

EasyLineImplant

The EasyLineImplant system was born thanks to the will of an Italian company focused on the design and realization of oral implantology products, and in general on biomechanics.

OVERMED is an Italian company with a

solid experience in medical field, thanks to years of research and development performed in close contact with doctors specialized in oral implantology, osteosynthesis and orthopedics. Located in its operative site next to Milan, develops medical devices thanks to a team of skilled people who use modern technologies and cooperate with scientific institutes. Moreover OVERMED is supported by the strong productive experience the entire productive process of a medical device, of its technicians, so that it is able to manage in total autonomy, using the last generation equipment. OVERMED is certified and organized with a quality system conforming to UNI EN ISO 13485:2016 standard.



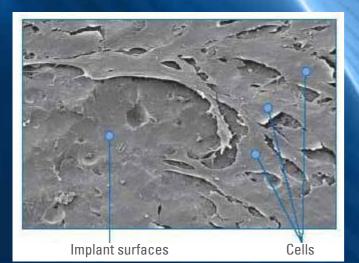
Made in Milano



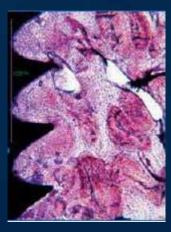
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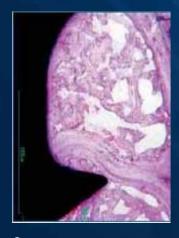
Histological research implant surface cells



In vitro studies demonstrate that osteoblast cells adhere and proliferate on micro rough surfaces (2). In vitro studies confirm that the SLA surface of EasyLine® accelerates the osseointegration process (3).



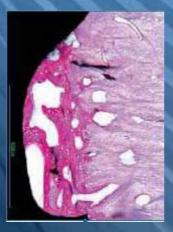
2
Histological
examination
immediately after
insertion (time 0),
the threads show
extensive contact
with the host bone.



At time 0 the large and widely spaced threads sink into trabecular bone.



Soon after the implant the peri-implant threads space is occupied by bone fragments with osteogenic potential



At two weeks inter-thread space is occupied by newly formed trabecular bone in direct contact with the surface of the peri-implant.

Bibliography

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- 2. S. Guizzardi, C. Galli, D. Martini, S. Belletti, A. Tinti, M. Raspanti, P. Taddei, A. Ruggeri and R. Scandroglio, "Different Titanium Surface Treatment Influences Human Mandibular Osteoblast Response", J Periodontol 2004 Feb; 75(2): 273-82
- 3. M. Franchi, E. Orsini, A. Trire, M. Quaranta, D. Martini, G.G. Piccari, A. Ruggeri, V. Ottani, "Osteogenesis and morphology of the peri-implant bone facing dental implants", ScientificWorldJournal 2004 Dec 14; 4: 1083-95
- 4. M.Franchi, M. Fini, D. Martini, E. Orsini, L. Leonardi, A. Ruggeri, G. Giavaresi, V. Ottani, "Biological fixation of endosseous implants", Micron 36 (2005): 665-671

EasyDip® system represents the solution for poor gingival thickness

Implant

EasyDip® is an implant designed to address the aesthetic problems due to poor gingival thickness. All fixtures are made in Grade 4 medical use Titanium and are manufactured using the most modern technologies. The attention in finishing and in surface characteristics, combined with meticulous controls during the production process, make the EasyDip® system one of the most viable solutions at the international level.

Connection

Inside the neck of the fixture there is an octagonal seating, followed by a tapered section.

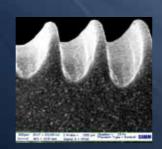
This seating is used for the engagement of the prosthetic components and is standard for all types of EasyDip® fixtures.

The conical coupling gives stability to the implant-abutment connection while the octagonal portion prevents rotation. On the bottom of the connection there is an M2 threaded hole that allows to tighten the abutment to the implant through a fastening screw.

Surface

For an optimal and rapid osseointegration, the implant surface is treated by a special shot peening process. This process is carried out with white corundum specific to the medical field with constant pressure and precise particle size.

Subsequently, the threaded portion of the fixture is subjected to a chemical etching treatment. In-vivo studies and histological analysis have confirmed that the surface treatments performed on EasyDip® implants are able to speed up the osseointegration process and thus reducing the time of bone neogenesis.





Micro-threading

The cortical micro-threading allows optimal osseointegration and minimal ridge shrinkage.

The surgical protocol involves the use of the countersink drill to allow for an ideal accommodation of the micro-threaded neck.

Longitudinal slots

The three longitudinal slots collect the bone fragments obtained from the action of th cutters.

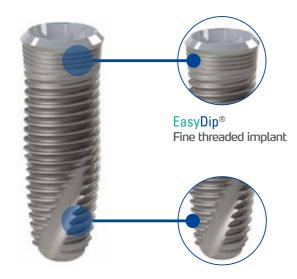
During screwing they allow the redistribution of the fragments along the lower portion of the implant.

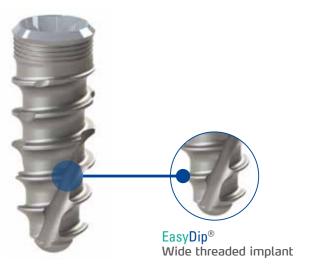
Thread profiles

The implant has been designed to adapt to the different characteristics of the bone tissue on which the intervention takes place. In this regard, there are two different thread profiles: fine-double threaded and coarse threaded.

The fine-double threaded implant is mainly adapted to the presence of compact bone tissue D1/D2. In these cases it is advisable to scrupulously respect the surgical protocol and use the tap. It is also possible to use this system, excluding the use of the tap, in bone tissues D3/D4 (upper and distal zones), after having verified the stability of the same.

The coarse threaded implant is characterized by an extremely large thread, which enables an exceptional screwing even in conditions of bone quality D3/D4. In case of more compact bone, we recommend the use of bone tap.



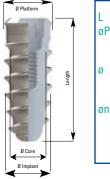


IMPLANTS

EasyDip® wide threaded implant

= ø Core

excluded



= Length øP = ø Platform Implant maximum dimensions outside bone = ø Implant bone space filled by the implant, threads included

implant, threads

bone space filled by the

Color code (yellow, blue, green) identifies implants with the same core diameter. This color code is used to identify the corresponding surgical instruments, too.

EasyDip	9	0	0
Øn	2,9	3,4	3,85



EasyDip[®] Wide threaded

Code	ø (mm)	ø P(mm)	L (mm)
EDW4008	4.00	4.25	8
EDW4010	4.00	4.25	10
EDW40115	4.00	4.25	11.5
EDW4013	4.00	4.25	13
EDW4015	4.00	4.25	15



EasyDip[®] Wide threaded

Code	ø (mm)	ø P(mm)	L (mm)
EDW47508	4.75	4.80	8
EDW47510	4.75	4.80	10
EDW475115	4.75	4.80	11.5
EDW47513	4.75	4.80	13
EDW47515	4.75	4.80	15

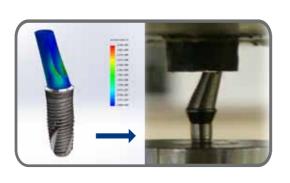


10

EasyDip® Wide threaded

Code	ø (mm)	ø P(mm)	L (mm)
EDW52508	5.25	4.80	8
EDW52510	5.25	4.80	10
EDW525115	5.25	4.80	11.5

The structure of the EasyLine fixture and its prosthetic components were analyzed by numerical techniques using FEA (Finite Element Analysis) and the results have been validated successfully by mechanical tests, performed in accordance with current regulatory requirements.



EasyDip® fine threaded implant



- Implant maximum dimensions outside bone = ø Implant bone space filled by the implant, threads included n = ø Core bone space filled by the implant, threads
- excluded







EasyDip® Fine threaded



EasyDip[®] Fine threaded

Color code (yellow, blue, green) identifies implants with the same core diameter. This color code is used to identify the corresponding surgical instruments, too.

EasyDip	0	0	0
Øn	2,9	3,4	3,85

Code	ø (mm)	ø P(mm)	L (mm)
ED3508	3.50	4.25	8
ED3510	3.50	4.25	10
ED35115	3.50	4.25	11.5
ED3513	3.50	4.25	13
ED3515	3.50	4.25	15

Code	ø (mm)	ø P(mm)	L (mm)
ED4008	4.00	4.25	8
ED4010	4.00	4.25	10
ED40115	4.00	4.25	11.5
ED4013	4.00	4.25	13
ED4015	4.00	4.25	15

Code	ø (mm)	ø P(mm)	L (mm)
ED47508	4.75	4.80	8
ED47510	4.75	4.80	10
ED475115	4.75	4.80	11.5
ED47513	4.75	4.80	13

Cover screw and healing screws

Cover screw

Included in the fixture packaging Material: Grade 4 Titanium



Code	
ELCS	

Standard healing screws

Material: Titanium gr 5 (Ti6AI4V)

Material: Titanium gr 5 (Ti6AI4V)

Anatomical healing screws



Code	ø (mm)	L(mm)
EDHA	4.5	2.0
EDHA1	4.5	3.5
EDHA2	4.5	5.0
ENHA	5.0	2.0

for implants ø P 4.25 mm

for implants ø P 4.8 mm

77	ΕC
4 2	ED

ENHA1

Code	ø (mm)	L(mm)
DAHA	5.5	2.0
DAHA1	5.5	3.5
DAHA2	5.5	5.0

5.0

for implants ø P 4.25 mm

EasyShort® system represents a solution for reduced bone height

Implant

EasyShort® is a submerged implant that has been designed to address the aesthetic problems due to reduced availability of bone in the vertical direction. All implants are made of Grade 4 medical use Titanium and are manufactured using the most modern technologies. The attention to finishing and surface characteristics, combined with meticulous controls during the production process, causes the EasyShort® system to come into the market as one of the most viable solutions at the international level.

