



# DENTI<sup>®</sup> BONE LEVEL

TWO STAGE IMPLANT SYSTEM





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TWO STAGE IMPLANT SYSTEM



PROF. DR. ISTVÁN VAJDOVICH



## ABOUT US

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### DENTI SYSTEM LTD.

Denti System Ltd. was founded in 1989 with the objective to develop and produce a dental implant system for the Hungarian dental practice that is widely available for dental patients in need and can be applied safely and economically by dentists. Our primary purpose was to fulfil the increasing demand of patients helping them to achieve a better quality of life.

### SMILE FOR EVERYONE

The high quality of our products is guaranteed by Hager & Meisinger GmbH /Germany/ that has been the manufacturer of our implants, instruments and implant system elements since the Spring of 2005 as well as supports our company by its development background.

### QUALITY AND TRADITION

The Denti® Implant System has 30 years of background. Its unbroken improvement is based on continuous research and development, theoretical knowledge collected since then and the experiences from the long term clinical practice. The always renewed, high quality Denti® Implant System is the result of many years of scientific experience and constant research and it is used both in Hungary and in other countries with great satisfaction. Denti® products can be easily, safely and highly successfully used in the everyday dental practice. The Denti® name is guaranteed by constant innovation and the strict quality assurance system.

## RESEARCH AND DEVELOPMENT

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### RESEARCH AND DEVELOPMENT

Research activities of our company are primarily focused on dental implants, related instruments and specific surgical methods for implantation. A series of experimental and clinical studies supports our successful research and development activity in implantology. In this research and development activity we consider cooperation with our users as a top priority.

### EDUCATION

Education is important part of the activity of our company. We have delivered accredited course with recognized university professors since 1990. We organize courses both for beginner and expert implantologists-dentists and dental technicians. The purpose of our courses is to teach the participants to the practical methods of implantology by using Denti® Implant System and safely apply these methods in their everyday practice. We institutionalized our educational activities in Spring 2010 under the name of DentiDent Implant Clinic.



# CONTENTS

ABOUT US.....	4
DENTI SYSTEM LTD. ....	4
SMILE FOR EVERYONE.....	4
QUALITY AND TRADITION .....	4
RESEARCH AND DEVELOPMENT.....	5
EDUCATION.....	5
RESEARCH AND DEVELOPMENT .....	5
CONTENTS.....	6
DENTI® BONE LEVEL.....	8
THE APPROVED SURFACE & MATERIAL.....	9
SURFACE.....	9
MATERIAL.....	9
PACKAGING AND STERILIZATION.....	10
ALL COMPONENTS .....	10
USABILITY.....	11
CONNECTION.....	12
CONNECTION.....	12
IMPLANT RANGE.....	13
DBL IMPLANT RANGE.....	13
DBL ONE STAGE SURGICAL PROTOCOL.....	14
DBL TWO STAGE SURGICAL PROTOCOL.....	16
SECOND SURGICAL INTERVENTION.....	18
PROSTHETICS.....	19
MILLING CENTER.....	19
DENTI® BONE LEVEL IMPLANT DESIGNS.....	20
DENTI® CEMENTED ABUTMENT TYPES .....	22
CYLINDRICAL ABUTMENT FOR ANGLED CORRECTION.....	22
INTERMEDIARY ABUTMENTS.....	23
GINGIVA FORMERS .....	24
GINGIVA FORMERS.....	24
TEMPORARY/SCANABLE ABUTMENT.....	25
TEMPORARY/SCANABLE ABUTMENT.....	25
DENTI® CEMENTED ABUTMENT TYPES .....	26
UNI ABUTMENT.....	26
CYLINDRICAL ABUTMENT FOR ANGLED CORRECTION.....	27
REVERSE CONICAL ABUTMENT FOR ANGLED CORRECTION .....	28
ANATOMIC ANGULATED ABUTMENT.....	29
DENTI® SCREW RETAINED ABUTMENT TYPE.....	30
INTERMEDIARY ABUTMENTS.....	30
BURNOUT PLASTIC CYLINDERS .....	31
ABUTMENT WITH SHOULDER AND INNER THREAD.....	32
COCR ABUTMENT WITH CASTABLE PLASTIC CYLINDER.....	33
TITANIUM BASE ABUTMENTS WITH CASTABLE PLASTIC CYLINDER.....	34



DENTI® REMOVABLE ABUTMENT TYPE.....	35
BALL ABUTMENT.....	35
DENTILOC ABUTMENTS.....	36
NOVALOC SWISS MADE.....	37
DENTI-UNIT ABUTMENTS.....	38
DENTI-UNIT ACCESSORIES.....	39
GINGIVA FORMERS .....	40
GINGIVA FORMERS.....	40
IMPRESSION TAKING.....	41
LABORATORY ACCESSORIES .....	
IMPRESSION TAKING.....	41
CLOSED TRAY IMPRESSION COPINGS .....	
CONICAL IMPRESSION COPING WITH CAP .....	41
IMPRESSION CAP .....	42
OPEN TRAY IMPRESSION COPINGS.....	42
LABOR ANALOGUES / SCREWS.....	43
LABOR ANALOGUES.....	43
SCREWS.....	43
IMPRESSION TECHNIQUE.....	44
STEPS OF THE OPEN-TRAY (DIRECT) IMPRESSION TECHNIQUE.....	44
STEPS OF THE CLOSED-TRAY (INDIRECT) IMPRESSION TECHNIQUE.....	46
STEPS OF THE CLOSED-TRAY (INDIRECT) IMPRESSION TECHNIQUE WITH THE USE OF AN IMPRESSION CAP.....	48
SURGICAL TRAY - PROFESSIONAL KIT .....	50
PROFESSIONAL SURGICAL SET.....	50
SURGICAL TRAY - ECO KIT.....	51
ECO SURGICAL SET.....	51
SURGICAL TRAY - PROFESSIONAL KIT - MAP.....	52
SURGICAL TRAY - ECO KIT - MAP.....	54
SURGICAL INSTRUMENTS.....	56
SURGICAL INSTRUMENTS.....	56
TWO-IN-ONES.....	57
TAPS.....	58
IMPLANT BODY DRIVERS.....	58
TRANSPARENT SCALE.....	59
GUIDED SURGERY.....	62
IMPLANT BODY SURFACE AREAS.....	63
WARRANTY.....	64
GENERAL WARRANTY CONDITIONS.....	64
DOWNLOADS.....	65
DENTYSYSTEM.COM/DOWNLOADS.....	65
DENTIGEN.....	66
WITH USING DENTIGEN .....	66
INDICATIONS OF DENTIGEN.....	66
CERTIFICATES.....	67
ISO, CE, WARRANTY.....	67
THE DENTI SYSTEM LTD. ....	67

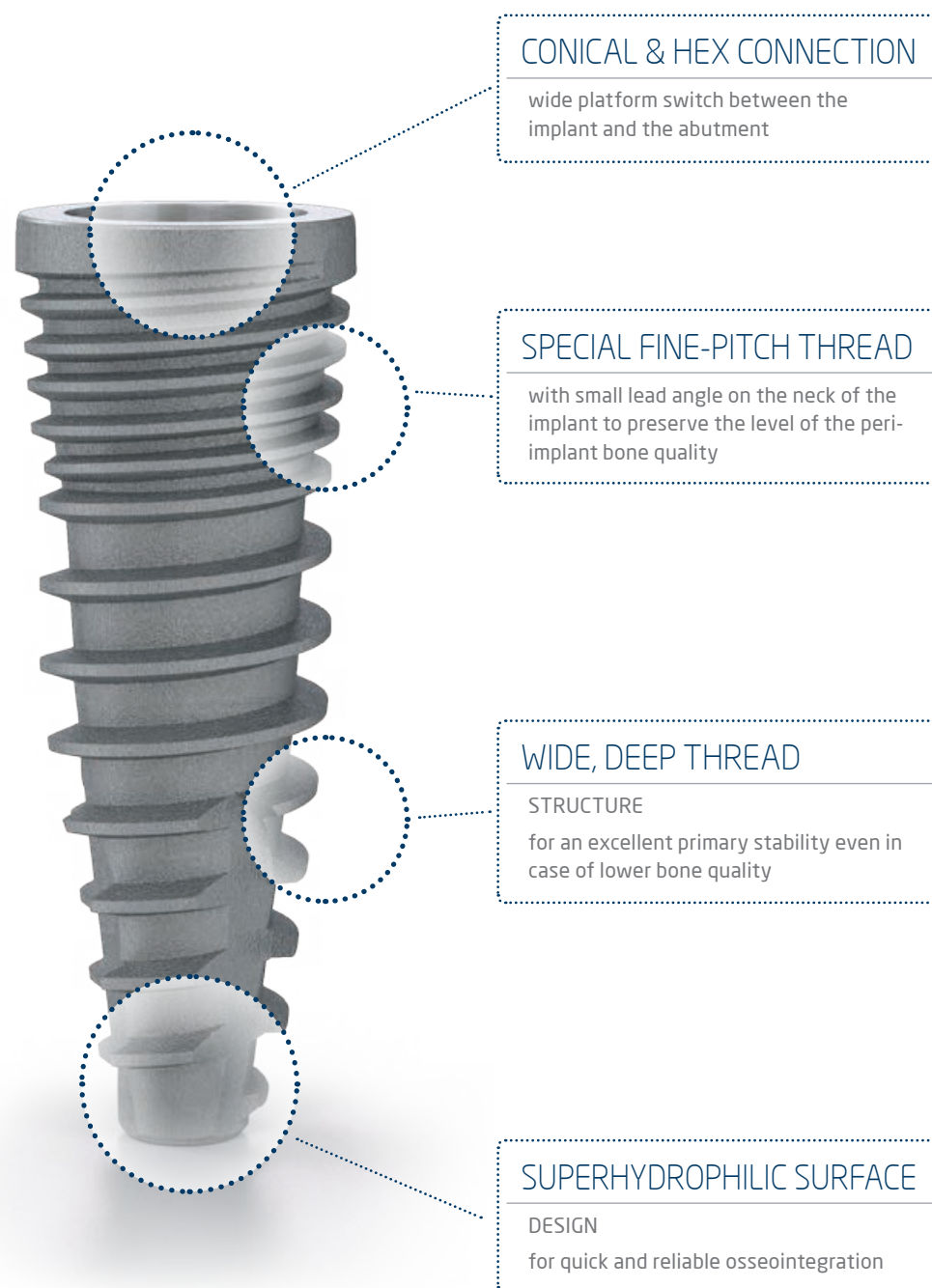




## DENTI® BONE LEVEL

### TWO-STAGE

BONE LEVEL GEOMETRY  
for the optimal  
distribution of the  
occlusal force in the  
bone tissue



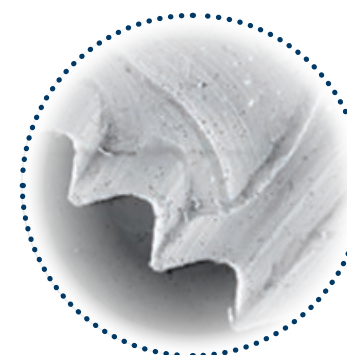
## THE APPROVED SURFACE & MATERIAL

### SURFACE

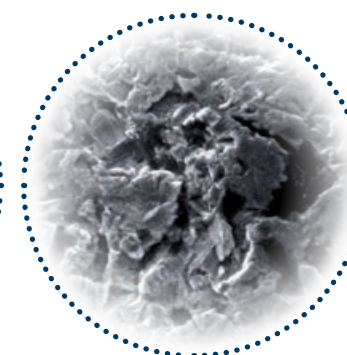
The Denti® implants' surface is the combination of a physical and mechanical surface treatments (sandblasting and chemical treatment). The surface of all implants connecting to the bone shows clear titanium-oxide (rutile) crystal structure which was first micro-roughened using the large particle "sand blasting" technique then thickened with passivation. This micro-roughened, passivated surface design with its high surface energies is the guarantee for the rapid and safe formation and permanent adherence of the bone tissue on the surface of the Denti® implants. Its highly micro-porous surface ensures a stable implant-bone connection thus creating an optimal condition for successful treatment. According to clinical control studies, the success rate of Denti® implants has been above 97% over the past 27 years.

### MATERIAL

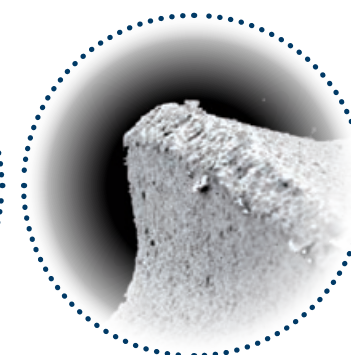
THE DENTI® IMPLANTS MADE OF UNALLOYED, PURE TITANIUM  
(Grade 4)



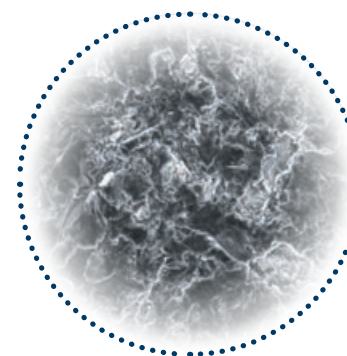
Raw processed surface



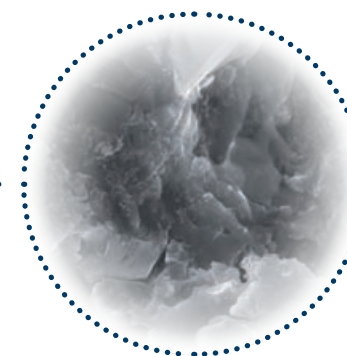
Sand-blasted surface



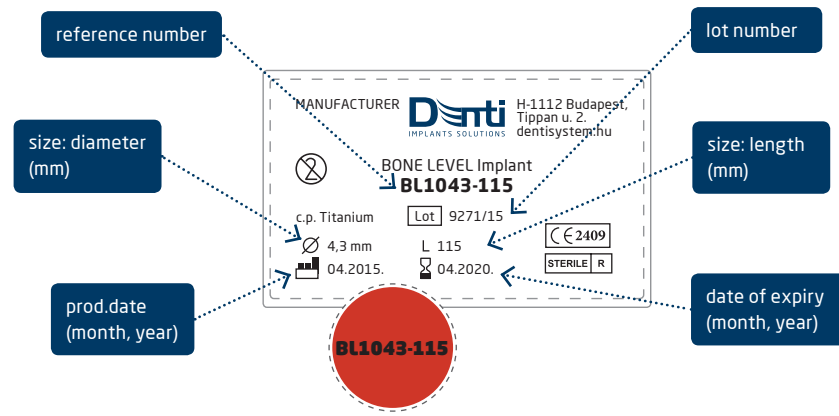
Passivated surface



Surface microstructure  
of Denti implants  
(MPS, SEM 500x)



Surface microstructure  
of Denti implants  
(MPS, SEM 10.000x)



The external packaging

## ALL COMPONENTS

have double safety packaging one external and one internal (thermo sealed) part.

