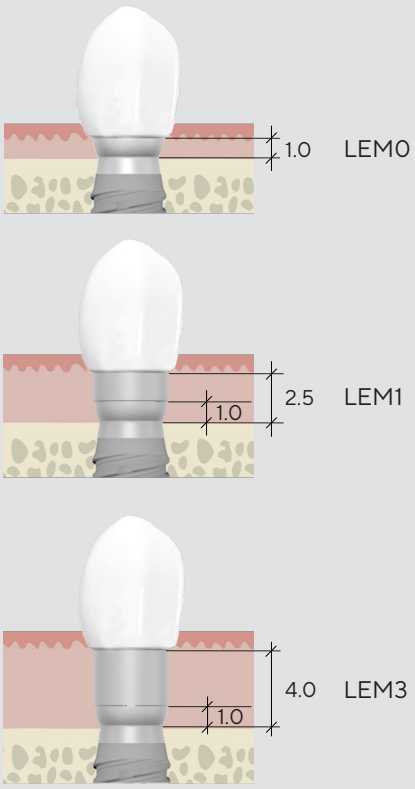
ORBIT passed the fatigue strength test with a 400 N for 5.000.000 cycles.

Orbit diameters and lengths



Soft tissue management

The special spherical connection that creates a 1.0 mm mucosal passage must be taken into consideration for the conditioning of soft tissues and the choice of the LEM abutment.



Diameter	Apex	Core	Sphere	Length						
Ø 2,4	Ø 2,0	Ø 1,4	Ø 4			mm 8	mm 10	mm 11,5	mm 13	mm 15
Ø 2,7	Ø 2,0	Ø 1,,4	Ø 4			mm 8	mm 10	mm 11,5	mm 13	mm 15
Ø 3,2	Ø 2,72	Ø 1,6	Ø 4			mm 8	mm 10	mm 11,5	mm 13	mm 15
Ø 3,7	Ø 2,8	Ø 1,6	Ø 4	mm 4	mm 6	mm 8	mm 10	mm 11,5	mm 13	mm 15
Ø 4,3	Ø 3,4	Ø 1,9	Ø 4	mm 4	mm 6	mm 8	mm 10	mm 11,5	mm 13	mm 15
Ø 5,0	Ø 3,9	Ø 2,5	Ø 4	mm 4	mm 6	mm 8	mm 10	mm 11,5	mm 13	mm 15
Ø 6,0	Ø 4,8	Ø 3,2	Ø 4	mm 4	mm 6	mm 8	mm 10	mm 11,5	mm 13	

Note:
All ORBIT fixture should be inserted with max 65 Ncm torque.

Product	Platform	Image	Material	Length	Art.-No.
ORBIT dental implant Ø 2.4 mm	Sphere Ø 4 mm		Ti gr. 4	8 mm	**OT2408**
				10 mm	**OT2410**
				11.5 mm	**OT2411**
				13 mm	**OT2413**
				15 mm	**OT2415**

Product	Platform	Image	Material	Length	Art.-No.
ORBIT dental implant Ø 2.7 mm	Sphere Ø 4 mm		Ti gr. 4	8 mm	**OT2708**
				10 mm	**OT2710**
				11.5 mm	**OT2711**
				13 mm	**OT2713**
				15 mm	**OT2715**

Product	Platform	Image	Material	Length	Art.-No.
ORBIT dental implant Ø 3.2 mm	Sphere Ø 4 mm		Ti gr. 4	8 mm	**OT3208**
				10 mm	**OT3210**
				11.5 mm	**OT3211**
				13 mm	**OT3213**
				15 mm	**OT3215**