Connection

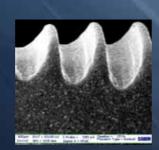
Inside the neck of the fixture there is an octagonal seating, followed by a tapered section.

This seating is used for the engagement of the prosthetic components and it is standard for all types of EasyShort® fixtures.

The conical coupling gives stability to the implantabutment connection while the octagonal portion prevents rotation. On the bottom of the connection there is an M2 threaded hole that allows to tighten the abutment to the implant through a fastening screw.

Surface

For an optimal and rapid osseointegration, the implant surface is treated by a special shot peening process. This process is carried out with white corundum, specific to the medical field, with constant pressure and particle size. Subsequently, the threaded portion of the fixture is subjected to a chemical etching treatment. In-vivo studies and histological analysis have confirmed that the surface treatments performed on EasyShort® systems are able to speed up the osseointegration process and thus reducing the time of bone neogenesis.





Micro-threading

The cortical micro-threading allows optimal osseointegration and minimal ridge shrinkage. The surgical protocol involves the use of the countersink drill to allow for an ideal accommodation of the micro-threaded neck.



Longitudinal slots

The three longitudinal slots collect the bone fragments obtained from the action of the cutters.

During screwing they allow the redistribution of the fragments along the lower portion of the implant.

Threads

The implant is designed to adapt to the characteristics of the bone tissue into which it is implanted.

IMPLANTS

EasyShort® wide threaded implant



- L = Length

 ØP = Ø Platform
 Implant maximum
 dimensions outside bone

 Ø = Ø Implant bone space
 filled by the implant,
 threads included
- in = Ø Core bone space filled by the implant , threads excluded

Color code (yellow, blue, green) identifies implants with the same core diameter. This color code is used to identify the corresponding surgical instruments, too.

EasyShort	0	0	0
Øn	2,9	3,4	3,85





Code	ø (mm)	ø P(mm)	L (mm)
EDW40065	4.00	4.25	6,5





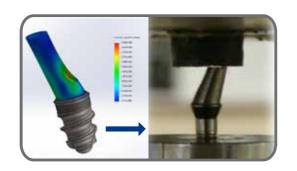
Code	ø (mm)	ø P(mm)	L (mm)
EDW475065	4.75	4.80	6,5



EasyShort® Wide threaded

Code	ø (mm)	ø P(mm)	L (mm)
EDW525065	5.25	4.80	6,5

The structure of the EasyLine fixture and its prosthetic components were analyzed by numerical techniques using FEA (Finite Element Analysis) and the results have been validated successfully by mechanical tests, performed in accordance with current regulatory requirements.



Cover screw and healing screws

Cover Screws

Included in the fixture packaging Material: Titanium gr 4



Code	
ELCS	

Standard healing screws

Material: Titanium gr 5 (Ti6AI4V)



Code	ø (mm)	L(mm)
EDHA	4.5	2.0
EDHA1	4.5	3.5
EDHA2	4.5	5.0
ENHA	5,0	2.0
ENHA1	5,0	3.5

Anatomical healing screws

Material: Titanium gr 5 (Ti6AI4V))



Code	ø (mm)	L(mm)
EDAHA	5.5	2.0
EDAHA1	5.5	3.5
EDAHA2	5.5	5.0

for implants ø P 4.25 mm

for implants

ø P 4.25 mm

for implants ø P 4.8 mm

EasyNeck® system represents the classical solution for one stage surgery

Implant

EasyNeck® is an implant recommended for all cases in which a one stage surgery is chosen, in the posterior sites and where the gingival thickness is important. It has a transgingival neck of 3 mm which, with appropriate surgical protocol, can be partially inserted sub cortically.

All fixtures are made in Grade 4 medical use Titanium and are manufactured using the most modern technologies. The attention to finishing and surface characteristics, combined with meticulous controls during the production process, causes the EasyNeck® system to come into the market as one of the most viable solutions at the international level.

Connection

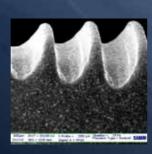
Inside the neck of the fixture is an octagonal seating, followed by a tapered section.

This seating is used for the engagement of the prosthetic components and it is standard for all types of EasyNeck® fixtures.

The conical coupling gives stability to the implantabutment connection while the octagonal portion prevents rotation. On the bottom of the connection there is an M2 threaded hole that allows to tighten the abutment to the implant through a fastening screw.

Surface

For an optimal and rapid osseointegration, the implant surface is treated by a special shot peening process. This process is carried out with white corundum, specific to the medical field, with constant pressure and particle size. Subsequently, the threaded portion of the fixture is subjected to a chemical etching treatment. In-vivo studies and histological analysis have confirmed that the surface treatments performed on EasyNeck® systems are able to speed up the osseointegration process and thus to reduce the time of bone neogenesis.





Collar

The transgingival neck (3.0 mm) has a machined surface that provides excellent adhesion to the gingival mucosa.

Longitudinal slots

The three longitudinal slots collect the bone fragments obtained from the action of the reamers.

During screwing they allow the redistribution of the fragments along the lower portion of the implant.

Thread profiles

The implant has been designed to adapt to the different characteristics of the bone tissue on which the intervention takes place. In this regard, there are two different thread profiles: fine-double threaded and coarse threaded.

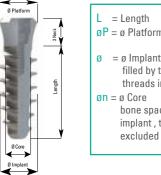
The fine-double threaded implant is mainly adapted to the presence of compact bone tissue D1/D2. In these cases it is advisable to scrupulously respect the surgical protocol and use the tap. It is also possible to use this system, excluding the use of the tap, in bone tissues D3/D4 (upper and distal zones), after having verified the stability of the same.

The coarse threaded implant is characterized by an extremely large thread, which enables an exceptional screwing even in conditions of bone quality D3/D4. In case of more compact bone, we recommend the use of bone tap.





EasyNeck® Wide threaded implant



L = Length $\emptyset P = \emptyset \text{ Platform 4,8}$ \emptyset = \emptyset Implant bone space filled by the implant, threads included bone space filled by the implant, threads

Color code (yellow, blue, green) identifies implants with the same core diameter. This color code is used to identify the corresponding surgical instruments, too.

EasyNeck	0	0	0
Øn	2,9	3,4	3,85



EasyNeck® Wide threaded

ø (mm)	L(mm)
4.00	8
4.00	10
4.00	11.5
4.00	13
4.00	15
	4.00 4.00 4.00 4.00



EasyNeck® Wide threaded

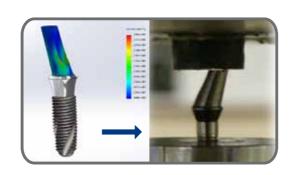
Code	ø (mm)	L(mm)
ENW47508	4.75	8
ENW47510	4.75	10
ENW475115	4.75	11.5
ENW47513	4.75	13
ENW47515	4.75	15



EasyNeck® Wide threaded

Code	ø (mm)	L(mm)
ENW52508	5.25	8
ENW52510	5.25	10
ENW525115	5.25	11.5

The structure of the EasyLine fixture and its prosthetic components were analyzed by numerical techniques using FEA (Finite Element Analysis) and the results have been validated successfully by mechanical tests, performed in accordance with current regulatory requirements.



EasyNeck® Fine threaded implant



 $\emptyset P = \emptyset \text{ Platform 4,8}$ ø = ø Implant bone space filled by the implant, threads included øn = ø Core bone space filled by the implant, threads excluded

L = Length

Color code (yellow, blue, green) identifies implants with the same core diameter. This color code is used to identify the corresponding surgical instruments, too.

EasyNeck	0	0	
Øn	2,9	3,4	



EasyNeck® Fine threaded

Code	ø (mm)	L(mm)
N3508	3.50	8
N3510	3.50	10
N35115	3.50	11.5
N3513	3.50	13
N3515	3.50	15



EasyNeck® Fine threaded

Code	ø (mm)	L(mm)
EN4008	4.00	8
EN4010	4.00	10
EN40115	4.00	11.5
EN4013	4.00	13
EN4015	4.00	15

Cover screw and healing screws

Cover Screw

Included in the fixture packaging Material: Titanium gr 4



Code	
ELCS	

Standard healing screws





Code	ø (mm)	L(mm)
ENHA	5.0	2.0
ENHA1	5.0	3.5

EasySmart® system represents the classical solution for one stage surgery with a reduced gingiva level.

Implant

EasySmart[®] is an implant recommended for all cases in which a one stage surgery is chosen, in the posterior sites and where the gingival thickness could be treated with a transgingival neck of 1.5 mm.

All fixtures are made in Grade 4 medical use Titanium and are manufactured using the most modern technologies. The attention to finishing and surface characteristics, combined with meticulous controls during the production process, causes th EasySmart® system to come into the market as one of the most viable solutions at the international level.

Connection

Inside the neck of the fixture is an octagonal seating, followed by a tapered section.

This seating is used for the engagement of the prosthetic components and it is standard for all types of EasySmart® fixtures.

The conical coupling gives stability to the implantabutment connection while the octagonal portion prevents rotation. On the bottom of the connection there is an M2 threaded hole that allows to tighten the abutment to the implant through a fastening screw.

