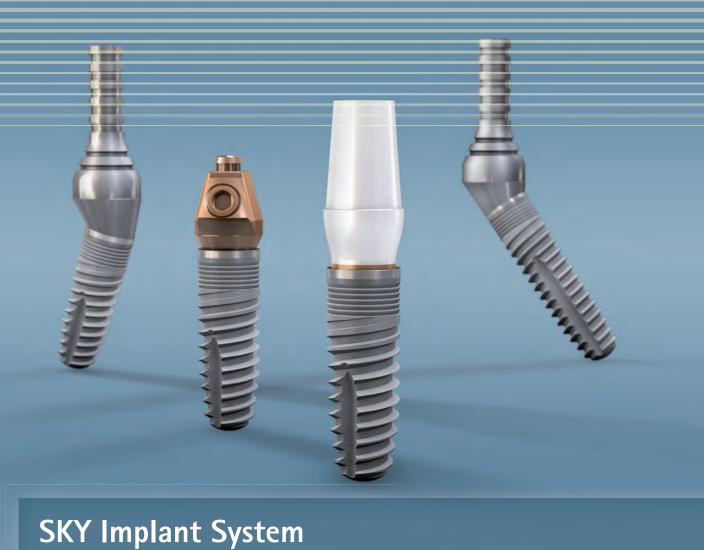


# Presentation of the system





# We are ONE

bredent group

bredent medical

HELBO

SKY fast & fixed

BioHPP SKY elegance

**Dentists, Dental Technicians, bredent group** 

One manufacturer in the field of implantology and prosthetics

One of the leaders in immediate restorations

One bacterial infection control

One session is all it takes

One abutment for temporary and final restoration

One team

All patients : Everyone is satisfied



HELBO® antimicrobial photodynamic treatment (aPDT) combats bacterial infections and has been proven to preserve teeth and implants. No pain. No side effects. No resistances. The treatment has been a scientifically proven success for over 10 years.



Single-tooth restorations Young people with a single-tooth gap benefit from a quick and aesthetic solution to their problem.



Potentially edentulous jaw The SKY fast & fixed therapy is designed for patients aged between 40 and 65 who are facing losing their teeth and feel too young to wear a removable prosthesis. The treatment provides an immediate fixed restoration after just one intervention, with minimal impact on their quality of life.



Prosthesis fixation This option is aimed at older patients who have already lost their teeth, but would like to be able to eat properly again and to enjoy going out in public without any worries.

#### bredent medical offers suitable treatments for all groups of patients.

In particular the immediate restoration options prevent errors and complications using standardised procedures and ensure costeffective treatment – both for users and patients.

9-13

14-17

# Presentation of the SKY System

33-37

38-43

44-54

# Presentation of the miniSKY system

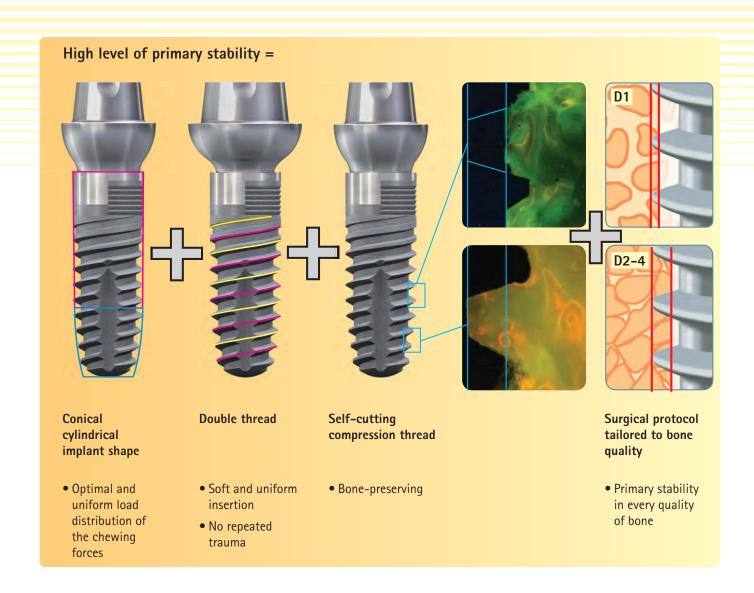
55-66

The diagrams are not all to scale.

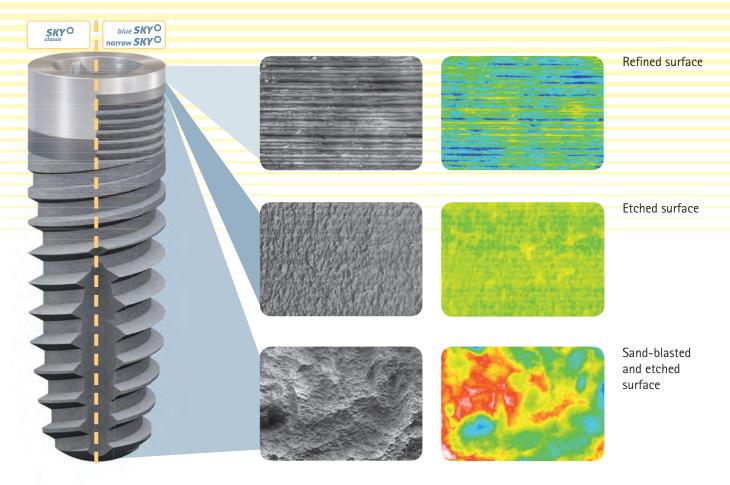
# Immediate restoration

# SKY Implant system – The basis for immediate restoration

Immediate restoration places particular requirements on an implant system. The design of the SKY Implants and the corresponding surgical protocol ensure high primary stability in all bone qualities and therefore form a reliable basis for immediate restoration.

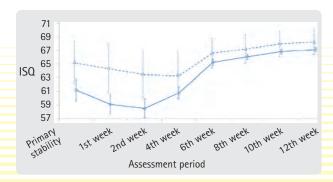


# SKY Implant system - surface structure



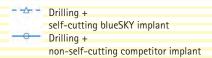
The three-dimensional surface structure ensures rapid osseointegration with no loss of stability, thanks to the blasted and etched surface. The two types of coronal neck design allow for optimal soft tissue attachment, which is enhanced by the etched surface and the horizontal micro-grooves of the refined surface.

## Scientifically proven



Changes to implant stability during the 12-week monitoring period.

The extremely high level of primary stability only decreases very slightly after insertion and the *osseo connect®* surface leads to rapid osseous integration and to a high degree of stability.

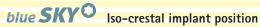


Source: Marković et al: Evaluation of primary stability of self-tapping and non-selftapping dental implants. A 12-week clinical study, Clinical Implant Dentistry and Related Research 2013

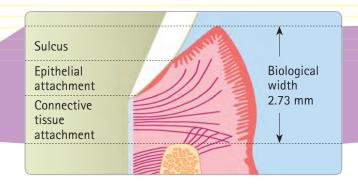


# **Immediate restoration**

# SKY Implant system - neck design







#### Indication



The coronally structured blueSKY implant is perfectly suited to being positioned flush with the bone.

The macro-grooves ensure a high level of bone preservation.

The blueSKY implant therefore works very well with augmentations.