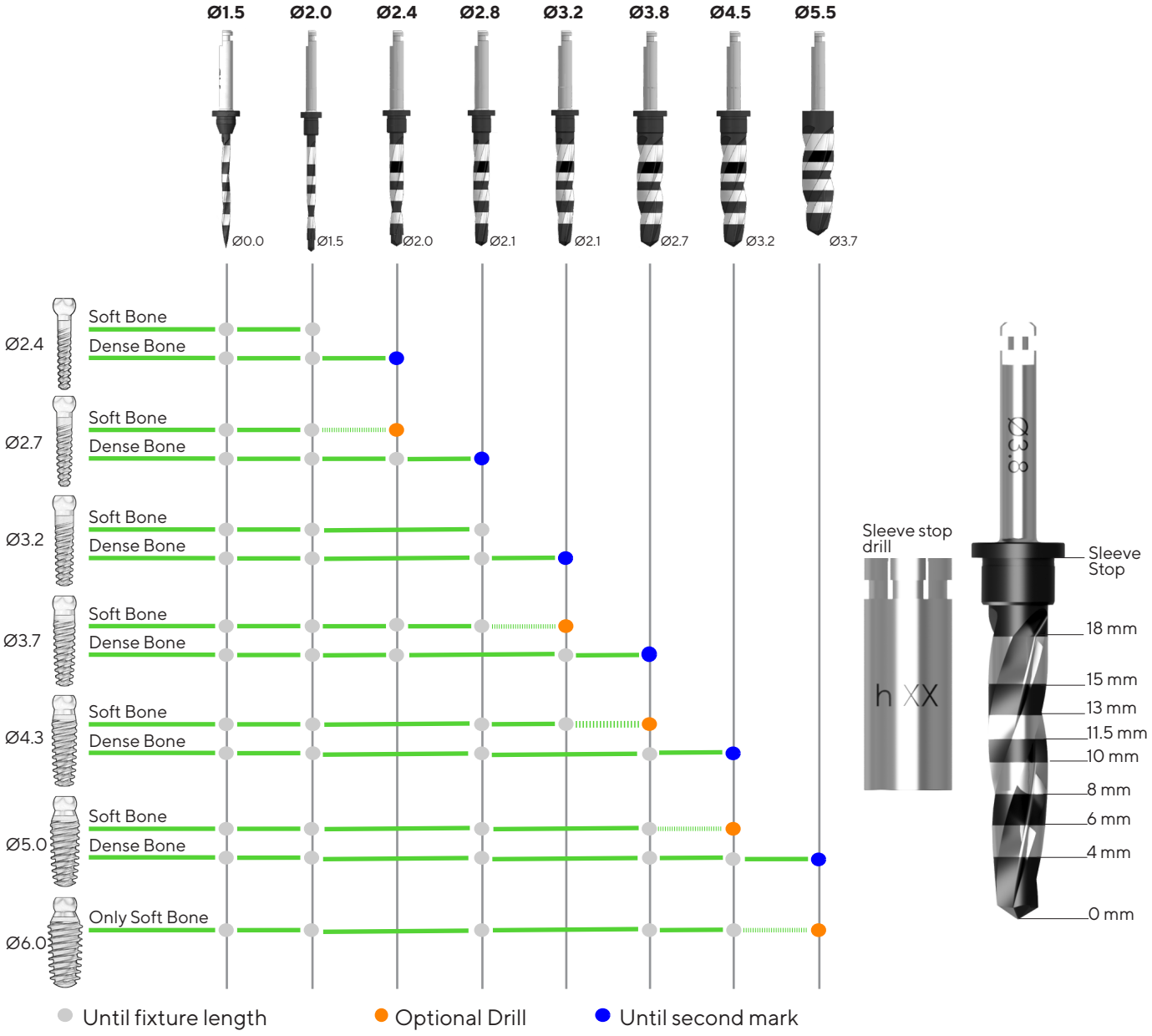
Product	Platform	Image	Material	Length	Art.-No.
ORBIT dental implant Ø 3.7 mm	Sphere Ø 4 mm		Ti gr. 4	4 mm	**OT3704**
				6 mm	**OT3706**
				8 mm	**OT3708**
				10 mm	**OT3710**
				11.5 mm	**OT3711**
				13 mm	**OT3713**
				15 mm	**OT3715**