Titanium implants are sterilized with gamma irradiation. The sterility is assured for 5 years.

### THE PACKAGE CONTAINS:

- instructions for use
- guidance for insertion
- guidance for prosthetic procedures
- guidance for impression taking
- detachable labels (LOT number and bar code for unique identification)

All Denti® implants can be traced back according to product name and LOT number, which can be found on both the outer and the inner packings. Please keep the self-adhesive barcode labels.



	Date of expiry (month, year)
	Size: diameter (mm)
	Registry number - individual product identification
	CE markings
	Date of manufacture (month, year)
	Do not use more than once
	Product code
	This product was sterilized with gamma rays
	NON STERILE Not sterile
	Attention, see instruction for use
	Caution: Federal law (USA) restricts this product to sale by or on the order of a dentist or physician
	This product was sterilized with heat or steam

label Legend

The internal packaging

REDESIGNED,  
DOUBLE STERILE PACKAGING



INNOVATION - ENVIRONMENTAL  
AWARENESS



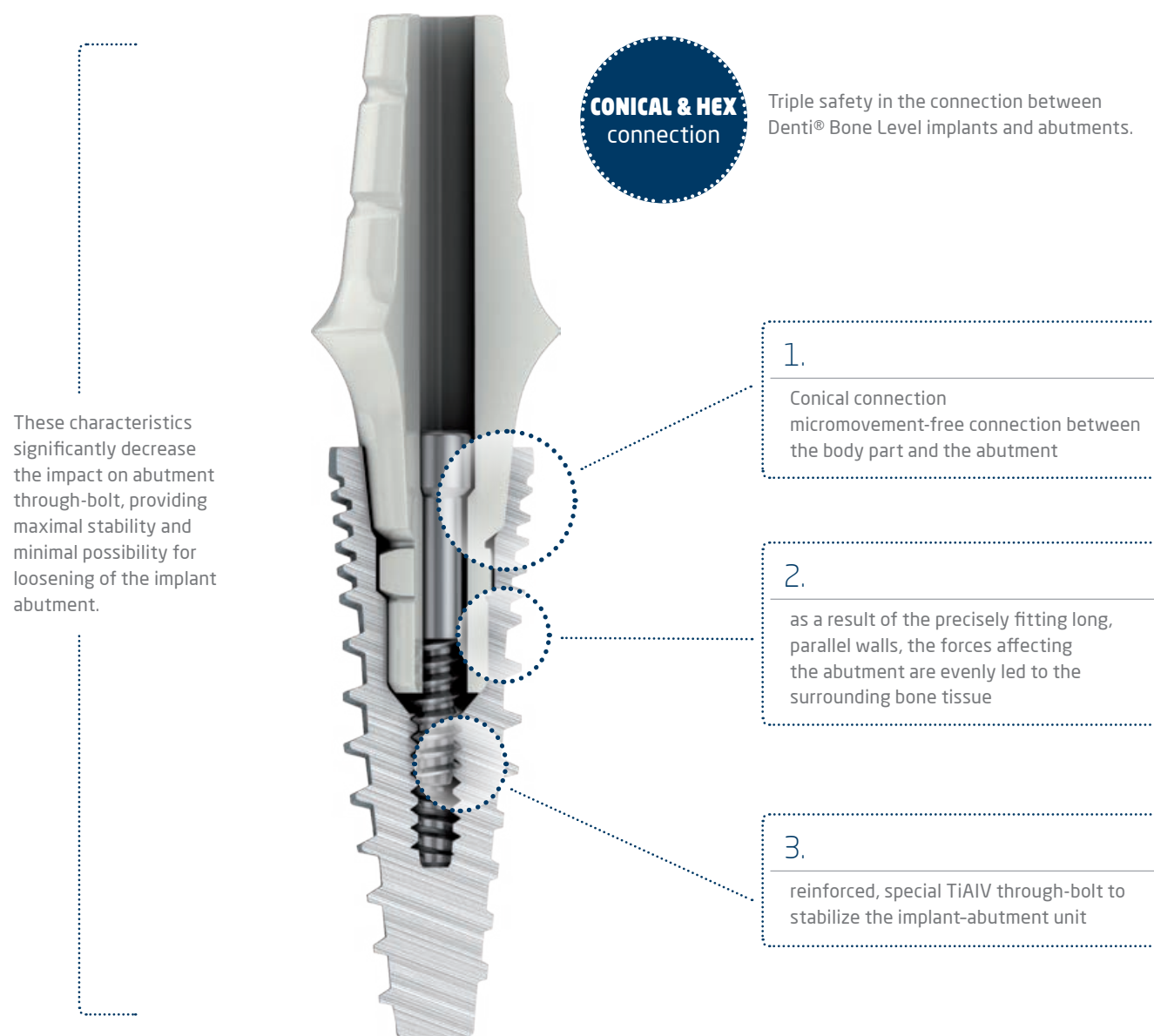


# CONNECTION

## CONNECTION

BACTERIA-FREE CLOSURE - MICROMOVEMENT-FREE  
IMPLANT-ABUTMENT CONNECTION

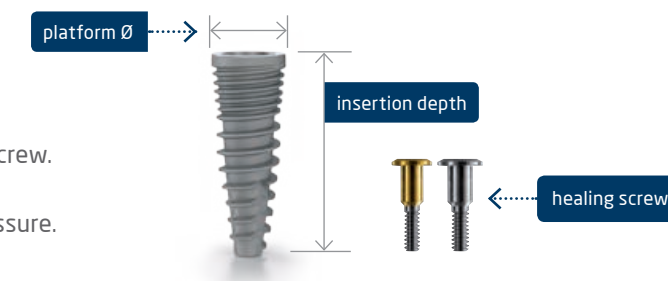
The self-locking cone surface is formed in the inlet of the neck part of the Denti® Bone Level implant, and there is a hexagonal recess below it. This hexagonal design serves for the screwing-in of the body part of the implant and the positioning of the abutment. From here a cylindrical bore starts in the apical direction, which receives the concentric skirt of the abutment. This tube-in-tube body part-abutment design allows for the precise insertion of the abutment, and aids the damage-free elimination of the masticatory forces acting on the abutment. Below this, apically, there is the nest of the screw securing the abutment.



# IMPLANT RANGE

## DBL IMPLANT RANGE

The implants are delivered together with the healing screw.  
Only single use of the healing screw is suggested.  
When tightening the healing screw use only finger pressure.



### Denti® DBL implants Ø 3,8 mm

Reference No.	Insertion depth (mm)	Platform Ø (mm)
BL 1038-095	9,5	4,2
BL 1038-115	11,5	4,2
BL 1038-135	13,5	4,2
BL 1038-155	15,5	4,2



### Denti® DBL implants Ø 4,3 mm

Reference No.	Insertion depth (mm)	Platform Ø (mm)
BL 1043-095	9,5	4,8
BL 1043-115	11,5	4,8
BL 1043-135	13,5	4,8
BL 1043-155	15,5	4,8



### Denti® DBL implants Ø 4,8 mm

Reference No.	Insertion depth (mm)	Platform Ø (mm)
BL 1048-095	9,5	5,2
BL 1048-115	11,5	5,2
BL 1048-135	13,5	5,2
BL 1048-155	15,5	5,2



### Denti® DBL implants Ø 5,3 mm

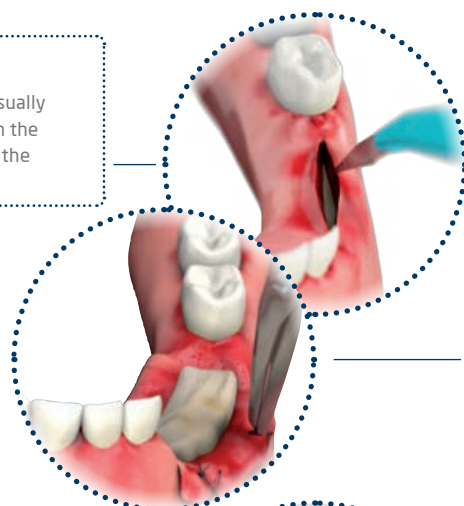
Reference No.	Insertion depth (mm)	Platform Ø (mm)
BL 1053-095	9,5	5,6
BL 1053-115	11,5	5,6
BL 1053-135	13,5	5,6
BL 1053-155	15,5	5,6





## 1a EXPLORATION

The surface of the alveolar crest is usually explored via an incision performed on the alveolar ridge at the intended site of the implantation.

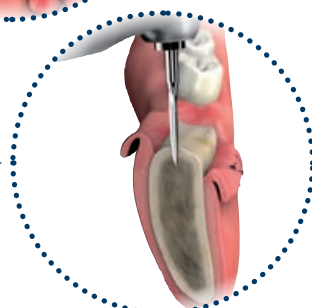


## 1b EXPLORATION

Preparation of the mucoperiosteum downwards to the sides should be performed so that the wound edges could be retracted tension-free. The bone surface that has been made visible is then examined.

## 2 MARKING

In case of a thin alveolar crest, we should mark the future site of the implant(s) on the bone surface with a initial drill.



Initial drill



Spherical drill



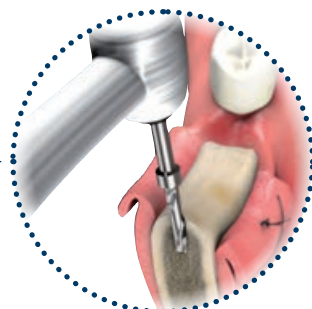
## 3 SPHERICAL DRILL MARKING

A plate shaped indentation of approximately 2 mm in depth is then performed in the bone surface /according to the previous marking/ with a spherical drill. Any inequality of the alveolar ridge must be smoothed at the intended site of the implantation.



## 4 PRE-DRILLING

On preparing the guide channel, parallel holes should be prepared carefully. Drilling a pilot is performed in the direction and depth determined previously by using a pilot drill with stop ring.



Pilot drill with stop

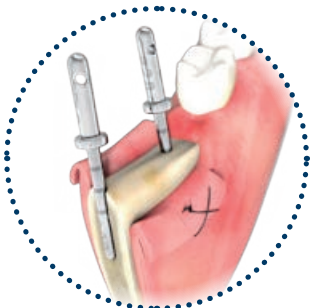


Parallel pin



## 5 CHECKING PARALLELISM

If we insert the parallel pin assuring parallel pre-drilling into the prepared hole, the direction of the previously prepared holes can be visualized. It can help us in preparing the next hole preferably being parallel with the previous one. The prepared hole is then rinsed with saline.



## 6 PREPARING THE IMPLANT BED

Dilation of the pre-drilled hole to the core width and recession of the neck part are performed in one step by using a two-in-one drill. A drill with an appropriate size should be used to prepare the implant nest so that it would fit the implant to be inserted. The size of the parallel edges of the drill should be the same as the body parts of the implant; therefore, they can also be used in one stage implantation. Thus, inserting the two-in-one drill into the bone only till the widening neck part, a reamer hole being exactly of the same size as the body part of the implant can be prepared.



Two-in-one drill



Thread cutter



## 7 THREAD CUTTING

In case the patient's mandible is D1 quality with thick and tough cortical layers, a thread should be cut into the hole with the appropriate size thread cutter before the insertion of the implant.



## 8a POWER DRIVE INSERTION

The bone nest is rinsed again, and then the implant is driven into the nest by the help of the mechanical driver. The implant is screwed until reaching the level of the bone.



Implant body driver with power drive



Manual implant body driver



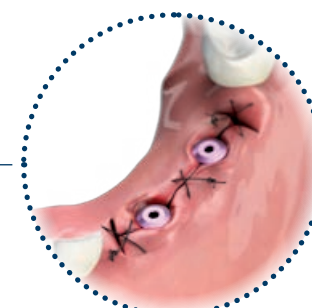
## 8b MANUAL INSERTION OF THE IMPLANT

The mechanical drivers can be converted into manual ones by the help of the adapters.



## 9 INSERTION OF THE HEALING SCREW AND WOUND CLOSURE

The implant body is covered with a healing screw, and then the mucoperiosteum is sealed around the neck of the implant with tension-free knotted sutures.



For more detail see the SURGICAL MANUALS available on [dentsystem.com](http://dentsystem.com)

**DOWNLOAD**  
SurgicalOnePhaseManual(EN)-DBL.pdf

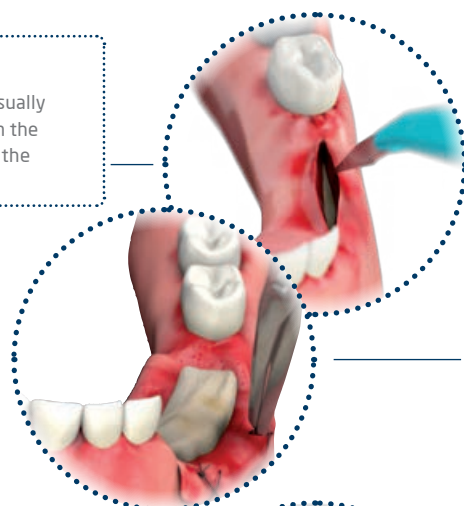




# DBL TWO STAGE SURGICAL PROTOCOL /SUBCRESTAL IMPLANT INSERTION/

## 1a EXPLORATION

The surface of the alveolar crest is usually explored via an incision performed on the alveolar ridge at the intended site of the implantation.