Implant position flush wisth the bone Augmented implant site

Jose Luis Calvo-Guirado et al.: Influence of collar design on peri-implant tissue healing around immediate implants: A pilot study in Foxhound dogs; Clin Oral Implants Res. 2014 Mar 31. DOI: 10.1111/clr.12374. [Epub ahead of print]

Jose Luis Calvo-Guirado et al.: Narrow- versus mini-implants at crestal and subcrestal bone levels. Experimental study in beagle dogs at three months; Clin Oral Investig. 2014 Dec 11. [Epub ahead of print]

# SKYC

# Semi-transgingival implant position



The refined surface of the SKY Implants in the neck region with:

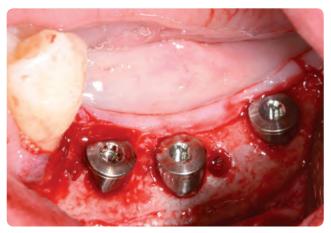
- horizontal micro-grooves, and
- an etched surface,

supports attachment of the connective tissue and allows for:

- soft-tissue attachment using a narrow collar for the blueSKY implant, and
- soft-tissue attachment using a wide collar for the SKY classic implant,

to the neck of the implant, which provides the implant with lasting protection.

# Indication



The SKY classic implant is ideal for preventing the bone from being ground off if the jaw ridge is narrow or irregular.

The 8 mm implant can be used as a short implant (6.5 mm) by way of supracrestal positioning.

The SKY classic implant is perfectly suited to flapless implantation, since the long, machined neck easily allows for a semi-transgingival implant position.



Semi-transgingival implant position



Short implants

#### Sources:

Zoran Vlahovic et al: Histopathological comparative analysis of peri-implant soft tissue response after dental implant placement with flap and flapless surgical technique. Experimental study in pigs; Clin Oral Implants Res. 2014 Jul 14. DOI: 10.1111/clr.12456. [Epub ahead of print]

Rafael Arcesio Delgado-Ruiz DDs, MSc, PhD Assistant professor et al.: Connective Tissue Characteristics around Healing Abutments of Different Geometries: New Methodological Technique under Circularly Polarized Light; Clin Implant Dent Relat Res. 2013 Oct 10. DOI: 10.1111/cid.12161. [Epub ahead of print]

# Immediate restoration

SKY Implant system – ideal for immediate restoration treatment using:

SKY fast & fixed
BioHPP SKY elegance

Immediate restoration for potentially edentulous jaws

for rapid and aesthetic restoration of a single-tooth gap





#### SKY fast & fixed Immediate restoration for potentially edentulous jaws

- Reduced number of implants
- No extensive surgical procedures such as augmentations
- Standardised work steps make the work easier
- Reduction and prevention of errors and complications
- In many cases, immediate fixed temporary bridges after only one session
- At an affordable price



# BioHPP SKY elegance Immediate restoration for closing a single-tooth gap

Thanks to the properties of the high-performance polymer BioHPP:

- Protection during the healing phase thanks to reduced force on the implant (Off-Peak property)
- Gap closure using a temporary restoration immediately after implantation
- Immediate and without abutment change for final prosthetics (One-Time Therapy)
- Can also be directly and definitively restored as a crown abutment
- Protects the gingiva, therefore no repeated trauma
- Natural-looking prosthetic results





Presentation of the SKY System



# Implant platforms and implant abutment connections

# bredent medical SKY Implant system

The SKY System is designed so that the number of prefabricated components is kept to a minimum.

For all indications which cannot be restored using these components, there are various custom solutions available.

Low number of prefabricated components

Custom solutions

# **SKY Implant Platform**

The SKY System has two implant platforms:

- narrow Platform 3.5
- regular Platform 4.0

The Torx (an anti-rotation element) is identical in both implant platforms, meaning that all red-gold abutments approved for narrowSKY can also be used on blueSKY and SKY classic with Platform switch.



# **SKY abutment Platform**

The SKY System has two abutment platforms:

- Abutment Platform Ø 3.5 suitable for narrowSKY without Platform switch and blueSKY and SKY classic with Platform switch
- Abutment Platform Ø 4.0 suitable for blueSKY and SKY classic without Platform switch













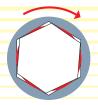
# **SKY Implant abutment connections**





If screws and screw joints are involved. The Torx® is the gold standard in mechanical engineering and the automotive industry and in implant dentistry as well.

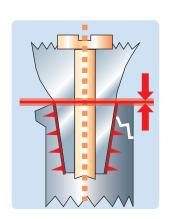
All SKY Implants have a Torx® connection.





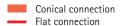
# Torx®: has six large force transfer surfaces

- significantly higher torques for the same force applied
- easier insertion of the implant
- no damage to the internal geometry at a high torque either



#### **Conical connections**

- No definitive vertical abutment height
- Height difference between laboratory and clinic
- Passive fit of bridge constructions very difficult





# Flat connections (SKY System)

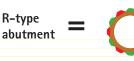
- Defined abutment height
- Passive-fit of bridge and bar restorations easier to achieve

# 12 orientation positions

Owing to the normal position and the R variants, there are 12 positions for the orientation of the angled abutments. Therefore, the abutment can be easily oriented to the best position in the laboratory after the operation.







