



Dental implants have special place in contemporary dentistry. Nowadays, it is impossible to imagine modern dental practice without implant-related therapy. Dental treatment should be performed with minimal trauma to natural dentition. This became the reason for us to create «**CONNECT**» dental implants system. «**CONNECT**» company is a manufacturer of implant system for restoring lost teeth.

Our system consists of full surgical kit and wide range of dental implants, including narrow diameter fixtures, which can be used in all possible clinical situations. Three implant types were developed with different implant-abutment connections; various implant lengths and diameters are available. Each implant type has numerous prosthetic options. We also offer bone block fixation kit, bone spreaders for ridge expansion and orthodontic implants.

Our work is based on more than 10-years experience in dental implants production.

Use of modern high-tech equipment, high-quality materials and scientific achievements have contributed to creating the best product for you.

Quality of «**CONNECT**» implant system was validated by clinical researches conducted in the Pavlo Shupyk Institute of Dentistry of National Medical Academy of Post-graduate Education of Ukrainian Healthcare Ministry, medical researches conducted in Dental Hospital №32 of Healthcare Administration of Northern-Eastern Administrative neighbourhood of Moscow, medical researches of Clinical Centre of Dentistry of federal medical and biological Agency of Russia. Numerous feedbacks have been received from the users, attesting positive long-term results of patients rehabilitation with «**CONNECT**» implants.

Company's developments are protected by the patents.

Trademark «**CONNECT**» IMPLANT SYSTEM is protected by Ukrainian Certificate of Goods and Services Sign.

System of quality control management has been introduced in the factory. It was approved by **Certificates ISO 9001** - Quality Control System, **ISO 13485** - Medical Products.

The choice of materials, technologies of components production and decontamination technologies have significant influence on physical and technological properties of dental implants. Osseointegration processes taking place in bone tissue, depend to great extent on biological compatibility of the material, macro- and microtexture of implant surface, and also on the absence of implant surface contamination. Therefore, «**CONNECT**» provides control at each stage of implant components production according to **ISO 13485:2005** standard. All components undergo strict sequence of production, decontamination and control procedures, including packaging and sterilization.

We are continuously developing, trying to make our products even more perfect.

Welcome to the World of CONNECT®!



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Titanium

Problem of choosing optimal material for implants production has been an issue for many years. Nowadays, as shown by numerous experimental and clinical studies, the best implant material is titanium.

Important information

- Titanium — pure chemical element, metal;
- Atomic number in periodical system - 22;
- Titanium has a property to remain inert for extended periods of time while staying in human body;
- Hardness - depends on the grade;
- Melting point - 1668 °C, high reactive activity;
- Density 4,51 g/cm³;
- Better chewing comfort for the patient due to fourfold less density (and the weight, respectively), in comparison to gold;
- Minor thermal conductivity;
- Ability to immediately form protective oxide layer;
- Biocompatibility, resistance to corrosion;
- Does not irritate hard and soft tissues;
- Neutral taste properties do not cause unpleasant taste in patient's mouth; absence of metal taste in the mouth, unlike some other alloys;
- Titanium is radiolucent.

All these advantages make use of titanium possible and necessary in contemporary dentistry and implantology.

IMPORTANT!

Titanium is a plastic metal; it can be mechanically treated, e.g. cutting, drilling, milling, grinding. Titanium is a non-magnetic material with low electroconductivity, which is especially important, because this ensures safe use of physiotherapeutic

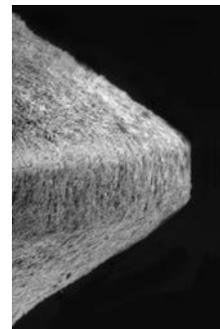
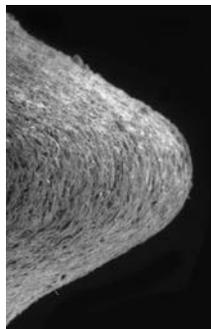
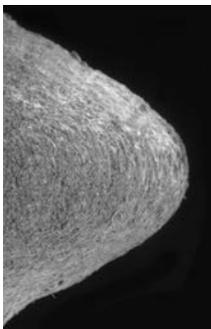
procedure for patients with titanium constructions implanted in their bodies.

However, the most important result of meticulous long-term researches has become discovery of titanium's inactivity in biologic environment. Titanium constructions are well accepted by the human body, and even become surrounded by bone and muscular tissues. There is virtually no corrosion of titanium in aggressive environment of bodily tissues, and tissues that surround it, do not change their structure with time.

High biocompatibility is provided by ability of titanium to form oxide layer on its surface within fraction of a second. Due to the presence of this layer, titanium does not corrode and does not release free metal ions, which can cause pathological processes around implant. Thus, tissues surrounding dental implant, remain free from metal ions.

Nowadays, three types of titanium are used for manufacturing of «CONNECT®» implant system components: Grade 2 pure titanium (corresponds to the ASTM F67 standard); Grade 4 titanium (corresponds to ASTM F67 standard); Grade 5 ELI titanium alloy (corresponds to ASTM F136-02 standard).

Grade 2 and Grade 4 is commercially pure titanium, which is used mainly for production of implants intended for surgical use. Grade 5 titanium alloy contains 90% of titanium, 6% of aluminium and 4% of vanadium Ti6Al4V. It was developed for increased strength properties (yield tensile strength - 900 MPa).



Surface of «STAR» implant. Stages of technological processing.

Osseointegration

Intraosseous implant is a result of extended searches and researches, which had started at the beginning of 50's of last century. Harvard talk entitled "Implantation: benefits and risks", which was presented by Swedish professor Per-Ingvar Branemark in 1978, and results of scientific researches, have started new era in implantology.

"Osseointegration" term was used for the first time during this conference. Various definitions of this term have been suggested since then, including "connection between living bone and load-bearing implant surface". In this text, we will stick to the latest definition which explains the essence of this phenomena: "anatomical and functional direct connection between living bone and implant surface bearing functional load". In other words, masticatory forces deliver direct impact to the bone via implant surface.

IMPORTANT!

Determinant factors for achieving and further maintaining of osseointegration are:

1. Implant biocompatibility;
2. Implant shape;
3. Quality of implant surface
4. Precise surgical technique;
5. Quality of bone tissue
6. Control of functional loading.

Osseointegration is not permanent, but rather changeable process, which stabilizes after around 18 months. Therefore, it is very important to know, understand and follow its key principles when choosing both surgical and prosthetic tactics in order to achieve satisfactory clinical results.

(Dr G.Pataraya Paris. France. November 1999).

Implant surface

Formation and vital activity of bone tissue, which borders non-biological structures, depend to great extent on microstructure of implant surface. Creating porosity on the surface has beneficial effect on osteogenic processes. It is higher porosity (in comparison to smooth surface) of bioinert materials surface that contributes to proteins adsorption, mechanical attachment of fibrin fibers and collagen to implant surface, provides for adhesion of osteogenic cells, fibro - and osteoblasts, proteins and growth factors synthesis, which, in the end, increases total surface area of osseointegration.

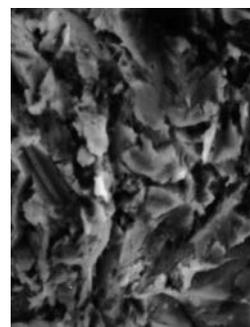
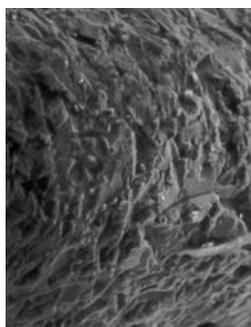
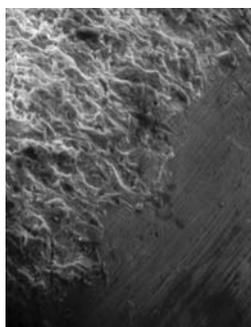
Surface porosity significantly increases surface area of interaction between implant surface and bone, which, in turn, contributes to osseointegration. Optimal pore size is considered to be between 70 and 700 μm .

Microrelief of intraosseous implant surface is formed by treating the surface with abrasive materials under pressure - the process of sandblasting. Aluminium or titanium-oxide ceramics powder is used as abrasive material.

With this technique, microrelief is being formed using 75 μm particles.

After mechanical treatment, chemical conditioning, namely acid etching, is normally used.

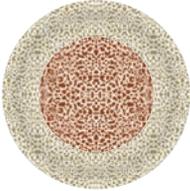
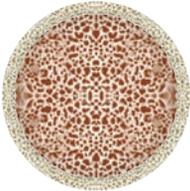
Combined use of these techniques during manufacturing of «CONNECT®» dental implants ensures optimal surface porosity and facilitates the osseointegration process.



Hydrophilic SLA-surface of Connect implants maximally facilitates osseointegration.
SLA - sand-blasted, large-grit, acid-etched.

Bone quantity and quality

Bone quality classification according to Lekholm and Zarb (1985)

D1		Type 1	<ul style="list-style-type: none">• almost entire bone is composed of homogenous compact bone
D2		Type 2	<ul style="list-style-type: none">• thick layer of compact bone surrounds a core of dense trabecular bone
D3		Type 3	<ul style="list-style-type: none">• thin layer of cortical bone surrounds a core of dense trabecular bone
D4		Type 4	<ul style="list-style-type: none">• thin layer of cortical bone surrounds a core of low density trabecular bone of poor mechanical strength

Success criteria

IMPORTANT! Success of implant therapy depends on:

- thorough treatment planning;
- following the recommended protocol of implant placement;
- adequate restorative treatment;
- individual maintenance of implant-supported restorations and regular check-ups by the dentist.

Implants



Implant type

Micro

thin \varnothing 3,0 mm
conical connection (Morse taper)
internal dodecahedron



BOSS

one-piece
 \varnothing 7,0 mm

MicroMono

one-piece
 \varnothing 3,0 mm i \varnothing 3,5 mm
standard thread



Implants range

MicroMono Plus

one-piece
 \varnothing 3,0 mm i \varnothing 3,5 mm
extended thread



Implant type

Star

conical connection (Morse taper)
internal hexagon
platform switching
standard thread



Implant type

Star Plus

conical connection (Morse taper)
internal hexagon
platform switching
extended thread



Implant type

Dental

internal connection
internal hexagon
platform switching
standard thread



Implant type

Dental Plus

internal connection
internal hexagon
platform switching
extended thread



DentalMono

one-piece
 \varnothing 3,5mm i \varnothing 4,0 mm
standard thread



Implant type

DentalMono Plus

one-piece
 \varnothing 3,5mm i \varnothing 4,0 mm
extended thread

Implant type

Transit

Provisional implants
 \varnothing 2,0 mm



Implant type

CUT

Orthodontic mini-implants
 \varnothing 1,2 mm

Micro Implants

Micro Implants Ø3.0 are designed for safe use in situations with limited width of edentulous space and limited bone quantity

DESIGN OF PROSTHETIC CONNECTION

- internal conical (Morse taper) and **dodecahedron connections** provide precise fit between implant and abutment (INTERLOCK function)
- enables uniform stress distribution and minimizes possible micromovements between implant and abutment, which may cause peri-implant bone loss
- beveled implant platform ensures tight bone adaptation

IMPLANT BODY

- imitates the anatomical shape of tooth root and ensures higher initial stability. When inserting conical-shaped implant into prepared bed, it usually takes its position even before using the instrument, which significantly facilitates operator's work.
- changes the direction of stresses arising between implant and cortical bone and transfers them to trabecular bone, which, in turn, reduces the risk of cortical bone loss

Flat apical part of implant reduces the risk of damage to anatomically important structures

THREE GROOVES

- anti-rotational effect and optimal implant stabilization
- spinning-resistance during insertion of prosthetic components
- minimising the risk of bone overheating

PROSTHETIC COMPONENTS
perfect prosthetic connection enables use of various prosthetic options

FIXATION SCREW
compatible with all abutments and Micro platform

DESIGN OF NECK PORTION

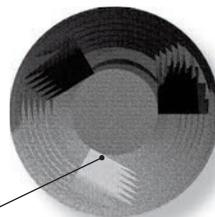
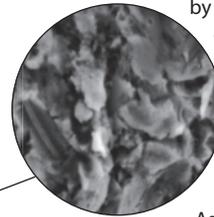
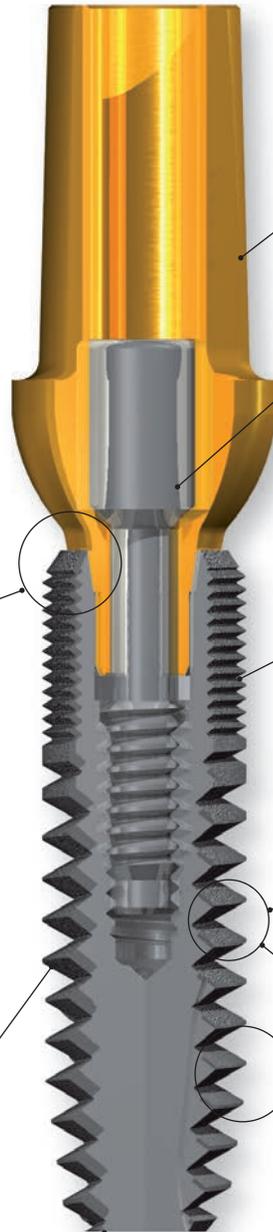
- micro-thread ensures:
- better primary stability
 - uniform distribution of occlusal forces derived from masticatory loads

ENLARGED SURFACE obtained by sand-blasting of implant surface by large-grit sand, which creates micro-porosity of titanium surface.

Further, titanium is treated by acid etching, which creates the microporous layer. As a result, surface is obtained, which contributes to growth of cells responsible for osteogenesis.

THREAD SHAPE

- facilitates easy penetration into the bone and correspondence with direction of implant bed created by drilling
- special thread configuration increases implant surface area and ensures perfect primary stability



Cover screw for MICRO implants

Cover screw is used for protection of internal part of dental implant during healing period (before second-stage surgery). **Manual** insertion torque of **10-15 Ncm** is recommended. Closure screw design enables tight fit.



Micro cover screw
1030010

Design of prosthetic connection

Internal conical connection was developed in accordance with compact size, high strength and tight abutment fit. Precise fit between implant and abutment prevents bacterial invasion into implant-abutment interface. Furthermore, such connection excludes the micromovements.

Implant body

Due to specific shape which imitates the anatomical shape of tooth root, implant surface area is increased. Therefore, total area of implant-bone interface becomes significantly larger. This ensures better primary stability, increases its resistance to functional loading.

Thread design

Microthread size with a pitch of 0.2 mm is uniform for all implant lengths. Thread pitch of 0.6 mm and specific thread shape enables resistance up to 40N of primary loading.

Cutting grooves

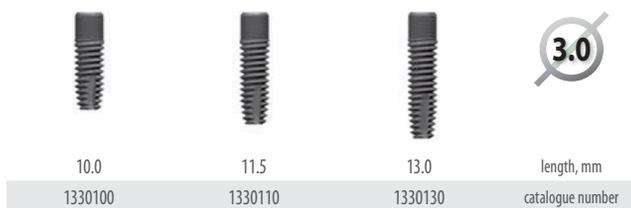
Three grooves in apical part of the implant have various sizes, depending on implant length. Length of vertical cutting grooves enables bone chips harvesting with its further compression in lower third of implant bed.

IMPORTANT!

Safe clinical solution

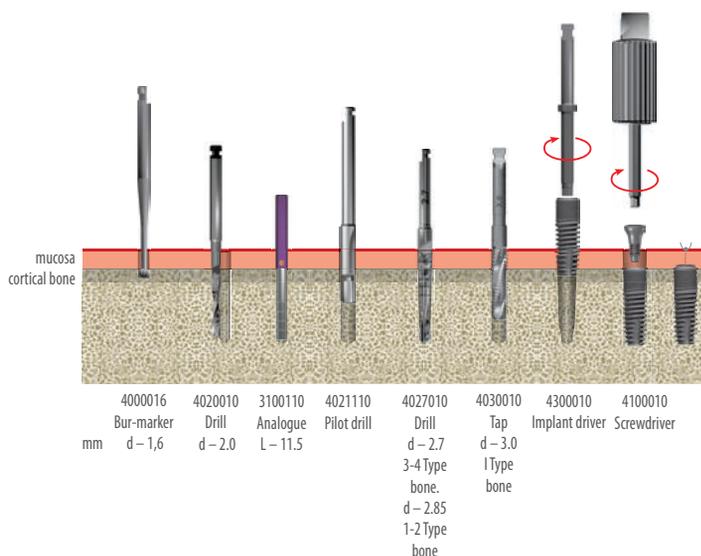
Use of narrow-diameter implants is considered safe and predictable treatment modality in situations where use of standard diameter implants would bring to the higher risk of clinical complications, e.g. associated with minimal bone volume and limited width of edentulous gap.