Product	Platform	Image	Material	Length	Art.-No.
ORBIT dental implant Ø 4.3 mm	Sphere Ø 4 mm		Ti gr. 4	4 mm	**OT4304**
				6 mm	**OT4306**
				8 mm	**OT4308**
				10 mm	**OT4310**
				11.5 mm	**OT4311**
				13 mm	**OT4313**
				15 mm	**OT4315**

Product	Platform	Image	Material	Length	Art.-No.
ORBIT dental implant Ø 5.0 mm	Sphere Ø 4 mm		Ti gr. 4	4 mm	**OT5004**
				6 mm	**OT5006**
				8 mm	**OT5008**
				10 mm	**OT5010**
				11.5 mm	**OT5011**
				13 mm	**OT5013**
				15 mm	**OT5015**

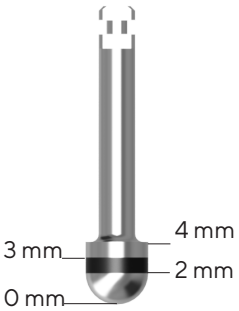
Product	Platform	Image	Material	Length	Art.-No.
ORBIT dental implant Ø 6.0 mm	Sphere Ø 4 mm		Ti gr. 4	4 mm	**OT6004**
				6 mm	**OT6006**
				8 mm	**OT6008**
				10 mm	**OT6010**
				11.5 mm	**OT6011**
				13 mm	**OT6013**

Drilling sequence



Bone mill

to prepare the bone in cases where it is necessary to sink the spherical part of the fixture.



Attention

When placing a ORBIT fixture in soft bone (D IV) the surgeon should consider undersizing osteotomy.

The final drill diameter should be limited to the one immediately smaller than the diameter that should have been used.

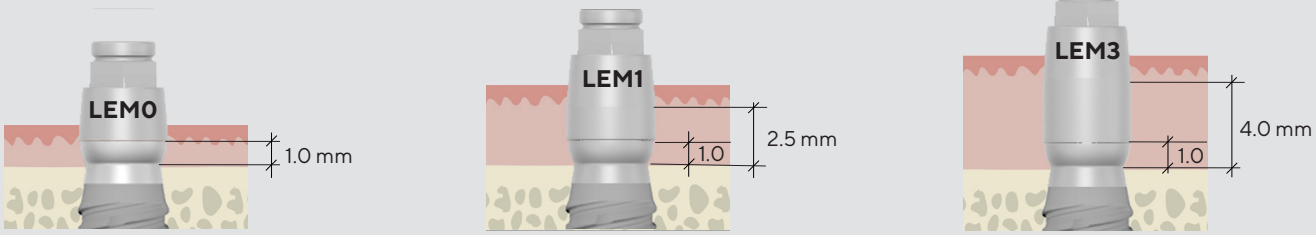
When placing an ORBIT fixture in hard bone (D I) do not underprepare the osteotomy site.

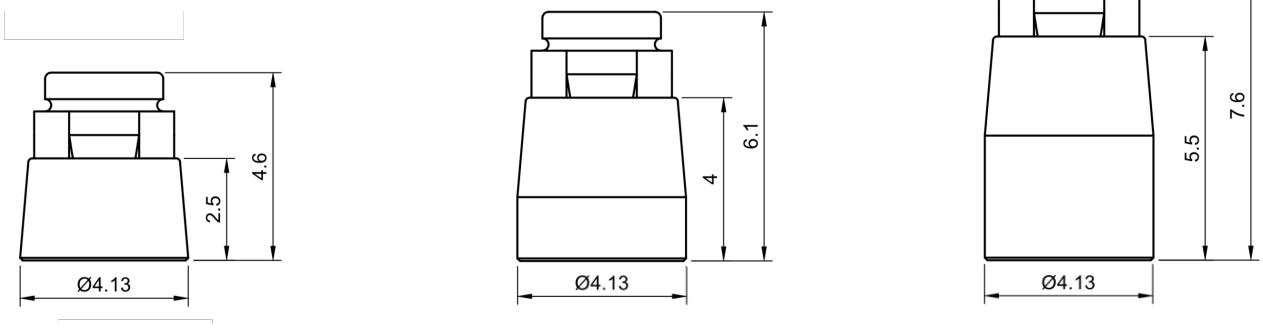
The surgeon should consider to use as final drill diameter the one immediately bigger than the diameter that should have been used, stopping at the second laser mark. This will create an osteotomy of proper dimension in the dense cortical bone without any underpreparation.