Surface

For an optimal and rapid osseointegration, the implant surface is treated by a special shot peening process. This process is carried out with white corundum, specific to the medical field, with constant pressure and particle size. Subsequently, the threaded portion of the fixture is subjected to a chemical etching treatment. In-vivo studies and histological analysis have confirmed that the surface treatments performed on Easy-Smart® systems are able to speed up the osseointegration process and thus to reduce the time of bone neogenesis.



Collar

The transgingival neck (1.5 mm) has a machined surface that provides excellent adhesion to the gingival mucosa.

Longitudinal slots

The three longitudinal slots collect the bone fragments obtained from the action of the reamers.

During screwing they allow the redistribution of the fragments along the lower portion of the implant.

Thread profiles

The implant has been designed to adapt to the different characteristics of the bone tissue on which the intervention takes place. In this regard, there are two different thread profiles: fine-double threaded and coarse threaded.

The fine-double threaded implant is mainly adapted to the presence of compact bone tissue D1/D2. In these cases it is advisable to scrupulously respect the surgical protocol and use the tap. It is also possible to use this system, excluding the use of the tap, in bone tissues D3/D4 (upper and distal zones), after having verified the stability of the same.

The coarse threaded implant is characterized by an extremely large thread, which enables an exceptional screwing even in conditions of bone quality D3/D4. In case of more compact bone, we recommend the use of bone tap.





EasySmart® Wide Threaded implant



= Length = ø Implant bone space filled by the implant, threads included

bone space filled by the implant, threads excluded

Color code (yellow, blue, green) identifies implants with the same core diameter. This color code is used to identify the corresponding surgical instruments, too.

EasySmart	0	0	
Øn	2,9	3,4	



EasySmart® Wide threaded

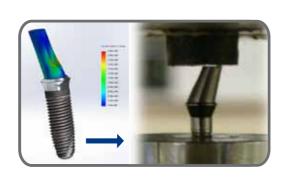
Code	ø (mm)	L(mm)
ESW4008	4.00	8
ESW4010	4.00	10
ESW40115	4.00	11.5
ESW4013	4.00	13
ESW4015	4.00	15



EasySmart® Wide threaded

Code	ø (mm)	L(mm)
ESW47508	4.75	8
ESW47510	4.75	10
ESW475115	4.75	11.5
ESW47513	4.75	13
ESW47515	4.75	15

The structure of the EasyLine fixture and its prosthetic components were analyzed by numerical techniques using FEA (Finite Element Analysis) and the results have been validated successfully by mechanical tests, performed in accordance with current regulatory requirements.



EasySmart® Fine threaded implant



 $\emptyset P = \emptyset \text{ Platform 4,8}$ ø = ø Implant bone space filled by the implant, threads included bone space filled by the implant, threads excluded

L = Length

Color code (yellow, blue, green) identifies implants with the same core diameter. This color code is used to identify the corresponding surgical instruments, too.

EasySmart	0	
Øn	3,4	



EasySmart® Fine threaded

Code	ø (mm)	L(mm)
ES4008	4.00	8
ES4010	4.00	10
ES40115	4.00	11.5
ES4013	4.00	13
ES4015	4.00	15

Cover screw and healing screws

Cover Screw

Included in the fixture packaging Material: Titanium gr 4



Code	
ELCS	

Standard healing screws

Material: Titanium gr 5 (Ti6AI4V)



Code	ø (mm)	L(mm)
ENHA	5.0	2.0
ENHA1	5.0	3.5

1

Cut a full-thickness flap with a first incision wide enough to expose the area where you intend to operate. If necessary, use mesial or distal incisions around the selected site.

Make a careful dissection of the lingual and buccal periosteum layer, preventing laceration and at the same time removing any fibrous adhesions. In case a bone crest leveling would be necessary, use the bone drill ELPC. For flapless surgery, you can intervene using the circular punch ELCM to create a gingival operculum of 5 mm diameter.



4

Carry on with preparation of the implant site using the reamer suitable for the diameter of the implant to be inserted, penetrating the site until you reach the length of terminal preparation previously determined, referring to the black marks or by using the drill stop corresponding to the length of the implant.



2

After the preparation of the surgical site, mark the position of the implants on the outer cortex with the precision drill ELOSD, using if necessary a surgical guide. Drill at a maximum speed of 1000 rpm, cooling the site with sterile saline solution at 5°C. It is advisable to flush the implant site with an antibiotic.

During this phase it is possible to approximately quantify the quality of cortical bone.



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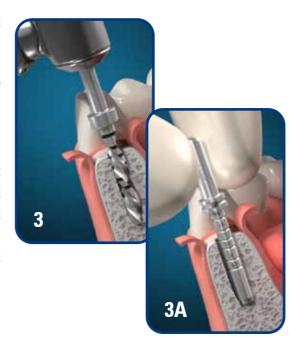
Then create a seating for the implant using the countersink drill ELPS up to the bottom edge of the laser mark for implants with platform diameter of 4,25 mm, or to the upper limit for implants with platform diameter of 4,8 mm.



3 e 3A

Proceed by drilling the selected sites with the pilot reamer ELPD, controlling both the mesiodistal direction (as perpendicular to the ridge as possible) and the bucco-lingual one, sometimes affected by anatomical limitations. During drilling (maximum cutting speed 800 rpm), move the contra-angle back and forth to cool the drill and to extract the chips of bone. In the case of compact bone do not exert excessive pressure on the contra-angle, it could overheat the bone tissue with a consequent risk of thermal necrosis.

During this process, care should be taken to check the direction and depth using the depth gauge and parallel indicator ELPAP.



6

In order to insert the fixture in the prepared site, create a thread with the dedicated bone tap. This delicate phase can be performed using the contraangle with the contraangle mounter key ELKC at low speed (15/20 rpm), while cooling the site with sterile saline solution at 5°C. The same operation can be done manually with the ratchet ELKW and the ratchet mounter key ELKMC1 (short) or ELKMC2 (long). In the presence of poor quality bone we recommend avoiding tapping to obtain greater primary implant stability.



7

After having checked that the contents of the package to be opened corresponds to the size of the implant previously selected, open the package and remove the cap of the plastic container, exposing the head of the mounter.

Extract the implant either mechanically (7A) or manually (7B).



7B

Insert the ratchet mounter key ELKMC1 (short) or ELKMC2 (long) (up to the stop, passing the Oring) and remove the implant from its titanium container. Turning clockwise, insert the implant in the implant site, insert the ratchet ELKW on the mounter key and finish screwing in a clockwise rotation until you meet increased resistance.



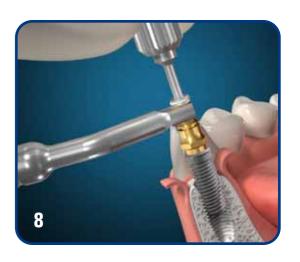
7A

Insert the contra-angle mounter key ELKC (up to the stop, passing the O-ring) and remove the implant from its titanium container. Turning clockwise, insert the implant in the implant site at a rate not exceeding 15 rpm, until you meet increased resistance.



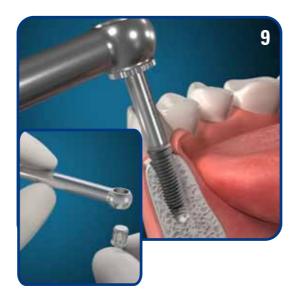
2

To free the implant from its mounter, use the open-end key ELKM to allow loosening of the fastening screw using manual screwdrivers ELCSK1 or ELCSK2 or the contra-angle wrench ELPSCAK.



)

Being discouraged the use of contra-angle to totally insert the implant, free the implant as mentioned above in step 8, and continue screwing using the implant driver ELKIC1 or ELKIC2 or the torque ratchet implant driver ELKID1 or ELKID2. The latters allow to check the torque produced during implant insertion (maximum suggested value 50Ncm). Use this same procedure also for manual insertion as excessive resistance is met.



10

Remove the cover screw ELCS from the cap of the container by using the manual screwdrivers ELCSK1 or ELCSK2 and screw it on the implant. As an alternative to the cover screw (included) it is possible to choose healing abutments specific for the patient anatomy.



11

Suture the surgical flaps over the implant. Use non-absorbable material sutures (nylon or Teflon). The sutures should be removed after 7/10 days.