Recommended implant insertion torque - up to **30 Ncm**.



Surgical protocol

Drills: Ø 2,0 mm > pilot drill > Drill Ø 2,7 mm > with Type 1 bone, use of Ø 3,0 mm tap is recommended



Star and Star Plus Implants

Implant STAR — patent-protected, № 53477, registered October 11, 2010



Star

DESIGN OF PROSTHETIC CONNECTION

- internal conical (**Morse taper**) connection with hexagon enables precise fit between implant and abutment (INTERLOCK function)
- uniform stress distribution, which minimizes micro-movements between implant and abutment and risk of bone loss.

STANDARD PLATFORM

Star and Star Plus for all implant diameters, all implant sizes have uniform connection type. Polished surface of implant platform ensures high resistance to bacterial invasion. Beveled implant platform guarantees tight bone adaptation. "Platform switching" concept.

IMPLANT BODY

- imitates the anatomical shape of tooth root and ensures better initial stability. When inserting conical-shaped implant into prepared bed, it usually takes its position even before using the instrument, which significantly facilitates operator's work
- changes the direction of stresses arising between implant and cortical bone and transfers them to trabecular bone, which, in turn, reduces the risk of cortical bone loss

Flat apical part of implant reduces the risk of damage to anatomically important structures

THREE GROOVES

- anti-rotational effect and optimal implant stabilisation
- spinning-resistance during insertion of restorative components
- minimizing the risk of bone overheating
- grooves become filled with bone chips during implant placement, which improves osseointegration



FIXATION SCREW

compatible with all abutments and platforms of **Star and Star Plus implants**

PROSTHETIC COMPONENTS

improved abutment design - anatomically concave, which reduces the risk of cortical bone overload and maintains stability of soft tissues

DESIGN OF NECK PORTION

micro-thread ensures

- better primary stability
- uniform distribution of occlusal forces derived from masticatory loads
- additional cortical fixation when placing implant simultaneously with sinus-floor elevation

ENLARGED SLA SURFACE

obtained by sand-blasting of implant surface by large-grit sand, which creates microporosity on titanium surface. Further, titanium is treated by acid etching, which creates the microporous layer. As a result, surface is obtained, which contributes to growth of cells responsible for osteogenesis

THREAD SHAPE

- facilitates easy penetration into the bone and correspondence with direction of implant bed created by drilling
- special thread configuration increases implant surface area and ensures perfect primary stability
- thread pitch for **Star implant** — 0,6 mm, for **Star Plus** — 0,9mm



Star Plus



Dental and Dental Plus Implants

DESIGN OF PROSTHETIC CONNECTION

- Internal type of connection with **internal hexagon** ensures precise fit between implant and abutment, virtually excluding micro movements between them
- internal hexagon with a height of 1.9 mm directs the load-derived forces internally, thus protecting the screw from overload
- internal bevel of connection walls increases resistance to lateral loads in cortical bone area
- low-profile of implant-abutment connection improves esthetic outcomes and ensures natural look of implant-supported restoration, especially in esthetic zones
- "platform switching" concept

STANDARD PLATFORM **Dental and Dental Plus**

for all implant diameters, all implant sizes have uniform connection. Polished platform surface guarantees high resistance to bacterial invasion. Beveled implant platform ensures tight bone adaptation

IMPLANT BODY

- imitates the anatomical shape of tooth root and ensures better initial stability. When inserting conical-shaped implant into prepared bed, it usually takes its position even before using the instrument, which significantly facilitates operator's work
- changes the direction of stresses between implant and cortical bone, transferring the load to trabecular bone, which, in turn, reduces the risk of cortical bone loss
- conical implant shape and use of soft-bone surgical protocol enables high primary stability due to osseocompression

Flat apical part of implant reduces the risk of damage to anatomically important structures



PROSTHETIC COMPONENTS
prosthetic connection enables use of various prosthetic options

FIXATION SCREW
compatible with all abutments and platform of **Dental and Dental Plus Implants**

DESIGN OF NECK PORTION
Micro-thread ensures

- better primary stability
- redistribution of loads in cortical bone area, which may cause resorption during functional loading
- three-fold increase of load-bearing resistance

ENLARGED SLA SURFACE
surface roughness and micro- and macro-relief of titanium are achieved by sand-blasting and acid-etching

- such surface increases contact area between bone and implant
- micromechanical fixation increases implant stability

THREAD SHAPE

- facilitates easy penetration into the bone and correspondence with direction of implant bed created by drilling
- special thread configuration increases implant surface area and enables achievement of perfect primary stability
- thread pitch for **Dental implant** - 0,6mm, for **Dental Plus** - 0,9mm

THREE GROOVES

- anti-rotational effect and optimal implant stabilisation
- spinning-resistance during insertion of restorative components
- minimising the risk of bone overheating
- grooves become filled with bone chips during implant placement, which improves osseointegration



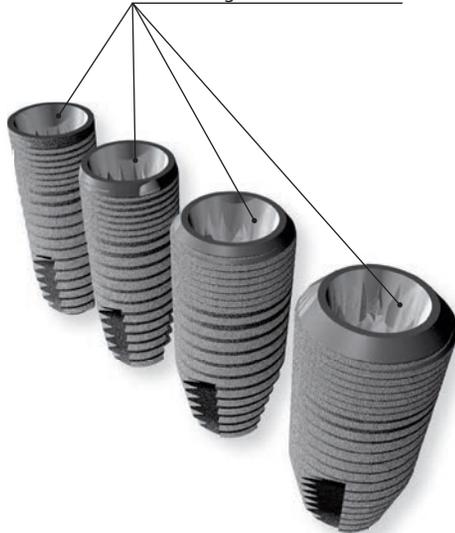
Dental



Dental Plus

Star Implants

Standard platform Ø 3,2 mm
all sizes of **Star and Star Plus implants**
have uniform internal conical connection (**Morse taper**)
with hexagon



3.5



length, mm	7	8.5	10	11.5	13	15
catalogue number	1035070	1035080	1035100	1035110	1035130	1035150

4.0



length, mm	7	8.5	10	11.5	13	15
catalogue number	1040070	1040080	1040100	1040110	1040130	1040150

4.5



length, mm	7	8.5	10	11.5	13	15
catalogue number	1045070	1045080	1045100	1045110	1045130	1045150

5.0



length, mm	7	8.5	10	11.5	13	15
catalogue number	1050070	1050080	1050100	1050110	1050130	1050150

DESIGN OF PROSTHETIC CONNECTION

- internal conical connection (**Morse taper**) with hexagon enables precise fit between implant and abutment (INTERLOCK function)
- biological connection provides uniform stress distribution, thus minimising micro-movements and crestal bone loss
- "platform switching" concept

Implant body

Due to specific shape which imitates the anatomical shape of tooth root, implant surface area is increased. Therefore, total area of implant-bone interface is significantly larger. This ensures better primary stability, increases its resistance to functional loading.

Thread design

Microthread size with a pitch of 0.3 mm is uniform for all implant lengths. Implant pitch of 0.6 mm and specific thread shape enables resistance to 40N of initial loading.

Cutting grooves

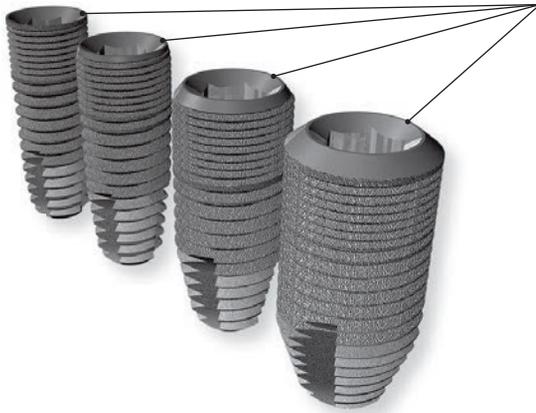
Three grooves in apical part of the implant have various sizes, depending on implant length. Length of vertical cutting grooves enables collection of bone chips with its further compression in lower third of implant bed.

Recommended implant insertion torque - up to **40 Ncm**. Do not exceed recommended insertion torque in order to avoid excessive bone compression.

IMPORTANT!

This implant type was created based on classical traditions in implant dentistry.

Dental Implants



Standard platform Ø3,5 mm
All sizes of **Dental and Dental Plus implants**
have uniform connection — **internal hexagon**



DESIGN OF PROSTHETIC CONNECTION

- internal type of connection with **internal hexagon** ensures stable abutment positioning, virtually excluding micro movements between implant and abutment
- **internal hexagon** with a height of 1.9 mm directs the load-derived forces internally, thus protecting the screw from overload
- internal tilt of connection walls increases resistance to lateral loads in cortical area
- low-profile implant-abutment connection improves esthetic outcomes and ensures natural look of implant-supported restoration, especially in esthetic zones
- “platform switching” concept

Implant body

Due to specific shape which imitates the anatomical shape of tooth root, implant surface area is increased. Therefore, total area of implant-bone interface is significantly larger. This ensures better primary stability, increases its resistance to functional loading.

Thread design

Microthread size with a pitch of 0.3 mm is uniform for all implant lengths. Thread pitch of 0.6 mm and specific thread shape enables resistance to 40N of initial loading.

Cutting grooves

Three grooves in apical part of implant have various sizes, depending on implant length. Length of vertical cutting grooves enables harvesting of bone chips with its further compression in lower third of implant bed.

Recommended implant insertion torque - up to **40 Ncm**. Do not exceed recommended insertion torque in order to avoid excessive bone compression.

3.5



length, mm	7	8.5	10	11.5	13	15
catalogue number	1735070	1735080	1735100	1735110	1735130	1735150

4.0



length, mm	7	8.5	10	11.5	13	15
catalogue number	1740070	1740080	1740100	1740110	1740130	1740150

4.5



length, mm	7	8.5	10	11.5	13	15
catalogue number	1745070	1745080	1745100	1745110	1745130	1745150

5.0



length, mm	7	8.5	10	11.5	13	15
catalogue number	1750070	1750080	1750100	1750110	1750130	1750150



Dental Plus implants

Cover screw for Dental and Dental Plus implants
Cover screw is used for protection of internal part of dental implant during healing period (before second-stage surgery). Manual insertion torque of **10-15 Ncm** is recommended.



Cover screw Dental
1700011



Cover screw Dental Plus
1700010

Standard platform Ø3,5 mm

All sizes of **Dental and Dental Plus implants** have uniform connection type — **internal hexagon**.

DESIGN OF PROSTHETIC CONNECTION

- internal type of connection with internal hexagon enables precise fit between implant and abutment, virtually excluding micro movements between implant and abutment
- **internal hexagon** with a height of 1.9 mm directs the load-derived forces internally, thus protecting the screw from overload
- internal tilt of connection walls increases resistance to lateral loads in cortical bone area
- low-profile implant-abutment connection improves esthetic outcomes and ensures natural look of implant-supported restoration, especially in esthetic zones
- “platform switching” concept.

Implant body

Due to specific shape which imitates the anatomical shape of tooth root and provides better primary stability, **Dental Plus** implant expands the alveolar ridge and plays a role of screw-type osteotome.

Thread design

KNOW-HOWS of Connect implants are: Microthread size in neck portion of **Dental Plus** implant has a pitch of 0.3 mm and it is uniform for all implant lengths.

Thread pitch of 0.9 mm and specific thread shape enables **Dental Plus** implant movement by 0.9 mm with each turn of the implant holder, in comparison to **Dental** implant, which moves by 0.6 mm with each turn.

This implant is recommended for Bone Types 3 and 4.

Cutting grooves

Three grooves in apical part of the implant have various sizes, depending on implant length. Length of vertical cutting grooves enables harvesting of bone chips with its further compression in lower third of implant bed.

Recommended implant insertion torque - up to **40 Ncm**. Do not exceed recommended insertion torque in order to avoid excessive bone compression.



	8.5	10	11.5	13	15	length, mm
	1735081	1735101	1735111	1735131	1735151	catalogue number

	7	8.5	10	11.5	13	15	length, mm
	1740071	1740081	1740101	1740111	1740131	1740151	catalogue number

	7	8.5	10	11.5	13	15	length, mm
	1745071	1745081	1745101	1745111	1745131	1745151	catalogue number

	7	8.5	10	11.5	13	15	length, mm
	1750071	1750081	1750101	1750111	1750131	1750150	catalogue number

Recommended implant insertion torque - up to **40 Ncm**.

DentalMono Implants



Bone level

Advantages of one-piece implants:

- fastest possible and, at the same time, effective osseointegration (reduction of working time during surgery);
- simple, fast and safe use due to the new shape of intraosseous part of one-piece "Dental-mono" implants; "switching platform" concept is used
- immediate loading with bone types 1 and 2 and primary stability of **35-40Ncm**. Possibility of restoration fabrication in esthetic zones immediately after implant placement;
- fabrication of temporary restoration without occlusal load is recommended;
- rational solution for tissue-preservation procedures - implant is inserted in fresh extraction socket;
- possibility to control implant stability during surgical stage (osseointegration period);
- guaranteed maximum primary stability without compression of cortical bone;
- minimum bone loss after restorative procedures;
- avoiding second surgical stage, fast soft tissues healing;
- reduction of overall treatment duration.

DentalMono Plus Implants



Thread design

DentalMono Plus thread pitch of 0.6 mm and specific thread shape enable resistance to 40N of primary loading.

Increased distance between macrothreads of **DentalMono Plus** implants increases osseointegration and accelerates healing processes. Thread pitch of 0.9 mm and specific thread shape enables DentalMono Plus implant movement by 0.9 mm with each turn of the implant holder, in comparison to **DentalMono implant**, which moves by 0.6 mm with each turn.

This implant is recommended for Bone Types 3 and 4.

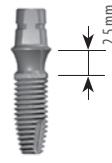
Recommended implant insertion torque - up to **40Ncm**. Do not exceed recommended insertion torque in order to avoid excessive bone compression.

3.5



length, mm	10	11.5	13
catalogue number	1835100	1835110	1835130

4.0



length, mm	10	11.5	13
catalogue number	1840100	1840110	1840130

Instruments: surgical kit - see page 42

3.5



length, mm	10	11.5	13
catalogue number	1835101	1835111	1835131

4.0



length, mm	10	11.5	13
catalogue number	1840101	1840111	1840131

Instruments: surgical kit - see page 42



Surgical protocol

Drills: \varnothing 2,0 mm > pilot > Drill \varnothing 2,7 mm > for bone types 1 and 2 use of \varnothing 3,0 mm bone tap is recommended



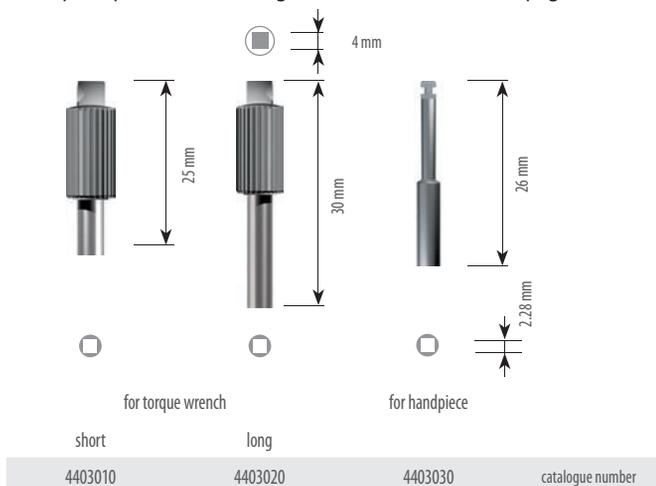
Surgical protocol

Drills: \varnothing 2,0 mm > pilot > Drill \varnothing 2,7 mm > Drill \varnothing 3,0 mm > for bone types 1 and 2 use of \varnothing 3,0 mm bone tap is recommended



Surgical protocol

Drills: \varnothing 2,0 mm > pilot > Drill \varnothing 2,7 mm
For implant placement use surgical instruments is shown at page 51



MicroMono Implants

MicroMono implant is a one-piece implant with integrated abutment, which is designed for one-stage surgical procedure and fabrication of cement-retained restorations.

Thread design

MicroMono implant thread pitch of 0.6 mm and specific thread shape ensure resistance to 40N of initial loading.