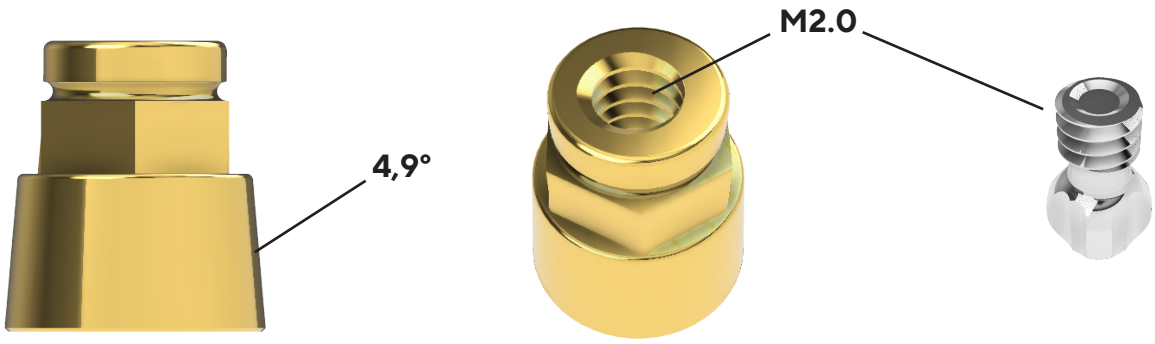
Product	Front	Persp.	Description	Material	Art.-No.
LEM-ABUTMENT 1.0 with PROBE-SCREW			Abutment for conometric and screw prostetic Ø 4.13 mm h 4.6 mm gingiva height 1.0 mm with Probe-screw	Ti gr. 5	**LEM0**
LEM-ABUTMENT 2.5 with PROBE-SCREW			Abutment for conometric and screw prostetic Ø 4.13 mm h 6.1 mm gingiva height 2.5 mm with Probe-screw	Ti gr. 5	**LEM1**
LEM-ABUTMENT 4.0 with PROBE-SCREW			Abutment for conometric and screw prostetic Ø 4.13 mm h 7.6 mm gingiva height 4.0 mm with Probe-screw	Ti gr. 5	**LEM3**
PROBE-SCREW			M2 Abutment screw for LEM	Ti gr. 5	**PRO**

Soft tissue management

The special feature of the spherical connection that creates a 1.0 mm mucous passage must be taken into consideration for the modeling of soft tissues and the choice of the LEM abutment.







Note:
All LEM abutments should be inserted with 45Ncm torque for bridges and extended work.
65Ncm for single implants.

Impression Coping

Product	Front	Persp.	Description	Material	Art.-No.
IMPRESSION COPING CLOSE TRAY			LEM transfert closed tray	Ti gr. 5	**TCC**
IMPRESSION COPING OPEN TRAY			LEM transfert open tray with screw	Ti gr. 5	**TCA**

Digital Impression

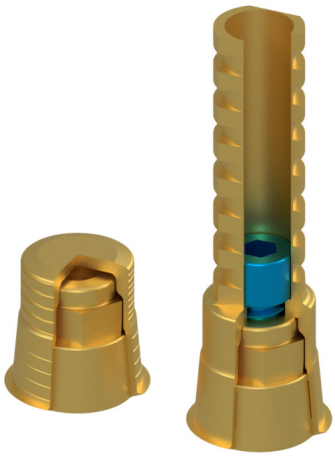
Product	Front	Persp.	Description	Material	Art.-No.
SCAN BODY LEM			Digital abutment sandblasted for LEM	Ti gr. 5	**MSD**