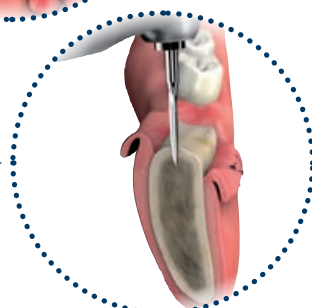


## 1b EXPLORATION

Preparation of the mucoperiosteum downwards to the sides should be performed so that the wound edges could be retracted tension-free. The bone surface that has been made visible is then examined.

## 2 MARKING

In case of a thin alveolar crest, we should mark the future site of the implant(s) on the bone surface with a initial drill.



Initial drill



Spherical drill

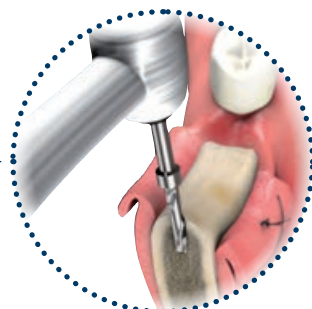


## 3 SPHERICAL DRILL MARKING

A plate shaped indentation of approximately 2 mm in depth is then performed in the bone surface /according to the previous marking/ with a spherical drill. Any inequality of the alveolar ridge must be smoothed at the intended site of the implantation.

## 4 PRE-DRILLING

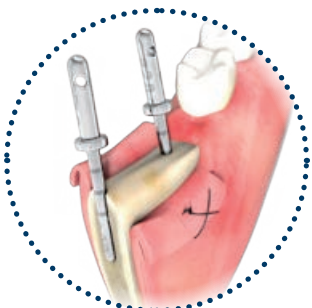
On preparing the guide channel, parallel holes should be prepared carefully. Drilling a pilot is performed in the direction and depth determined previously by using a pilot drill with stop ring.



Pilot drill with stop



Parallel pin



## 5 CHECKING PARALLELISM

If we insert the parallel pin assuring parallel pre-drilling into the prepared hole, the direction of the previously prepared holes can be visualized. It can help us in preparing the next hole preferably being parallel with the previous one. The prepared hole is then rinsed with saline.



# DBL TWO STAGE SURGICAL PROTOCOL

## 6 PREPARING THE IMPLANT BED

Dilation of the pre-drilled hole to the core width and recession of the neck part are performed in one step by using a two-in-one drill. A drill with an appropriate size should be used to prepare the implant nest so that it would fit the implant to be inserted. The size of the parallel edges of the drill should be the same as the body parts of the implant; therefore, they can also be used in one stage implantation. Thus, inserting the two-in-one drill into the bone only till the widening neck part, a reamer hole being exactly of the same size as the body part of the implant can be prepared.



Two-in-one drill



Thread cutter



## 7 THREAD CUTTING

In case the patient's mandible is D1 quality with thick and tough cortical layers, a thread should be cut into the hole with the appropriate size thread cutter before the insertion of the implant.

## 8a POWER DRIVE INSERTION

The bone nest is rinsed again, and then the implant is driven into the nest by the help of the mechanical driver. The implant is screwed until reaching the level of the bone.



Implant body driver with power drive



Manual implant body driver

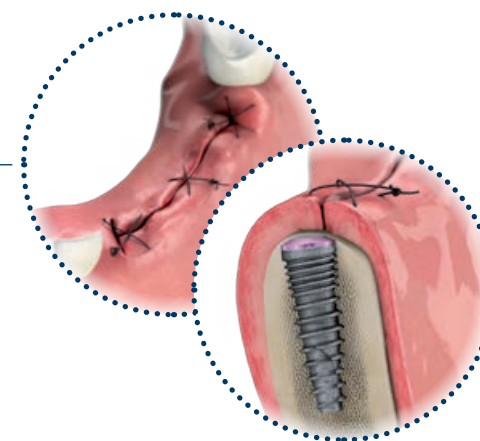


## 8b MANUAL INSERTION OF THE IMPLANT

The mechanical drivers can be converted into manual ones by the help of the adapters.

## 9 INSERTION OF THE HEALING SCREW AND WOUND CLOSURE

We close the body part with a healing screw and after that we unify the periosteum above it with knotty stitches without tension.



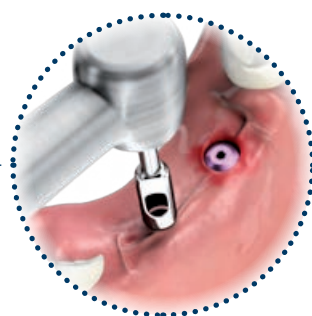


# DBL TWO STAGE SURGICAL PROTOCOL

## SECOND SURGICAL INTERVENTION

### 1 EXPLORATION

To uncover the neck part of the implants, a gingiva cutter is used to excise the mucosa. The gingiva is incised in a circle with a gingiva cutter centrally to the abutment, and then the circularly incised part is removed.



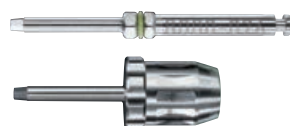
*A drawback of the two stage surgical protocol is that a second surgical intervention should be performed to uncover the implants from the mucoperiosteum. A gingiva shaper is driven into the implants to promote the epithelial junction in the peri-implant sulci.*

gingiva cutter



### 2a REMOVAL OF THE HEALING SCREW (MANUAL)

A manual dental torque wrench is used to remove the healing screw.



### 2b REMOVAL OF THE HEALING SCREW (WITH POWER DRIVE)

Both the manual and the mechanical dental torque wrenches can be used to remove the healing screw.



### 3a FORMING OF THE GINGIVA

After removing the healing screw, a gingiva former is driven into the implant until the wound in the mucosa is healed. The dental torque wrench used in the previous step can be applied to insert them. For further information on gingiva shapers see the prosthetic manual / gingiva shapers.



### 3b FORMING OF THE GINGIVA

The gingiva former should stay in the jaw until the prosthetic work begins.



For more detail see the SURGICAL MANUALS available on [dentsystem.com](http://dentsystem.com)

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SurgicalTwoPhaseManual(EN)-DBL.pdf



# PROSTHETICS

## MILLING CENTER

With an experience of 20 years in dental techniques, our team introduced CAD-CAM technology in the DentMill Milling Center in June 2011. Our goal is to serve dental technicians and dentists at the highest level from design to production. Our Milling Center offers services on the whole scale of CAD-CAM technology. We design crowns, bridges, implants based prosthesis, individual structures, dental bars, inlays, inlay anchorage with high quality optical scanners.



## WHAT KIND OF SERVICES DO WE OFFER?

- scanning samples
- designing prosthesis with CAD software
- receiving variety of data from open systems, designed replacement
- 3M LAVA zircon planning, receiving data only here in Hungary
- production from titanium, zircon, CoCr
- all above from the highest quality materials, on professional machines and with skilled colleagues



## MATERIALS WE WORK WITH

- ceramic fused and anatomic bridge structure from titanium, zircon and CoCr materials
- solo or zircon bridge piers inlay, onlay
- designing and producing individual implant abutments from zircon and titanium
- hybrid replacements, primer piers of titanium directly attached to the implant platform
- complete dental work starting from negatives
- ceramic frames of zircon, titanium, CoCr on sectional sample
- receiving data from CAD software and milling of zircon, titanium, CoCr
- professional, technical assistance to DWOS scanners



[WWW.DENTMILL.HU](http://WWW.DENTMILL.HU)



## STANDARD

connection means that the connection between implant and the abutment will be established on the platform of the implant instead of conical switching.



## PLATFORM SWITCH

connection means that the connection between implant and the abutment will be established on a 7° tapered connection that creates the Tissue Care Concept.

## DENTI® BONE LEVEL IMPLANT DESIGNS



### COLOR CODE AND SIGNS

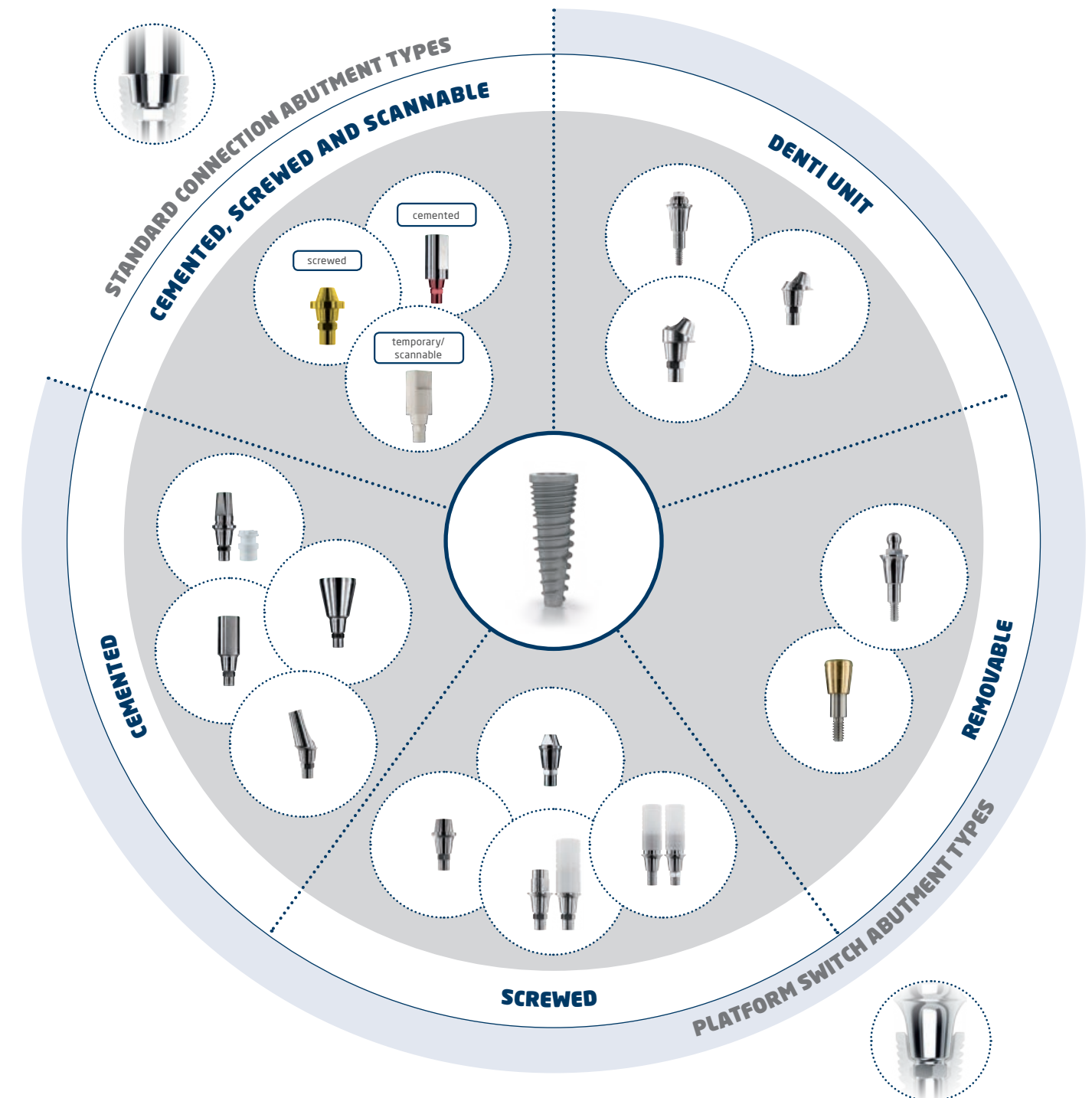
The purpose of color-coding is to make usability easier in surgical procedures as well as in prosthetic and laboratory stages.

The Denti® color codes are obtained by an electro-chemical reaction process without any addition of materials and thus without any change to the titanium properties.

The Denti® Bone Level system are available in 4 diameters in order to meet different needs of the patients.

The chart indicates which color corresponds to each Denti® implant diameter

Diameter of Bone Level Implants (mm)	Color code
3,8	yellow 
4,3 - 4,8 - 5,3	natural 



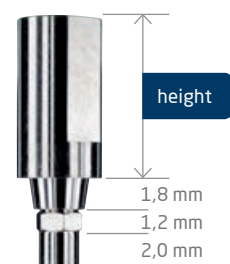




# DENTI® CEMENTED ABUTMENT TYPES

## CYLINDRICAL ABUTMENT FOR ANGLED CORRECTION

The cylindrical abutment is recommended whenever there is a need to correct axial deviations in case any implants are not adequately parallel with each other. It can be used for the preparation of both individual crowns and bridge and can be corrected by means of milling whenever necessary.



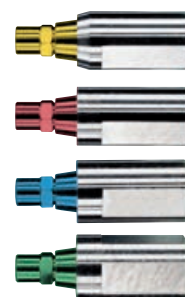
Cylindrical abutment for angled correction

Reference No.	Implant Ø (mm)	Height (mm)
BL 38661	3,8	9
BL 43661	4,3	9
BL 48661	4,8	9
BL 53661	5,3	9

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



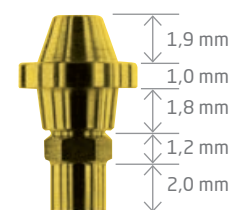
STANDARD  
ABUTMENTS



# DENTI® SCREW RETAINED ABUTMENT TYPE

## INTERMEDIARY ABUTMENTS

Denti® intermediary abutments are especially useful when treating tight edentulous gaps. Reshaping of the crowns and bridges can be carried out by prefabricated burnout plastic cylinder.



Intermediary abutments

Reference No.	Implant Ø (mm)	Platform height (mm)	Height (mm)
BL 38637	3,8	1	2,9
BL 43637	4,3	1	2,9
BL 48637	4,8	1	2,9
BL 53637	5,3	1	2,9

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



STANDARD  
ABUTMENTS





## GINGIVA FORMERS

### GINGIVA FORMERS

The gingiva formers are designed to use for the formation of a new periimplant gingival cuff. Denti® gingiva formers are designed with three heights. The appropriate one to choose is the one, which is approx. 1 mm longer than the mucoperiosteum. Thus when tightened, it will protrude into the mouth. In case of implants assembled by a two-stage surgery method, we recommend the use of Denti® gingiva formers for the healing period after the second operation.