MicroMono Plus Implants

MicroMono implant is a one-piece self-tapping implant with integrated abutment, which is designed for one-stage surgical procedure and fabrication of cement-retained restorations.

MicroMono Plus implant was designed for narrow alveolar ridges and edentulous areas with insufficient mesio-distal width.

Thread design

Design features of the implant are compressive, concentrating thread configuration and specific shape of implant body, that provide maximum confidence for the operator in compromised situations. **MicroMono Plus** implant is indicated for all types of bone and can be used for immediate functional use (loading).

In particular situations, it is possible to submerge transgingival part into bone tissue.

Recommended implant insertion torque - up to **40 Ncm**. Do not exceed recommended insertion torque in order to avoid excessive bone compression.

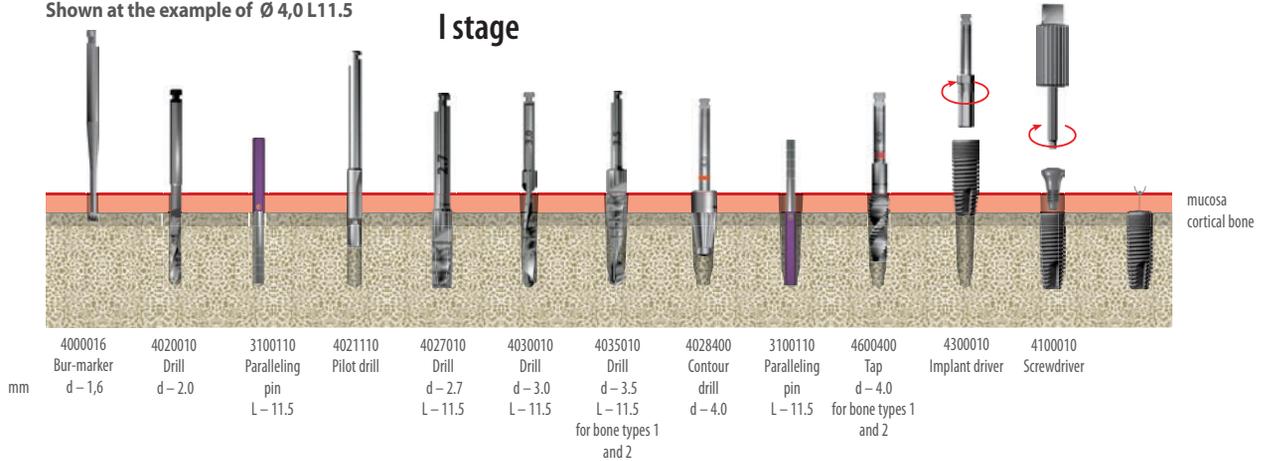


Implant placement technique

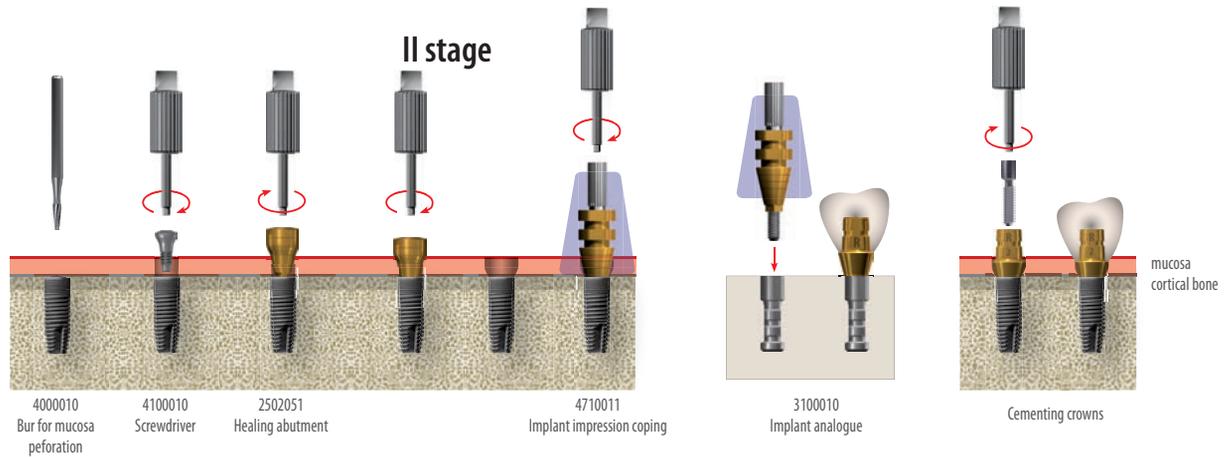
Two-stage technique

Shown at the example of $\varnothing 4,0$ L11.5

I stage



II stage



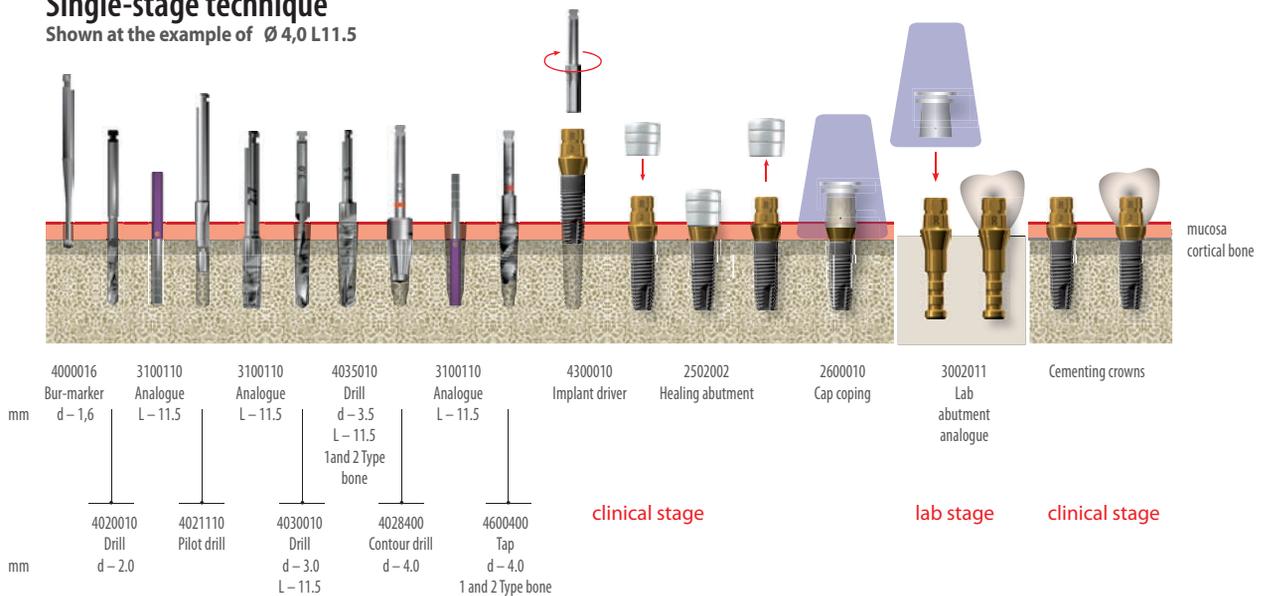
clinical stage

lab stage

clinical stage

Single-stage technique

Shown at the example of $\varnothing 4,0$ L11.5



clinical stage

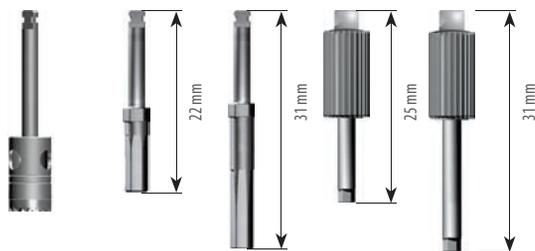
lab stage

clinical stage

Boss Implant



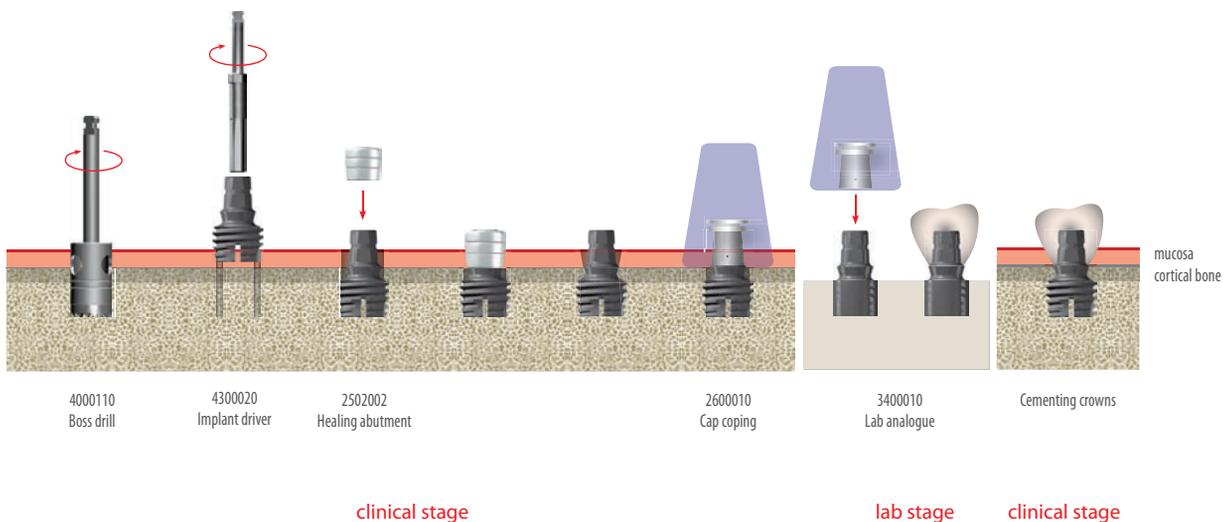
For insertion, use instruments shown at this page.



Boss drill	for handpiece		for torque wrench		catalogue number
	short	long	short	long	
4000110	4300010	4300020	4301010	4301020	

Advantages:

- can be used in cases of severe atrophy of maxilla and mandible
- simplified surgical protocol - only one drill
- optimal for situations with low positioning of maxillary sinus floor
- immediate loading with bone types 1 and 2 (one surgery only), possibility of esthetic rehabilitation immediately after surgery
- possibility to control implant stability during surgical phase (osseointegration period)
- minimum bone loss after restorative phase
- absence of second surgical stage, fast soft tissues healing
- reduction of overall treatment duration



Transit provisional implants

Indications:

- can be used as provisional implant for temporary rehabilitation during osseointegration phase of definitive implants and bone augmentation procedures.

Provisional implants can be used for cementation of fixed restorations. Has conical shape, fixes easily in the bone due to self-tapping properties.

If necessary, implant length can be reduced with diamond disk (residual length should not be less than 10 mm). Implant insertion protocol remains unchanged.

Prosthetic platform of Transit №2 implant can be bent up to 30 degrees (only once).

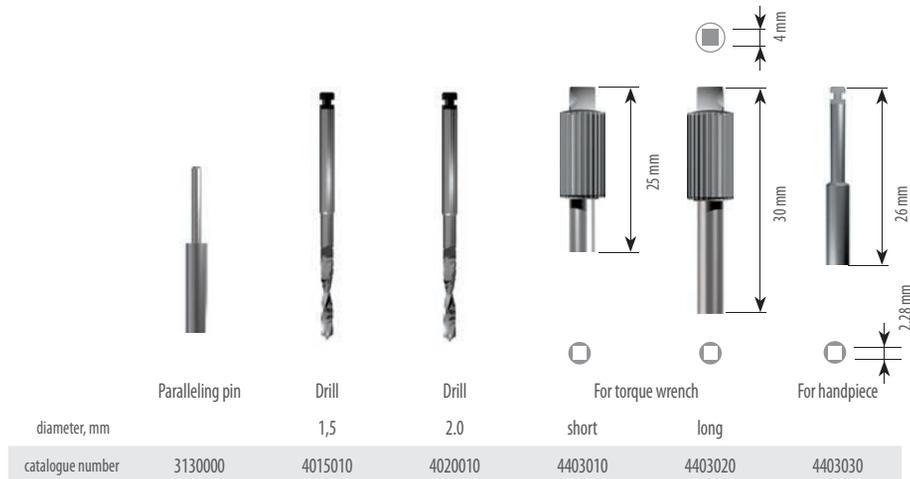
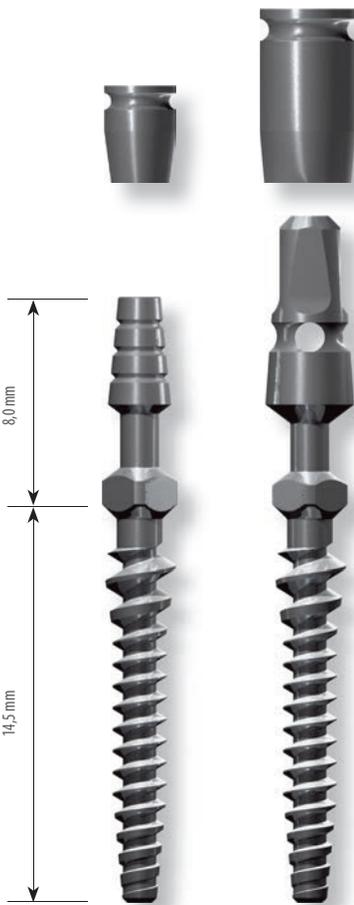
Recommended implant insertion torque - **20 Ncm.**

With a bending key, abutment angulation can be changed (only once).

For implant insertion, use surgical instruments indicated in this page.



For insertion, use instruments shown at this page.



IMPORTANT! Drill Ø 2.0 mm should be used if necessary for type 1 mandibular bone.



Abutment key for folding	
№1	4403040
№2	4403041

CUT Orthodontic micro-implants

8,0	10,0	12,0	length L1, mm
1,5	1,5	1,5	length L2, mm
1512080	1512100	1512120	catalogue number

8,0	10,0	12,0	length L1, mm
3,0	3,0	3,0	length L2, mm
1512081	1512101	1512121	catalogue number

Orthodontic micro-implants are temporary implants that create additional anchorage during orthodontic treatment. Implant head with slot and hole is ideally suited for attachment of orthodontic archwire and other orthodontic devices.

Easy and reliable insertion protocol. Self-tapping threads simplify implant insertion.

Manual insertion torque of **20 Ncm** is recommended

CUT orthodontic implants can be placed transgingivally, using flapless approach, and also without implant bed preparation in bone types 3 and 4.



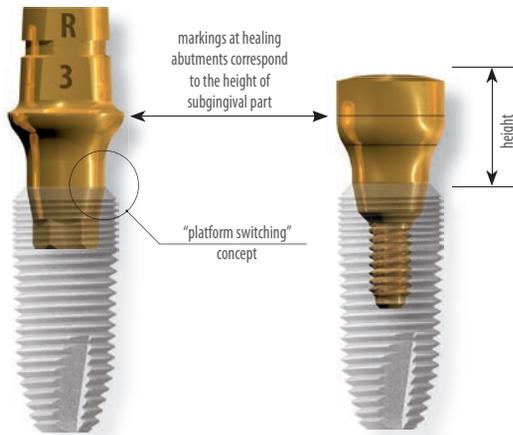
For insertion, use instruments shown at this page.

For torque wrench		For handpiece	Drill for contra-angle handpiece	Drill for straight handpiece	
short	long		1,0	1,0	diameter, mm
			12,0	12,0	length, mm
4403010	4403020	4403030	4010111	4010110	catalogue number

IMPORTANT!

The drills diameter is very small - you should control the force applied to the drill and drilling direction has to be directed alongside the long axis of the drill in order to avoid drill fracture.

Star healing abutments conical connection



Healing abutments (gums formers, healing platforms) are used at the second stage of implant treatment (two-stage protocol) or with single-stage protocol for soft tissues healing or contouring

- for optimal contouring of peri-implant soft tissues
- choice of healing abutment is defined by soft tissues configuratio

Manual insertion torque is recommended:
15 Ncm — for **Star** healing abutments,
20 Ncm — for **Dental** healing abutments,
15 Ncm — for **Micro** healing abutments,
 (using manual Screwdriver).

Markings: healing abutment markings correspond to the height of subgingival component, which facilitates choice of abutment size. First marking corresponds to height №1, second marking №2, third marking - №3, fourth marking - №4 (marking step is 1 mm). When looking from above - markings that correspond to the diameter and number of healing abutment.

Due to standard internal hex prosthetic connection, **standard platform** $\varnothing 3,2$ mm allows use of all **Star** healing abutments with all four diameters of Star and **Star Plus implants**.