Analogs

Product	Front	Persp.	Description	Material	Art.-No.
ORBIT REPLICA			ORBIT replica analogic/digital	Ti gr. 5	**ANO**
LEM REPLICA			LEM replica analogic/digital	Ti gr. 5	**ANL**

Healing Cover

Product	Front	Persp.	Description	Material	Art.-No.
HEALING COVER LEM H5.4			Cover LEM Ø 5.2 mm, gingiva height 5.4 mm	Ti gr. 5	**HC1**
HEALING COVER LEM H6.7			Cover LEM Ø 5.2 mm, gingiva height 6.7 mm	Ti gr. 5	**HC3**
HEALING COVER LEM LARGE H5.4			Cover LEM large Ø 5.6 mm, gingiva height 5.4 mm	Ti gr. 5	**HCS1**
HEALING COVER LEM LARGE H6.7			Cover LEM large Ø 5.6 mm, gingiva height 6.7 mm	Ti gr. 5	**HCS3**
COVER SCREW			Cover screw for ORBIT	Ti gr. 5	**VT**



Using the appropriate cap, both conometric and screw prosthetic can be added to the LEM.
For both these options there are rotational non-rotational caps.
The prosthetic screws should be inserted using 25/30Ncm.
The medical grade 5 titanium caps are covered in titanium nitride to increase their resistance to wear and tear.
Aesthetics is improved by the gold colour which hides the metal under the soft tissue.

Conical-retained Restoration

Product	Front	Persp.	Description	Material	Art.-No.
CONOMETRIC LEM-CAP ENGAGING			Not rotational LEM-cap for conometric retained crowns	Ti gr. 5	**CLCAE**
CONOMETRIC LEM-CAP NOT ENGAGING			Rotational LEM-cap for conometric retained bridges	Ti gr. 5	**CLCRE**
CONOMETRIC RESIN LEM-CAP NOT ENGAGING			Rotational resin LEM-cap for conometric retained bridges	Ti gr. 5	**CLCRRE**
CONOMETRIC WELDING LEM-CAP NOT ENGAGING			Rotational welding LEM-cap for conometric retained bridges	Ti gr. 5	**CLCRW**

Screw-retained Restoration

Product	Front	Persp.	Description	Material	Art.-No.
SCREW LEM-CAP ENGAGING			Not rotational LEM-cap for screw retained crowns with VCA screw	Ti gr. 5	**CLAA**
SCREW LEM-CAP NOT ENGAGING			Rotational LEM-cap for bridges retained screw with VCA screw	Ti gr. 5	**CLAR**

Cemented Restoration

Product	Front	Persp.	Description	Material	Art.-No.
CEMENTED LEM-CAP ENGAGING			Not rotational LEM-cap for cemented retained crowns with VCA screw	Ti gr. 5	**LC1**
CEMENTED LEM-CAP NOT ENGAGING			Rotational LEM-cap for cemented retained crowns with VCA screw	Ti gr. 5	**LC0**

Screw-retained

Product	Front	Persp.	Description	Material	Art.-No.
SCREW RETAINED			retained screw	Ti gr. 5	**VCA**