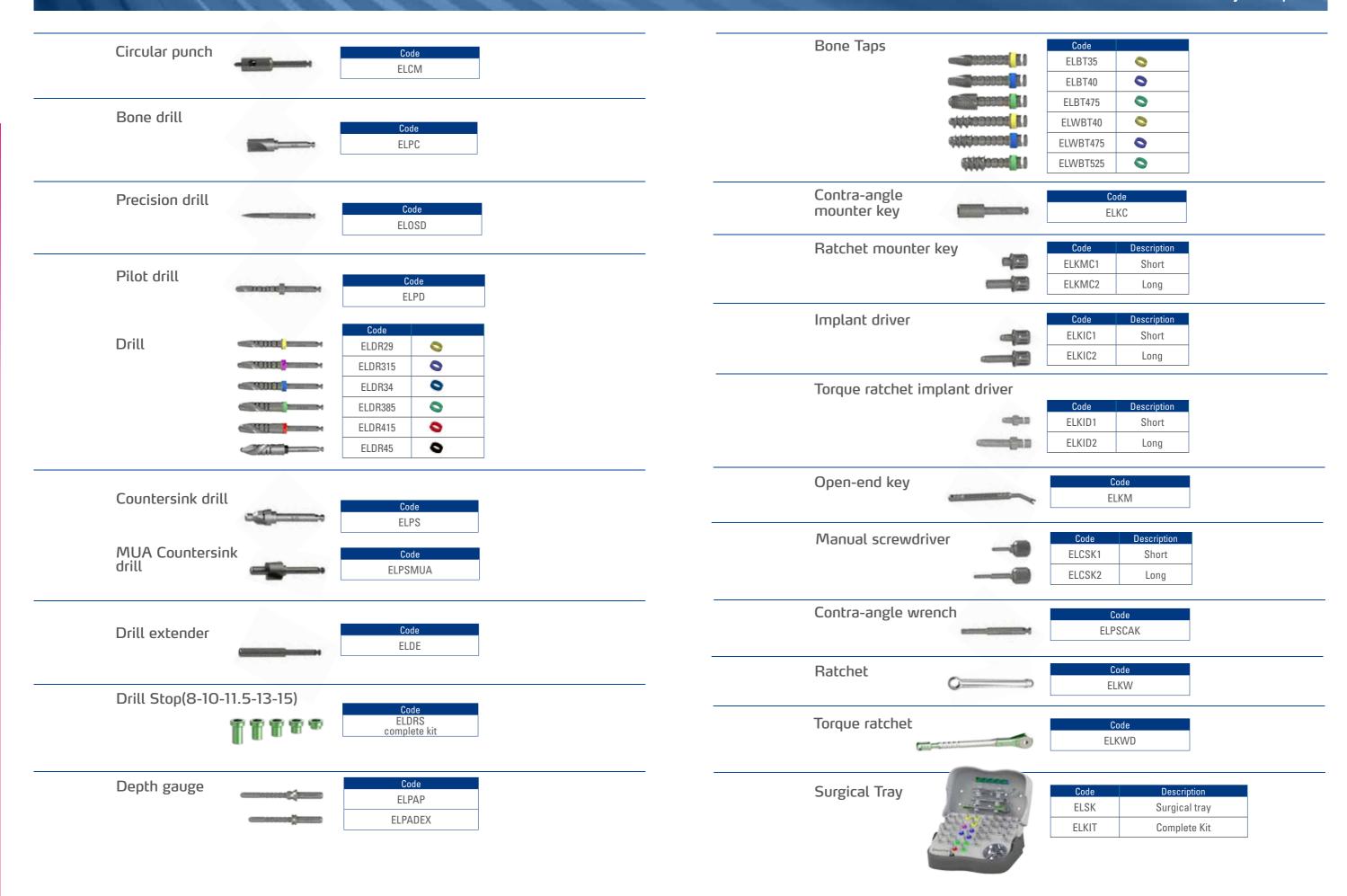


		YuannamiD		CZYZ)- CZEAD SIRAD BREAD BREAD STRAD		∮	11011
Diameter	Precision drill	Pilot reamer	Depth gauge	Reamer	Bone dendity D1/D2*	Conuntersink drill	Bone tap
Ø 3.5 mm	ELOSD (1000 rpm)	ELPD Ø 2.25 mm (800 rpm)	ELPAP	Ø 2.9 mm (800 rpm)	+ ELDR315 Ø 3.15 mm (700 rpm)	ELPS (500 rpm)	ELBT35
Ø 4.0 mm	ELOSD (1000 rpm)	ELPD Ø 2.25 mm (800 rpm)	ELPAP	Ø 3.4 mm (600 rpm)	+ ELDR385 Ø 3.85 mm (500 rpm)	ELPS (500 rpm)	ELBT40
Ø 4.75 mm	ELOSD (1000 rpm)	ELPD Ø 2.25 mm (800 rpm)	ELPAP	ELDR34 Ø 3.4 mm (600 rpm) ELDR385 Ø 3.85 mm (500 rpm)	+ ELDR415*** Ø 4.15 mm (500 rpm)	ELPS (500 rpm)	ELBT475
Ø 4.0 mm	ELOSD (1000 rpm)	ELPD Ø 2.25 mm	ELPAP	ELDR29 Ø 2.9 mm	+ ELDR315 Ø3.15 mm	ELPS (500 rpm)	ELWBT40
Ø 4.75 mm	ELOSD (1000 rpm)	(800 rpm) ELPD Ø 2.25 mm (800 rpm)	ELPAP	(800 rpm) ELDR34 Ø 3.4 mm (600 rpm)	(700 rpm) + ELDR385 Ø 3.85 mm (500 rpm)	ELPS (500 rpm)	ELWBT475
Ø 5.25 mm	ELOSD (1000 rpm)	ELPD Ø 2.25 mm (800 rpm)	ELPAP	ELDR34 Ø 3.4 mm (600 rpm) ELDR385 Ø 3.85 mm (500 rpm)	+ ELDR415** Ø 4.15 mm (500 rpm)	ELPS (500 rpm)	ELWBT525

EasyDip® and EasyShort® implants have to be completely inserted into the bone (bone level), so it is necessary to include the preparation of the shoulder with the special tool ELPS (up to the laser mark, for implants with platform \emptyset 4.25 mm, or up to the top edge, for implants with platform \emptyset 4.8 mm) which allows the non-threaded part of the implant to drop below the cortex.

Drills with color code yellow, blue and green create a hole with dimensions equal to the core diameter (Øn) of the corresponding colored implant.

	0		0
Øn	2,9	3,4	3,85



Torque ratchet wrenches



Code	Description	
ELPSK1	Short	
ELPSK2	Long	

Manual screwdrivers



Code	Description
ELCSK1	Short
ELCSK2	Long

Torque ratchet wrench for octagonal and ball abutments



ELSAPK

Torque ratchet wrench for screw-retained abutment



ELMAK

Torque ratchet





connect the torque ratchet with the instruments of Your surgical High performance The materials

Versatility The head

can be personalized to

used, titanium and surgical steel, guarantee high strength quality and long duration.

Ergonomics

and easy of

The central part is articulated.

use



It is possible to set the torque value from 15Ncm to 50Ncm by turning the control



Prosthetic components are compatible with EasyDip® EasyShort® EasyNeck® EasySmart®

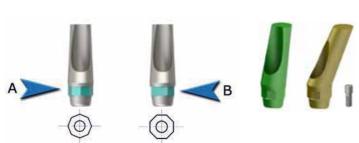
All the abutments, analogues and transfers are made of Grade 5 titanium (Ti6Al4V). The fastening screw ELPSC1 is included in the packaging of the abutments. Tighten to 30 Ncm using the torque ratchet wrench ELPSK1 or ELPSK2 with the torque ratchet ELKWD.

Titanium abutment for cemented prosthesis



Code	
ELDTA	for implants ø P 4.25 mm and ø P 4.8 mm

Angled titanium abutments



Note:
The difference between abutments type "A" and type "B",
consists in a rotation of 22.5° of the octagon with respect to
its axis of reference and that of inclination. This allows you to
double the chances of placement of such abutments.

Code	Angle	Туре	Colour
ELA15A	15°	Α	Green
ELA15B	15°	В	Purple
ELA25A	25°	А	Blue
ELA25B	25°	В	Gold
ELA15AC	15°	Α	Green
ELA15BC	15°	В	Purple
ELA25AC	25°	А	Blue
ELA25BC	25°	В	Gold

for implants ø P 4.25 mm and ø P 4.8 mm for test

PEEK*Abutments for temporary solutions



Code	Angle	тур
ELDTAP	0°	
ELA15AP	15°	Α
ELA15BP	15°	В
ELA25AP	25°	Α
ELA25BP	25°	В

for implants ø P 4.25 mm and ø P 4.8 mm

Castable abutment * *



Code
ELCPXI

for implants ø P 4.25 mm and ø P 4.8 mm

- *Polyether-ether-ketone (PEEK)
- * * Plexiglass

Shouldered abutments



Ø Max Shoulder

Code	ø Max mm	Shoulder mm
EDS5010	5.0	1
EDS5015	5.0	1.5
EDS5020	5.0	2.0
EDS5510	5.5	1
EDS5515	5.5	1.5
EDS5520	5.5	2.0
ENS5510	5.5	1
ENS5515	5.5	1.5
ENS5520	5.5	2.0
ENS6010	6.0	1
ENS6015	6.0	1.5
ENS6020	6.0	2.0

for implants ø P 4.8 mm

for implants ø P 4.25 mm

Milling abutment



Code	
EDMFD] for implai g P 4.25 n
ENMFD]for impla

Platform Switching Abutments



Code	ø Max mm	Ang
ELSP45	4.5	
ELSP4515	4.5	15
ELSP55	5.5	
ELSP5515	5.5	15

ø P 4.25 mm and for implants ø P 4.8 mm

Screw-retained abutments for cemented prosthesis

Tighten to 30 N*cm using the wrench ELMAK with the torque ratchet ELKWD.

Code	H mm	Colour	
ELMAC1	Short 4.0	Gold	for implants
ELMAC2	Medium 5.5	Blue	ø P 4.25 mm and for implants
ELMAC3	Long 5.7	Green	ø P 4.8 mm

Castable* for screw-retained abutments

Combine the indication to the corresponding screw-retained abutment



Code	Indication
EDCAM1	Short
EDCAM2	Medium
EDCAM3	Long
ENCAM1	Short
ENCAM2	Medium
ENICANAS	Long

for implants ø P 4.25 mm for implants

ø P 4.8 mm

* Plexiglass

Prosthetic components are compatible with EasyDip® EasyShort® EasyNeck® EasySmart®

All the abutments and caps are made of Grade 5 titanium (Ti6Al4V), unless otherwise stated. Tighten the abutments to 30 Ncm using the torque ratchet wrench for octagonal and ball abutments ELSAPK with the torque ratchet ELKWD. The fastening screw ELPSC1 is included in the packaging of the caps and it should be tighten to 30 Ncm using the torque ratchet wrench ELPSK1 or ELPSK2 with the torque ratchet ELKWD.