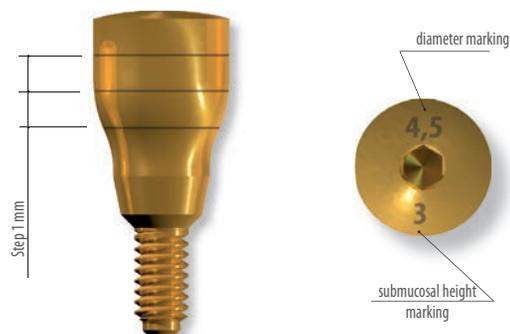
Design of healing abutment provides tight fit.

	№1	№2	№3	№4
N (narrow)				
diameter, mm	4,5	4,5	4,5	4,5
height, mm	3	4	5	6
catalogue number	2501031	2501041	2501051	2501061

	Ftoroplastic	№1	№2	№3	№4
R (regular)					
diameter, mm	5,0	5,0	5,0	5,0	5,0
height, mm	5	3	4	5	6
catalogue number	2502052	2502031	2502041	2502051	2502061

	№1	№2	№3	№4
W (wide)				
diameter, mm	5,5	5,5	5,5	5,5
height, mm	3	4	5	6
catalogue number	2503031	2503041	2503051	2503061

Instrument: Screwdrivers at page 47





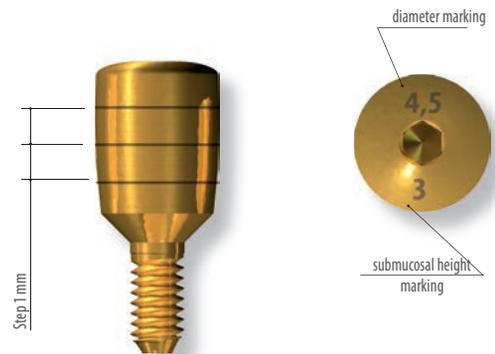
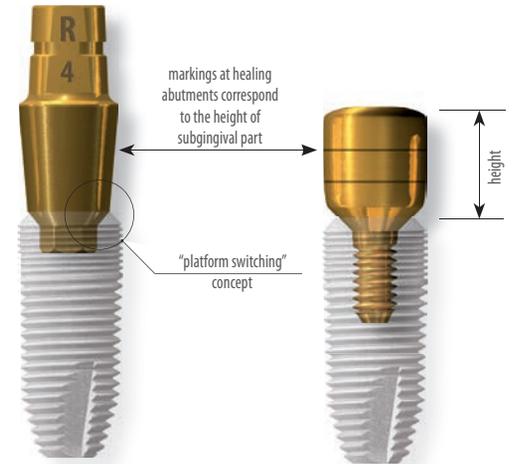
Due to standard internal hex prosthetic connection, **standard platform** Ø 3.5 mm allows use of all **Dental** healing abutments with all four diameters of **Dental i Dental Plus** implants Design of healing abutment provides tight fit.

Dental healing abutment hexagon connection

N°1	N°2	N°3	N°4	
				N (narrow)
4,5 3	4,5 4	4,5 5	4,5 6	
2571031	2571041	2571051	2571061	diameter, mm height, mm catalogue number

Ftropolastic	N°1	N°2	N°3	N°4	
				R (regular)	
5,0 5	5,0 3	5,0 4	5,0 5		
2572052	2572031	2572041	2572051	2572061	diameter, mm height, mm catalogue number

N°1	N°2	N°3	N°4	
				W (wide)
5,5 3	5,5 4	5,5 5	5,5 6	
2573031	2573041	2573051	2573061	diameter, mm height, mm catalogue number



Instruments: see Screwdrivers at page 47

Micro healing abutments conical connection



N°1	N°2	N°3	
			diameter, mm height, mm catalogue number
4,0 2	4,0 4	4,0 6	
2502320	2502340	2502360	

Due to standard internal prosthetic connection, **standard platform** Ø 2,6 mm enables use of all **Micro** healing abutments with all **Micro** implants.



Instruments: see Screwdrivers at page 47

Micro prosthetic components

Prosthetic stage is initiated after completion of implant osseointegration or simultaneously with implants uncovering, depending on clinical situation.

- Pick-up impression coping (for open tray) long and short
 - Pick-up screws included
 - for transferring implant position to stone cast using open-tray impression technique
- Manual tightening torque of **10-15 Ncm** is recommended for impression copings.

- Pop-in impression coping (for closed-tray technique), screw included
 - for transferring implant position to stone cast using closed-tray technique
 - can be used in situations with non-parallel implants positioning
- Manual tightening torque of **10-15 Ncm** is recommended for impression copings.

Lab implant analogue is used for fixation of prosthetic components on stone cast.



Micro impression coping (open tray)		
		
height, mm	13,0	15,5
height all, mm	18,5	21,0
catalogue number	4700331	4700332

Micro impression coping (closed tray)	
	
height, mm	12,5
height all, mm	18,0
catalogue number	4700330

	Micro implant analogue	Lab screw
		
thread (M)		1,4
catalogue number	3300010	2000110

Instruments: see screwdrivers at page 47

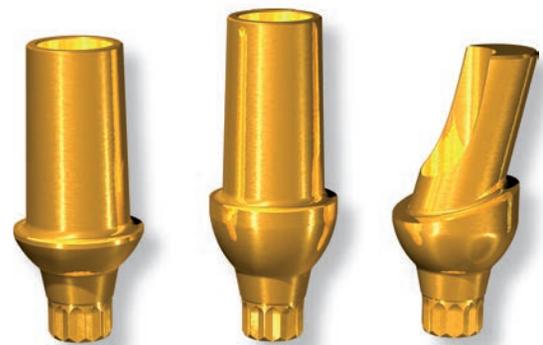
Micro abutments

conical connection

№1		№2		Temporary	
					
0	0	15	0	angulation	
4,0	4,0	4,0	3,4	shoulder diameter, mm	
1	2			height, mm	
2300010	2300020	2315000	2300000	catalogue number	

- abutments can be easily adapted to clinical situation
- for cement-retained restorations
- guiding dodecahedron for simple and precise positioning

Micro fixation screwcan	
	Can be used with all Micro abutments
1,4	thread (M)
2000011	catalogue number

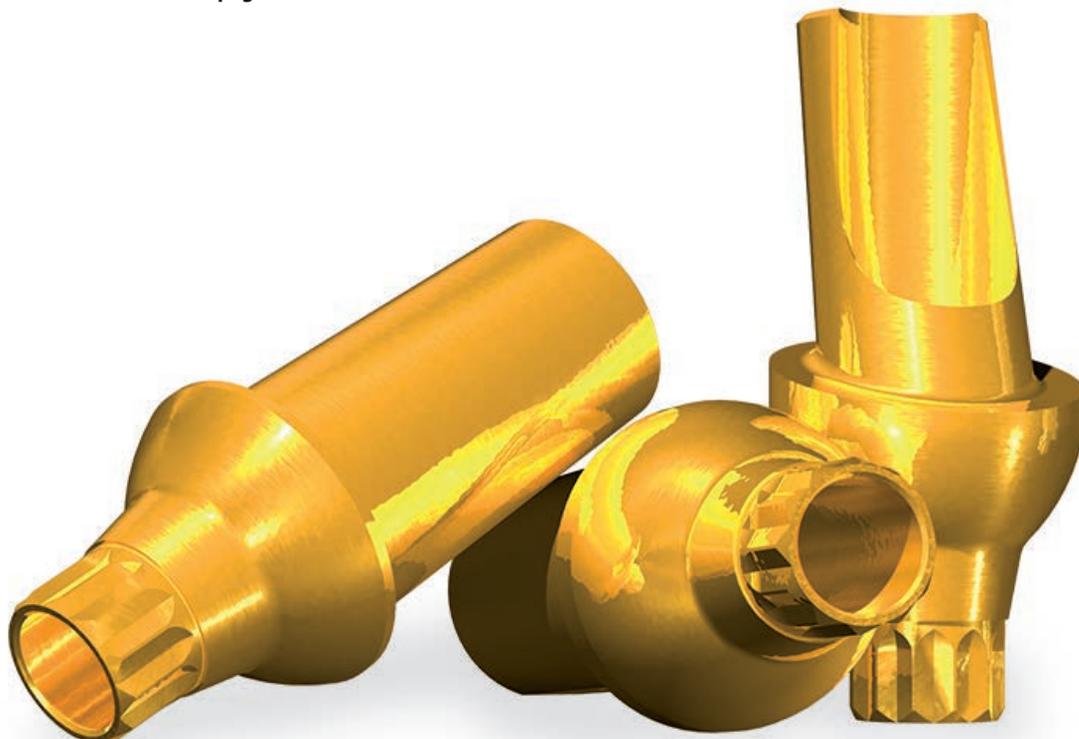


Conical connection with internal dodecahedron enables directional positioning of prosthetic components, which facilitates abutment insertion and makes it more precise. Guiding dodecahedron allows abutment insertion in one of 12 possible positions, and the cone guarantees optimum stability and anti-rotational protection.

Manual insertion torque of **20 Ncm** is recommended.

ATTENTION! USE ONLY NEW SCREW (straight from package) to fix abutment in the patient's mouth. The screw can be used only once.

Instruments: see screwdrivers at page 47



Star prosthetic components conical connection

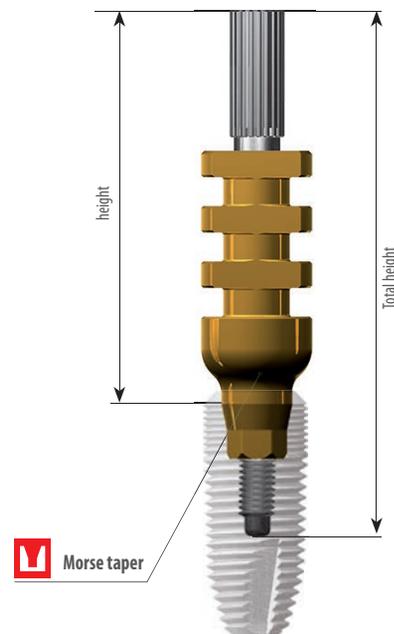
Prosthetic stage is initiated after completion of implant osseointegration or simultaneously with implants uncovering, depending on clinical situation.

Connect implant system offers wide range of prosthetic components for various types of implant-supported restorations. Independent of implant diameter, necessary abutment can be chosen and successful result achieved. Conical connection with internal hexagon enables guiding positioning of prosthetic component, that facilitates abutment insertion and makes it more precise. Guiding hexagon allows abutment fixation in one of six possible positions, and the cone guarantees optimum stability and anti-rotational protection. All prosthetic components have laser markings.



- Pick-up impression coping (for open tray) — long and short
 - Pick-up screws included
 - for transferring implant position to stone cast using open-tray technique
 - same impression coping is used for all diameters of Star and Star Plus implants
- Tightening torque of **10-15 Ncm** is recommended for impression coping screws.

- Pop-in impression coping (for closed tray) — long and short
 - Pop-in screw included
 - for transferring implant position to stone cast using closed-tray impression technique
 - can be used in situation with non-parallel implants positioning
 - same impression coping is used for all diameters of Star and Star Plus implants
- Tightening torque of **10-15 Ncm** is recommended for impression coping screws.



Impression coping for implant-level impressions (open tray)



height, mm	14,0	16,0
height all, mm	18,5	21,0
catalogue number	4710011	4710021

Instruments: see screwdrivers at page 47

Impression coping for implant-level impression (closed tray)



height, mm	13,0	16,5
height all, mm	17,5	20,5
catalogue number	4710040	4710050

Instruments: see screwdrivers at page 47

Star prosthetic components

conical connection

Implant analogue



3100010

Lab screw



1,8

2000220

thread (M)

catalogue number

Lab implant analogue

is used for fixation of prosthetic components in stone cast.

Abutment analog



N

3001011



R

3002011



W

3003011

Markings

catalogue number

Lab abutment analogue

is used for transferring abutment position to the stone cast after impression taking using abutment impression copings.

Cap coping



2600020

catalogue number

Cap coping

is used for individual waxing-up of cast framework.



Screwdriver long

4100030

Abutment impression coping



2600010

catalogue number

Lab coping and abutment head have one beveled side, which has to click when plastic coping is inserted onto abutment. Big advantage of plastic coping is its rigid and reliable fixation in impression material, which ensures only one correct position of coping+analogue and virtually excludes mobility due to impression material elasticity.

Plastic coping is used:

- for transferring abutment position from oral cavity to stone cast (for R and W abutments)
- for fabrication of temporary restorations
- as a modelling coping for lab implant analogue

Star abutments

conical connection



- abutments can be easily adapted to any clinical situation
- can be milled for individualization purposes
- for cement-retained restorations
- guiding hexagon is used for simple and precise positioning

IMPORTANT!

Design of prosthetic connection

Internal conical connection (Morse taper) with hexagon is used for reliable fixation of various abutments types. This type of implant/abutment connection contributes to perfect, sealed and stable fit, which excludes bacterial invasion, uniformly distributes occlusal forces and virtually excludes any micro-movements.

Standard platform Ø3,2 mm

The size of internal prosthetic connection is standard for all four diameters of **Star** and **Star Plus Implants**. This allows fixation of all straight and angled Star abutments. Implant walls remain strong enough with this type of connection, being able to withstand direct loads.

Use of angulated abutment is recommended in situations when implant was placed at more than 15° angle to tooth long axis.

Burn-out plastic abutment is used for individual abutment fabrication by dental technician.

Surface coating

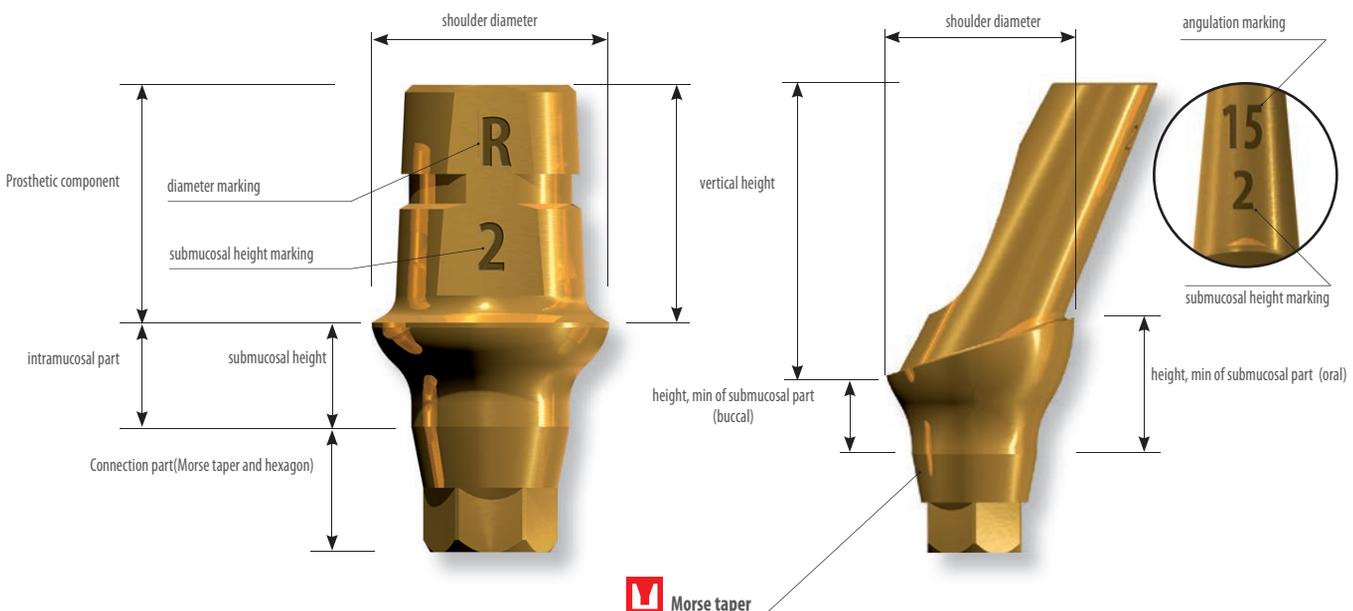
Vacuum arc technique of surface coating (titanium-nitride coating) is used, which is characterised by high adhesion properties and mechanical strength, resistance to friction wear and influence of atmospheric air, aggressive environments, erosion.

Markings

Abutment markings correspond to the height of subgingival part, which facilitates the choice of abutment type (step is 1 mm).