Note
The prosthetic screws should be inserted using 30Ncm

Overdenture Restoration

Product	Image	Description	Material	Art.-No.
OVER-LEM 3.6		Abutment for overdenture restoration h 3.6	Ti gr. 5	**030ORB36**
OVER-LEM 5.0		Abutment for overdenture restoration h 5.0	Ti gr. 5	**030ORB5**
CAP ATTACHEMENT KIT		Cap attachement housing and elastic retentive caps	Steel	**192ECE**
CAP ATTACHEMENT		Cap attachement housing	Steel	**141CAE**
ELASTIC RETENTIVE CAP		Yellow retentive cap - Retention 0,6 kg	Plastic	**140CEG**
ELASTIC RETENTIVE CAP		Pink retentive cap - Retention 1.2 kg	Plastic	**140CER**
ELASTIC RETENTIVE CAP		White retentive cap - Retention 1.8 kg	Plastic	**140CET**
ELASTIC RETENTIVE CAP		Purple retentive cap - Retention 2.7 kg	Plastic	**140CEV**
ELASTIC RETENTIVE CAP		Black retentive LABORATORY cap	Plastic	**140CEN**
RETENTIVE HOLDER		White retentive older for driver	Plastic	**144MTE**
IMPRESSION COPING		OVER-LEM transfert	Steel	**044CAIN**
OVER-LEM REPLICA		OVER-LEM analog	Steel	**144AE**
INSERTION/EXTRACTOR TOOL		Insertion and extractor tool for elastic retentive cap	Plastic steel	**485IC**

Note
The OVER-LEM should be locked at torque MAX 50 Ncm

Laboratory component

Product	Front	Persp.	Description	Material	Art.-No.
REPOSITION LEM-CAP			LEM-CAP for reposition	Ti gr. 5	**LCPZ**
LABORATORY CONOMETRIC LEM-CAP ENGAGING			Not rotational laboratory LEM-cap for crowns conometric retained	Ti gr. 5	**CLCLAE**
LABORATORY CONOMETRIC LEM-CAP NOT ENGAGING			Rotational laboratory LEM-cap for bridges conometric retained	Ti gr. 5	**CLCLRE**
LABORATORY PROSTHETIC SCREW CAP			Laboratory M2.0 screw-retained HEX 1.2	Ti gr. 5	**VCAL**

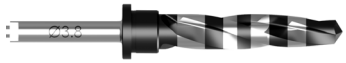
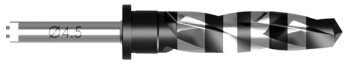
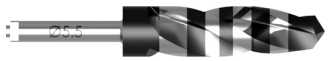
BOX IMPLANT SURGICAL KIT

Autoclavable boxes made entirely from materials suitable for steam sterilisation, with silicon support and printed drill sequence surgical protocol.
Is certified in accordance with ISO 9001:2008 for the design and production of injection moulded plastic containers for the industrial and medical sectors.
And it complies with UNI CEI EN ISO 13485:2016 "For the design and production of plastic autoclavable containers for use in the medical sector".

SURGICAL AND PROSTHETIC INSTRUMENTS

All the surgical instruments were created by BIONICA with the highest quality materials for increased durability.
A specific instrument has been designed to facilitate the parallelize of LEM abutment prosthetic emergence.

Product	Image	Description	Material	Art.-No.
SURGICAL BOX		Surgical box without instruments	Plastic and silicone	**BKO**
SURGICAL BOX WITH SURGICAL INSTRUMENTS		Surgical box with instruments Drill, Stop drill sleeves, Bone mill, Extension, Implant driver small and long, Screw driver small and long, Torque wrench, Lem parallelize.	Plastic silicone and surgical stell	**KCCO**

Product	Image	Description	Material	Art.-No.
LANCEOLATE MILLING CUTTER		Lanceolate milling cutter Ø 1.5	AISI630	**FL15**
STRAIGHT DRILL Ø 2.0		Straight drill Ø 2.0	AISI630	**FD20**
STRAIGHT DRILL Ø 2.4		Straight drill Ø 2.4	AISI630	**FD24**
CONICAL DRILL Ø 2.8		Conical drill Ø 2.8 apex Ø 2.1	AISI630	**FC285**
CONICAL DRILL Ø 3.2		Conical drill Ø 3.2 apex Ø 2.1	AISI630	**FC325**
CONICAL DRILL Ø 3.8		Conical drill Ø 3.8 apex Ø 2.7	AISI630	**FC385**
CONICAL DRILL Ø 4.5		Conical drill Ø 4.5 apex Ø 3.2	AISI630	**FC455**
CONICAL DRILL Ø 5.5		Conical drill Ø 5.5 apex Ø 3.7	AISI630	**FC575**