Octagonal abutment



Code	for implants
ELMEO	ø P 4.25 mm ar ø P 4.8 mm

Castable*for octagonal abutment



Code	Indications	
EDCEOC	For circulars	for implants
EDCEOE	For monoimplants	g P 4.25 mm
ENCEOC	For circulars	for implants
ENCEOE	For monoimplants	ø P 4.8 mm

Titanium cap for octagonal abutment



		_
Code	Height mm	
EDMEOA	15]for implants ø P 4.25 mm
ENMEOA	15]for implants]ø P 4.8 mm

Protection for octagonal abutment



Code	for implants
	ø P 4.8 mm

Esthetic octagonal abutment



Code	Height mm
ELME015	1.5
ELME03	3.0
ELME04	4.0

for implants ø P 4.25 mm and ø P 4.8 mm

Titanium cap for esthetic octagonal abutment



	_
Code	for implants
ELMEOC	ø P 4.25 mm and ø P 4.8 mm

Castable* for esthetic octagonal abutment





*Plexiglass

*Plexiglass

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Implant Impression transfer technique for all abutments in the catalogue

To transfer the location of the fixture onto a casting, proceed by inserting the implant transfer EDTRA or ENTRA in the implant and secure it with the long fastening screw ELPSC2 included in the packaging of the transfer. Tighten using the screwdrivers ELCSK1 or ELCSK2 or the contra-angle wrench ELPSCAK. Then proceed with the impression using a slotted spoon. Before removing the impression, loosen the fastening screw releasing the transfer. Insert the implant analogue EDAN or ENAN, assembling it to its transfer EDTRA or ENTRA using the fastening screw previously loosened. Now it is possible to send the impression to the laboratory.

Implant analogues



Code	Colour	
EDAN	Gold	for implants ø P 4.25 mm
ENAN	Green	for implants ø P 4.8 mm
		•

Implant Transfers



Codice	Colour	
EDTRA	Gold	for implants ø P 4.25 mm
ENTRA	Green	for implants ø P 4.8 mm

Screws for laboratory (sold in packaging of 3)



Code		
ELPSC3	Laboratory screws for all abutments	M2
ELCPTS1	Laboratory screws for MUA caps	M1,4

Laboratory screws should be used instead of corresponding screws included in the abutments and MUA caps packaging (ELPSC1 and ELCPTS, respectively) during screwing test made on impression copings. This prevents the premature wear of the screw thread and, consequently, the risk of abutment unscrewing in the patient mouth. Laboratory screws are clearly distinguishable from standard screw by the length, highly and specifically increased, and by the laser mark "LAB". Moreover, on the ELPSC3 a, strip which identifies the superior limit of the ELPSC1 head, is laser marked.

Impression transfer technique for octagonal abutment ELMEO

To transfer the location of the octagonal abutment onto a casting, proceed by inserting the transfer for octagonal abutment EDICE or ENICE and secure it with the long fastening screw ELPSC2 included in the packaging of the transfer. Tighten using the manual screwdrivers ELCSK1 or ELCSK2 or the contra-angle wrench ELPSCAK. Then proceed with the impression using a slotted spoon. Before removing the impression, loosen the fastening screw releasing the transfer. Insert the implant analogue for octagonal abutments EDAMEO or ENAMEO, assembling it to its transfer EDICE or ENICE using the fastening screw which has been previously loosened. Now it is possible to send the impression to the laboratory

Octagonal abutment analogues



Code	Colour	
EDAME0	Gold] for implants] ø P 4.25 mm
ENAME0	Blue]for implants]ø P 4.8 mm

Octagonal abutment transfers





Code	Colour	
EDICE	Gold]for implant]ø P 4.25 mn
ENICE	Blue]for implant]ø P 4.8 mm

Impression transfer technique for Screw-retained abutments ELMAC

To transfer the location of the screw-retained abutment onto a casting, proceed by screwing the abutment on the implant. Then proceed with the impression using a slotted spoon. Insert the screw-retained abutment analogue EDMAC or ENMAC of the corresponding abutment length. Now it is possible to send the impression to the laboratory.





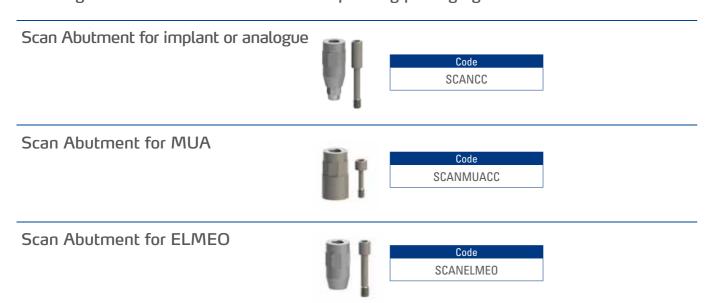


	Colour	Indication	Code
1	Gold	Short	EDMAC1A
for implants ø P 4.25 mm	Blue	Medium	EDMAC2A
] 7.23 11111	Green	Long	EDMAC3A
1	Gold	Short	ENMAC1A
for implants ø P 4.8 mm	Blue	Medium	ENMAC2A
] b F 4.0 IIIIII	Green	Long	ENMAC3A

Prosthetic components are compatible with EasyDip® EasyShort® EasyNeck® EasySmart®

Scan Abutments are made of sandblasted allumium to avoid using opacizier spray during scanning. Titanium bases and Premilled are made of Titanium grade 5 (Ti6Al4V) and should be tighten to 30 N*cm using the torque ratchet wrench ELPSK1 or ELPSK2 with the torque ratchet ELKWD.

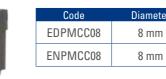
All fixing screws are included in the corresponding packaging.



Titanium base:







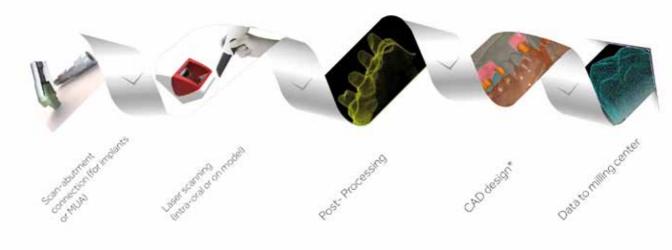
for implant Ø P 4.25 mm
] ø P 4.25 mm
1 for implant
∫ ø P 4.8 mm

Premilled



Code	Diameter	
EDPMCC14	14 mm	for implant Ø P 4.25 mn
ENPMCC14	14mm	for implant ø P 4.8 mm

CAD-CAM Work Flow



*Main 3D model softwares Exocad, 3Shape, etc.

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for implants

ENBSCCRCO

Prosthetic components are compatible with EasyDip® EasyShort® EasyNeck® EasySmart

All the abutments, analogues and transfers are made of Grade 5 titanium (Ti6Al4V) Tighten the abutments to 30 Ncm using the torque ratchet wrench for octagonal and ball abutments ELSAPK with the torque ratchet ELKWD.

Ball abutments



Code	H. mm	ø Ball mm
ELSAP	0	2.5
ELSAP1	1	2.5
ELSAP2	2	2.5
ELSAP4	4	2.5

for implants ø P 4.25 mm and ø P 4.8 mm

O-ring holder



Code	ø Ext mm	H. mm
ELGOR	5.5	2.4

O-ring



Code	
ELOR	

Normo caps*







Code	Colour	Ritention
040CRN	White	Standard
040CRNSN	Pink	Soft
060CRNAY	Yellow	Extrasoft

Normo stainless steel housing cap*



Code
041 CAN

Protective diskette*



Code	
100 PD	

Impression transfer technique for ball abutment

To transfer the location of the ball abutments for mobile prosthesis, proceed by screwing abutments themselves with a torque of 30 N * cm, using the torque ratchet wrench ELSAPK inserted into the torque ratchet ELKWD. Take a traditional impression with a traditional spoon and place in the impression the analogues of the ball abutments ELSAPA. Send the impression to the laboratory.

Ball abutment analogue



Code	L
ELSAPA	for implants ø P 4.25 mm and ø P 4.8 mm

Impression transfer technique for implant

To transfer the location of the fixture onto a casting, proceed by inserting the implant transfer EDTRA or ENTRA in the implant and secure it with the long fastening screw ELPSC2 included in the packaging of the transfer. Tighten using the screwdrivers ELCSK1 or ELCSK2 or the contra-angle wrench ELPSCAK. Then proceed with the impression using a slotted spoon. Before removing the impression, loosen the fastening screw releasing the transfer. Insert the implant analogue EDAN or ENAN, assembling it to its transfer EDTRA or ENTRA using the fastening screw previously loosened. Now it is possible to send the impression to the laboratory.

Implant analogues



•	è		
- 1	•	E	
- 8		•	
- 8		ı	
- 8		8	
- 8		8	
- 9	P	,	

Code	Colour	- f ! l
EDAN	Gold] for impla g P 4.25
ENAN	Green	for impla g P 4.8 n

Implant transfers





Code	Colour
EDTRA	Gold
ENTRA	Green

] for implants] ø P 4.25 mm for implants

*In collaboration with RHEIN83

In collaboration with PHEINSS

EasyEquator® is the smallest attachment on the market: the overall vertical dimension is just 2.1 mm with a maximum diameter of 4.4 mm.