KNOW-HOWS

- Morse taper connection which forms implant-abutment "monostructure"
- tulip-shaped abutment contour, which takes bacteria away from contact zone between implant and bone, moves risks towards inside parts of platform and forms dense soft tissues cuff around implant neck;
- "switching platform" concept



Cement-retained restorations

Ashless	N°1	N°2	N°3	N°4	N°5	N°6	N°1	N°2	N°1	N°2	
											N (narrow) angulation shoulder diameter, mm height min, mm height max, mm vertical height, mm catalogue number, mm
4,2	4,2	4,2	4,2	4,2	4,2	4,2	4,2	4,2	4,2	4,2	
2	1	2	3	4	5	6	1	2	1	2	
6	6	6	6	6	6	6	2,5	3,5	2,5	3,5	
2021010	2001011	2001021	2001031	2001041	2001051	2001061	2015111	2015121	2025111	2025121	

Ashless	N°1	N°2	N°3	N°4	N°5	N°6	N°1	N°2	N°5	N°1	N°2	N°5	
													R (regular) angulation shoulder diameter, mm height min, mm height max, mm vertical height, mm catalogue number
4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	
2	1	2	3	4	5	6	1	2	5	1	2	5	
4,8	4,8	4,8	4,8	4,8	4,8	4,8	2,5	3,5	6,5	2,5	3,5	6,5	
2021020	2002011	2002021	2002031	2002041	2002051	2002061	2015211	2015221	2015251	2025211	2025221	2025251	

Ashless	N°1	N°2	N°3	N°4	N°5	N°6	N°1	N°2	N°1	N°2	
											W (wide) angulation shoulder diameter, mm height min, mm height max, mm vertical height, mm catalogue number
5,4	5,4	5,4	5,4	5,4	5,4	5,4	5,4	5,4	5,4	5,4	
2	1	2	3	4	5	6	1	2	1	2	
4,8	4,8	4,8	4,8	4,8	4,8	4,8	2,5	3,5	2,5	3,5	
2021030	2003011	2003021	2003031	2003041	2003051	2003061	2015311	2015321	2025311	2025321	

For milling	For milling	Temporary	Temporary without hexagon	
6,0	8,0	4,8	4,8	shoulder diameter, mm
7,0	6,0	9,0	9,0	vertical height, mm
2004060	2004080	2060001	2060000	catalogue number

Fixation screw	
1,8	Thread (M)
2000020	catalogue number

Recommended insertion torque **35 Ncm**.

ATTENTION! USE ONLY NEW SCREW (straight from package) to fix abutment in patient's mouth. The screw can be used only once.

Individual abutment (consists of base titanium part and burn-out plastic coping) is used as a base for individual zirconia abutment for cement-retained restorations (metal-metal). Abutment is fixed to the coping with a special glue.

Fixation screw fits all Star and Star Plus abutments and platforms

Ashless cap	Base	
4,3	4,3	shoulder diameter, mm
4,2	0,6	height, mm
10	4,0	vertical height, mm
2420010	2420001	catalogue number



Instruments: see screwdrivers at page 47

Star abutments

for screw-retained restorations



	N°1	N°2	N°3	N°4	Abutment micro-screw	Abutment microscrew-spline	Abutment closure screw
diameter, mm	3,8	3,8	3,8	3,8			
height, mm	0	1	2	3			
catalogue number	2400010	2400020	2400030	2400040	2000030	2000031	2000041

Solid-body abutments for screw-retained fixation were designed for achieving maximum versatility of screw-retained restorations. They have following characteristics:

- load transfer to implant body, which minimises overload and fracture risks
- screw retention provides rigid connection between restoration and abutment
- recommended insertion torque for microscrew - **15Ncm**
- up to 40° difference between implants angulations is acceptable
- increased precision of restorations
- retrievability of implant-supported restorations

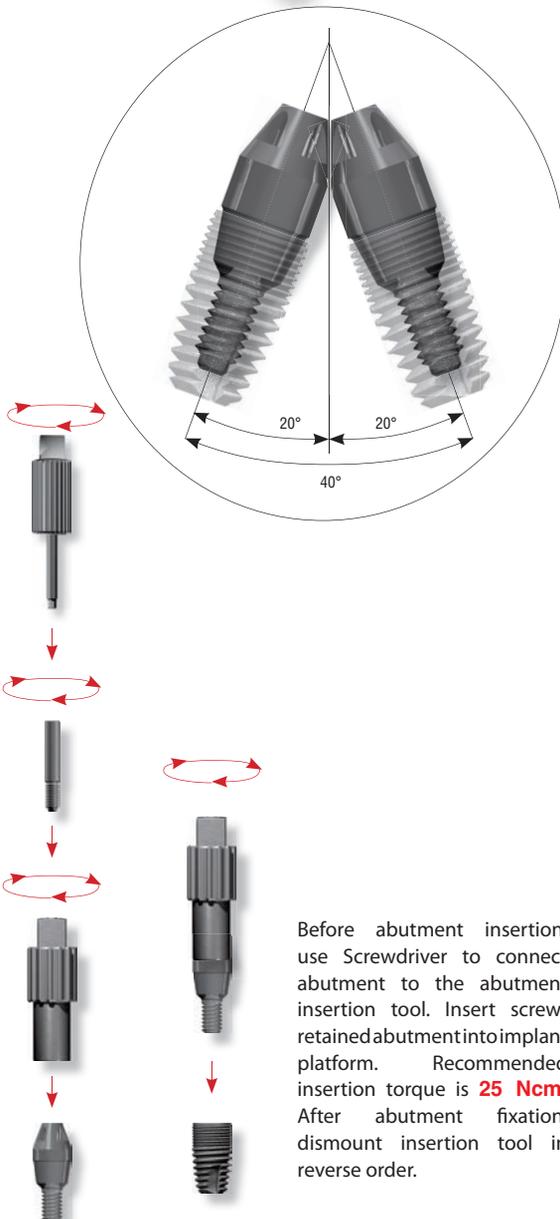
IMPORTANT!

Necessity to remove implant-supported restoration may arise in case of:

- routine change of prosthetic components;
- screw loosening or fracture
- abutment fracture
- restoration adjustment after implant loss
- repeated surgical procedure

Retrievability of implant-supported restoration significantly increases safety of rehabilitation.

Screw-retained restorations have proved their long-term efficiency in edentulous patients.



Before abutment insertion, use Screwdriver to connect abutment to the abutment insertion tool. Insert screw-retained abutment into implant platform. Recommended insertion torque is **25 Ncm**. After abutment fixation, dismount insertion tool in reverse order.

Lab abutment analog	Abutment impression coping	Cap	Cap Temporary Ti	Abutment micro-screw	Abutment microscrew-spline	
catalogue number	3500010	4740011	2600040	2600041	2000030	2000031

For abutment insertion, use instrument shown in this page.

Abutment insertion tool short	Abutment insertion tool long	Fixation screw for abutment insertion tool	Screwdriver, short
catalogue number	4410010	4410020	4100010

Star abutments ball-abutments for overdentures

№1	№2	№3	Cap for overdenture	
2,0	4,0	6,0		height, mm
2200011	2200021	2200031	2600031	catalogue number



Cap for denture

Ball-abutments are designed for stabilization of overdentures supported by 2 or more implants. They provide adequate stabilization and retention of the prosthesis. With this type of restorations, priority is given to functional component. Therefore, overdenture adjustment is directed to maximum fit between restoration and ball-abutments.

Abutments design tolerates difference between implant angulations up to 10° minimum ball size is Ø2 mm; ; coping with replaceable sealing rubber ring.

Coping inclination up to 20° degrees is possible (10°+10°).

Design of ball abutments for overdentures is recommended for immediate loading protocol.

Recommended insertion torque - **35 Ncm**.



For insertion, use instruments shown at this page.

25 mm	30 mm	26 mm	2,28 mm	
Abutment insertion tool for torque wrench	Abutment insertion tool for torque wrench	Abutment insertion tool for handpiece	Ball abutment lab analogue	
short	long			
4403010	4403020	4403030	3200011	catalogue number

Dental prosthetic components internal hexagone

Prosthetic stage is initiated after completion of implant osseointegration or simultaneously with implants uncovering, depending on clinical situation.

Connect implant system offers wide range of prosthetic components for various types of implant-supported restorations. Independent of implant diameter, necessary abutment can be chosen and successful result achieved. Conical connection with internal hexagon enables guiding positioning of prosthetic component, that facilitates abutment insertion and makes it more precise. Guiding hexagon allows abutment fixation in one of six possible positions, and the cone guarantees optimum stability and anti-rotational protection.

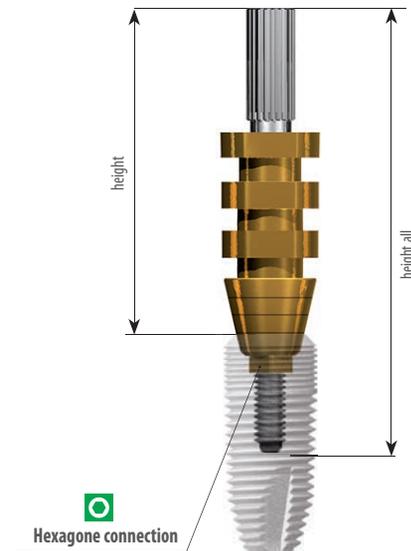
All prosthetic components have laser markings.



- Pick-up impression coping (for open tray)
 - Pick-up screws included
 - for transferring implant position to stone cast using open-tray impression technique
 - same impression coping is used for all diameters of Dental and Dental Plus implants
- Tightening torque of **10-15 Ncm** is recommended for impression coping screws.

- Pop-in impression coping (for closed tray)
 - long and short
- Pop-in screw included
- for transferring implant position to stone cast using closed-tray impression technique
- used in situations with non-parallel implants positioning
- same impression coping is used for all diameters of Dental and Dental Plus implants

Tightening torque of **10-15 Ncm** is recommended for impression coping screws.



Implant impression coping (open tray)



height, mm	16,0
height all, mm	21,0
catalogue number	4717011

Implant impression coping (closed tray)



height, mm	13,0	17,0
height all, mm	16,5	20,0
catalogue number	4717040	4717050

Instruments: see Screwdriver at page 47



Dental prosthetic components internal hexagone

Implant analogue



3170011

Lab screw



1,8

2000220

Lab screw is compatible with all
Dental abutments

thread (M)
catalogue number

Implant analogue Indications

Lab implant analogue is used for fixation of prosthetic components on stone cast.

Dental analog abutment



N

3001011



R

3002011



W

3003011

Markings
catalogue number



Screwdriver long

4100030

Dental implant lab analogue

Lab abutment analogue is used for transferring abutment position to the stone cast after impression taking using abutment impression copings.

Lab coping



2600020

catalogue number

Lab coping

copings is used for individual waxing-up of cast framework.

Abutment impression coping



2600010

catalogue number



Dental lab holder

4930010

Lab coping and abutment head have one beveled side, which have to click when plastic coping is inserted onto abutment. Big advantage of plastic coping is its rigid and reliable fixation in impression material, which ensures only one correct position of coping+analogue and virtually excludes mobility due to impression material elasticity.

Plastic coping is used:

- or transferring abutment position from oral cavity to stone cast (for R and W abutments)
- for fabrication of temporary restorations
- as a modelling coping for lab implant analogue

Dental abutments

internal hexagon

- abutments can be easily adapted to any clinical situation
- can be milled for individualization purposes
- for cement-retained restorations
- guiding hexagon is used for simple and precise positioning

IMPORTANT!

Design of prosthetic connection

Internal hexagon connection is used for reliable fixation of various abutments types. This type of implant/abutment connection contributes to perfect, sealed and stable fit, which excludes bacterial invasion, uniformly distributes occlusal forces and virtually excludes any micro-movements.

Standard platform

The size of internal prosthetic connection is standard for all four diameters of **Dental and Dental Plus Implants**. This allows fixation of all straight and angled **Dental** abutments, and implant walls remain strong enough with this type of connection, being able to withstand direct loads.

Use of angulated abutment is recommended in situations when implant was placed at more than 15° angle to tooth long axis. Burn-out plastic abutment is used for individual abutment fabrication by dental technician.

Shoulderless abutment and burn-out plastic abutment is used for individual abutment fabrication by dental technician.

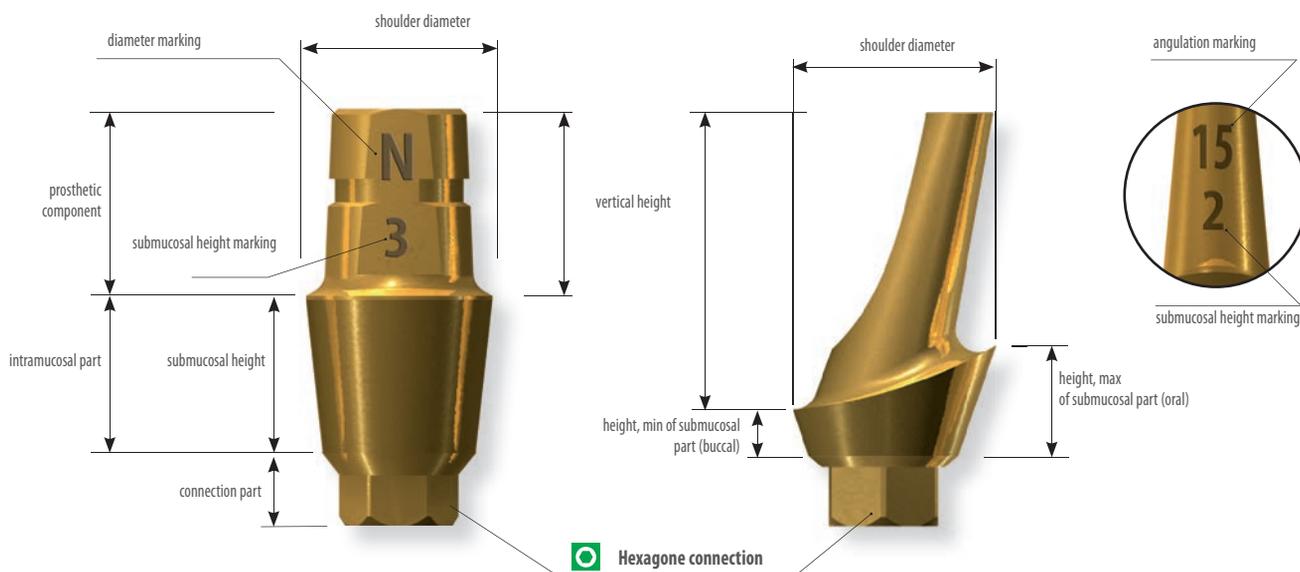
Individual abutment (consists of base titanium part and burn-out plastic coping) is used as a base for individual zirconia abutment for cement-retained restorations (metal-metal).

Surface coating

Vacuum arc technique of surface coating (titanium-nitride coating) is used, which is characterised by high adhesion properties and mechanical strength, resistance to friction wear and influence of atmospheric air, aggressive environments, erosion.

Markings

Abutment markings correspond to the height of subgingival part, which facilitates the choice of abutment type (pitch is 1 mm).





Cement retention

№1		№2		№3		№4		№1		№2		№1	
												N (narrow)	
												angulation	
												shoulder diameter, mm	
												height min, mm	
												height max, mm	
												vertical height, mm	
2701011	2701021	2701031	2701041	2715111	2715121	2725111	15	15	25	4,2	4,2	4,2	8
4,2	4,2	4,2	4,2	1	2	1	4,2	4,2	4,2	2,5	3,5	2,5	8
1	2	3	4	8	8	8	1	2	1	2,5	3,5	2,5	8
6	6	6	6	8	8	8	1	2	1	2,5	3,5	2,5	8
2701011	2701021	2701031	2701041	2715111	2715121	2725111	15	15	25	4,2	4,2	4,2	8
												catalogue number, mm	

Ashless	№1		№2		№3		№4		№1		№2		№5	
														R (regular)
														angulation
														shoulder diameter, mm
														height min, mm
														height max, mm
														vertical height, mm
2721020	2702011	2702021	2702031	2702041	2715211	2715221	2715251	2725211	2725221	2725251	15	15	15	25
4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	
2	1	2	3	4	1	2	5	1	2	5	2,5	3,5	6,5	
4,8	4,8	4,8	4,8	4,8	8	8	8	8	8	8	2,5	3,5	6,5	
2721020	2702011	2702021	2702031	2702041	2715211	2715221	2715251	2725211	2725221	2725251	15	15	15	
														catalogue number, mm

№1		№2		№3		№4		
								W (wide)
								shoulder diameter, mm
								height, mm
								vertical height, mm
2703011	2703021	2703031	2703041	5,4	5,4	5,4	5,4	
1	2	3	4	1	2	3	4	
4,8	4,8	4,8	4,8	4,8	4,8	4,8	4,8	
2703011	2703021	2703031	2703041	5,4	5,4	5,4	5,4	
								catalogue number

Without sholder	Temporary	Temporary without hexagon	For milling		Fixation screw
					Fixation screw fits all Dental and Dental Plus abutments and platforms
					diameter, mm
					vertical height, mm
2700001	2760001	2760000	2704060	2704080	2000020
4,8	4,8	4,8	6,0	8,0	1,8
9,0	9,0	9,0	7,0	6,0	Thread (M)
2700001	2760001	2760000	2704060	2704080	2000020
					catalogue number

Burn-out coping	Base	Individual abutment	
			shoulder diameter, mm
			height, mm
			vertical height, mm
2720111	2720001	4,2	
4,2	4,2	0,5	
4,2	0,5	2,8	
10	2,8	catalogue number	
2720111	2720001	catalogue number	

Recommended insertion torque — **35Ncm**.