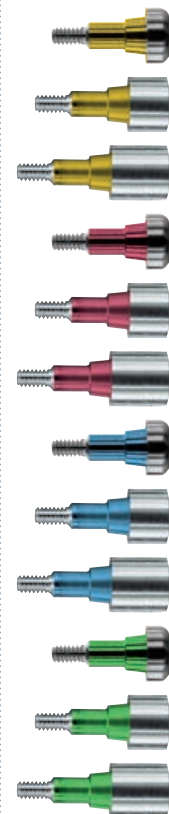


Gingiva formers		
Reference No.	Implant Ø (mm)	Height (mm)
BL 38650	3,8	2
BL 38651	3,8	5
BL 38652	3,8	8
BL 43650	4,3	2
BL 43651	4,3	5
BL 43652	4,3	8
BL 48650	4,8	2
BL 48651	4,8	5
BL 48652	4,8	8
BL 43650	5,3	2
BL 43651	5,3	5
BL 43652	5,3	8

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



STANDARD  
ABUTMENTS



## TEMPORARY/SCANABLE ABUTMENT

### TEMPORARY/SCANABLE ABUTMENT

Due to the material of the temporary abutment (WHITE PEEK), it can be applied in dental scanners. For the construction of immediate, temporary prostheses, we recommend the use of temporary head parts made of hard plastic (PEEK). The head part is secured into the implant with a through bolt. After securing the head part, it may be grinded in, as necessary, with a turbine in the mouth, and the impression for the temporary immediate prosthesis can be taken immediately. The completed crown/bridge is fixed to the head parts with adhesive cement.

Immediate head part are not recommended for long-term loading.



Temporary/scanable abutment		
Reference No.	Implant Ø (mm)	Height (mm)
BL 38615	3,8	8
BL 43615	4,3	8
BL 48615	4,8	8
BL 53615	5,3	8

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



STANDARD  
ABUTMENTS



# DENTI® CEMENTED ABUTMENT TYPES

## UNI ABUTMENT

The conical, universal abutments can be used for the preparation of both individual crowns and bridges.



**PLATFORM  
SWITCH  
ABUTMENTS**

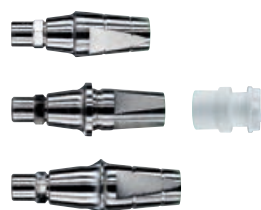


Uni abutment			
Reference No.	Implant Ø (mm)	Gingiva height (mm)	Height (mm)
BL-PS 24521	3,8-4,3-4,8-5,3	0,6	7
BL-PS 24522	3,8-4,3-4,8-5,3	1,4	7
BL-PS 24523	3,8-4,3-4,8-5,3	2,4	7

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



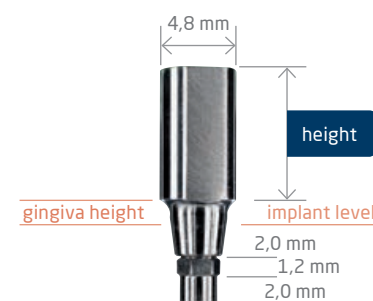
# DENTI® CEMENTED ABUTMENT TYPES

## CYLINDRICAL ABUTMENT FOR ANGLED CORRECTION

The cylindrical abutment is recommended whenever there is a need to correct axial deviations in case any implants are not adequately parallel with each other. It can be used for the preparation of both individual crowns and bridge and can be corrected by means of milling whenever necessary.



**PLATFORM  
SWITCH  
ABUTMENTS**



Cylindrical abutment for angled correction			
Reference No.	Implant Ø (mm)	Gingiva height (mm)	Height (mm)
BL-PS 24661	3,8-4,3-4,8-5,3	0,6	8
BL-PS 24662	3,8-4,3-4,8-5,3	1,4	8
BL-PS 24663	3,8-4,3-4,8-5,3	2,4	8

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm





# DENTI® CEMENTED ABUTMENT TYPES

## REVERSE CONICAL ABUTMENT FOR ANGLED CORRECTION

Denti® reverse conical abutments are recommended whenever there is a need for the correction of considerable axial deviations in case implants could not be prepared in an adequately parallel position. It can be used for the preparation of both individual crowns and bridges and can be reshaped by means of milling whenever necessary.



PLATFORM  
SWITCH  
ABUTMENTS



Reverse conical abutment for angled correction

Reference No.	Implant Ø (mm)	Gingiva height (mm)	Height (mm)
BL-PS 24671	3,8-4,3-4,8-5,3	0,6	8
BL-PS 24672	3,8-4,3-4,8-5,3	1,4	8
BL-PS 24673	3,8-4,3-4,8-5,3	2,4	8

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



# DENTI® CEMENTED ABUTMENT TYPES

## ANATOMIC ANGULATED ABUTMENT

HEAD PARTS FOR 15 AND 25-DEGREE AXIS CORRECTION

The head parts available in the Denti Implant System for 15- and 25-degree axis correction have a circular shoulder and a curved shape, in accordance with the curve of the gingival margin. Head parts with neck heights that are appropriate for the thickness of the mucoperiosteum can be selected during the second surgery. Correction head parts are available with a neck height of 2.5 mm. Their correct use must be ensured even during the placement of the implant by positioning the head part properly.



PLATFORM  
SWITCH  
ABUTMENTS



Anatomic angulated abutment

Reference No.	Implant Ø (mm)	Gingiva height (mm)	Height (mm)
BL-PS 24681	3,8-4,3-4,8-5,3	0,6	8
BL-PS 24682	3,8-4,3-4,8-5,3	1,6	9
BL-PS 24781	3,8-4,3-4,8-5,3	0,6	8
BL-PS 24782	3,8-4,3-4,8-5,3	1,6	9

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm





# DENTI® SCREW RETAINED ABUTMENT TYPE

## INTERMEDIARY ABUTMENTS

Denti® intermediary abutments are especially useful when treating tight edentulous gaps. Reshaping of the crowns and bridges can be carried out by prefabricated burnout plastic cylinder.



PLATFORM  
SWITCH  
ABUTMENTS



Intermediary abutments					
Reference No.	Implant Ø (mm)	Gingiva height (mm)	Height (mm)	Diameter (mm)	Bournout plastic cylinders
BL-PS 23637	3,8-4,3	1,4	2,4	4,0	3034-009, 3034-010
BL-PS 24637	4,8-5,3	1,4	2,4	4,8	3455-009, 3455-010
BL-PS 23638	3,8-4,3	2,4	2,4	4,0	3034-009, 3034-010
BL-PS 24638	4,8-5,3	2,4	2,4	4,8	3455-009, 3455-010
Instrument to use with:					
• 8000-076 screwdriver with power drive					
• 8000-077 screwdriver, manual					
Suggested torque with fixing screws max 25 Ncm					



# DENTI® SCREW RETAINED ABUTMENT TYPE

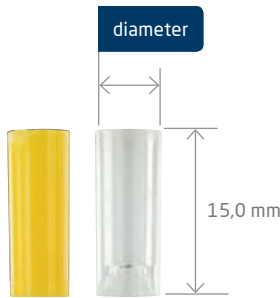
## BURNOUT PLASTIC CYLINDERS

The burnout cylinders provide full flexibility when selecting the method for single tooth restorations and multiple constructions.

Denti® burnout plastic cylinders are recommended for the precise copying of the intermediary abutments. Castable plastic cylinders are available in two types. Cylindrical types (-009) are recommended for several interposed abutments. Flat sided types are recommended for single or telescopic construction.



PLATFORM  
SWITCH  
ABUTMENTS



Burnout plastic cylinders			
Reference No.		Diameter (mm)	
3034-009	BL-PS 23637, BL-PS 23638	4,0	without scarf
3034-010	BL-PS 24637, BL-PS 24638	4,0	with scarf
3455-009	BL-PS 24637, BL-PS 24638	4,8	without scarf
3455-010	BL-PS 23637, BL-PS 23638	4,8	with scarf







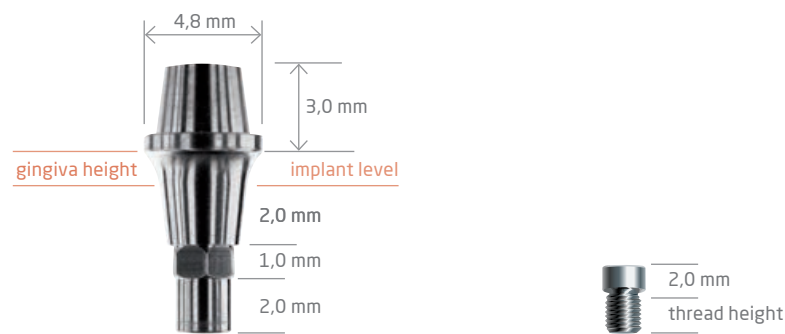
# DENTI® SCREW RETAINED ABUTMENT TYPE

## ABUTMENT WITH SHOULDER AND INNER THREAD

Denti® abutment with shoulder and inner thread are recommended mainly for the implantation of bridge prostheses in the posterior region.



PLATFORM  
SWITCH  
ABUTMENTS



Abutment with shoulder and inner thread		
Reference No.	Implant Ø (mm)	Gingiva height (mm)
BL-PS 24601	3,8-4,3-4,8-5,3	1,4
BL-PS 24602	3,8-4,3-4,8-5,3	2,4
Fixing screw		
Reference No.	Thread height (mm)	
2455-571	4	
2455-572	3	
2455-573	1,8	

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



# DENTI® SCREW RETAINED ABUTMENT TYPE

## COCR ABUTMENT WITH CASTABLE PLASTIC CYLINDER

CoCr abutments with castable plastic cylinder are designed to apply on crowns or bridges made of metal ceramic. Individually designed abutments cemented on Denti CrCo base can be produced by using CAD/CAM technique, molding or pressing. The connection with the implant platform is perfect due to this abutment.

To be applied primarily for metal ceramic or CoCr materials.

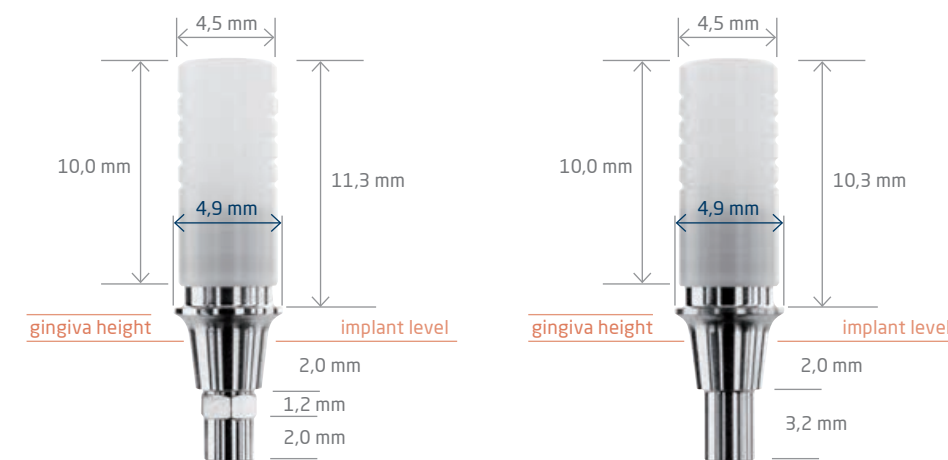
Denti CoCr abutments are available in two different designs:

- Anti-rotational (Hexagonal shape): to be applied for single tooth replacement
- Circularly symmetric (Cylindrical shape): to be applied for multiple tooth replacement

Not recommended for correction of an extremely big angulation.



PLATFORM  
SWITCH  
ABUTMENTS



CoCr abutment with burnout plastic cylinder			
Reference No.	Implant Ø (mm)	Gingiva height (mm)	Connection
BL-PS 24611	3,8-4,3-4,8-5,3	1,4	Hex
BL-PS 24614	3,8-4,3-4,8-5,3	1,4	Cylinder

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm

Composition (percentage by mass):

Co: 65,4 %

Cr: 27,75 %

Mo: 5,06 %

Additional elements less than 1 % (Fe, Mn, Si, N, Ni, C, Ti, P, S)





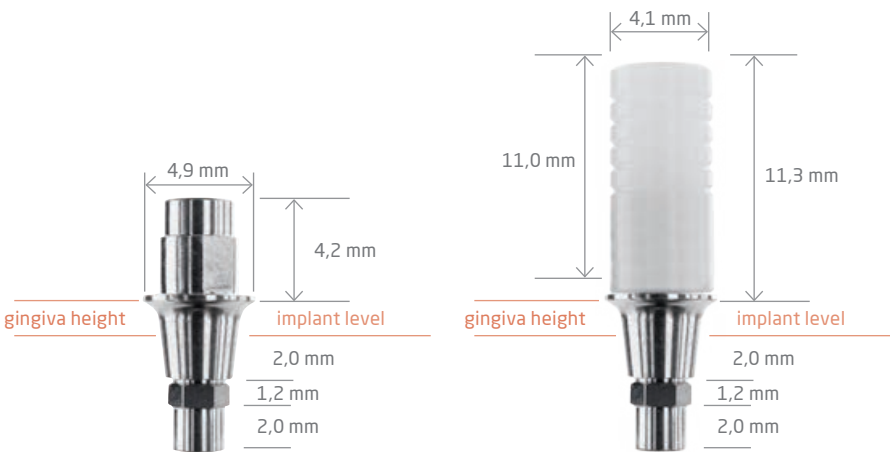
# DENTI® SCREW RETAINED ABUTMENT TYPE

## TITANIUM BASE ABUTMENTS WITH CASTABLE PLASTIC CYLINDER

For the Denti® Bone Level Implant System we offer Titanium base abutments with castable plastic cylinder, which are designed for a very precise manufacturing of crowns and bridges made of zirconia. Individually designed abutments cemented on Denti® titanium base can be produced by using CAD/CAM technique, molding or pressing. The connection with the implant platform is perfect due to the Titanium base, as the individual part is cemented to the base by an adhesive, composite cement which makes a gap-free connection between both parts. Materials: Zirconia Dioxide, TiAl6V4. This is a cost-effective and secure abutment which is esthetically very satisfying with metal-free constructions. Although built up on a titanium base, the transgingival part of the abutment is made of ceramic which can be colored if needed. Not recommended for correction of an extremely big angulation.