EasyEquator® is available in castable or titanium nitride TiN version that allows to plan, depending on the available space, different types of over-denture solutions. The implant has high quality retention, minimal dimensions and gives the ability to correct major discrepancies until 25° of disparallelism. In cases in which the disparallelism exceed 25°, the Smartbox system is the optimal solution.

Using EasyEquator® simply involves screwing (either manually or with the torque ratchet wrench) the abutment on the implant so that it emerges 0.5 mm above the mucosa, in order to ensure optimum operation. You then proceed with fixing the retention caps protecting the implant from any resin infiltration with the protective silicone diskette; the elastic retentions will stabilize the prosthesis.

The retention caps used with the special stainless steel containers have 4 levels of holding capacity; the colour of the cap identifies the degree of retention:

- > 0.6 kg extra-soft yellow
- > 1.2kg soft pink,
- > 1.8 kg standard white
- > 2.7 kg violet strong

A black cap for laboratory is always available.

Implant abutment

Titanium abutment + TiN



Code	Height mm
030	Ø
030-1	1
030-2	2
030-3	3
030-4	4
030-5	5

Titanium abutment KIT

KIT CONTAINS:

- 1 TITANIUM ABUTMENT + TIN
- 1 CAPS INOX BOX
- 1 PROTECTIVE DISKETTE
- 4 SORTED RETENTIVE CAPS



Code	Height mm
130	Ø
130-1	1
130-2	2
130-3	3
130-4	4
130-5	5
	130 130-1 130-2 130-3 130-4

KIT for implants with Smart Box

KIT CONTAINS:

- 1 TITANIUM ABUTMENT + TIN
- 1 SMARTBOX HOUSING WITH BLACK CAP FOR LABORATORY
- 1 PINK PROTECTIVE DISK
- 4 SORTED RETENTIVE CAPS (1 EXTRA-SOFT, 1 SOFT, 1 STANDARD, 1 FORTE)



Code	Height mm
131	Ø
131-1	1
131-2	2
131-3	3
131-4	4
131-5	5



KIT SMART BOX

KIT CONTAINS:

- 1 SMARTBOX HOUSING WITH BLACK CAP FOR LABORATORY
- 1 PINK PROTECTIVE DISK
- 4 SORTED RETENTIVE CAPS





1 Smartbox housing with black cap for laboratory

SMARTBOX HOUSING



330SBE

335SBC

SMARTBOX BLACK CAPS FOR LABORATORY

4 Smartbox black caps (for laboratory)



335CSB

Castable

EasyEquator® castable is an economic and aesthetic solution for the bar retention on implants. Connected to the castable (UCLA) offers the opportunity to correct extreme implants divergences.



092ECQ

Castable EasyEquator® KIT

KIT CONTAINS:

- 2 CASTABLE MALE "HEMISPHERES"
- 2 STAINLESS STEEL HOUSINGS WITH CAPS
- 4 ASSORTED RETENTIVE CAPS (2 SOFT, 2 STANDARD)





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EQUATOR

Seeger system passive bar

The "Seeger" System has been designed to allow the construction of bars on implants, with passive connection. The Seeger correct any imperfections, generated during the technical steps or phase of the attachment position. The New "Seeger" in peek connects passively the bar to the attachments and prevents from unscrewing, may also be easily extracted with the self-extracting screw in Titanium.



KIT CONTAINS:

- 1 CASTABLE CYLINDER FOR SEEGER
- 1 SELF-EXTRACTING SEEGER
- 1 TITANIUM SCREW FOR SELF-EXTRACTING SEEGER



Code	- 5	
158ES		

Accessories

Ot EQUATOR titanium transfer + titanium screw		Code 144TTE
2 Transfer for impressions	8	Code 144MTE
2 Impression copings normal size - ot equator		Code 044CAIN
2 Laboratory analogs		Code 144AE

Spare parts

Caps selection kit with housing cap	Code 192ECE
2 Castable "hemisphere" male	Code 151SS
4 Violet Caps - Strong Retention - 2,5 Kg	Code 140CEV
4 White Caps - Standard Retention - 1,8 Kg	Code 140CET
4 Pink Caps - Soft Retention - 1,2 Kg	Code 140CER
4 Yellow Caps - Extra Soft Retention - 0,6 Kg	Code 140CEG
4 Processing Caps - Black For Laboratory Use	Code 140CEN
2 Stainless Steel Housings	Code 141CAE

Instruments

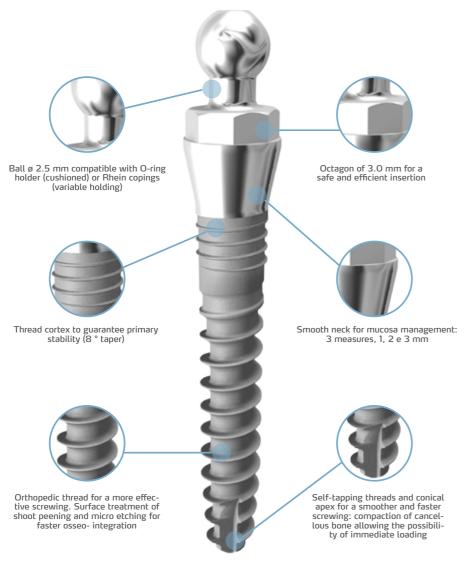
1 Parallelometer key "normal size"	Code 74AC01
1 Ot equator square screw driver + holder (square 1.25mm)	Code 774CHE
1 Square driver connector for torque controller contra angle (square 1.5 mm)	Code 760CE
1 Hex screwdriver (hex 0.9 mm)	Code 772CSF
1 Metal insertion tool for SEEGER	Code 185SIS
1 Multiuse caps inserter/extractor tool	Code 485IC
1 Multiuse extractor tool for caps (with hole stem HOLDER)	Code 491EC

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ASY FIX

EasyFix® system, temporary mini-implant

EasyFix[®] implants are mini implants 2.4 mm in diameter with a length of 11 mm, 13 mm and 15 mm, suitable for use on narrow ridges and suitable for temporary restorations supported via an O-ring.



Code	Ø (mm)	L Thread mm	Neck	Mucosa height (mm)
IM2411A	2.4	11	Α	1
IM2413A	2.4	13	Α	1
IM2415A	2.4	15	А	1
IM2411B	2.4	11	В	2
IM2413B	2.4	13	В	2
IM2415B	2.4	15	В	2
IM2411C	2.4	11	С	3
IM2413C	2.4	13	С	3
IM2415C	2.4	15	С	3



Instruments and surgical procedure



The surgical procedure is simplified, with the use of a single reamer of diameter 1.4 mm, which allows rapid and easy insertion. It is recommended to drill at a maximum speed of 1000 rpm while cooling the site with sterile saline at 5°C. Choose the most suitably size for the mini implants, characterized by the best transmucosal collar size: there are three different sizes 1, 2 and 3 mm to fit optimally into the soft tissues. Open the packing, take out the implant and screw it manually until you meet excessive resistance. To complete the insertion, use the torque ratchet wrench ELSAPK with the torque ratchet ELKWD set to 50 Ncm.

Prosthetic components

O-ring holder		Code ELGOR	ø Ext mm 5.5	H mm 2.4
O-ring	0		Code ELOR	
Normo caps*		Code 040CRN 040CRNSN 060CRNAY		Ritention Standard Soft Extrasoft
Normo stainless steel housing cap*			Code 041 CAN	
Protective diskette*	0		Code 100 PD	



All-on-four technique was devised by Dr. Malò and it consists in the insertion of only 4 implants, 2 in the anterior region, vertically located, and the other 2 in the posterior region with an angle up to 45°. This kind of treatment gives to edentolous patients the chance to have a complete prosthesis in a single surgical session.

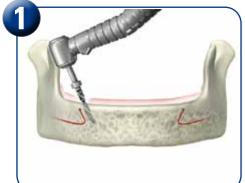
Bending the 2 posterior implants, longer implants may be used, increasing the area of bone-to-implant contact, giving a better loading distribution and an optimal support also with an insufficient bone volume.

The implants indicated for the All-on-four technique are the EasyDip®. The prosthetic components comprise Multi-Unit Abutment (MUA) both straight and angled (17° and 30°) with two different transmucosal height (1.5 and 3.0 mm) in order to perfectly adapt to the mucosal tissue.