ATTENTION! USE ONLY NEW SCREW (straight from package) to fix abutment in patient's mouth. The screw can be used only once.

Individual abutment (consists of base titanium part and burn-out plastic coping) is used as a base for individual zirconia abutment for cement-retained restorations (metal-metal). Abutment is fixed to the coping with a special glue.

Fixation screw fits all Star and Star Plus abutments and platforms



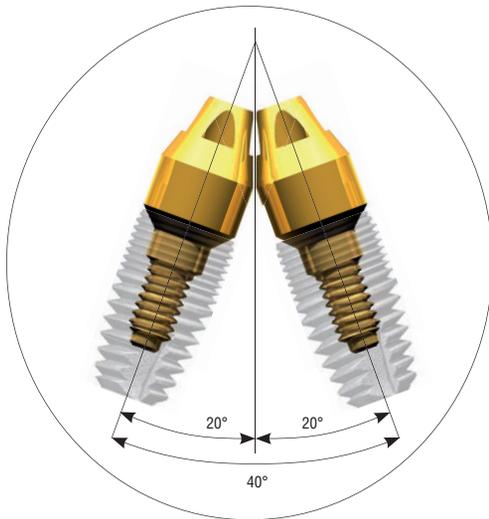
Instruments: see Screwdriver at page 47

Combine dream and reality!

Dental abutments for screw-retained restorations



	N°1	N°2	N°3	N°4	Abutment micro-screw	Abutment micro-screw-spline	Abutment closure screw
diameter, mm	3,8	3,8	3,8	3,8	Ø	Ø	
height, mm	0	1	2	3			
catalogue number	2700011	2700021	2700031	2700041	2000030	2000031	2000041



One-piece abutments for screw-retained fixation were designed for achieving maximum versatility of screw-retained restorations. They have following characteristics:

- load transfer to implant body, which minimises overload and fracture risks
- screw retention provides rigid connection between restoration and abutment
- recommended insertion torque for micro-screw - **15Ncm**
- up to 40° difference between implants angulations is acceptable
- increased precision of restorations
- retrievability of implant-supported restorations

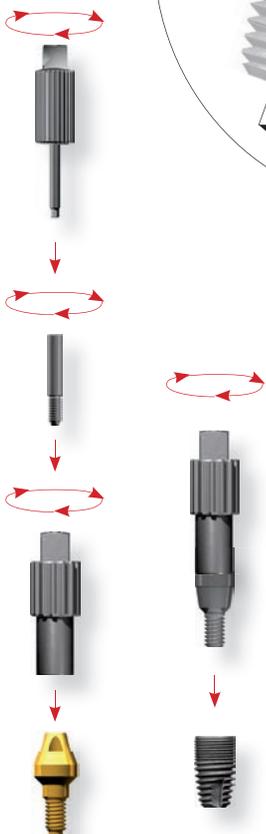
IMPORTANT!

Necessity to remove implant-supported restoration may arise in case of:

- routine change of prosthetic components;
- screw loosening or fracture
- abutment fracture
- restoration adjustment after implant loss
- repeated surgical procedure

Retrievability of implant-supported restoration significantly increases safety of rehabilitation.

Screw-retained restorations have proved their long-term efficiency in edentulous patients.



Before abutment insertion, use Screwdriver to connect abutment to the abutment insertion tool. Insert screw-retained abutment into implant platform. Recommended insertion torque is **25 Ncm**. After abutment fixation, dismount insertion tool in reverse order.

	Lab abutment analog	Abutment impression coping	Cap	Cap Temporary Ti	Abutment micro-screw	Abutment micro-screw-spline
catalogue number	3500010	4740011	2600040	2600041	2000030	2000031

For abutment insertion, use instrument shown in this page.

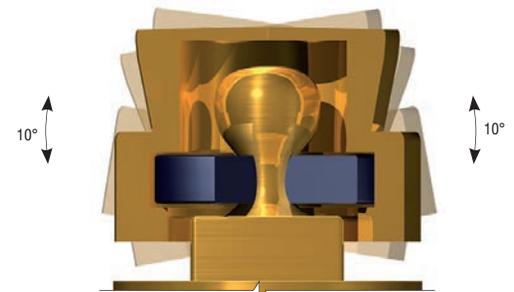
	Abutment insertion tool short	Abutment insertion tool long	Fixation screw for abutment insertion tool	Screwdriver, short
catalogue number	4410010	4410020		4100010



Dental abutments

ball-abutments for overdentures

№1	№2	№3	Cap for overdenture	
2,0	4,0	6,0		height, mm
2720011	2720021	2720031	2600031	catalogue number



Cap for denture

Ball-abutments are designed for stabilization of overdentures supported by 2 or more implants. They provide adequate stabilization and retention of the prosthesis. With this type of restorations, priority is given to functional component. Therefore, overdenture adjustment is directed to maximum fit between restoration and ball-abutments.

Abutments design tolerates difference between implant angulations up to 10° minimum ball size is Ø2 mm; ; coping with replaceable sealing rubber ring.

Coping inclination up to 20° degrees is possible (10°+10°).

Design of ball abutments for overdentures is recommended for immediate loading protocol.

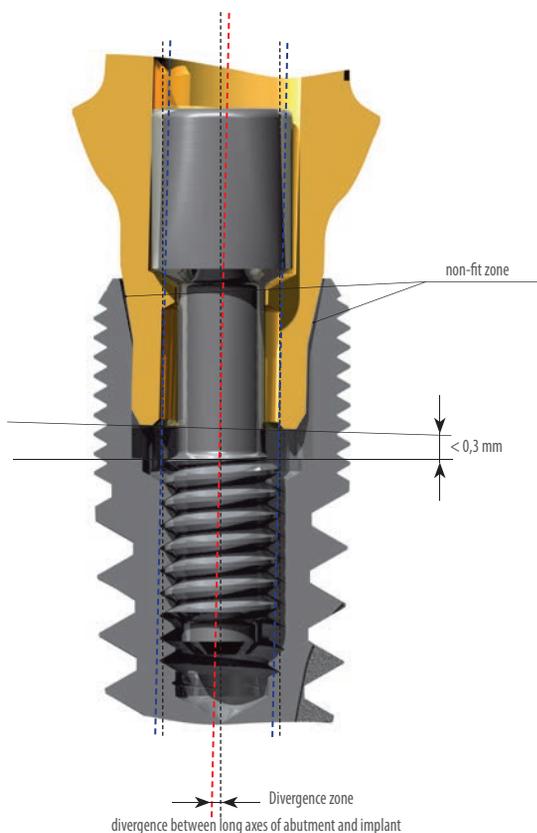
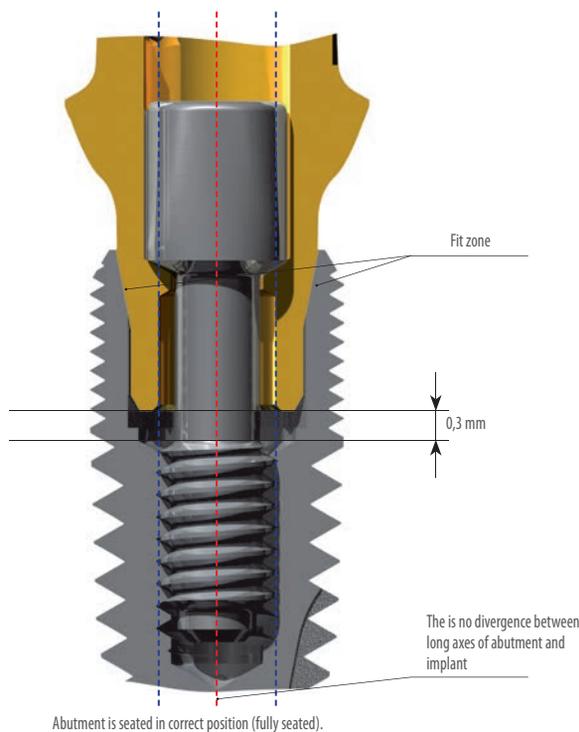
Recommended insertion torque - **35 Ncm**.

For insertion, use instruments shown at this page.

25 mm	30 mm	26 mm	2,28 mm	
4 mm				
Abutment insertion tool for torque wrench	Abutment insertion tool for handpiece	Ball abutment lab analogue		
short	long			
4403010	4403020	4403030	3200011	catalogue number



Recommendations



Recommendations on the use of implants with conical connection.

Correct implant positioning is a prerequisite for achieving optimal esthetic result and successful functioning of the restoration.

Abutments insertion.

1. Insert abutment into implant platform and make sure that hexagon or dodecahedron connection is in the right position. For this, try to slightly rotate abutment and press on it.
2. Make sure that abutment is in correct horizontal and vertical position.

ATTENTION! USE ONLY NEW SCREW (straight from package) to fix abutment in patient's mouth. The screw can be used only once.

3. Tighten the screw with partial torque only.
4. Correct position and depth of abutment should be checked on X-ray.
5. Tighten the abutment screw with **35 Ncm** torque using Screwdriver and torque wrench.

Abutment removal.

In order to facilitate abutment removal, pin can be used (see page 49), which is

- designated for removal of conical connection abutments.
- using screwdriver, unscrew the abutment screw
- insert the abutment removal pin into abutment and fix it with the screwdriver until screw comes in contact with the bottom of implant opening
- apply some force to the screwdriver, in order to disengage abutment from implant platform. At this stage, abutment unscrewing process is initiated.

Insertion of impression coping.

For correct registration of implant position, use following technique:

1. Insert impression coping into implant platform and make sure that hexagon or dodecahedron connection is in the right position. For this, try to slightly rotate abutment and press on it.
2. Make sure that impression coping is in correct horizontal and vertical position.
3. Gently tighten the impression coping screw using manual force of **10 Ncm** and screwdriver. Do not apply excessive force (>10-15 Ncm) when tightening impression coping, in order to avoid its locking inside implant platform. If this happens, use light swinging motions to remove impression coping and then retake the impression.

Packaging

«CONNECT[®]» dental implants are supplied in double sterile package: titanium capsule and glass ampule.

Advantages of titanium capsule:

- titanium-titanium contact guarantees preservation of titanium oxide on implant surface
- reduces the risk of contamination during surgical intervention
- guarantees contactless withdrawal of implant out of the capsule and its insertion into implant holder (fixed in handpiece) during surgical procedure
- provides secure implant position inside the package and protects it from damage
- each implant is supplied with cover screw

Open protective cap of sterile ampule. Sterility of implant with SLA surface is provided by ampule and titanium capsule.

Use implant holder to withdraw implant from titanium capsule before its insertion into prepared implant bed. Specific shape of capsule indicates implant diameter.

Markings on insert-capsules correspond to implant length (one marking - corresponds to implant length 7.0 mm; two markings - 8.5 mm; three markings - 10.0 mm etc.)



~~3.0~~

3.5

~~4.0~~

4.5

~~5.0~~



— 7

== 8.5

=== 10

==== 11.5

===== 13

===== 15



— 7
— 8.5
— 10
— 11.5
— 13
— 15

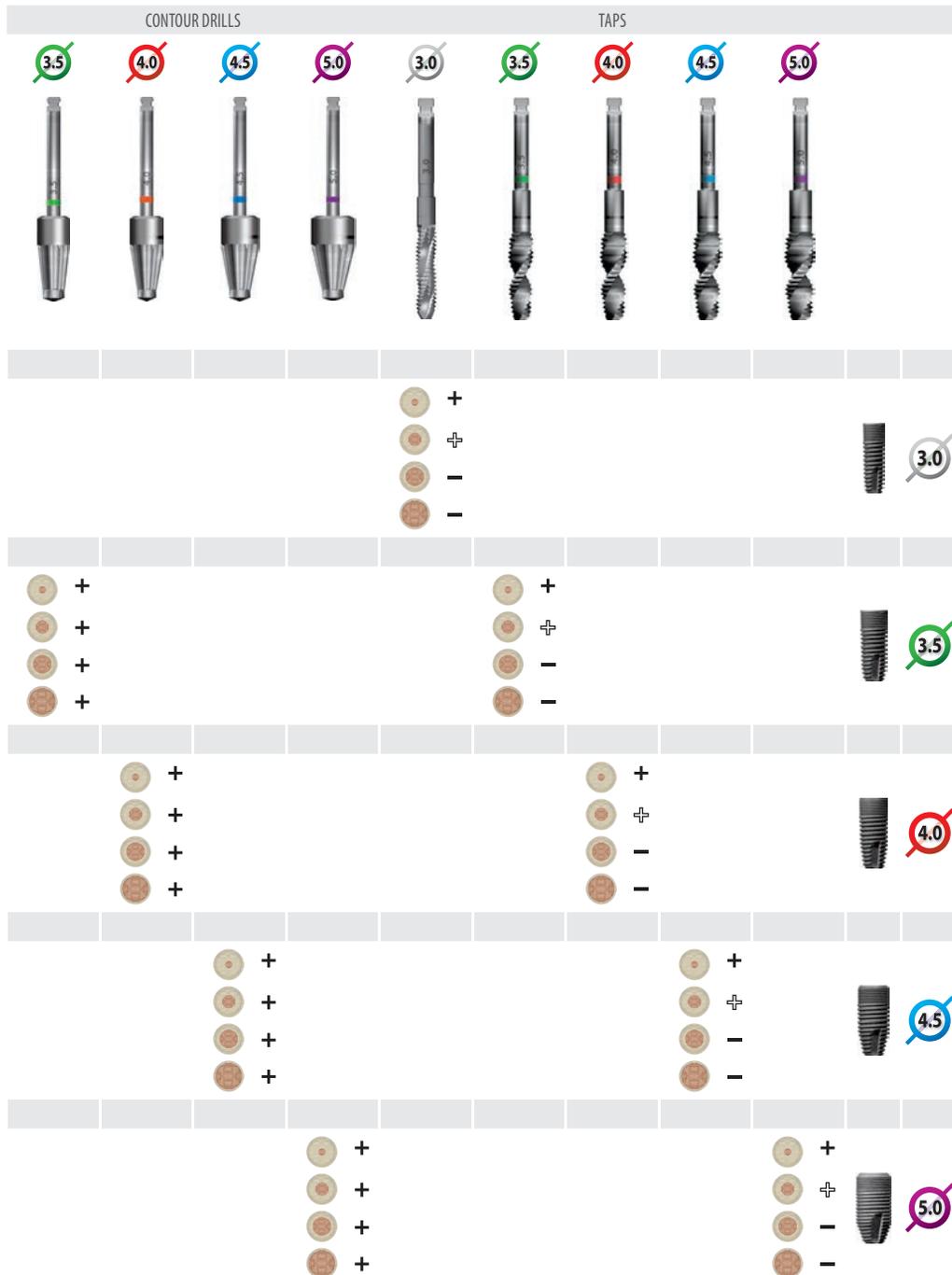
Surgical protocol

		Drills							
		bur	2.0	pilot drill	2.7	3.0	3.5	4.0	4.5
3.0	1	+	+	+	+				
	2	+	+	+	+				
	3	+	+	+	+	+			
	4	+	+	-	-				
3.5	1	+	+	+	+	+			
	2	+	+	+	+	+			
	3	+	+	+	+	+	+		
	4	+	+	+	+	+	+	-	
4.0	1	+	+	+	+	+	+	+	
	2	+	+	+	+	+	+	+	
	3	+	+	+	+	+	+	+	+
	4	+	+	+	+	+	+	+	-
4.5	1	+	+	+	+	+	+	+	+
	2	+	+	+	+	+	+	+	+
	3	+	+	+	+	+	+	+	+
	4	+	+	+	+	+	+	+	-
5.0	1	+	+	+	+	+	+	+	+
	2	+	+	+	+	+	+	+	+
	3	+	+	+	+	+	+	+	+
	4	+	+	+	+	+	+	+	-

- Bone type 1 **+** Use
- Bone type 2 **+** Use if necessary
- Bone type 3 **-** Do not use
- Bone type 4

If you feel too much resistance during implant insertion into implant bed, unscrew the implant using reverse rotation of implant holder, put it back into titanium capsule, check the depth of implant bed by surgical implant analogue or depth gauge, and then additionally expand surgical bed to necessary dimensions, following the recommended protocol

For bone types classification - see page 8



IMPORTANT!