PLATFORM SWITCH ABUTMENTS



TI base abutment with burnout plastic cylinder	
Reference No.	Gingiva height (mm)
BL-PS 24621	1,4
Instrument to use with:	
• 8000-076 screwdriver with power drive	
• 8000-077 screwdriver, manual	
Suggested torque with fixing screws max 25 Ncm	



# DENTI® REMOVABLE ABUTMENT TYPE

## BALL ABUTMENT

The ball abutments are available in 2 heights. The ball abutment is made of titanium alloy TiAlV. The radius of the ball is 2,5 mm. Ball abutments do not have internal hex connection.



PLATFORM SWITCH ABUTMENTS



Ball abutment		
Reference No.	Implant Ø (mm)	Gingiva height (mm)
BL-PS 24551	3,8-4,3-4,8-5,3	1,4
BL-PS 24552	3,8-4,3-4,8-5,3	2,4
Instrument to use with:		
• 8000-076 screwdriver with power drive		
• 8000-077 screwdriver, manual		
Suggested torque with fixing screws max 30 Ncm		





# DENTI® REMOVABLE ABUTMENT TYPE

## DENTILOC ABUTMENTS

Dentiloc abutment provides spherical retention fixation. It can mainly be utilized in implants with larger axial deviation, where excellent fixation can be provided even at 40° axial deviation. Another advantage is its low height resulting in smaller space requirement. Compared to ball-head assembly, it has a larger retention surface, better prevention of loosening, and it is more resistant to wear-and-tear due to the larger interface.



Dentiloc abutments		
Reference No.	Implant Ø (mm)	Height (mm)
BL-PS 24561	3,8-4,3-4,8-5,3	2,7
BL-PS 24562	3,8-4,3-4,8-5,3	3,7
BL-PS 24563	3,8-4,3-4,8-5,3	4,7
BL-PS 24564*	3,8-4,3-4,8-5,3	5,7
BL-PS 24565*	3,8-4,3-4,8-5,3	6,7

\*special order

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



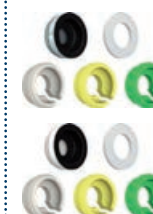
PLATFORM  
SWITCH  
ABUTMENTS



# DENTI® REMOVABLE ABUTMENT TYPE

## NOVALOC SWISS MADE

NOVALOC		
Reference No.		pcs.
2010.101	2010.101 Equipment Box with 3 tools 2010.731, 2010.741, 2010.751 (excluding consumables)	
2010.601	Processing package Titanium Titanium matrix housing incl. PEEK mounting insert black. Retention inserts white, yellow, green Mounting collar silicone	2
2010.611	Processing package PEEK PEEK matrix housing incl. PEEK mounting insert black Retention inserts white, yellow, green Mounting collar silicone	2
2010.710	Retention insert white PEEK, pull-off weight	4 extra-light
2010.712	Retention insert yellow PEEK, pull-off weight	4 medium
2010.713	Retention insert green PEEK, pull-off weight	4 strong
2010.714	Retention insert blue PEEK, pull-off weight	4 extra-strong
2010.715	Retention insert black. PEEK, pull-off weight	4 ultra strong
2010.731	Demounting tool for mounting insert model analogue reposition aid, blue	
2010.741	Mounting and demounting tool for retention inserts, brown	
2010.751	Matrix housing extractor grey	
2010.703	Titanium matrix housing with attachment option incl. PEEK mounting insert	4
2010.701	Titanium matrix housing incl. PEEK mounting insert	4
2010.702	PEEK matrix housing incl. PEEK mounting insert	4
2010.725	PEEK mounting insert black	4
2010.721	Model analog Aluminium	4
2010.722	Forming/fixing matrix, red PEEK	4
2010.723	Processing spacer, white POM C	4
2010.724	Mounting collar silicone	10





# DENTI® REMOVABLE ABUTMENT TYPE

## DENTI-UNIT ABUTMENTS

The Denti-unit Abutment is designed for screw-retained restorations of partially edentulous and edentulous arches. It comes in straight and angled (17° and 30°) alternatives with a broad selection of collar heights to match the thickness of the soft tissue.



**PLATFORM  
SWITCH  
ABUTMENTS**



Denti-unit Abutments		
Reference No.	Implant Ø (mm)	Gingiva height (mm)
BL-PS 24701	3,8-4,3-4,8-5,3	1,4
BL-PS 24702	3,8-4,3-4,8-5,3	2,4
BL-PS 24703	3,8-4,3-4,8-5,3	3,6



Denti-unit Abutments 17°		
Reference No.	Implant Ø (mm)	Collar height (mm)
BL-PS 24704	3,8-4,3-4,8-5,3	2,0
BL-PS 24705	3,8-4,3-4,8-5,3	3,0



# DENTI® REMOVABLE ABUTMENT TYPE



**PLATFORM  
SWITCH  
ABUTMENTS**

Denti-unit Abutments 30°		
Reference No.	Implant Ø (mm)	Collar height (mm)
BL-PS 24708	3,8-4,3-4,8-5,3	3,0
BL-PS 24709	3,8-4,3-4,8-5,3	4,0

Instrument to use with:

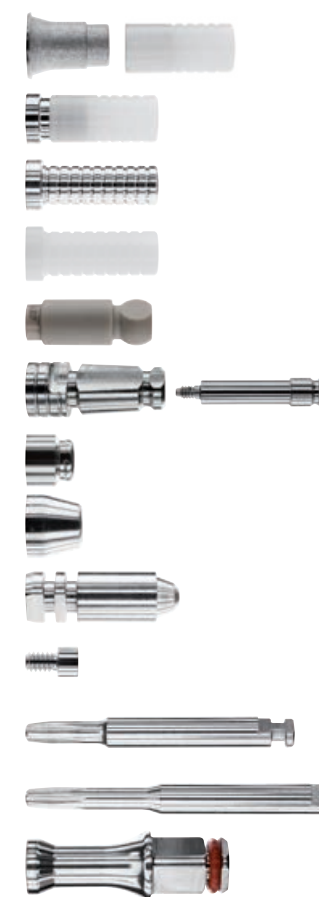
- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm



## DENTI-UNIT ACCESSORIES

Denti-unit accessories		
Reference No.		Height (mm)
MU 101	Denti-unit titan base with burnout plastic cylinder	11,0
MU 102	Denti-unit CoCr base with burnout cylinder	10,3
MU 103	Denti-unit temporary abutment	12,0
MU 104	Denti-unit plastic abutment	11,5
MU 105	Denti-unit scannable abutment	11,5
MU 106	Denti-unit impression copy	12,0
MU 107	Denti-unit Dentiloc abutment	4,0
MU 108	Denti-unit healing cap	4,15
MU 109	Denti-unit labor analogue	14,15
MU 110	Denti-unit fixing screw	3,45
MU 8077	Denti-unit screw driver, short	20,0
MU 8078	Denti-unit screw driver, long	24,0
MU 8088	Denti-unit abutment driver	17,0







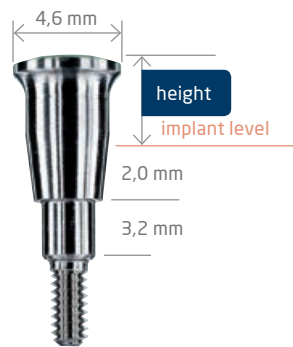
# GINGIVA FORMERS

## GINGIVA FORMERS

The gingiva formers are designed to use for the formation of a new periimplant gingival cuff. Denti® gingiva formers are designed with three heights. The appropriate one to choose is the one, which is approx. 1 mm longer than the mucoperiosteum. Thus when tightened, it will protrude into the mouth.

In case of implants assembled by a two-stage surgery method, we recommend the use of Denti® gingiva formers for the healing period after the second operation.

The so-called transgingival healing screws allow for the aesthetic shaping of the gingiva around the implant. These can be used when implants are assembled by a half-open, half-closed operation method.



Gingiva former		
Reference No.	Implant Ø (mm)	Height (mm)
BL-PS 24651	3,8; 4,3; 4,8; 5,3	2,0
BL-PS 24652	3,8; 4,3; 4,8; 5,3	4,0
BL-PS 24653	3,8; 4,3; 4,8; 5,3	6,0

Instrument to use with:

- 8000-068 screwdriver, manual

Suggested torque max 20 Ncm



# IMPRESSION TAKING

## LABORATORY ACCESSORIES IMPRESSION TAKING

Transmitting the structure of implants to the specimen must be extremely precise. By using Denti® Implant Systems, taking a dental impression can be done with open or closed tray. The method of impression taking (open or closed tray) is dependent on the parallelism, number and angulation of the implants as well. There are appropriate impression copings for both impression methods. Each element is color coded according to the diameter of the implant.

A precise copy of the intraoral conditions can be made by the means of impression copings and labor analogues.



## CLOSED TRAY IMPRESSION COPINGS CONICAL IMPRESSION COPING WITH CAP

The indirect, closed-tray impression technique is used when the placed implants show only a small degree of axis deviation (9 to 10° at most). This impression technique is primarily recommended for partial or subtotal tooth loss. An A-silicone or polyester impression material is recommended for obtaining the impression. Use hard plastic factory or custom trays for obtaining the impression. If possible, use a one-stage or a simultaneous two-stage impression technique.

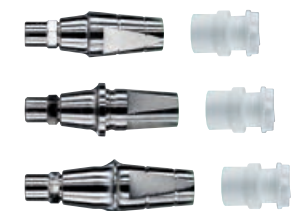


Closed tray impression copings conical impression coping with cap			
Reference No.	Implant Ø (mm)	Gingiva height (mm)	Height (mm)
BL-PS 34521	3,8-4,3-4,8-5,3	0,6	7
BL-PS 34522	3,8-4,3-4,8-5,3	1,4	7
BL-PS 34523	3,8-4,3-4,8-5,3	2,4	7

Instrument to use with:

- 8000-076 screwdriver with power drive
- 8000-077 screwdriver, manual

Suggested torque with fixing screws max 25 Ncm





# IMPRESSION TAKING

## IMPRESSION CAP



Impression cap		
Reference No.	Abutments	Height (mm)
34724	BL-PS 34521; BL-PS 34522; BL-PS 34523	8
Three items per pack		

## OPEN TRAY IMPRESSION COPINGS

Denti® laboratory components allow an impression to be taken from the fixture. The impression copings and the laboratory analogues ensure correct transfer of the situation to the model.



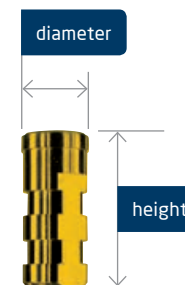
Open tray impression copings		
Reference No.	Implant Ø (mm)	Height (mm)
BL-PS 34840	3,8; 4,3; 4,8; 5,3	8,0
BL-PS 34841	3,8; 4,3; 4,8; 5,3	10,0
BL-PS 34842	3,8; 4,3; 4,8; 5,3	12,0
Instrument to use with:		
• 8000-076 screwdriver with power drive		
• 8000-077 screwdriver, manual		
Suggested torque with fixing screws max 15 Ncm		



# LABOR ANALOGUES / SCREWS

## LABOR ANALOGUES

Unalloyed titanium. Analogous to the body of the fixture.



Labor analogues			
Reference No.	Implant Ø (mm)	Diameter	Height (mm)
BL-BS 38870	3,8	4,2	9,5
BL-BS 43870	4,3	4,8	9,5
BL-BS 48870	4,8	5,2	9,5
BL-BS 53870	5,3	5,6	9,5



## SCREWS

Table of prosthetic screws

Fixing screws	
Reference No.	Application
BL 1345-001	Healing screws for every BL implants
BL 3034-120	Fixing screw with BL standard intermediary abutments
BL 3034-121	Fixing screw with BL Platform switch intermediary abutments short (637)
BL 3034-121	Fixing screw with BL Platform switch intermediary abutments long (638)
BL 3034-140	Fixing screw with BL-PS34840 abutments
BL 3034-141	Fixing screw with BL-PS 344841 abutments
BL 3034-142	Fixing screw with BL-PS 34842 abutments
BL 3034-160	Fixing screw with any BL Platform switch abutments
MU 110	Fixing screw with Denti-unit accessories



## STEPS OF THE OPEN-TRAY (DIRECT) IMPRESSION TECHNIQUE

The open-tray impression technique is primarily advised when the placed implants show a considerable axis deviation ( $> 9$  to  $10^\circ$ ) but, because of its high precision, its use can be recommended in every case. This impression technique is recommended for partial or complete tooth losses.

An A-silicone or polyester impression material is recommended for obtaining the impression. Use a hard plastic factory or custom tray for obtaining the impression. If possible, use a one-stage or a simultaneous two-stage impression technique.

### 1. PREPARING THE MOUTH FOR TAKING THE IMPRESSION

For 1 week after the release of the implant, the patient will wear a healing abutment, which ensures the optimal shaping of the peri-implant gingiva. This method is primarily recommended in the case of implants placed with the two-stage surgical procedure. A healing abutment is not required if a one-stage surgical procedure was performed. After that, a situation impression is obtained for the custom tray.



GINGIVA FORMERS



### 2a. OBTAINING THE IMPRESSION

After the regeneration of the gingiva (about 7 to 10 days), the healing abutment(s) is (are) removed, the impression post suitable for the open-tray impression technique is placed and secured with a long fixation screw, and then the custom tray is tried in its place. The custom tray should be laid over the impression abutment so that the fixation screws extend 1 to 2 mm beyond the openings on the occlusal side of the tray.



OPEN TRAY IMPRESSION COPINGS

### 2b.

The tray filled with the impression material is placed in the mouth. Make sure to have the custom tray seated exactly in its place.