Surgical procedure

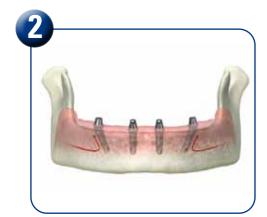
LOWER JAW



Planning the surgical intervention

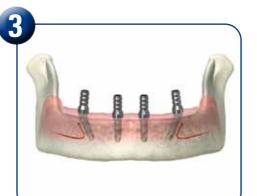
UPPER



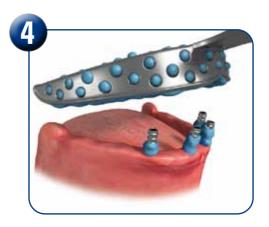


Implant and
MUA abutment
insertion





Screw the impression transfer caps
ELTRAMUA for the impression coping



Impression coping with an open personalized spoon using soft material



Temporary prosthesis prepared in the laboratory. Connect the temporary prosthesis on the abutments and screw it at 15Ncm





After an adeguate healing period follow the standard prosthetic procedure

MUA transfer

for implants

Straight MUA Abutment



olour ink	Shoulder mm 0.5
ink	0.5
	1.5
old	3.0
ink	0.5
	1.5
old	3.0
	ink

for implants ø P 4.25 mm for implants ø P 4.8 mm

Angled MUA Abutment











Code	Angle	Colour	Shoulder mm
EDMUA1705	17°		0.5
EDMUA1715	17°	Green	1.5
EDMUA1730	17°	Purple	3.0
EDMUA3005	30°		0.5
EDMUA3015	30°	Green	1.5
EDMUA3030	30°	Purple	3.0
ENMUA1705	17°	Pink	0.5
ENMUA1715	17°	Blue	1.5
ENMUA1730	17°	Gold	3.0
ENMUA3005	30°	Pink	0.5
ENMUA3015	30°	Blue	1.5
ENMUA3030	30°	Gold	3.0
•			

for implants ø P 4.25 mm

for implants ø P 4.8 mm

Titanium prosthetic cap



	Code	Length mm	
	ELCPT1	11.4]for implants]ø P 4.25 mm and ø P 4.8 mn
m			

Castable prosthetic cap * *



Code	Length mm	
ELCAL1	11.4	for implants ø P 4.25 mm and ø P 4.8 mm

PEEK cap*



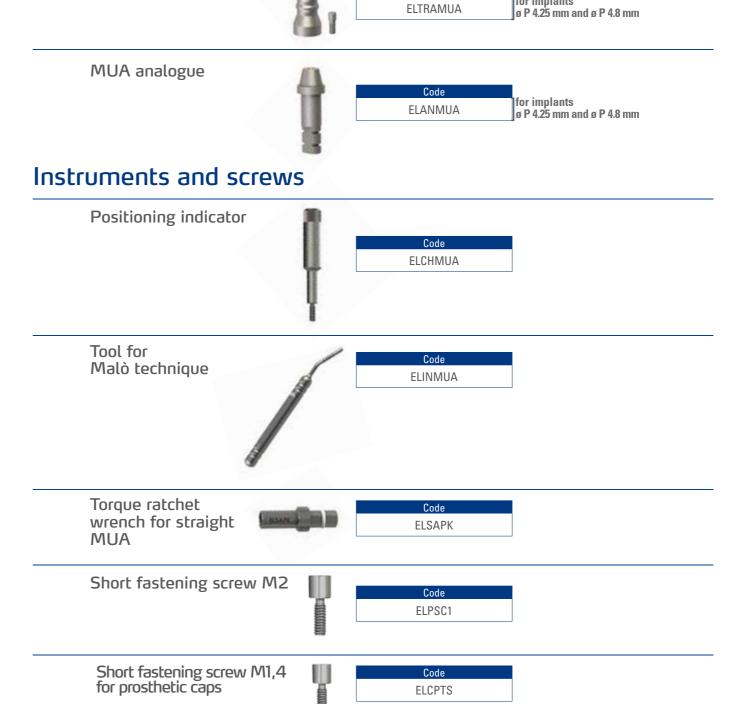
	Code	Lunghezza mm	L
	ELCPK1	11.4	for implants ø P 4.25 mm and ø P 4.8 mm
9			-

Titanium gingival adapter



	Code	
1	ELADMUA	for implants ø P 4.25 mm and ø P 4.8 mm
-		

- * Polyether-ether-ketone (PEEK)
- * * Plexiglass



Laboratory screws (sold in packaging of 3)



Code		
ELPSC3	Laboratory screws for all abutments	M2
ELCPTS1	Laboratory screws for MUA caps	M1,4

KIT FOR REMOVAL OF BROKEN IMPLANT SCREWS

A screw which breaks inside of an implant does not occur often. When it does, it poses a serious problem. With the Broken Screw Extractor Kit (Rhein83), it is possible to remove a broken screw from an implant if it has not been fastened with some type of cement or damaged during previous attempts to remove it.

Insert the manual centering device (A) into the implant and using the claw reamer bur (B), following with great care the instruction, in 90% of cases, the broken screw can be removed easily. However if the broken screw is frozen in place, the reverse cutting bur (C) must be used, by consuming the broken screw. The operation should be performed with attention, patience and competence. The time occurred may be depend on many factor, among which the implant position that can simplify or complicate the operation. Once the screw is completely consumed, the shavings can be removed with air or water.



Ref. 680 BROKEN SCREW EXTRACTOR KIT

Packaging includes:

- •1 CLAW REAMER BUR
- •1 REVERSE CUTTING BUR
- •1 MANUAL CENTERING DEVICE

Ref. 680FS 1 REVERSE CUTTING BUR Ref. 680FA 1 CLAW REAMER BUR









MANUAL CENTERING DEVICE

IMPLANT EXTRACTION KIT

Komet trepan burs permit safe explantation of EasyLineimplants with diameters of 3.5 - 4.0 - 4.75*.

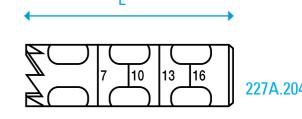
Being universal burs, the depth laser marking do not correspond to the length of our implants, but they should be used according to the indication reported in the table below.

N.B. For a correct use, please, refer to the instruction for use enclosed to the device.



L mm implant	Laser Mark
6.5	7
8	between 7 and 10
10	10
11.5	between 10 and 13
13	13
15	16

L mm	ø Dexternal mm	ø D1 internal mm
18	6	5.1







^{*}Not available for implants Ø5,25.

Ten Golden Rules

Each instrument should be used only according to its intended use.

Never let dry out organic residuals (blood, secretions, tissue residuals) on the instrument; immediately remove them after surgery.

Carefully remove encrustation using only plastics brushes with stiff, non-metal bristels.

3

Do not clean, disinfect or sterilize instruments made of different materials. Do not put in contact sharp instruments.

Use only cleansers or disinfectants specific for the used instrument, following the instructions for use.

Rinse with water. Frequently change the washing solution.

Do not leave or store moist or wet instruments.

Before sterilization always check the instruments: microorganisms may survive under superficial residuals on dirty instruments and made sterilization useless.

Always check surgical and prosthetic instruments and immediately arrange for substitution in case of malfunctioning or wear. Substitute instruments after 20 applications.



PRETREATMENT

Coarse impurities must be removed from the instruments directly after use (within two (2) hours at the most). Sort the instruments according to material groups and clean, disinfect and sterilize these groups separately.

DISINFECTION-DECONTAMINATION

Place the instruments in a disinfectant solution. Contaminated instruments must always be disinfected before cleaning and as soon as possible in order to guarantee safety to the odontoiatric staff during their handling. Adhere strictly to the manufacturer's instructions regarding dispensing/concentration, reaction time and temperature.

CLEANING

The instruments must be cleaned before sterilization and after disinfecting because remains from the operation adhere to them and must be removed to prevent encrustations. Cleaning can be performed manually, with ultrasonic unit or in cleaning machines.

Manual: clean the instruments with hot water using a neutral cleanser, not corrosive. If necessary, to clean in depth, use only a soft brush or a clean soft cloth that is used only for this purpose. Never use metal brushes or steel wool for the manual removal of impurities. Attention! Gloves must always be worn when handling contaminated instruments to avoid risk of accidental wounds.

Ultrasonic: only use neutral, non corrosive detergent. It is advisable to use a detergent including rust restrictor. Place the instruments in the ultrasonic bath making sure that the instruments do not touch one another. Ensure that the instruments are sufficiently covered by the disinfection solution. Adhere strictly to the manufacturer's instructions: temperature, amount of liquid, cleaning time, suitable cleaners. It is suggested to regularly change the detergent solution. The high ultrasound capacity to penetrate holes, cavities and depressions guarantee a cleaning qualitatively superior and a lesser risk of accidental wound compared to the manual cleaning.

Mechanical: adhere strictly to the manufacturer's instructions and recommendations regarding concentration and reaction time. Place the disassembled instruments in the disinfector so that joints are opened and water can flow out of canulas and blind holes. Make sure that the instruments do not touch one another. Remove the instruments from the disinfector after the end of the program.

RINSING

After manual or ultrasonic cleaning rinse the instruments very throughly with water to remove all cleaning or biological residues that separate during the ultrasonic procedure. An accurate rinsing of the cleaned devices is as important as the cleaning itself.

DRYING

Immediately after the rinsing, devices must be dryied with disposable towels, or better compressed air.

INSPECTION

Check all instruments after cleaning or cleaning/disinfection for corrosion, damaged surfaces, chipping and contamination and sort out damaged instruments. Critical areas such as handle structures, joints or blind holes, in particular, must be inspected carefully. Instruments with illegible markings/labeling must also be replaced. The instruments must be subjected to a functional test. Multi-piece instruments are assembled for this purpose. Instruments which are still contaminated must be cleaned and disinfected anew. Damaged, corroded or worn instruments should not come into contact with intact instruments to avoid contact corrosion.

STERILIZATION

Instrument sterilization does not substitute cleaning!

Sterilization process aim to remove all infectious micro-organisms and must be performed after an accurate cleaning. Sterilization in autoclave: the process is performed with hot vapor at high pressure. Instruments may be placed into the autoclave either with their surgical kit or in proper sterilization wrap. Do not overload the autoclave and adhere stricty to the manufacturer's instruction. As indicated the sterilization must be in compliance with UNI EN ISO 17665-1:2007 (Tmax 134°C for 4 min., drying times 20 to 30 min.)