In situations when cutting abilities of the drill decrease, drill change is mandatory. Under no circumstances you should use dull drills. Correct and accurate maintenance care of high-quality cutting instruments (drills, taps, burs) will allow their multiple use. (It is not recommended to use surgical drills **more than 40 times**).

Recommended:

- 800-900 rpm at drilling stage (except for bone tap and contour drill)
- 30 rpm at tapping stage
- 30 rpm at implant insertion stage
- 400-600 rpm at the stage of using contour drill

Surgical kit



Surgical kit:

- compact and universal
- with transparent lid and silicone instruments holders
- made of special polymer, resistant to chemical and temperature influences
- easy access to instruments thanks to hinged lid
- instruments search is facilitated by graphic icons and colour markings

Markings

Instruments maintenance

Success of implant treatment depends on adequate maintenance of surgical instruments. Even minor damage to the drill or its insufficient cleaning after surgical procedure may cause implant failure.

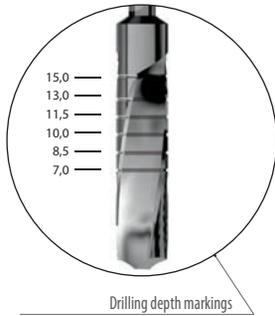
Therefore, following sequence of procedures have to be kept immediately after surgery:

- immerse instruments into special "solution for instruments treatment after surgical procedure" (see requirements of SanPiN 2.1.3.2524-09) in order to prevent drying of blood, saliva, soft tissues residues etc.
- thoroughly clean instruments in running water using special brushes for mechanical cleaning;
- immerse instruments into disinfecting solution (follow manufacturer's prescriptions); use of ultrasound baths is recommended
- rinse instruments in running and distilled water;
- dry instruments thoroughly before packing and sterilising;
- pack instruments, made of similar materials, into sterilization pouches and put them into autoclave
- follow the standard sterilization procedure for surgical instruments

Surgical kit

Burs		Drills							PARALLELING PINS
1,2	1,6	2,0	pilot drill	2,7	3,0	3,5	4,0	4,5	L7.0
4000012	4000016	4020010	4021110	4027010	4030010	4035010	4040010	4045010	3100070
		DRILL EXTENDER							
				3,15	3,5	4,0	4,5	5,0	L8.5
		4800020	4800010	4031510	4600350	4600400	4600450	4600500	3100080
				3,5	4,0	4,5	5,0		L10.0
				4028350	4028400	4028450	4028500		3100100
				3,5	4,0	4,5	5,0		L11.5
				4028350	4028400	4028450	4028500		3100110
				3,5	4,0	4,5	5,0		L13.0
				4028350	4028400	4028450	4028500		3100130
SCREWDRIVERS		IMPLANT DRIVERS		<p>Torque wrench universal 4410110</p>				<p>Depth gauge universal 4520010</p>	
			for handpiece						
4100010	4300010	4300020							
			for torque wrench						
4100020	4301010	4301020							

Surgical drills



EASY, FAST, CONVENIENT

When using standard drill of any diameter, respective drill with depth stop can be used instead.



IMPORTANT!

Recommendations

Correct and accurate maintenance care of high-quality cutting instruments (drills, taps, burs) will ensure their multiple use.

It is not recommended to use surgical drills **more than 40 times**.

- 800-900 rpm at drilling stage (except for bone tap and contour drill)
- 30 rpm at the stage of bone harvesting drill
- 30 rpm at the stage of contour drill.

Drills

diameter, mm	1.5	2.0	pilot drill	2.7	2.85	3.0	3.15	3.5	3.85	4.0	4.3	4.5
catalogue number short	4015010	4020010	4021110	4027010	4028510	4030010	4031510	4035010	4038510	4040010	4043010	4045010
catalogue number long	4015020	4020020		4027020	4028520	4030020	4031520	4035020				

Contour Drills

diameter, mm	3,5	4,0	4,5	5,0
catalogue number	4028350	4028400	4028450	4028500

Drills Ø2 mm with depth stops (other diameters can be ordered)

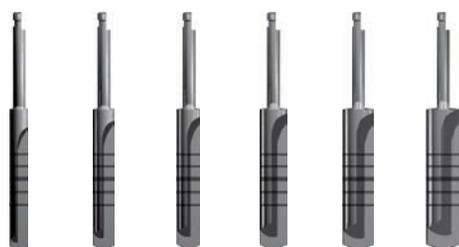
length, mm	7,0	8,5	10,0	11,5	13,0	15,0
catalogue number	4020107	4020108	4020110	4020111	4020113	4020115

IMPORTANT!

During implant insertion, it is of utmost importance to avoid bone overheating. The latter may occur due to the use of worn drill and as a result of instrument overload. If cutting potential of the drill has been exhausted (more than 40 drillings), its cutting ability significantly decreases, the drill starts to work in idle mode and this may cause bone overheating. Any overheating induces bone necrosis, which will affect osseointegration.

Surgical drills

Bone harvesting drill



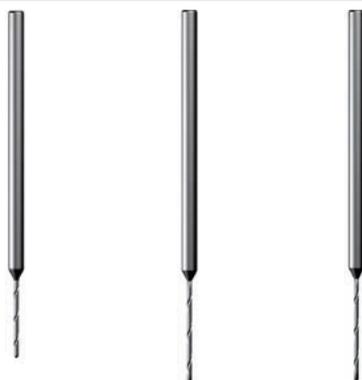
2,5	3,0	3,5	4,0	4,5	5,0	diameter, mm
4025100	4030100	4035100	4040100	4045100	4050100	catalogue number

Bone harvesting drill may be used for implant bed formation with simultaneous harvesting of bone chips and their use for bone augmentation. Bone chips are harvested in internal part of the drill during drilling.

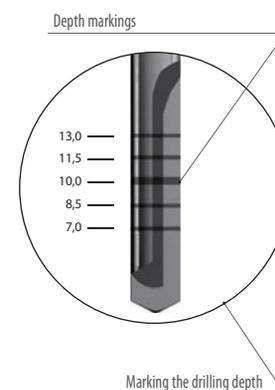
Recommendations:

Start drilling with light pressure and continue to apply pressure for some time. When withdrawing the drill, do not stop its rotation. This will help the bone to remain inside the drill groove (bone collector). When harvesting the bone, drill without water irrigation! Speed of cutting instrument - 30-50 rpm.

Drills for straight handpiece



0,8	0,8	1,0	diameter, mm
8,0	14,0	12,0	length, mm
4008110	4008111	4010110	catalogue number



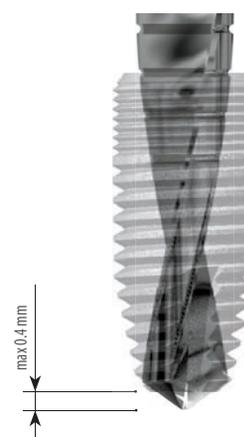
IMPORTANT!

The drills have very narrow diameter - you should control the forces applied to the drill and keep its direction parallel to the drilling axis, in order to avoid drill fracture.

Drills for contra-angle handpiece



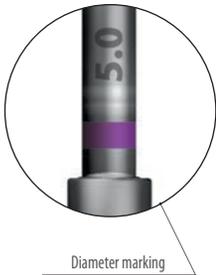
0,8	0,8	1,0	diameter, mm
8,0	14,0	12,0	length, mm
4008010	4008011	4010111	catalogue number



ATTENTION!

You should take into account additional depth of implant bed, which results from configuration of drill tipage. This additional depth is max + 0,4 mm.

Instruments



Diameter marking

Use of bone tapping is defined by bone type.

IMPORTANT!

Bone tapping should not be used for implants with expanded thread.

Recommendations: 30 rpm for tapping

Coating

Vacuum arc technique is used for surface coating of surgical instruments, which is characterised by high adhesion properties and mechanical strength, resistance to friction wear and influence of atmospheric air, aggressive environments, corrosion and erosion.

Drill extenders are used to improve instruments handling. They facilitate operator's work in areas with restricted access, where use of instruments may be otherwise complicated or impossible.

Taps



diameter, mm	3,0	3,5	4,0	4,5	5,0
catalogue number	4600300	4600350	4600400	4600450	4600500

Burs



Burs for mucosa perforation

Bur for abutment preparation

Burs for cortical plate perforation

diameter, mm		1,2	1,6	
catalogue number	4000010	4000020	4000012	4000016

Drill extenders



for handpiece

for torque wrench

catalogue number	4800020	4800010
------------------	---------	---------

Instruments

IMPLANT DRIVERS



for handpiece		for torque wrench		
short	long	short	long	catalogue number
4300010	4300020	4301010	4301020	

IMPORTANT!

When ordering implant holders, pay attention to the type of your contra-angle handpiece.

- Used for implants
- Star
 - Star Plus
 - Dental
 - Dental Plus
 - DentalMono
 - DentalMono Plus

Recommendations

- 30 rpm for implant insertion

Implant driver Micro



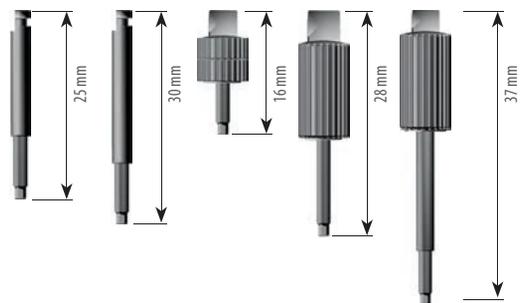
for handpiece	
short	
4303010	catalogue number

Used only for Micro implants.

Recommendations:

- 30 rpm for implant insertion

SCREWDRIVERS



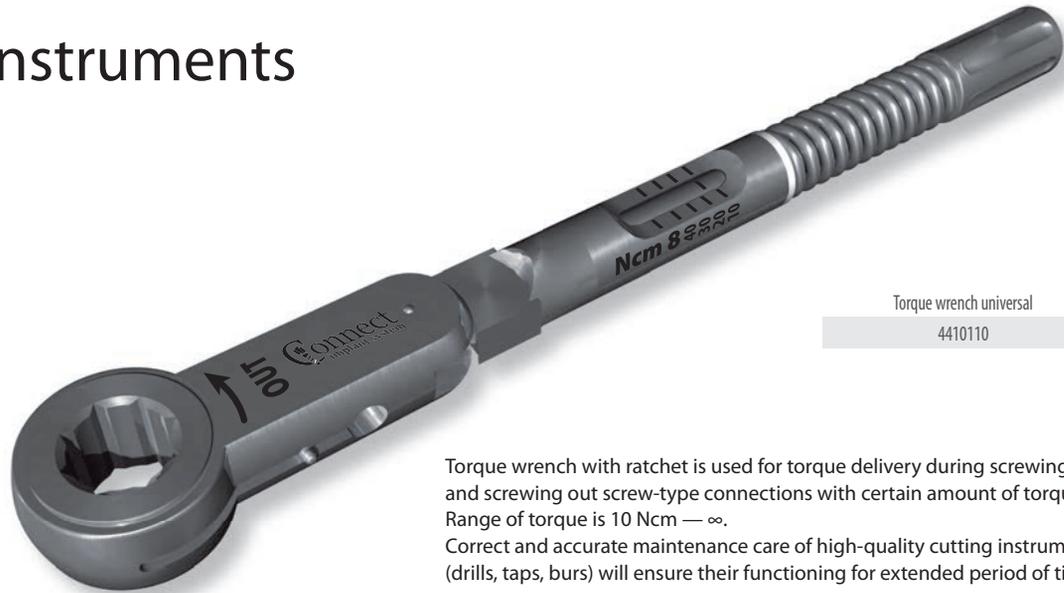
for handpiece		for torque wrench або ручна			
short	long	min	short	mid	catalogue number
4101010	4101020	4100000	4100010	4100020	

Size of screwdriver hexagon is universal and fits all (all models):

- closure screws
- healing abutments
- abutment screws
- impression coping screws
- lab screws
- screw-retained abutment insertion tools
- horizontal spreaders

ATTENTION! In order to avoid dropping of MINI screw driver in oral cavity, fix the Screwdriver with dental floss attached to special groove in Screwdriver.

Instruments



Torque wrench universal

4410110

Torque wrench with ratchet is used for torque delivery during screwing in and screwing out screw-type connections with certain amount of torque. Range of torque is 10 Ncm — ∞.

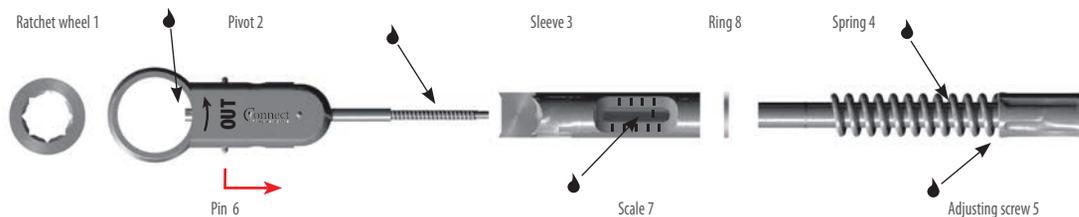
Correct and accurate maintenance care of high-quality cutting instruments (drills, taps, burs) will ensure their functioning for extended period of time..

Recommendations on maintenance care of torque wrench with ratchet.

Immediately after surgery, follow these steps:

- disassemble torque wrench with ratchet
Using pin 6, remove ratchet wheel 1 and, unscrewing adjusting screw 5, remove spring 4 and sleeve 3 with torque scale 7 from pivot 2.

Points that need lubrication



- further, immerse parts into "special solution for instruments treatment after surgical procedure" (see requirements of SanPiN 2.1.3.2524-09) in order to prevent drying of blood, saliva, soft tissues residues etc.
- thoroughly wash the parts in running water using special soft brush for mechanical cleaning;
- immerse parts into disinfecting solution (follow manufacturer's prescriptions)
- rinse parts in running and distilled water;
- put parts in drying oven, dry them thoroughly before packing
- assemble torque wrench in reverse order, lubricating indicated points (shown with arrows) with Tektro-Universal Dental spray or similar.

Working condition with defined torque



Torque wrench with maximum torque, which is set by screw 5 on scale 7.

IMPORTANT! Exceeding maximum torque values may damage torque wrench.

Instruments

DENTAL bone profiler



4000060

catalogue number

Drill is used for bone contouring (bone profiler)
- removal of bone residues which may interfere with insertion of healing abutment or definitive abutment.

It is not recommended to make more than 2 full rotations of the drill..

Tap for thread calibration



1,6

360016



1,8

360018



2,0

360020

thread (M)

catalogue number

Tap is used for calibration (tapping) procedure inside osseointegrated implant in cases of abutment screw fracture or damage to the internal implant thread.

Pin for Star abutments removal



4410033

catalogue number

Abutment removal

In order to facilitate abutment removal, pin can be used, which is designed for removal of conical connection abutments.

- using screwdriver, unscrew abutment screw
- insert abutment removal pin into abutment and fix it with screwdriver until screw comes in contact with the bottom of implant opening
- apply some force to the screwdriver, in order to disengage abutment from implant platform. At this stage, abutment unscrewing process is initiated.

Instruments: Screwdrivers at page 44

Instruments



Surgical suction tip Aspiration tip (suction tip) is used for saliva removal from oral cavity.