Product	Image	Description	Material	Art.-No.
BONE MILL Ø 4.0		Bone mill Ø 4.0	AISI630	**FRO**

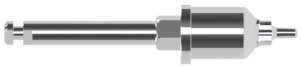
Product	Image	Description	Material	Art.-No.
EXTENSION INSTRUMENT		Extension instrument	AISI630	**PRFR**

Product	Image	Description	Material	Art.-No.
H 4.0 DRILL STOP		Stop sleeve h 4.0 mm for section drill max Ø 3.2	AISI630	**BCC400**
H 6.0 DRILL STOP		Stop sleeve h 6.0 mm for section drill max Ø 3.2	AISI630	**BCC600**
H 8.0 DRILL STOP		Stop sleeve h 8.0 mm for section drill max Ø 3.2	AISI630	**BCC800**
H 10.0 DRILL STOP		Stop sleeve h 10.0 mm for section drill max Ø 3.2	AISI630	**BCC100**
H 11.5 DRILL STOP		Stop sleeve h 11.5 mm for section drill max Ø 3.2	AISI630	**BCC115**
H 13.0 DRILL STOP		Stop sleeve h 13.0 mm for section drill max Ø 3.2	AISI630	**BCC130**

Product	Image	Description	Material	Art.-No.
H 4.0 DRILL STOP LARGE		Stop sleeve h 4.0 mm large for section drill max Ø 4.5	AISI630	**BCC400L**
H 6.0 DRILL STOP LARGE		Stop sleeve h 6.0 mm large for section drill max Ø 4.5	AISI630	**BCC600L**
H 8.0 DRILL STOP LARGE		Stop sleeve h 8.0 mm large for section drill max Ø 4.5	AISI630	**BCC800L**
H 10.0 DRILL STOP LARGE		Stop sleeve h 10.0 mm large for section drill max Ø 4.5	AISI630	**BCC100L**
H 11.5 DRILL STOP LARGE		Stop sleeve h 11.5 mm large for section drill max Ø 4.5	AISI630	**BCC115L**
H 13.0 DRILL STOP LARGE		Stop sleeve h 13.0 mm large for section drill max Ø 4.5	AISI630	**BCC130L**

Parallelizer LEM

Product	Image	Description	Material	Art.-No.
Parallelizer LEM		Parallelizer for LEM abutment. This specific instrument has been designed to facilitate the paral-lelize of LEM abutment prosthetic emergence.	Surgical Steel	**PAR**
TORQUE WRENCH		Torque wrench with Ø 7.0 mm head	Surgical Stell-Peek	**DNM**

Product	Image	Description	Material	Art.-No.
LEM Driver		Insert for abutment LEM	Surgical Stell	**ILEM**
IMPLANT DRIVER S		Implant driver contrangle small	Surgical Stell	**ICIC**
IMPLANT DRIVER L		Implant driver contrangle long	Surgical Stell	**ICIL**
IMPLANT DRIVER GUIDED		mplant driver contrangle guided	Surgical Stell	**ICIG**

Product	Image	Description	Material	Art.-No.
SCREWDRIVER 1.2 SMALL		Prostetic srew-driver 1.2 small	Surgical Stell	**CMC**
SCREWDRIVER 1.2 LONG		Prostetic srew-driver 1.2 long	Surgical Stell	**CML**
SCREWDRIVER 1.2 MACHINE SMALL		Prostetic srew-driver 1.2 machine small	Surgical Stell	**CCC**
SCREWDRIVER 1.2 MACHINE LONG		Prostetic srew-driver 1.2 machine long	Surgical Stell	**CCL**
EXTRACTOR CAP		Extractor for conometrical LEM cup	Surgical Stell	**EC3**
OVER-LEM SCREWDRIVER MACHINE		Prostetic srew-driver machine for OVER-LEM	Surgical Stell	**ICLEMB**
IMPLANT CAVITY CLEANET		Implant cavity cleanet	Surgical Stell	**PLC**

ORBIT®

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