12 positions

# SKY Implant system – order information



# blueSKY regular Platform



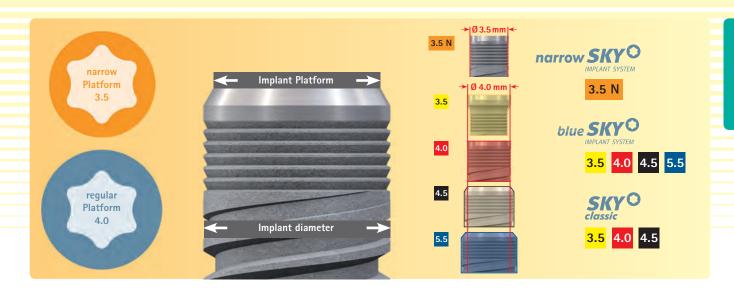






# **SKY Implant Platform**

# **SKY Implant diameter**

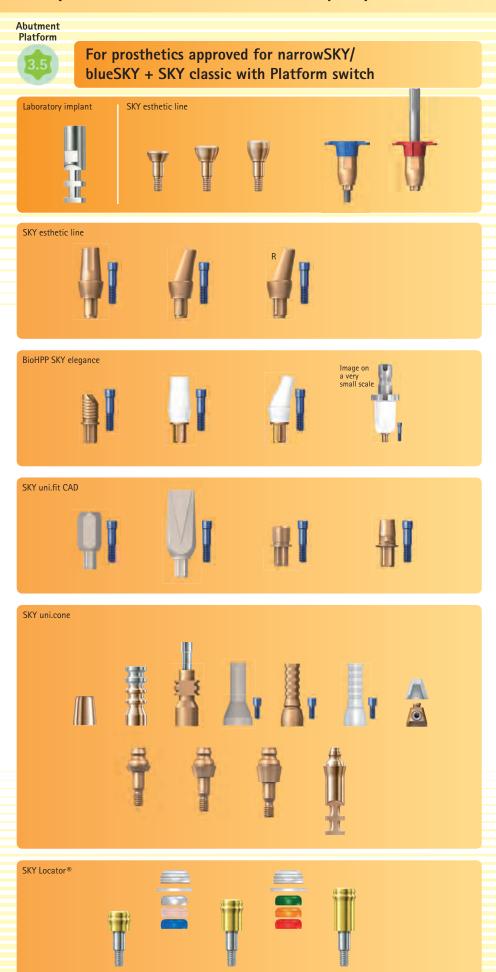


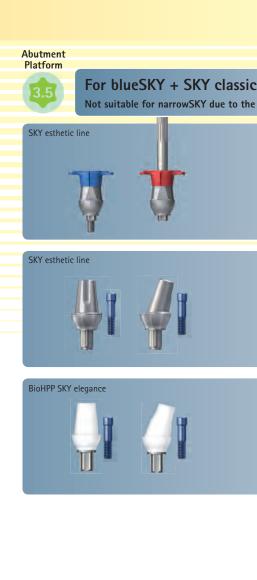


# Cover screw for blueSKY and SKY classic implants



# SKY prosthetic overview – sorted by implant









abutment shoulder











# For blueSKY + SKY classic

Not suitable for narrowSKY due to the abutment Platform





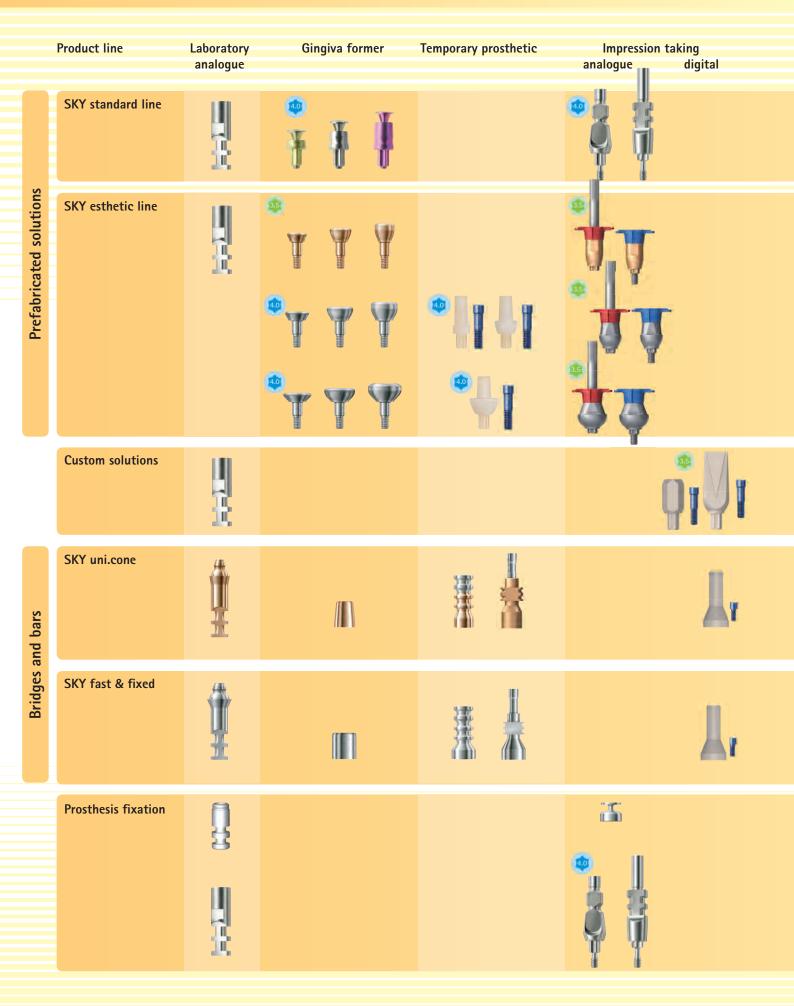








# SKY prosthetic overview – sorted by product line



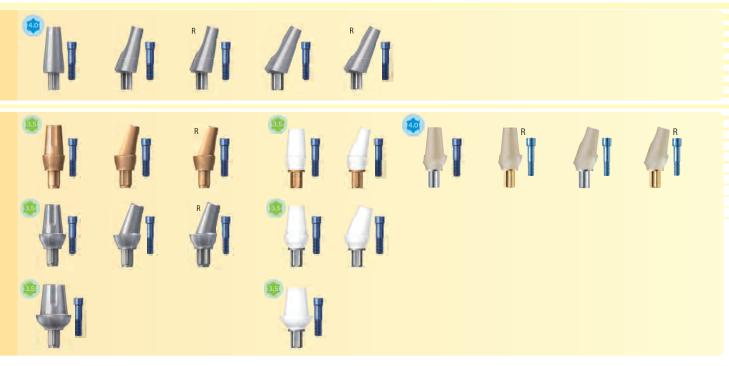


**Abutments** 















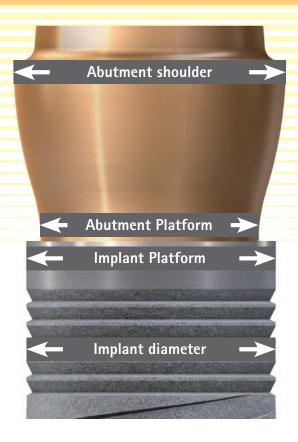




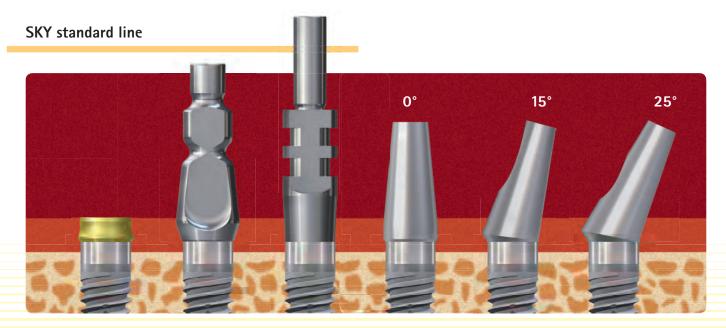


# Overview of prefabricated structures

# Abutment shoulder



The overview again shows all the parameters that are important for using the SKY System correctly.

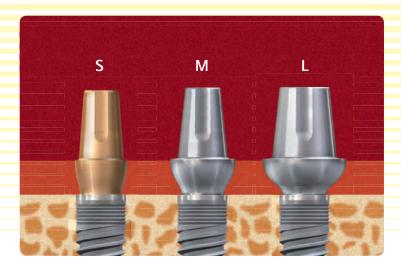


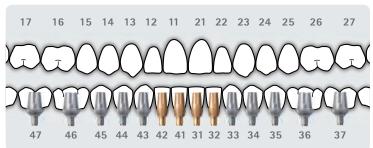
## SKY standard line:

- Abutment shoulder 4.5
- Abutment Platform 4.0
- Only suitable for blueSKY and SKY classic



# SKY esthetic line



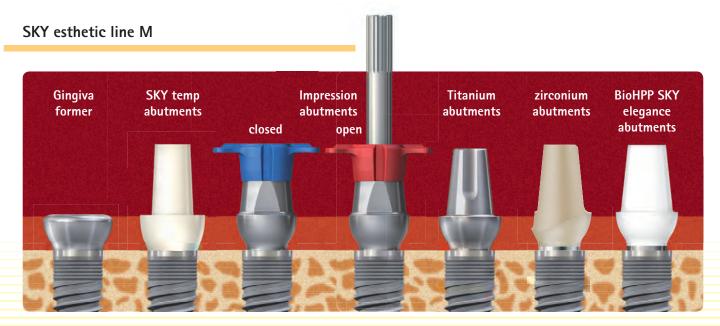


#### SKY esthetic line:

- Three diameters of the abutment shoulder:
  - S: 4.5 mm
  - M: 5.5 mm
  - L: 7.0 mm

plus an abutment Platform of 3.5

- which fits narrowSKY, and
- blueSKY and SKY classic with Platform switch
- A concave and convex abutment shape in the gingival region ensures optimal attachment of the soft tissue
- Customisable axis compensation of up to 20°
- Particularly suitable for custom transverse screw fixation



All components in the SKY esthetic line are matched to one another: Corresponding concave and convex sulcus shape.
Also available for abutment shoulders with S and L diameters.