General Catalogue General Catalogue General Catalogue

List of used materials

Component	Material	Standard reference
Implants	Titanium gr. 4	ISO 5832-2, ASTM F67-06
Prosthetic components	Titanium gr. 5 (Ti6Al4V ELI)	ISO 5832-3, ASTM F136-11
Surgical Instruments	AISI 630 (EN 1.4542) Titanium gr. 5 (Ti6AI4V ELI) only for bone taps	ASTM A564; ASTM F899 ISO 5832-3, ASTM F136-11
Castable components	Plexiglass (Polycarbonate)	
Temporary components	PEEK (Polyether-ether-ketone)	
Scan abutment	Aluminum 11S	

Titanium Gr. 4 characteristics

Chemical composition					
	0	N	С	Fe	Ti
	0,4 % max.	0,06 % max.	0,10% max.	0,5 % max	Balance

Mechanical characteristics	Min Value	Max value
Resistance	680 Mpa	700 Mpa
Yield strength (0.2%)	520 Mpa	560 Mpa
Elasticity	15%	35%
Area reduction	25%	57%

Titanium Gr. 5 (Ti6Al4V ELI) characteristics

	Chemical composition					
V	Al	С	Fe	N	0	Ti
3.5 – 4.5 %	5.5 – 6.5 %	0,08% max.	0,25 % max	0,06 % max	0,13 % max	Balance

Mechanical characteristics	Min Value	Max value
Resistance	900 Mpa	1500 Mpa
Yield strength (0.2%)	795 Mpa	920 Mpa
Elasticity	15%	35%
Area reduction	25%	57%

Aluminum characteristics

Mechanical characteristics	Value
Tensile strength Rm	300-340 N/mm2
Yield strength Rp 0,2%	200-220 N/mm2
Elongation A	6-7 %
hardness HB	100
Thermical treatment	T4-T6

Plexiglass characteristics

Mechanical characteristics	Value	Standard
Tensile strength	69 MPa	DIN EN ISO 527-2
Bending strength	97 MPa	DIN EN ISO 527-2
Compression strength (deformation 1% / 2% 5mm/min, 10 N)	16/29/64 MPa	EN ISO 604

Thermical characteristics	Value	Standard
Glass transition temperature	149 °C	DIN EN ISO 11357
Working temperature	120-140 °C	
Thermal expansion	8 10-5 K-1	DIN EN ISO 11359-1;2
Specific heat	1.3 J/(g*K)	ISO 22007-4:2008
Thermal conductivity	0.25 W/(K*m)	ISO 22007-4:2008

Peek characteristics

Mechanical characteristics	Value	Standard
Tensile strength	116 MPa	DIN EN ISO 527-2
Bending strength	175 MPa	DIN EN ISO 527-2
Compression strength (deformation 1% / 2% 5mm/min, 10 N)	23/43/102MPa	EN ISO 604

Thermical characteristics	Value	Standard
Glass transition temperature	150 °C	DIN EN ISO 11357
Working temperature	260-300 °C	
Thermal expansion	5 10-5 K-1	DIN EN ISO 11359-1;2
Specific heat	1.1 J/(g*K)	ISO 22007-4:2008
Thermal conductivity	0.27 W/(K*m)	ISO 22007-4:2008

"Titanium Base" cementing protocol- Zirconia or Lithium Disilicate

- 1 Finalize the prosthesis polishing the parts.
- 2 Sandblast with Al2O3 100µ the prosthesis portion that should connect with the "titanium base" (set the pressure according to the material to be sandblasted).
- 3 Sandblast the portion of "Titanium Base" that should connect with the prosthesis.
- 4 Apply Multilink® Hybrid Abutment according to the instruction for use of the manufacturer.
- 5 Insert the "Titanium Base" and follow the instruction for use of Cement manufacturer for duration and gripping modes.
- 6 Finish the extremity removing cement surplus.
- 7 Screw the prosthesis in position on the model and keep the components in position till complete cement hardening.

"Titanium Base" cementing protocol - Metal

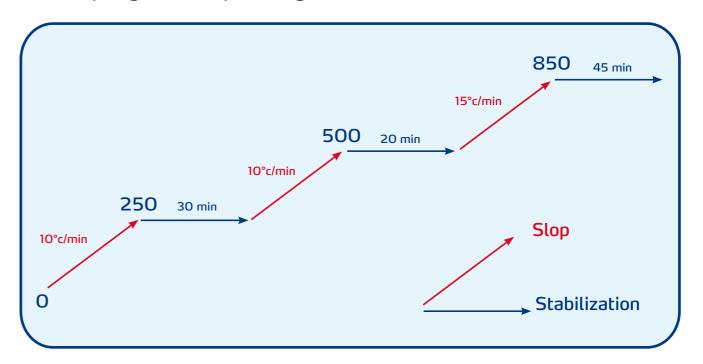
- 1 Finalize the prosthesis polishing the parts.
- 2 Sandblast with Al2O3 100µ the prosthesis portion that should connect with the "titanium base" (set the pressure according to the material to be sandblasted).
- 3 Sandblast the portion of "Titanium Base" that should connect with the prosthesis
- 4 Apply OT Cem Rhein83® according to the instruction for use of the manufacturer.
- 5 Insert the "Titanium Base" and follow the instruction for use of Cement manufacturer for duration and gripping modes.
- 6 Finish the extremity removing cement surplus.
- 7 Screw the prosthesis in position on the model and keep the components in position till complete cement hardening.

Castable abutment casting protocol

- 1 Apply the casting plugs as usual (it is suggested, if possible, NOT position an entry channel directly in correpondence to the castable abutment but mesially and distally to the component)
- 2 Position on the rubber base, as usual, and cover with the usually coating bulk. Some tests have been performed with Magnum Lucens alloy (Mesa) Freevest coating (Techim Italia) and the alloy casting with Fonditrice a centrifuga Hally digital (Manfredi).
- 3 The suggested proportion between mixing liquid and distilled water is 50 50. The performed tests have showed that the variation on the connecting octagon dimension is the following:

Mixing liquid	Distilled water	Octagon dimension variation
30 %	70 %	+0,05
60 %	40 %	+0,035
50 %	50 %	+0,01
40 %	60 %	+0,03
70 %	30 %	+0,02

4 Slop diagram of the preheating oven:



5 Open the cylinder as the ambient temperature is reached and make a roughing cleaning using glass pearls 90µm at 4 atm of pressure + finishing cleaning.

Packaging

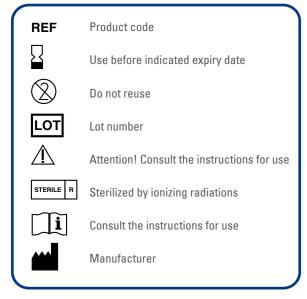
All the fixtures, accessories, prosthesis and instruments in the EasyLine® system are treated in a certificated decontamination process and are packed in laminar air flow class ISO 6 conditions. The EasyLine® implants are supplied in sterile packaging. The whole package protects the system against external agents and ensures its sterility until the expiration date printed on the label.

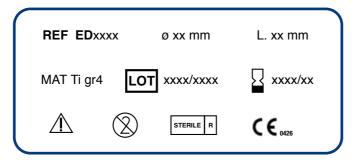




Notes on the symbols

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Overmed is certified and organized with a quality system conforming to UNI EN ISO 13485:2016.

Warnings

For a correct use of EasyLine® recommend to take note of these informations and of the instructions for use which are available on our website www.overmed.eu in the dedicated section (Ref. European Regulation n. 207/2012). Informations about our products can also be provided verbally, in writing, by e-mail or through practical demonstrations at our centers. The choice of the device, its suitability for the clinical situation, as well as the implementation of the correct surgical procedure are responsibilities of the user. The user should be continually up to date on the development and application of EasyLine® parrticularly in the case of use of the product in proceedings not expressly recommended. If you have any doubt, we recommend to contact the manufacturer.

Attention

EasyLine® is provided exclusively for accredited professionals in the dental sector who are responsible for the use of the product. The manufacturer is excluded from any liability for damages caused or produced by an incorrect use of the product. EasyLine® system should be solely used with components and

Choice of the Fixture

The number and type of fixtures to be implanted depend on many factors including quality of the bone in which to place the fixture, thickness of the bone, the situation of the implant site, local mastication force, etc. It is recommended to evaluate all these factors before choosing the system

Indications

EasyLine® dental fixtures, which are indicated for all cases of aesthetic and functional restoration, can be inserted into the dental arches of fully or partially edentulous patients. The fixtures should be used in a minimum number of four, following the instructions given in the surgical protocol.

Contraindications

EasyLine® dental fixtures are contraindicated in the following cases: insufficient quantity of bone tissue, the presence of chronic or acute infections, systemic diseases, subacute chronic maxillary osteitis, diseases involving microvascular disorders; it is also not recommended to use the fixtures in patients who are unwilling to collaborate, who are abusing drugs or alcohol or have a poor oral hygiene.

Side Effects and Interactions

Patient should stay at rest and avoid heavy physical activity for at least two days after surgery. Advise, in the case of onset of pain and complications, to immediately consult the dentist or surgeon.

General Catalogue

Loss of bone on the ridge (top and bottom), irreversible damage to contiguous or antagonist teeth, persistent pain due to the fixture, bone fracture, fracture of the fixture or superstructure, oroantral and oronasal fistulas, esthetic problems.

A risk of failure, despite the very high percentage success rate, may be present and its causes are not easily detectable. They must nevertheless be researched and documented, such as: poor quality and quantity of bone, infections, poor dental hygiene, incorrect surgical protocols and poorly distributed prosthetic loads.

All cases of failure must be communicated to the manufacturer in order to activate product improvements, if necessary,