### 2c.

The set impression can be removed from the mouth only by screwing off the long screws that secure the impression posts through the openings on the occlusion side of the tray, and then pulling them out, one by one, of the implants. After removing the impression tray from the mouth, we can see that the retentive impression abutments have remained secured in the impression. After that, the healing abutment(s) - or, in case of implants placed with the one-stage surgical procedure, the transgingival screw(s) - is (are) placed back in the mouth, and the implants are closed.



### 2d.

Before casting the impression, the laboratory implants can be precisely and safely inserted in the impression abutments, and secured strongly with the long fixation screws going through them. This latter step can also be performed in the dental laboratory.



From that point on, the procedure is the same as the one used for the construction of prostheses in the dental practice.

The steps of obtaining the impression are independent of the type of the prosthesis. The open-tray impression technique may be suitable for the construction of any implant-based prosthesis (cemented, screwed-in or removable). There is no difference between the different prostheses in regard to the steps of obtaining the impression and the use of the prosthetic accessories.



## STEPS OF THE CLOSED-TRAY (INDIRECT) IMPRESSION TECHNIQUE

The indirect, closed-tray impression technique is used when the placed implants show a relatively small degree of axis deviation (9 to 10° at most). This impression technique is primarily recommended for partial tooth loss. An A-silicone or polyester impression material is recommended for obtaining the impression. Use a hard plastic factory or custom tray for obtaining the impression. If possible, use a one-stage or a simultaneous two-stage impression technique.

### 1. PREPARING THE MOUTH FOR TAKING THE IMPRESSION

For 1 week after the release of the implant (second surgery), the patient will wear a healing abutment, which ensures the optimal shaping of the peri-implant gingiva. This method is primarily recommended in the case of implants placed with the two-stage surgical procedure. A healing abutment is not required if one-stage surgical procedure was performed.



GINGIVA FORMERS



### 2a. OBTAINING THE IMPRESSION

After the regeneration of the gingiva (about 7 to 10 days), the healing abutment(s) is (are) removed, and the impression post(s) is (are) placed and secured in the implant(s) with a through fixation bolt.



CLOSED TRAY IMPRESSION COPINGS

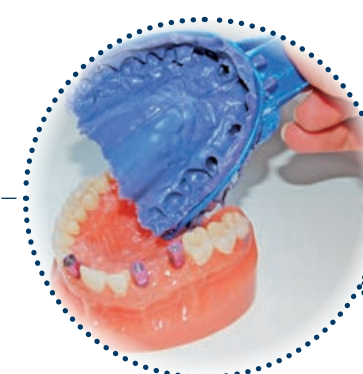
### 2b.

The tray filled with the impression material is placed in the mouth.



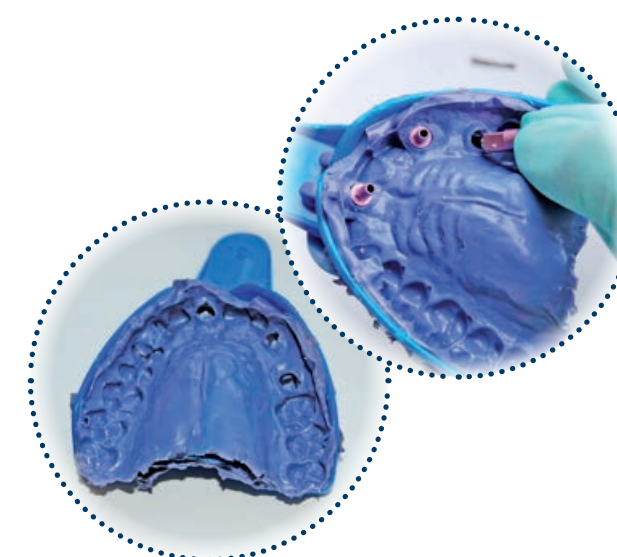
### 2c.

The set impression is removed from the mouth, and then the impression posts are screwed out of the implants one by one. After this, the healing abutments or transgingival healing screws are placed back into the implants in the mouth, closing the implants.



### 2d.

Before casting the impression, the laboratory implants are secured onto the impression posts removed from the mouth with the through bolt. The obtained impression post-laboratory implant assembly must be placed back carefully into the impression. It may be performed in the office or in the dental laboratory.



From that point on, the procedure is the same as the one used for the construction of prostheses in the dental practice.

The steps of obtaining the impression are independent of the type of the prosthesis. The closed-tray impression technique may be suitable for the construction of any implant-based prosthesis (cemented, screwed-in or removable). There is no difference between the different prostheses in regard to the steps of obtaining the impression and the use of the prosthetic accessories.



## STEPS OF THE CLOSED-TRAY (INDIRECT) IMPRESSION TECHNIQUE WITH THE USE OF AN IMPRESSION CAP

The indirect, closed-tray impression technique is used when the placed implants show only a small degree of axis deviation (9 to 10° at most). This impression technique is primarily recommended for partial or subtotal tooth loss. An A-silicone or polyester impression material is recommended for obtaining the impression. Use hard plastic factory or custom trays for obtaining the impression. If possible, use a one-stage or a simultaneous two-stage impression technique.

### 1. PREPARING THE MOUTH FOR TAKING THE IMPRESSION

For 1 week after the release of the implant (second surgery), the patient will wear a healing abutment, which ensures the optimal shaping of the peri-implant gingiva. This method is primarily recommended in the case of implants placed with the two-stage surgical procedure. A healing abutment is not required if a one-stage surgical procedure was performed.



GINGIVA FORMERS



### 2a. OBTAINING THE IMPRESSION

After the regeneration of the peri-implant gingiva (about 7 to 10 days), the healing abutment(s) is (are) removed, and the No. 725 abutment(s) suitable for obtaining the impression with a cap is (are) placed and secured in the implant with a fixation screw.



CONICAL IMPRESSION COPING WITH CAP

### 2b.

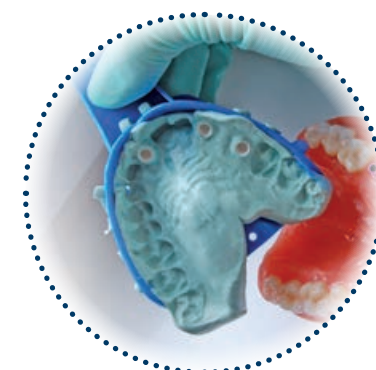
After that, the impression caps (Catalog No.: 34724) are secured in the proper position by pressing them onto the abutments.



34724  
H: 8mm

### 2c.

The tray filled with the impression material is placed in the mouth.



### 2d.

After setting, the impression is removed from the mouth. The impression caps with the retention screw stay secured in the impression material.



### 2e.

Then, the impression components (abutments) are screwed out of the implants one by one, and are placed back on the caps in the impression material by applying light pressure. After that, the healing abutments or the transgingival healing screws are placed back into the implants in the mouth, closing the implants this way.



From that point on, the procedure is the same as the one used for the construction of prostheses in the dental practice. The steps of obtaining the impression are independent of the type of the prosthesis. The impression technique with the use of an impression cap may be suitable for the construction of any implant-based prosthesis (cemented, screwed-in or removable). There is no difference between the different prostheses in regard to the steps of obtaining the impression and the use of the prosthetic accessories.



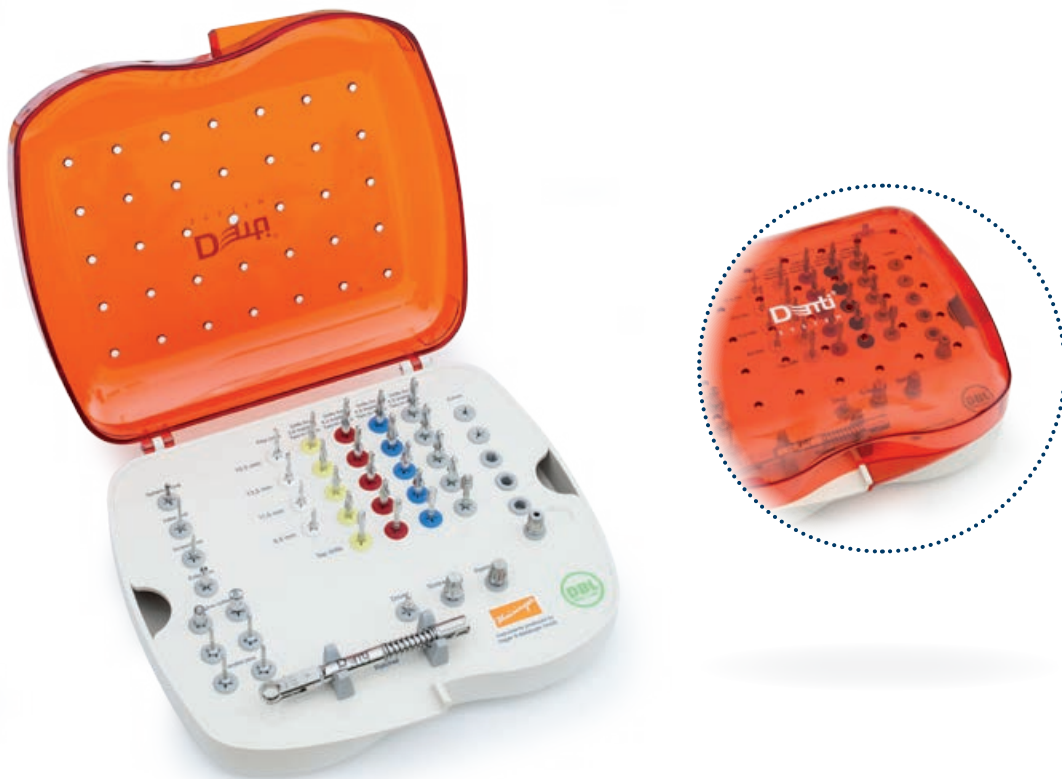
# SURGICAL TRAY - PROFESSIONAL KIT

## PROFESSIONAL SURGICAL SET

The surgical instrument trays can be used for the storage and sterilization of the instruments that belong to the implants of each system.  
The surgical trays are made up of the following components: basic tray, holder, cover, colored rings, which may be exchanged when damaged.

SIZE OF THE Professional SURGICAL TRAY:  
199 mm x 174 mm x 60 mm.

For DBL implants	
Reference No.	
BL 8265	Denti Bone Level surgical tray
BL 8365	Denti Bone Level surgical set