# **Prefabricated solutions**

# SKY gingiva former





Two-part gingiva former with spacer sleeve, Torx® and conical screw for secure fixing in the implant



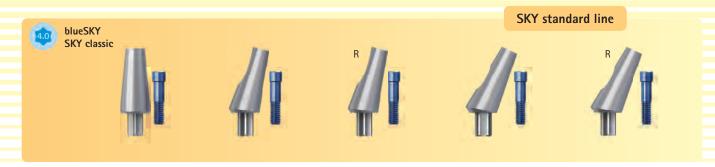
Material: Titanium Torque: 10 Ncm

SKY gingiva former height 2 mm

incl. screw



# **SKY Titanium abutments**





Wide-based SKY Titanium abutments are ideal for supra-crest implants, as they form a relatively wide crown base at the gingival emergence. With the three available angulations

- 0°
- 15°
- 25°

all relevant clinical restorations can be covered. This is also supported by the R-abutments, where the torque is turned 30°, so that 12 prosthetic positions are provided with inclined abutments.





Material: Titanium Torque: 25 Ncm

# **Prefabricated solutions**

# SKY esthetic gingiva former

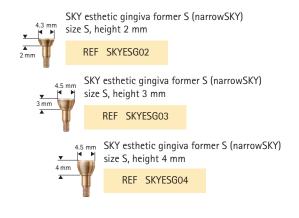


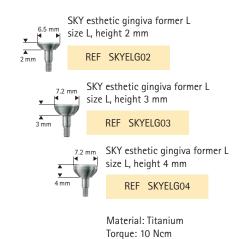




The SKY esthetic gingiva former gives the emergence profile the optimum shape for the subsequent use of the corresponding SKY esthetic abutments.









# SKY temp





A temporary crown or small bridge can be easily and quickly produced on the SKY temp abutment made of POM (polyoxymethylene), in order to exploit the advantages of immediate restoration for forming the gingiva.

# SKY temp as a custom gingiva former

The shortened and customised SKY temp can also be quickly adapted into a custom gingiva former, either chairside or in the laboratory.







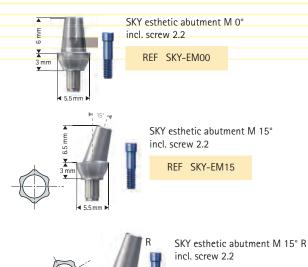
# **Prefabricated solutions**

## SKY esthetic abutments

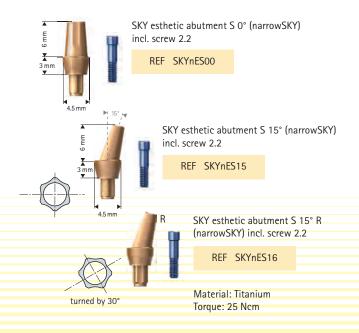




The concave and convex shape of the SKY esthetic abutments allows the dental technician to customise them to a large extent, and gives the gingiva a lot of space for attachment. This attachment is further enhanced by additional surface refinement.



turned by 30°





REF SKY-EM16



## SKY zirconium abutments





In the laboratory, the prefabricated zirconium abutment is bonded to a titanium bonding base. The SKY zirconium abutments are in dentine colours.

#### **Important:**

The SKY zirconium abutments must not be subjected to grinding, as the minimum wall thickness is required in order to guarantee long-lasting stability.

In cases where restoration cannot be optimally achieved using the prefabricated SKY zirconium abutments owing to their angle or orientation, it is recommended that a custom ceramic abutment be produced, for example using the SKY uni.fit CAD titanium bonding base.







SKY zirconium abutment 15° R incl. screw 2.2 2.2

REF SKYZA15R

Material: Titanium + ZiO2 Torque: 25 Ncm

# **Prefabricated solutions**

# **BioHPP SKY elegance abutments**







The BioHPP SKY elegance abutments are hybrid abutments in which the abutment body made of BioHPP is connected to the titanium base without a gap. These abutments are best used for One-Time Therapy for immediate restoration, since they combine the properties of a temporary and a definitive abutment, i.e. it is not necessary to change the abutment. As a result, the gingiva is not subjected to multiple traumas. In addition, the time and costs are reduced.

BioHPP can be ground in the mouth as easily as dentine using carbide milling tools.



BioHPP SKY elegance abutment M 0° incl. screw 2.2 REF SKYEEM00



BioHPP SKY elegance abutment M 15° incl. screw 2.2

REF SKYEEM15



BioHPP SKY elegance abutment L 0° incl. screw 2.2 REF SKYEEL00



BioHPP SKY elegance abutment S 0° incl. screw 2.2 REF SKYEES00



BioHPP SKY elegance abutment S 15° incl. screw 2.2

REF SKYEES15

Material: Titanium Torque: 25 Ncm

# **Custom solutions**



# Custom abutments – conventional or CAD/CAM

Custom abutments with a natural emergence profile through the gingiva provide the best aesthetics and will satisfy even the most demanding of patients.

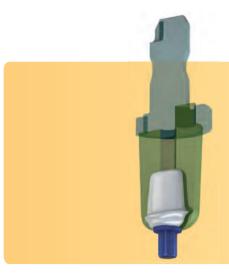
Using the SKY System, custom abutments can be produced both conventionally by wax modelling and using a digital workflow.



#### Conventional workflow

The following options for producing custom abutments are available with the conventional workflow:

- BioHPP SKY elegance titanium bases for producing hybrid abutments from BioHPP
- SKY abutments which can be cast on for producing highgold-content abutments
- SKY uni.fit CAD titanium bases with modelling sleeve for the bonding technique



#### CAD/CAM workflow

The following options for producing custom abutments are available with the digital workflow:

- SKY uni.fit CAD titanium base for the bonding technique
- SKY uni.fit titanium base for CEREC® for the bonding technique in the closed CEREC ®workflow
- BioHPP SKY elegance prefab

# **Custom solutions**

# BioHPP SKY elegance titanium base









# **Conventional solutions**



BioHPP SKY elegance titanium base incl. screw 2.2

REF SKYETBOO

A custom abutment in a natural tooth shape is modelled on the BioHPP SKY elegance titanium base (sand-blasted by the technician). It is then embedded and remoulded with BioHPP in the *for*2press device.

This custom BioHPP abutment can then be directly veneered with the visio.lign veneer system to form a crown abutment or can be restored using a crown or a bridge.



# BioHPP SKY elegance prefab









With the BioHPP SKY elegance prefab, the abutment body made of BioHPP is pressed onto the BioHPP SKY elegance titanium base without a gap and forms a perfect mechanical connection. The required tooth shape for the custom abutment is designed in CAD software and the corresponding data set is passed on to the machine manufacturing stage.