Aspiration
4920010

Cheek retractor
Used for retracting soft tissues of oral cavity for improved access to operating field.

retractor
4910010

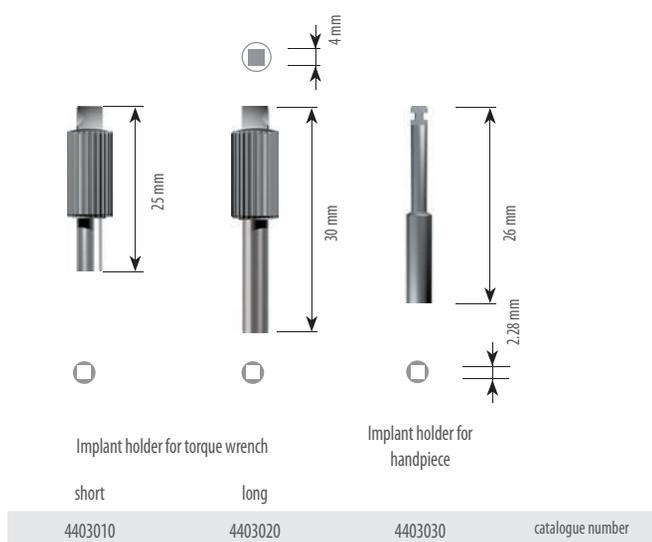


Periosteal elevator
Used for detaching periosteum from bone and soft tissue elevation in bone surgery. Periosteum is elevated using wedge-shaped cutting edge of the instrument.

Periosteal
4900010



Instruments

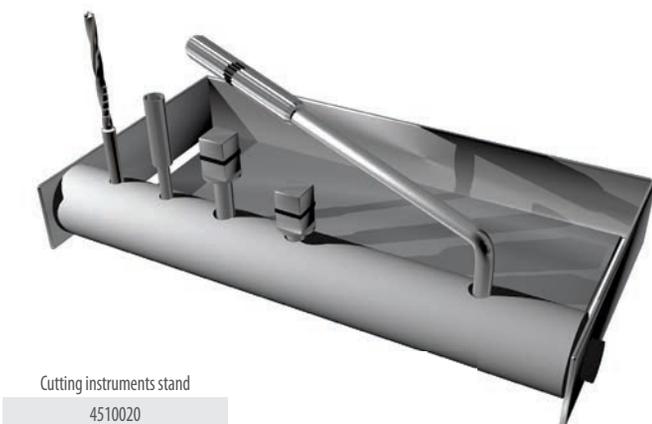


Implant holder for implants:

- MicroMono
- MicroMono Plus
- Transit
- Cut

Can be used for abutments:

- Star ball abutments for overdentures
- Dental ball abutments for overdentures



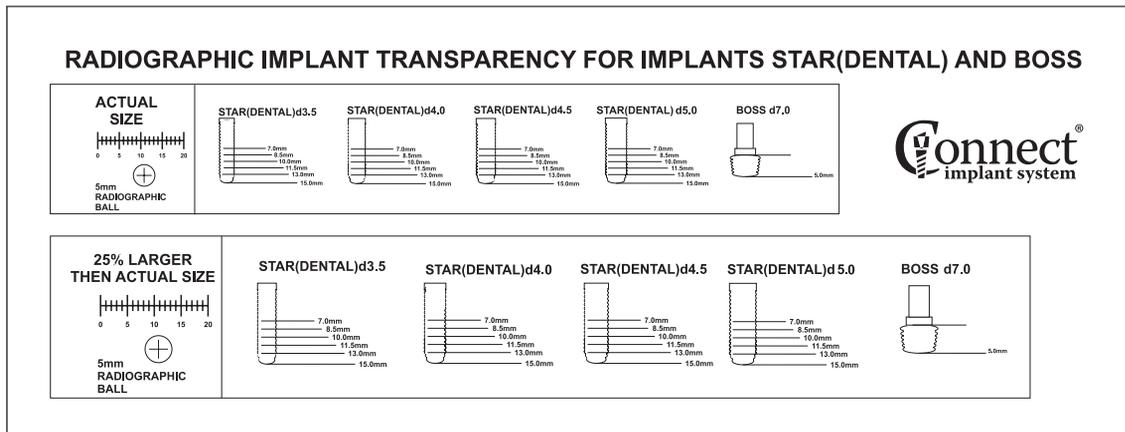
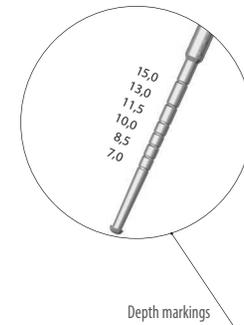
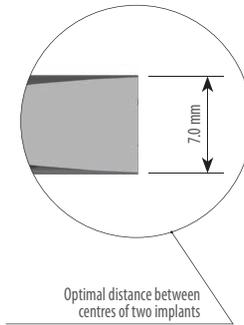
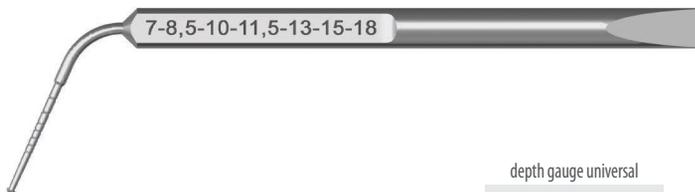
Stand can be used as organizer for any cutting instruments.

Tray can be used for various surgical procedures.



Instruments

Depth gauge is used for depth measurement and drilling direction indication.

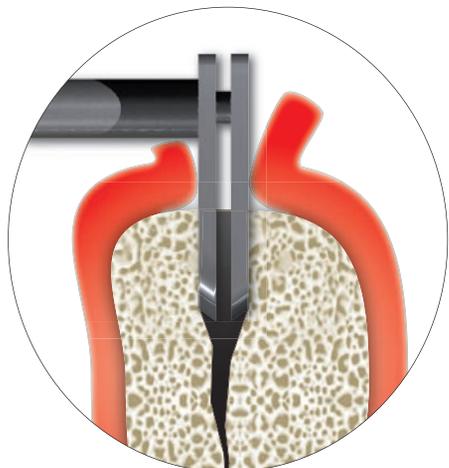


X-ray template with implant length indication is used to determine planned implant length and diameter. Template has two distortion factors (1:1 and 1:1.25), depending on x-ray machine used.



Implant type, diameter and length are selected based on X-ray data with the use of X-ray templates, and according to clinical situation. X-ray templates have schematic representations of implants, which take into account X-ray distortion of actual size of anatomic structures.

Spreaders



Spreaders are used for alveolar ridge expansion - horizontal augmentation - and implants insertion into thin ridge, expanded by pulling apart cortical plates of the bone in mechanic way.

Used for:

- controlled expansion of horizontally atrophied alveolar ridge (when buccolingual bone width is more than 3 mm and trabecular structures are present between cortical plates)
- soft condensation of trabecular bone
- achieving primary stability of implant.

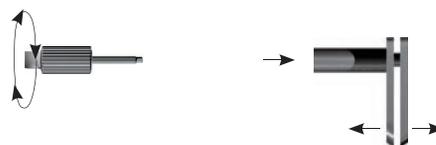
After use of spreader (expander), implant may be inserted into expanded ridge, and its osseointegration is accelerated due to high potential of bone-grafting material and native bone.

Spreader horizontal



catalogue number

4770010



Spreaders vertical



catalogue number

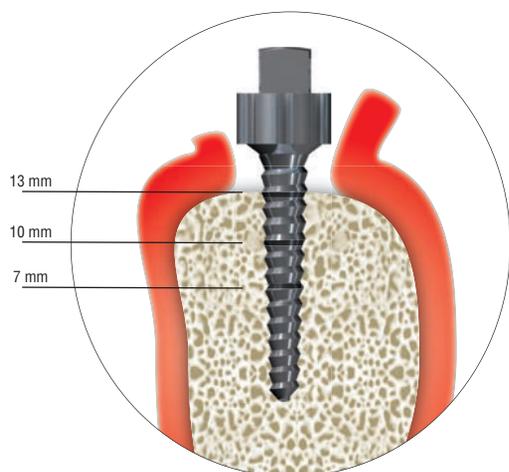
4770027

4770031

4770035

4770040

№ marking	Ø mm, apical part	Ø mm, at given length				Ø mm, implant
		7,0	10,0	13,0	15,0	
1	1,5	2,1	2,4	2,7	2,9	3,5
2	1,9	2,5	2,8	3,0	3,4	4,0
3	2,3	2,9	3,2	3,4	3,7	4,5
4	2,7	3,4	3,7	4,0	4,3	5,0



Markings



"Oss" kit for screw-type fixation of bone blocks

"Oss" kit for screw-type fixation of bone blocks includes instruments and screws. Very thin — 1,0 mm and 1,2 mm titanium micro-screws facilitate stabilization of cortical bone blocks.

Use of micro-screws:

- Lateral bone augmentation;
- Vertical bone augmentation;
- 3D augmentation and tunnelling technique.

Micro-screws characteristics:

- 1,0 mm and 1,2 mm diameter;
- length - 4,0 mm - 14,0 mm;
- safe stabilization;
- easy and safe removal.

Drills:

Two options available:

- for contra-angle and straight hand-piece;
- diameter 0,8 mm and 1,0 mm;
- length- 8,0 mm - 14,0 mm.

Screwdrivers:

two options available:

- manual and for contra-angle handpiece
- precision fit screw holding system

Container for instruments and screws:

- ergonomic screws location
- additional markings
- secure storage
- convenient sterilization

Stabilising pin

- used for primary fixation of bone block to recipient bed immediately after drilling before screws insertion (simultaneous use of two pins is recommended)



Micro-screw Ø1,0 mm					
length, mm	6,0	8,0	10,0	12,0	14,0
catalogue number	2000006	2000008	2000010	2000012	2000014

Micro-screw Ø1,2 mm					
length, mm	4,0	6,0	8,0	10,0	12,0
catalogue number	2001204	2001206	2001208	2001210	2001212



Stabilising pin

3130080

Screwdriver for contra-angle handpiece

4140020

Manual Screwdriver

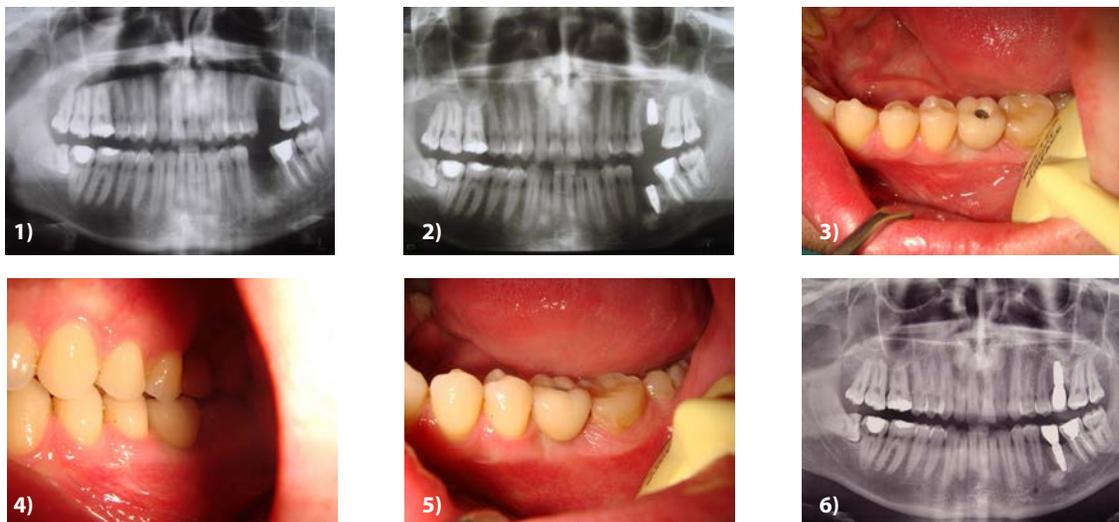
4140030

	Drills for straight handpiece			Drills for contra-angle handpiece		
diameter, mm	0,8	0,8	1,0	0,8	0,8	1,0
length, mm	8,0	14,0	12,0	8,0	14,0	12,0
catalogue number	4008110	4008111	4010110	4008010	4008011	4010111

Clinical cases

Clinical case I

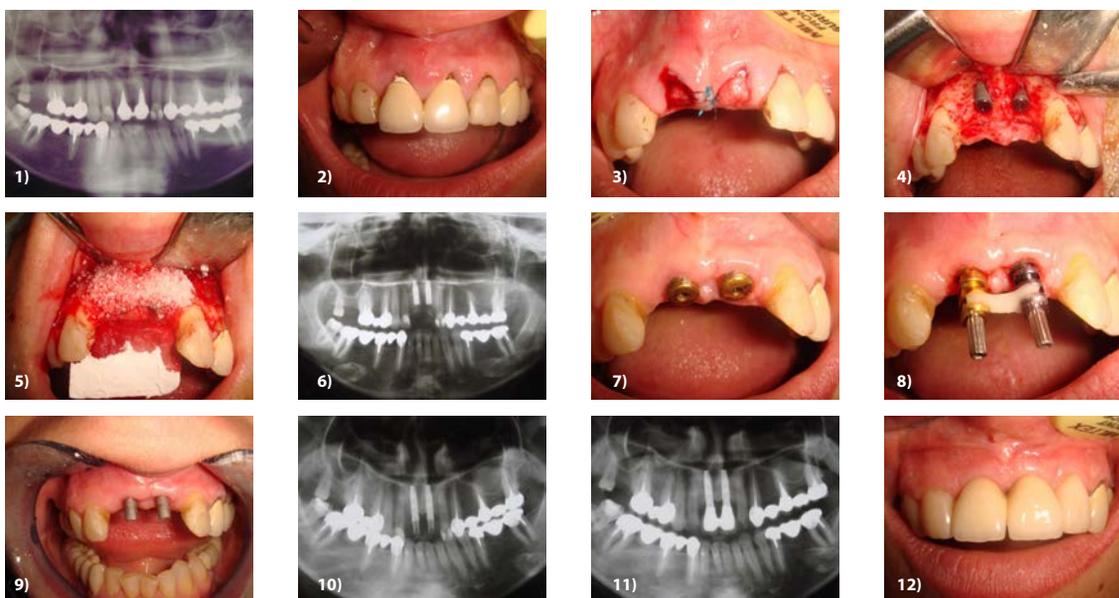
Diagnosis: partial edentulism with missing 26 and 36 (situation after traumatic extraction)



- 1) OPG before treatment
- 2) OPG after implants insertion and bone augmentation
- 3) 4) 5) End of restorative phase (26 - cement-retained restoration, 36 - screw-retained restoration)
- 6) OPG - 1 year post-op

Clinical case II

Diagnosis: traumatic vertical fracture of 11 and 21

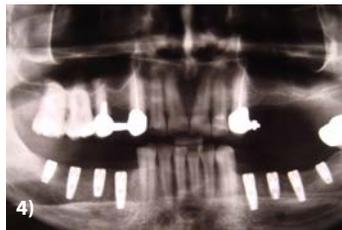
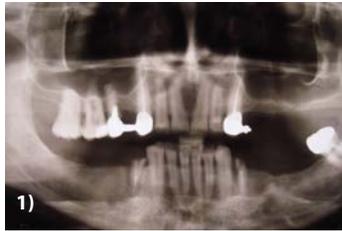


- 1) OPG before treatment
- 2) Clinical situation before treatment
- 3) Intraoral view of situation after atraumatic extraction, granulation tissues removal, filling the socket with collagen fleece and soft tissues management
- 4) 5) Implants insertion 2 months after extraction and alveolar ridge augmentation with bone-grafting materials
- 6) Control OPG - situation after surgery
- 7) Second-stage surgery - soft-tissues condition after soft-tissues management and insertion of healing abutments (after 3 weeks)
- 8) 9) Impression taking using impression coping and insertion of definitive abutments
- 10) OPG control of abutments positioning
- 11) 12) Control OPG and intraoral view, 8 weeks after cementation

Clinical cases

Clinical case III

Diagnosis: partial edentulism of maxilla and mandible



- 1) Initial panoramic X-ray before treatment
- 2) 3) Surgical stages
- 4) Control OPG — post-op
- 5) 6) Abutments fixation — second stage of implant therapy
- 7) Final result of rehabilitation of partially edentulous mandible with fabrication of fixed restoration

- 8) X-ray control after treatment
- 9) situation 2 years post-op - motivation to change upper jaw restoration.

Clinical case IV

Diagnosis: chronic generalised periodontitis, partial edentulism, bilateral distal-end defects in maxilla and mandible



- 1) OPG — initial situation
- 2) OPG 1.5 years after treatment initiation (bilateral sinus floor elevation, bone ridge augmentation, periodontal flap surgery in mandible, implants placement)

- 3) 4) 5) 6) Intraoral view — 6 months after completion of prosthetic phase