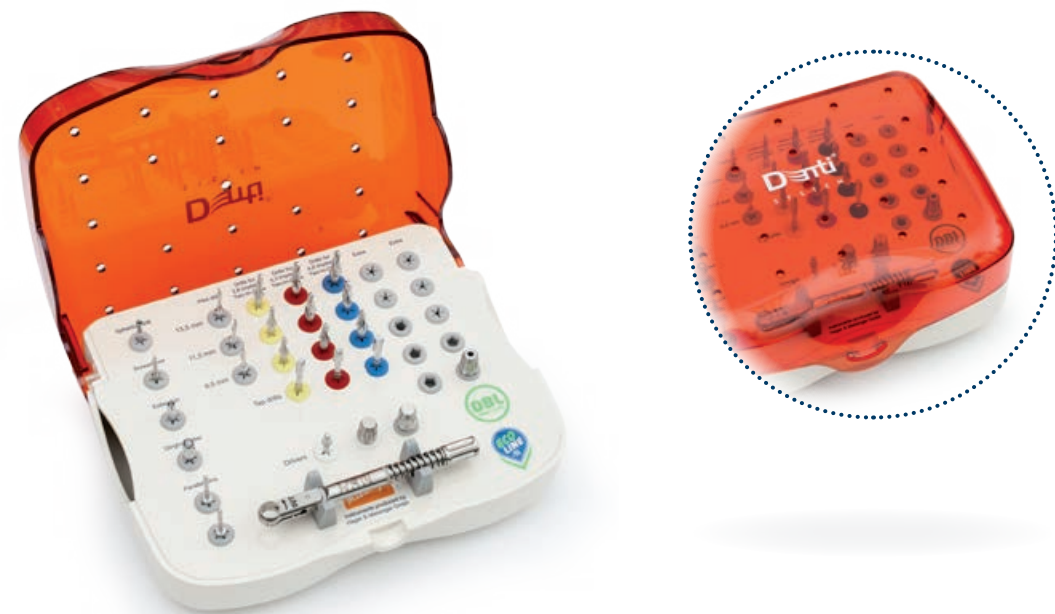





















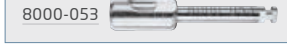
















# SURGICAL TRAY - ECO KIT

## ECO SURGICAL SET

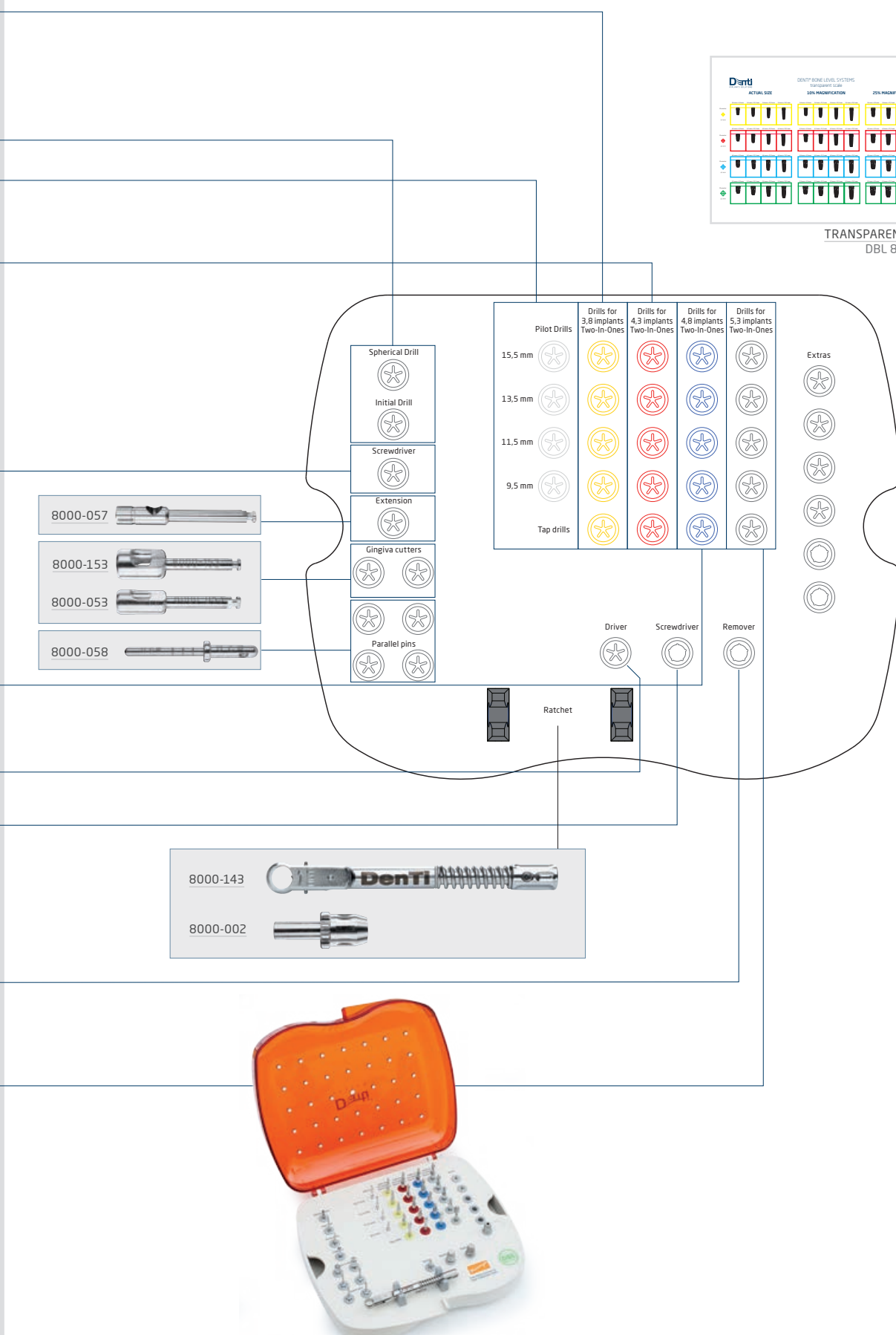
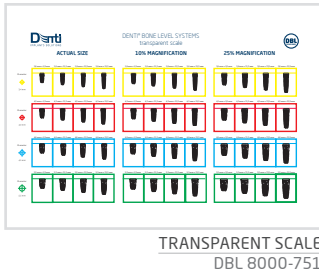
SIZE OF THE ECO SURGICAL TRAY:  
176 mm x 143 mm x 63,5 mm.

For DBL implants	
Reference No.	
BL 8264	Denti Bone Level ECO surgical tray
BL 8364	Denti Bone Level ECO surgical set



INITIAL DRILLS	TWO-IN-ONE DRILLS	TAPS	SCREW AND IMPLANT BODY DRIVERS
<div> 8000-066</div> <div> 8000-067</div>	<div> R 8038-095</div> <div> R 8038-115</div> <div> R 8038-135</div> <div> R 8038-155</div>	<div> R 8038-030</div>	
<div> 8010-095</div> <div> 8010-115</div> <div> 8010-135</div> <div> 8010-155</div>	<div> R 8043-095</div> <div> R 8043-115</div> <div> R 8043-135</div> <div> R 8043-155</div>	<div> R 8043-030</div>	<div> 8000-076</div>
			<div> 8000-057</div> <div> 8000-153</div> <div> 8000-053</div> <div> 8000-058</div>
	<div> R 8048-095</div> <div> R 8048-115</div> <div> R 8048-135</div> <div> R 8048-155</div>	<div> R 8048-030</div>	<div> BL 8000-370</div> <div> 8000-068</div>
			<div> BL 8000-470</div>
	<div> R 8053-095</div> <div> R 8053-115</div> <div> R 8053-135</div> <div> R 8053-155</div>	<div> R 8053-030</div>	<div> 8000-077</div> <div> BL 8000-471</div>
INITIAL DRILLS	TWO-IN-ONE DRILLS	TAPS	SCREW AND IMPLANT BODY DRIVERS

PROFESSIONAL SURGICAL KIT






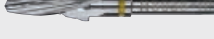


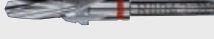









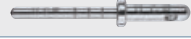



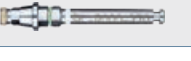






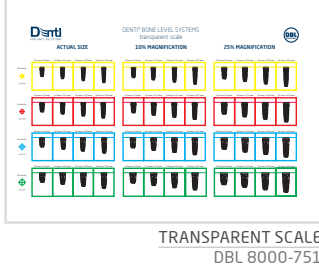
DBL 3,8

DBL 4,3

DBL 4,8

INITIAL DRILLS	TWO-IN-ONE DRILLS	TAPS	SCREW AND IMPLANT BODY DRIVERS
<div><div>8010-095</div></div> <div><div>8010-115</div></div> <div><div>8010-135</div></div> <div><div>8000-066</div></div>	<div><div>R 8038-095</div></div> <div><div>R 8038-115</div></div> <div><div>R 8038-135</div></div> <div><div>R 8043-095</div></div> <div><div>R 8043-115</div></div> <div><div>R 8043-135</div></div> <div><div>R 8048-095</div></div> <div><div>R 8048-115</div></div> <div><div>R 8048-135</div></div>	<div><div>R 8038-030</div></div> <div><div>R 8043-030</div></div> <div><div>R 8048-030</div></div>	<div><div>8000-076</div></div> <div><div>8000-053</div></div> <div><div>8000-058</div></div> <div><div>8000-068</div></div> <div><div>BL 8000-470</div></div> <div><div>BL 8000-471</div></div> <div><div>BL 8000-370</div></div> <div><div>8000-143</div></div> <div><div>8000-002</div></div>

ECO SURGICAL KIT



Spherical drill

Screwdriver

Gingiva cutter

Parallel pins

Pilot drills

13,5 mm

11,5 mm

9,5 mm

Drills for 3,3 implants Two-In-Ones

Drills for 3,8 implants Two-In-Ones

Drills for 4,3 implants Two-In-Ones

Extra

Extra

Tap drills

Drivers

Ratchet



ECO SURGICAL KIT

DBL 3,8

DBL 4,3

DBL 4,8





# SURGICAL INSTRUMENTS

## SURGICAL INSTRUMENTS

Special surgical kit was developed for the insertion of Denti® Bone Level implants. Drills and bone cutters with a cutting edge used for cutting the living bone are made of stainless steel meeting international standards. The instruments are designed to ensure atraumatic preparation. High primary stability is guaranteed for every quality bone.

### THE DRILLS ARE:

- made from surgical stainless steel
- color coded on the shaft for quick identification
- numerically coded on the shaft
- laser marked for marking depths and diameters
- autoclavable
- available in a complete kit or as individual items
- for external irrigation
- double possibility: using with contra angle or manually

INITIAL DRILLS			
For DBL implants			
Reference No.		Ø mm	Cutting depth (mm)
8000-067	Initial drill	Ø 2,00	16,0
8000-066	Spherical drill		
8010-095	Pilot drill with stop	Ø 2,00	9,5
8010-115	Pilot drill with stop	Ø 2,00	11,5
8010-135	Pilot drill with stop	Ø 2,00	13,5
8010-155	Pilot drill with stop	Ø 2,00	15,5

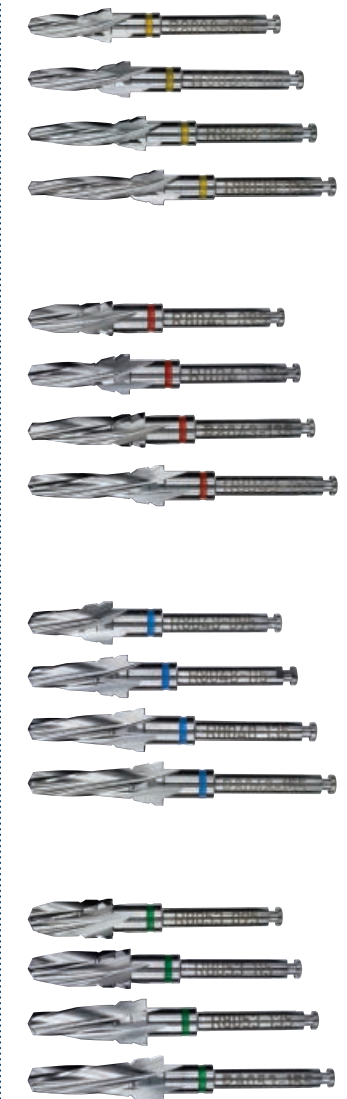


# SURGICAL INSTRUMENTS

## TWO-IN-ONES

The Denti® two-in-one drills are designed to prepare the implant bed precisely. The size of the drills is adjusted to the length and diameter of the corresponding fixture. The profile of the two-in-one drills is designed to collect and conserve the vital bone.

TWO-IN-ONE DRILLS	
For DBL implants 3,8 mm	
Reference No.	Cutting depth (mm)
R 8038-095	9,5 mm
R 8038-115	11,5 mm
R 8038-135	13,5 mm
R 8038-155	15,5 mm
For DBL implants 4,3 mm	
Reference No.	Cutting depth (mm)
R 8043-095	9,5 mm
R 8043-115	11,5 mm
R 8043-135	13,5 mm
R 8043-155	15,5 mm
For DBL implants 4,8 mm	
Reference No.	Cutting depth (mm)
R 8048-095	9,5 mm
R 8048-115	11,5 mm
R 8048-135	13,5 mm
R 8048-155	15,5 mm
For DBL implants 5,3 mm	
Reference No.	Cutting depth (mm)
R 8053-095	9,5 mm
R 8053-115	11,5 mm
R 8053-135	13,5 mm
R 8053-155	15,5 mm



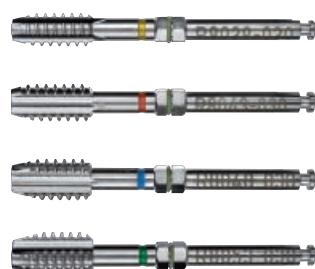


# SURGICAL INSTRUMENTS

## TAPS

The tap drills are to be used for tapping hard, dense bone. The tap drills are designed with a thread having the same configuration as the implant. There is no tap drill for screw implants with thread height 1,25 mm as they are designed for soft bone where there is no tap drilling is needed.

For DBL implants	
Reference No.	Application
R 8038-030	for Ø3,8 mm implants
R 8043-030	for Ø4,3 mm implants
R 8048-030	for Ø4,8 mm implants
R 8053-030	for Ø5,3 mm implants
Both Denti® Bone Level self threading implants may require the use of tap drills (different for each diameter) only in case of hard bone.	



## IMPLANT BODY DRIVERS

The inner shaping of the Ø 3,8- 4,3-4,8-5,3 mm DBL implants are identical, so the drivers can be equally used for these fixtures. The implant body drivers are available in two lengths:

For DBL implants		
Reference No.	Total length (mm)	Application
BL 8000-370	25,0	For Ø 3,8- 4,3-4,8-5,3 DBL implants
BL 8000-371	29,5	For Ø 3,8- 4,3-4,8-5,3 DBL implants

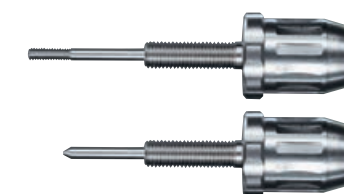


# SURGICAL INSTRUMENTS

Screwdrivers			
Reference No.		Hex (mm)	Length (mm)
8000-076	Screwdriver with power drive	1,2	30,0
8000-077	Screwdriver, manual	1,2	22,0
8000-177	Screwdriver long, manual	1,2	35,0
8000-068	Screwdriver, manual	2,0	22,0
MU 8077	Denti-unit screw driver, short	Torx06	20,0
MU 8078	Denti-unit screw driver, long	Torx06	24,0
MU 8088	Denti-unit abutment driver	-	17,0



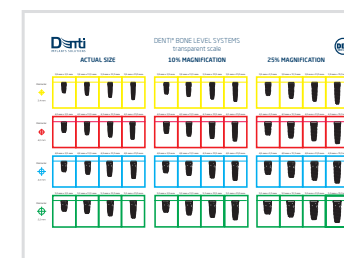
Abutment removers		
Reference No.		Length (mm)
BL 8000-470	Abutment removers	30,0
BL 8000-471	Abutment removers for intermedier abutments	27,0



## TRANSPARENT SCALE

The transparent scale is used to select the proper implant length and diameter. It can be placed on the panoramic radiograph. Available magnification rates are 1:1; 1:1,1; 1:1,25

For DBL implants		
Reference No.		Scale
BL 8000-751	Tranparent scale	1:1, 1:1,1 1:1,25





## SURGICAL INSTRUMENTS

Standard instruments		
Reference No.		Diameter (mm)
8000-053	Gingiva cutter	4,0
8000-153	Gingiva cutter	5,0



Reference No.	
8000-057	Drill extension

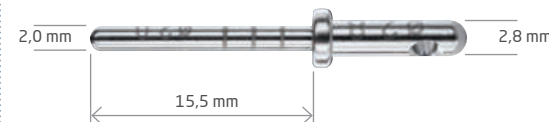


Reference No.	
8000-056	Titanium forceps



Reference No.	
8000-058	Parallel pin

The parallel pin is to check inclination of surgical site, parallelism as well as to check the insertion depth.