This is already possible using systems from the following providers:

- DATRON®
- imes.icore®
- Roland®
- röders Tec®

A wide range of indications can be restored in this way:

- Custom abutments for single-tooth and bridge restorations also suitable for immediate restoration
- Crown abutments
- Telescopes

# For CAD/CAM production



BioHPP SKY elegance prefab incl. screw 2.2 3 pieces

#### REF SKYEPF03

BioHPP SKY elegance prefab incl. screw 2.2 6 pieces

#### REF SKYEPF06

BioHPP SKY elegance prefab incl. screw 2.2 9 pieces

REF SKYEPF09

BioHPP SKY elegance prefab incl. screw 2.2 12 pieces

REF SKYEPF12

# **Custom solutions**

# SKY uni.fit







SKY uni.fit CAD abutment

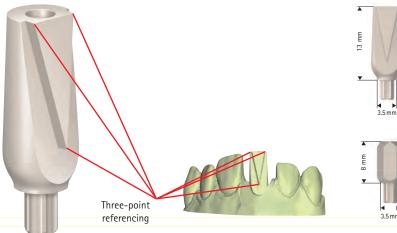
REF SKYUFCAD

Material: Titanium Torque: 25 Ncm

Modelling cap 10 pieces

REF UFCADMOD

The geometry of the SKY uni.fit CAD abutments is such that the custom ceramic structure can be milled to create a perfect fit. The subsequent bonding is made easier by the additional space for excess adhesive.





SKY uni.fit Scan-Abutment extraoral

REF SKYUSCAE

Material: PEEK Torque: 10 Ncm

SKY uni.fit Scan-Abutment intraoral 1 piece

REF SKYUSCAI

## Scan abutments

The position and orientation of the implant is transferred to the virtual model using a three-point reference system.



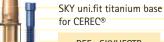
## SKY uni.fit titanium base for CEREC®











REF SKYUFCTB

The SKY uni.fit titanium base for CEREC® combines the SKY Implant abutment connection with the abutment geometry of the CEREC® TiBase S. It is therefore possible to produce custom abutments for restoration with SKY Implants using the CEREC® system.

- The implant position is scanned using the original Sirona® scan bodies:
  - Scan bodies for Bluecam® S
  - Scan bodies for Omnicam® S.
- For construction in the CEREC® software, a suitable implant is selected from the library, e.g. Camlog® 3.8.
- All CEREC® blocks with the S geometry can be used for this process.
- The subsequent bonding is carried out according to the manufacturer's instructions.

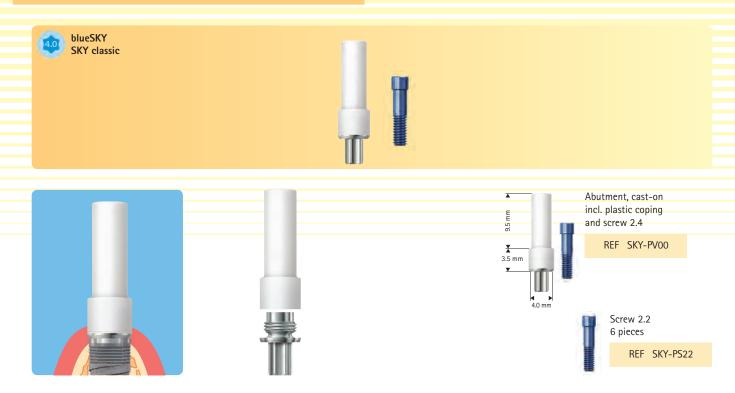
Can be ordered from Sirona®

Scan bodies for Bluecam® S 36 pieces REF 6431295

Scan bodies for Omnicam® S 36 pieces REF 6431311

# **Custom solutions**

#### Castable abutment



With cast-on abutments, difficult individual clinical situations can also be easily handled from a prosthetic point of view.

This is held securely by screwing the sleeve onto the metal base, so as to facilitate quick and reliable modelling of the custom abutment. The burn-out plastic sleeve is provided already mounted.

Technical data: Melting interval 1400 - 1490 °C

WAK (thermal expansion coefficient)

11.9 - 12.2 10<sup>-6</sup>K<sup>-1</sup>

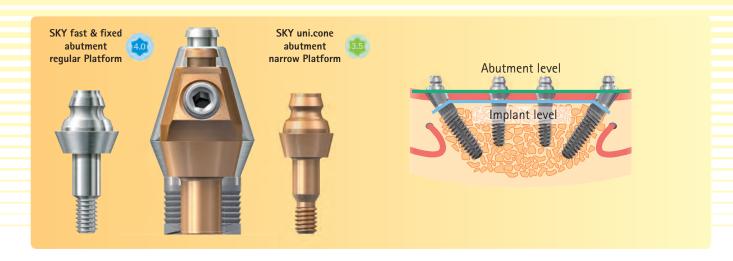
(Au 60 %, Pd 20 %, Pt 19 %, Ir 1%)

Weight: 0.33 g

Torque: 25 Ncm



# SKY fast & fixed / SKY uni.cone

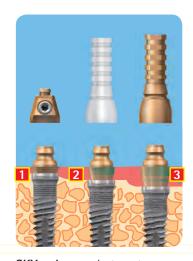


- Two abutment shoulder diameters
- A prosthetic restoration concept
- No need to change the abutment between temporary and definitive restoration
- Modelling at abutment level
- Occlusal or transversal screw retention on the same abutment









SKY fast & fixed abutments with regular Platform for

- blueSKY
- SKY classic
- Gingiva height in mm

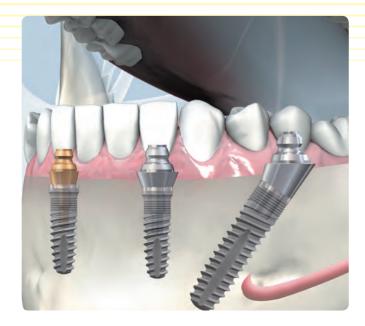
**SKY uni.cone** abutments with narrow Platform for

- narrowSKY
- blueSKY
- SKY classic

# **Bridges and bars**

## Abutment system





SKY fast & fixed / SKY uni.cone lab screw M 1.4 grey, 10 pieces

REF SKYFFLPK

SKY fast & fixed / SKY uni.cone lab screw M 1,4 blue, 6 pieces

REF SKYFFSPK

SKY fast & fixed / SKY uni.cone tansversal screw 6 pieces

**REF SKYUFTS9** 

In addition to the SKY fast & fixed abutment system, we now also offer the SKY uni.cone abutment system with a reduced diameter of 4.5 mm, meaning that high-quality aesthetic restorations, which can be screwed either occlusally or transversely, can be carried out quickly and simply even in atrophied jaws.

The SKY uni.cone abutment system is copper-color anodized for better distinction in the patient's mouh and in the laboratory.

A typical application for SKY uni.cone is the combination with SKY fast & fixed in the lower jaw. Implants placed at an angle are attached to the normal SKY fast & fixed abutments and the SKY uni.cone abutments are placed on the straight abutments in the corresponding height.



# Abutment system





SKY uni.cone impression coping Closed tray with integrated screw

REF SKYUCAGL



SKY uni.cone laboratory analog

REF SKYUCTLA



SKY uni.cone Impression coping open tray

REF SKYUCAOL



SKY uni.cone Gingiva former

REF SKYUCGF2



SKY uni.cone scan cap intraoral (extraoral) incl. screw 2.2 1.4

REF SKYUSCIE

Material: PEEK Torque: 10 Ncm



SKY uni.cone Prosthetic coping, titanium 1 piece each Silicone tubing

REF SKYUCPKT



SKY uni.cone Prosthetic coping, resin 1 piece each

REF SKYUCPKK



SKY uni.cone Prosthetic coping transversal screw-retained

REF SKYUCPKS



SKY uni.cone Abutment 0° height 1 mm

REF SKYUC001



narrowSKY

blueSKY

SKY uni.cone Abutment 0° height 2 mm

REF SKYUC002



SKY uni.cone Abutment 0° height 3 mm

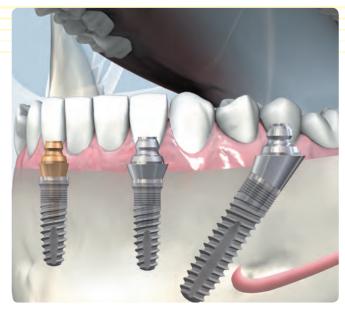
REF SKYUC003



# **Bridges and bars**

## Abutment system





SKY fast & fixed / SKY uni.cone lab screw M 1.4 grey, 10 pieces

REF SKYFFLPK

SKY fast & fixed / SKY uni.cone screw M 1.4 blue, 6 pieces

REF SKYFFSPK

Overview of the prosthetics and instruments required for a SKY fast & fixed restoration (diameter of the abutment shoulder 5.65 mm). At positions with a low jaw ridge width, implants can be restored with SKY uni.cone (diameter of the abutment shoulder 4.5 mm) in the same manner.

Suitable surgical and prosthetic tools are found on page 50/51.







#### Abutment system





SKY fast & fixed impression coping Closed tray with integrated screw

REF SKYFFOAK



SKY fast & fixed Impression coping open tray with captive screw

REF SKYFFAOL



SKY fast & fixed scan coping intraoral/extraoral incl. screw 1,4

REF SKYFSCIE



SKY fast & fixed laboratory analog

REF SKYFFTLA



SKY fast & fixed Gingiva former

REF SKYFFGF2



SKY fast & fixed Prothetic coping incl. screw 1.4 HSL cast-on

REF SKYFFPKH

Technische Daten: Schmelzintervall 1770 – 1800 °C WAK 9 10-6K-1

Material: Pt 90 % / Ir 10 %

Gewicht: 0.59 g



SKY fast & fixed Prosthetic coping transversal screw-retained Plastic modelling aid cap

REF SKYFTPKS



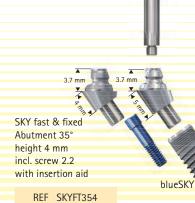
SKY fast & fixed / SKY uni.cone Transversal screw 6 pieces

REF SKYUFTS9



SKY fast & fixed Abutment 17,5° height 5 mm incl. screw 2.2 with insertion aid

REF SKYFT175



SKY fast & fixed Abutment 35° height 5 mm incl. screw 2.2 with insertion aid

REF SKYFT355

## **Prosthesis fixation**

#### retention.sil & SKY TiSi.snap - Application



The high guide cone of the SKY TiSi.snap abutments allows safe and reliable fixation of dentures with only two implants. As a result, perfect control of the denture during removal and integration is ensured and tilting is avoided to obtain increased stability of the entire restoration during masticatory stress and provide the patient with high wearing comfort.



The low guide cone of the SKY TiSi.snap abutments is particulary suitable for dentures with slender designs. In such cases, retention.sil is integrated into the denture from the basal direction. The use of at least 3 implants with SKY TiSi.snap abutment is recommended.



In cases of low bone height, the implants can be placed at an angle to make optimum use of the local bone. Thanks to the use of angled SKY TiSi.snap abutments on implants with oblique placement, the path of insertion is adjusted.



If an increased retention force is required and the pull-off force of retention.sil is not sufficient, the pull-off force can be raised up to almost 2 kg for each part for 10° to 20° by using the Locator® retention elements.



#### retention.sil & SKY TiSi.snap











retention.sil 200 Shore hardness 25 SH Pull-off forces 200 g / 2 Newton

REF 580RTS25

retention.sil 400 Shore hardness 50 SH Pull-off forces 400 g / 4 Newton



REF 580RTS50

retention.sil 600 Shore hardness 65 SH Pull-off forces 600 g / 6 Newton



REF 580RTS65



SKY TiSi.snap 5/3

REF TISIOY53



SKY TiSi.snap Abutment 17.5°

REF TISIAY17







Special Silicon Trimmer Ø 4.1 mm

REF SKY-DR41

The special silicone cutter is suitable for angled and lab handpiece.





REF 580 RT SET

Contents: retention.sil in 3 hardnesses Mixing Tips and application instrument



#### **Prosthesis fixation**

#### SKY Locator®









SKY Locator® Abutment height 2 mm

REF LOCZAB02



SKY Locator® Abutment height 4 mm

REF LOCZAB04



SKY Locator® Abutment height 6 mm

REF LOCZABO6

Due to its low structural height, the SKY Locator® offers excellent possibilities for fixing prostheses in many cases.

The long-lasting stability of the bone around the implant is supported by the built-in Platform switch.

The 3 gingival heights of 2, 4, and 6 mm cover all of the relevant clinical situations.



SKY Locator® Processing set 0°-10° 2 Sets

REF LOCLAB10



SKY Locator® Processing set 10°-20° 2 Sets



REF LOCLAB20

Material: Titanium TiN-coated Torque: 25 Ncm



Assortment 14 pieces 1 cartridge 50 ml

1 Qu-connector 10 ml 12 mixing cannulas, size 1, blue

REF 540 0116 1





The original Locator® on an angled SKY base opens up new prosthetic horizons. The two-component design corrects the insertion direction:

- Locator® base 17.5°
- Locator® base 35°

The Locator® coping is the same for both products. Furthermore, the prostheses can now have better posterior support.

All Locator® retention elements can be used.



SKY Locator®Abutment 17,5° Height 2 mm

REF LOCAB172

Material: Titanium TiN-coated Torque: 25 Ncm



SKY Locator®Abutment Height 2 mm

REF LOCAB352



#### Accessories SKY Locator®





Impression coping
4 pieces

REF LOCZAK40



**Laboratory analog** 4 pieces

REF LOCZLA40



Blocking out ring 20 pieces

REF LOCblock



Processing insert black 4 pieces

REF LOCZVA11



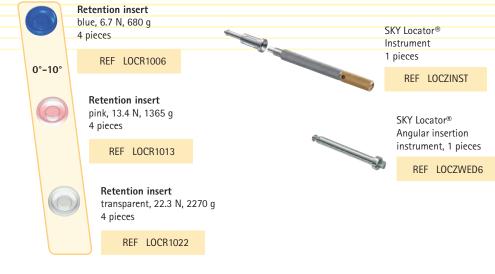
Angular measuring abutment, 4 pieces

REF LOCZWIMP



Angular measuring gauge, 1 pieces

REF LOCZWIML





Retention insert red, 6.7 N, 680 g 4 pieces

10°-20° REF LOCR2006



Retention insert orange, 9.1 N, 907 g 4 pieces

REF LOCR2009



Retention insert green, 17.8 N, 1815 g 4 pieces

REF LOCR2018

## **Prosthesis fixation**

#### **Ball head attachments**

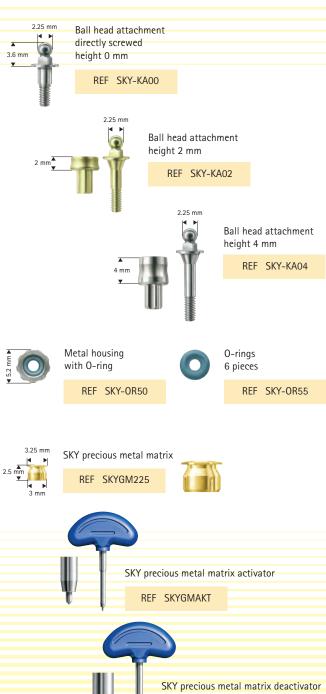




Based on the gingiva former, the patrix is screwed in after replacing the screw.