Reference No.	
8000-770	Surgical screwdriver
To be used with all drivers with power-drive	



## SURGICAL INSTRUMENTS

Torque ratchet with adjustable torque	
Reference No.	
8000-001	Hand adapter for ratchet - standard
8000-002	Hand adapter for ratchet - standard with hex and tube
8000-102	Hand adapter for ratchet - long with hex and tube
8000-143	Torque ratchet

The torque ratchet with hand adapter can be used:

- for implant insertion
- with tap drills
- with implant body drivers
- for fixing the ball abutment



Hand adapters	
Reference No.	
8000-003	Hand adapter for instrument with power-drive for doctors
8000-004	Hand adapter for instrument with power-drive for technicians



### SUGGESTED TORQUE WITH DENTI® SCREWS

Healing screw	manual
Impression coping	manual
Gingiva formers	manual
Fixing screws	25 Ncm
Ball abutment	25 Ncm
Bar retention	25 Ncm

### SURGERY – MAXIMUM TORQUE

Suggested torque with surgery		
	IN	OUT
Implant placement	50Ncm	
Checking primary stability		20 Ncm
Tap retrieving	50 Ncm	-



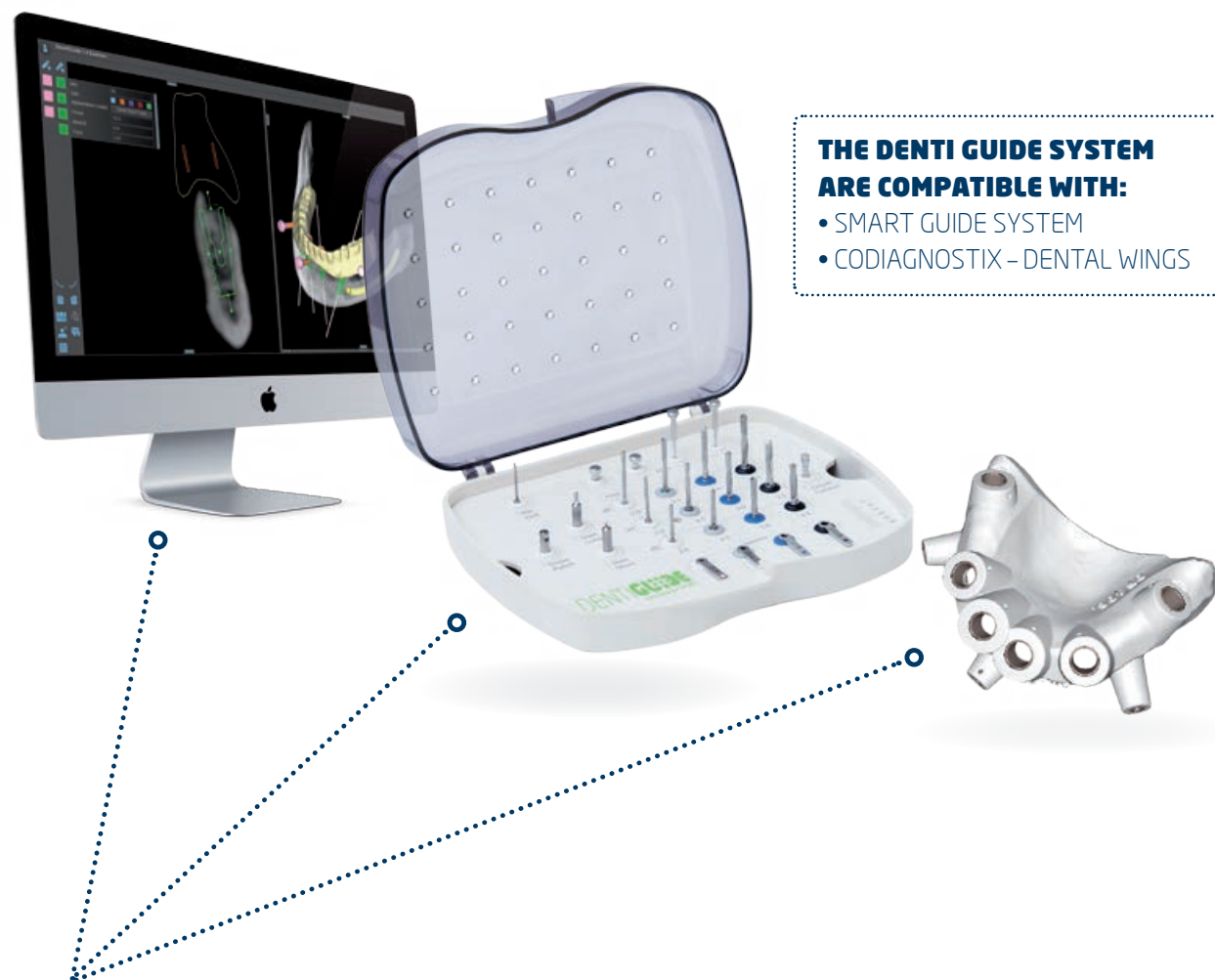
## GUIDED SURGERY

# DENTI**GUIDE**

**A GUIDED TECHNOLOGY**

DESIGNED FOR

DENTI® IMPLANT SYSTEMS



**THE DENTI GUIDE SYSTEM  
ARE COMPATIBLE WITH:**

- SMART GUIDE SYSTEM
- CODIAGNOSTIX – DENTAL WINGS

### ONE SYSTEM CONTAINING THE ENTIRE WORKFLOW

- straightforward and quick procedure for all edentulous cases
- simple planning on a clear software platform
- denti implants integrated into the software
- high quality surgical guide with a patient specific surgical protocol arriving on the following day of the first patient visit

### SURGICAL PLANNING GUIDED IMPLANT SITE PREPARATION GUIDED IMPLANT PLACEMENT

The most advanced guided system  
totally fitting into your daily practice

Surgical tools completely in line  
with the entire technology



## IMPLANT BODY SURFACE AREAS

Tooth type	Maxillary	Mandibular
	Surface area (mm2)	Surface area (mm2)
Central incisor	204	154
Lateral incisor	179	138
Canine	273	268
First premolar	234	180
Second premolar	220	207
First molar	433	431
Second molar	431	421

IMPLANT TYPE	Reference No.	Implant diameter (mm)	Implant length (mm)	Implant surface area (mm2)
DBL	BL 1038-095	3,8	9,5	375
	BL 1038-115	3,8	11,5	450
	BL 1038-135	3,8	13,5	525
	BL 1038-155	3,8	15,5	600
	BL 1043-095	4,3	9,5	425
	BL 1043-115	4,3	11,5	510
	BL 1043-135	4,3	13,5	595
	BL 1043-155	4,3	15,5	680
	BL 1048-095	4,8	9,5	470
	BL 1048-115	4,8	11,5	570
	BL 1048-135	4,8	13,5	670
	BL 1048-155	4,8	15,5	770
	BL 1053-095	5,3	9,5	520
	BL 1053-115	5,3	11,5	630
	BL 1053-135	5,3	13,5	740
	BL 1053-155	5,3	15,5	850





# WARRANTY

## GENERAL WARRANTY CONDITIONS

Since 1989, the Denti Systems Ltd. produces and develops dental implants, thus provides dental experts/technicians (herein after referred to as "User") an extensive product portfolio.

Our product line, which satisfies all needs, includes almost all type of implants according to the current market requirements, starting with the two-phase system down to the single-phase titanium implants.

As a matter of course, all of our systems can be used versatily. In interest of short and long term clinical results and success of implantation, implantologists who use our system, may find the most adequate implant family from our product portfolio.

Our products are scientifically documented and tested in everyday clinical practice for decades, and used day by day.

Below you can find the prospectus with full information of warranty conditions regarding implant systems of Denti System:

### WARRANTY CONDITIONS

- The warranty applies to all implants and its components, which has been marketed by Denti System Ltd. This includes implants, locking screw, healing cap and all kinds of prosthetic structures, heads and other clinical instruments.
- The warranty claims, the rights and advantages specified below may exclusively be enforced by the user of our company. The warranty is non-transferable, third-party (with the exception of product liability claim of Civil Code § 6:168), laboratories or suppliers cannot exercise it.

### PERIOD OF WARRANTY

The warranty period for the products of Denti System Ltd. are as follows:

- 3 years on clinical instruments and other surgical accessories;
- 5 years on components of Denti Systems Ltd. made of zirconium;
- unlimited warranty on clinical components of Denti System Ltd. (except components made of zirconium).

### VALIDITY OF WARRANTY

The following conditions define the merit of the warranty claim regarding the products of Denti System Ltd.:

- Material quality of the product:
  - » In case the material of the product is defective or it has been damaged during production and so it has come to the market - that means the product does not meet the quality requirements of the Denti System Ltd. - as a matter of course our company will replace it at no additional costs.
- Osseointegration (bone-healing):
  - » The Denti System Ltd. provides replacement implant for its doctors (users) at no additional costs, in case the osseointegration is not proper after the implantation. The entitlement above shall be exercisable after the adequate clinical investigation, in case the investigation exludes the possible responsibility of the doctor performing implantation and the patient.

### ENFORCEMENT OF WARRANTY CLAIM

The warranty claim is enforceable, if the User fulfills the following conditions:

- A warranty claim shall be accepted, if the User notifies it to our company without any delay, but latest in 30 days after the implantation. The User is obligated to contact the regional representative of Denti System Ltd. or the company's customer service centre and shall fill out a complaint sheet.
- All the relevant information regarding the complaint shall be represented on the complaint sheet and the product shall be attached as well. The claimed product shall be disinfected before returning.
- The whole documentation of the case in question shall be enclosed to the complaint sheet and the User shall prove that there was no contraindication in the given case for the patient.

- The User, who vindicates its warranty claim, shall prove that the operation has been conducted in compliance with the surgical protocol specified by Denti System Ltd.
- In case of enforcement of the warranty, the costs regarding the shipping of the defective product shall be advanced by the User, while the costs concerning the shipping of the replacement product shall be advanced by the Denti System Ltd. In case of substantiated warranty claim the costs above shall be borne by Denti System Ltd., in case of unsubstantiated warranty claim the costs above shall be borne by the User.

### LIMITATION OF WARRANTY

The Denti System Ltd. is liable for warranty claims and lack of conformity exclusively in accordance with the present prospectus and § 6:157-173 of the Civil Code.

The Denti System is liable exclusively regarding the conformance of the products produced and distributed by itself, whether these products meet the legal provisions, respectively the technical requirements specified in the product specification and user guide.

Making legal statements by unauthorized third parties on behalf of the Denti System Kft either orally or in writing, which are different from above or supplement its statements, do not constitute a commitment by the Denti System Ltd., thus Denti System Ltd. has no responsibility regarding these statements.

The liability for damages of Denti System Ltd. is excluded for any other damages in the asset of the User and for the loss of pecuniary advantage, except the damages caused intentionally and which injure human life, limb or health.

### EXCLUSIONS FROM WARRANTY CLAIMS AND ITS ENFORCEMENT

No warranty claim is enforceable against the Denti System Ltd. in the following cases:

- Failure concerning the implant or any other component may be originated from an accident, trauma or any other injury, which has been caused by the patient or a third party.
- The cause of the failure and the damage is a component distributed by Denti System Ltd., which has been implanted in such patient, by whom the success of the operation was not guaranteed. These contraindications are ( but shall not be limited to) the following:
  - » o not appropriate bone supply
  - » o circulatory, blood coagulation problems
  - » o diabetes
  - » o cancer
  - » o bite disorder
  - » o not appropriate oral hygiene
  - » o heavy smoking
  - » o daily alcohol consumption
  - » o drug addiction
  - » o in the growth phase of the the jaw and the skull bone
  - » o during pregnancy

- The cause of the failure is natural wear and tear.

- The product, in respect of which the warranty may be enforced, was directly or indirectly used together with another instrument made by another producer.

Modification of the warranty period or the possible withdrawal of warranty

Denti System Ltd. reserves all rights to change the warranty conditions without any prior notice, or to revoke them. As a matter of course these modifications and revocations do not apply to those components of Denti, which have been already implanted or used, respectively to products purchased by the User before the modification.

The above conditions come into effect on: 2015



# DOWNLOADS

## DENTYSYSTEM.COM/DOWNLOADS

### IMPLANT SYSTEM MAPS

- Map - DR+ (PDF)
- Map - DR+ Eco (PDF)
- Map - DN (PDF)
- Map - DOP (PDF)
- Map - DR (PDF)
- Map - DR Eco (PDF)
- Map - DBL (PDF)
- Map - DBL Eco (PDF)

### MANUALS

- MANUAL - Surgical 1 phase DR+ (PDF)
- MANUAL - Surgical 1 phase DR+ (PDF)
- MANUAL - Surgical 2 phase DBL (PDF)
- MANUAL - Surgical 2 phase DBL (PDF)

### GUIDES

- CATALOGUE - One stage implants (PDF)
- CATALOGUE - Two stage implants (PDF)
- DR+ product catalogue
- DBL product catalogue
- Patient Guide (PDF)
- User guide (PDF)
- User guide - prosthetics (PDF)

### MISCELLANEOUS

- EC Designe Examination Certificate (PDF)
- EC Designe Examination Certificate - Annex (PDF)
- EK Certificate (PDF)

For more detail see the DOWNLOAD section available on dentisystem.com

[dentisystem.com/downloads](https://dentisystem.com/downloads)



## DENTIGEN

### WITH USING DENTIGEN

in the dental implant diagnosis a quality management can be achieved within the implantology field and economically sound success rates could be maintained.

Principles of the genetic testing of the DentiGen test  
The DentiGen test enables to predispose the Interleukin-1



### INDICATIONS OF DENTIGEN

#### REFRACTORY, THERAPY RESISTANT PERIODONTITIS

The positive test result can explain why previous therapies have been ineffective and may be an indication of the initiation of an alternative therapy.

#### PROGRESSIVE PERIODONTITIS

The positive test result is an indication of more aggressive therapy and more frequent follow-ups.

#### EARLY SIGNS OF PERIODONTITIS

The test result achieved prior to the initiation of the treatment can be helpful in planning the therapy tailored to the patient's needs, in stopping the progression of the disease and in preventing 'overmedicalization'.

#### RELATIVES OF GENOTYPE-POSITIVE PATIENTS

It may call the attention to the importance of more intense preventive measures in genotype-positive patients even if no symptoms are present.

#### BEFORE A COSTLY RESTORATIVE TREATMENT

Identifying the patient's genotype may be helpful in assessing the possible risks of complications that may develop after implantation and tissue regeneration.

#### NONCOMPLIANT PATIENT

Patient compliance can significantly be improved if the patient is aware of the genetic risk factors.



## CERTIFICATES

### ISO, CE, WARRANTY

EN ISO 9001 and EN ISO 13485.

The Denti® products are CE marked.

All Denti® products undergo strict testing by the Quality Department.

### THE DENTI SYSTEM LTD.

commits itself to a 10-year period warranty after purchase to substitute its implants.

The procedure for substitution is detailed in the General Terms and Conditions.