Various matrix systems are available:

- SKY metal housing with O-ring
- SKY precious metal matrix





#### **SKY Bar Abutment**





Based on the titanium gingiva formers, three abutments are available for the fabrication of the bars:

- burn-out base
- cast-on HL base
- titanium base

Improved soft tissue situation thanks to the use of the gingiva former - healing process is not affected. High flexibility when selecting materials. Fewer components, hence more efficient.



Technical data:

Melting interval 1400 - 1490 °C WAK (thermal expansion coefficient)  $11,9 - 12,2 \cdot 10^{-6} \text{K}^{-1}$  (Au 60 %, Pd 20 %, Pt 19 %, Ir 1 %) Weight: 0.63 g



Torque: 25 Ncm

# **Technical specifications SKY**

### Six implants - one set of instruments



A study by the University of Belgrade showed that, when using the SKY drill, only a small amount of heat was generated in the bone.

Source: Markovi et al: Heat generation during implant placement in low-density bone: effect of surgical technique, insertion torque and implant macro design. Clin Oral Implants Res. 2013 Jul;24(7):798-805. DOI: 10.1111/j.1600-0501.2012.02460.x. Epub 2012 Apr 2.



### Surgical protocol tailored to bone quality

#### Bone density from hard to soft

#### Hard bone

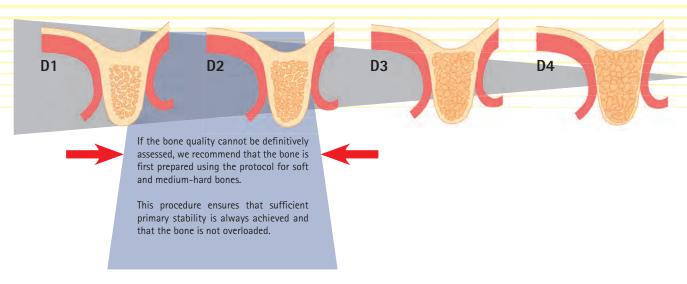
#### Atraumatic tapping

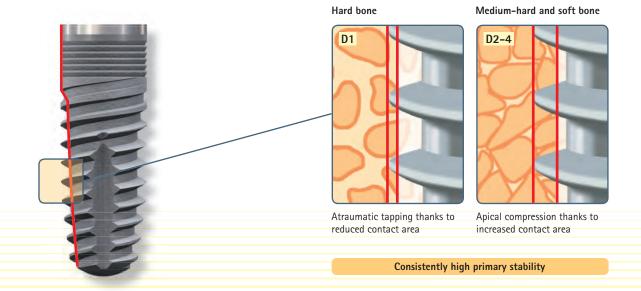
Prevention of bone overloading during surgery

#### Medium-hard to soft bone

#### Bone compression

Achieving primary stability





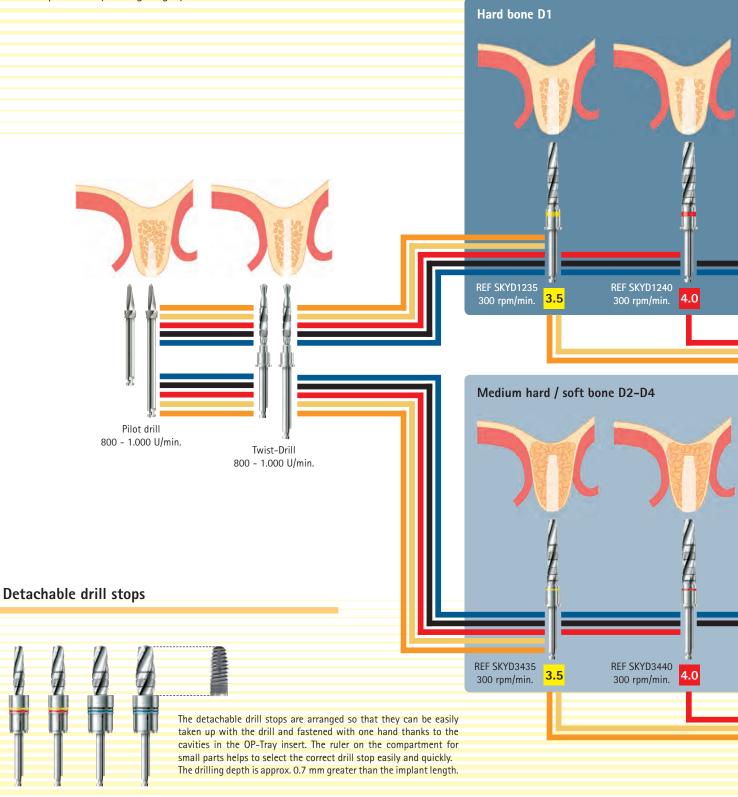
## **Technical specifications SKY**

### Surgical protocol tailored to bone quality

- Optimized, bone quality-oriented set of instruments and surgical protocol for unsurpassed primary stability
- Drills with detachable drill stops
- Reduction of the number of drills for increased control and dependability during surgery

5.5





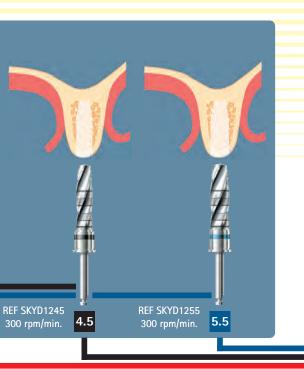
3.5

4.0

4.5







REF SKYD3455

300 rpm/min.

REF SKYD3445

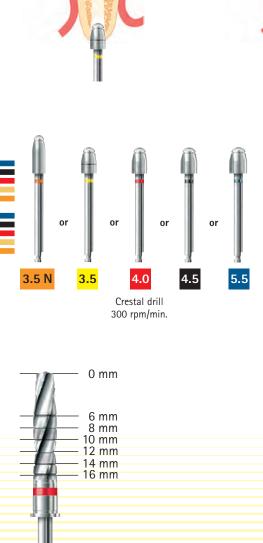
300 rpm/min.

4.5

With the 3.5 diameter blueSKY and SKY classic implants, the crestal drill is only sunk up to the laser marking.

In the following implants:

- narrowSKY
- blueSKY 4.0 to 5.5
- SKY classic 4.0 to 4.5 the crestal drill is completely inserted.







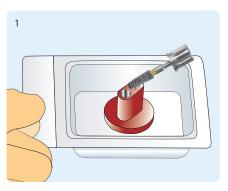
## **Technical specifications SKY**

#### Fast, reliable and atraumatic implant placement



Removing and screwing in the implant and the cover screw without changing instruments.

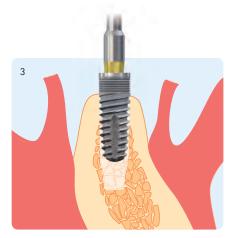
blueSKY and SKY classic implants come in double-sterile packaging. They are supplied in a colour-coded carrier with details of the applicable length so that mistakes can be avoided. After opening the Tyvek-Folie® foil, it can be directly removed using the SKY TK insertion instrument.



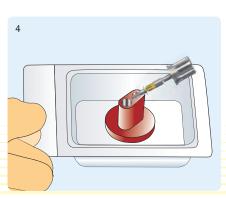
Open the new double sterile packaging. Remove the implant with the insertion instrument for the ratchet or the contra-angle.



The conical Torx® allows to hold the implant safely.

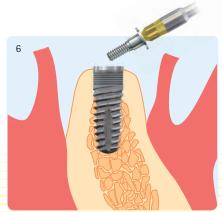


The implant is inserted and can be screwed in immediately.



The cover screw can be removed using the same The cover screw is held securely by the cone.



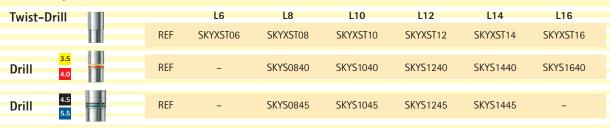


Screw the screw directly into the implant. The smooth cone ensures that the screw only needs to be slightly tightened and cannot become jammed. Recommended max. torque: 10 Ncm.



#### Order information

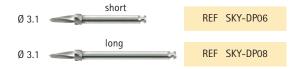
#### **Drill stops**



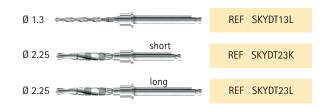
#### Bone bur rpm/min 800-1.000

# Ø 4.1 REF SKY-DR41

#### Pilot drill rpm/min 800-1.000



#### Twist-Drill rpm/min 800-1.000



#### Drill for hard bone rpm/min 300

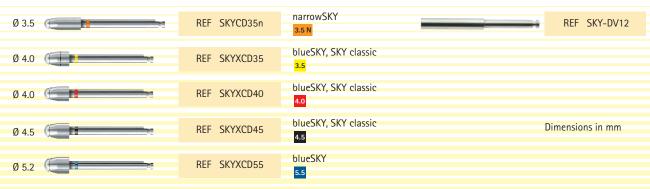


#### Drill for medium hard and soft bone rpm/min 300



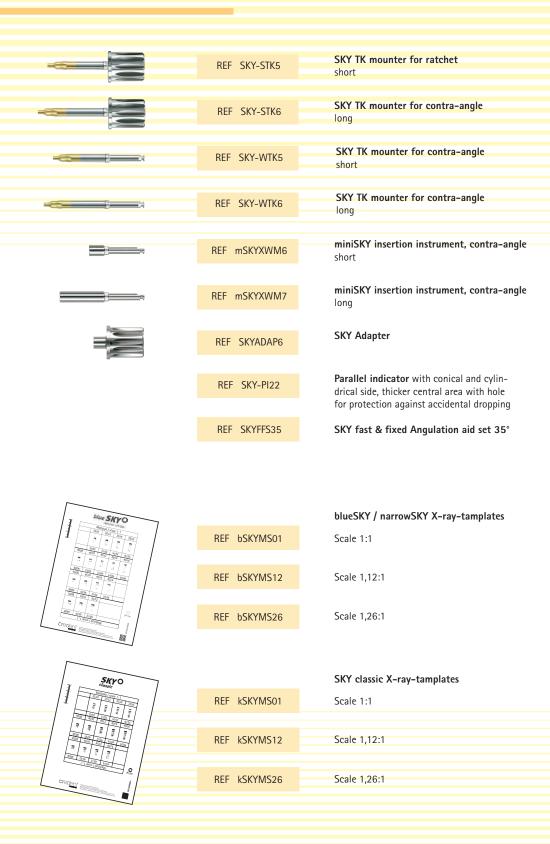
#### Crestal drill rpm/min 300

### SKY Drill extension



# **Technical specifications SKY**

#### Surgical tools





## **Prosthetic tools**

	REF SKY-SD16	SKY prosthetic key short
	REF SKY-SD25	SKY prosthetic key long
-	REF SKY-SD22	SKY prosthetic key for contra-angle short
	REF SKY-SD28	SKY prosthetic key for contra-angle long
	REF LOCZWED6	SKY Locator® mounter for contra-angle
	REF SKYADAP6	SKY Adapter
	REF LOCZINST	SKY Locator® Instrument
	REF SKY-SD21	SKY prosthetic key for ball abutments
	REF 310W0106	Screwdriver Alle 0.9 for transversal screw-retention
[8 of ] ■ 133335	REF SKY-SD50	<b>SKY Torque ratchet</b> Adjustable from 10 to 30 Ncm. Is directly attached onto the key or mounter.
	REF SKY-SD80	SKY Laboratory handle incl. SD-22 High-grip tool for the laboratory. One working end for contra-angle instruments or square tap. The other end corresponds to SD-21 for screwing in ball
		abutments.  SKY Universal forceps
	REF SKY-SD60	The universal forceps with titanium-coated gripping surface to hold implants and abutments, also suitable to hold prosthetic keys.
	REF SKY-SD65	SKY Key holder The useful and compact holding tool for all prosthetic instruments.

# **Technical specifications SKY**

#### Screws



In two posters presented at the SKY Meeting 2012, Dr. the appropriate laboratory screws are used in the laboratory, in Wentaschek from the University of Mainz illustrated how Pre- order to prevent screw loosening. tension can be significantly reduced by repeatedly tightening These results can be transferred to the recall. In this case, we plant-abutment connection. It is therefore recommended that removed for cleaning.

the screw. Pretension is the decisive crucial factor for the im- recommend replacement of the screws when the abutment is

#### Clinical screws Laboratory screws SKY prosthetic screw 2.2 SKY lab screw PS22 blue, 6 pieces grey, 10 pieces REF SKYLPS22 REF SKY-PS22 SKY fast & fixed and SKY uni.cone SKY fast & fixed and SKY uni.cone M1.4 for prosthetic coping screw 2.2 lab screw M1.4 blue, 6 pieces grey, 10 pieces REF SKYFFSPK REF SKYFFLPK SKY adjustment screw 2 mm 3 pieces REF SKY-DS02 Spacer analog incl. screw 2.4 SKY adjustment screw 4 mm REF SKY-DA77 REF SKY-DS04 SKY adjustment screw 6 mm 3 pieces REF SKY-DS06 **Findings** 25000 SKY impression screw 20000 closed trays Pre-stress [cN] 6 pieces REF SKY-PS18 10000 SKY aesthetic impression 5000 screw, open trays, short 6 pieces [Time] 1 x screw fixation 5 x screw fixations REF SKYAPS18 — 10 x screw fixations Repeatedly tightening the screws reduces pretension by up to 40%.

Source: S. Wentaschek et al: Reibungskoeffizient und Vorspannung beim Implantat-Abutment-Schraubenverbindungen [Coefficient of friction and pre-tension in implant abutment screw connections]; Scientific Book SKY Meeting 2012; S. 54-55; bredent medical GmbH & Co. KG, ISBN 978-3-00-038740-1



#### **Torque specification**

SKY cover screw 25 rpm 10 Ncm

TTT

SKY gingiva former 25 rpm 10 Ncm

777 777 777 77 1

SKY impression abutments 25 rpm 10 Ncm



SKY temp 25 rpm 18 Ncm



SKY abutments 25 rpm 25 Ncm



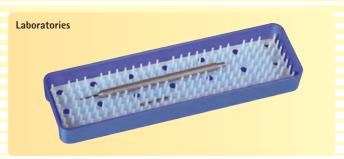
SKY fast & fixed SKY uni.cone Prosthetic screw 25 rpm 18 Ncm



## **Technical specifications**

#### SKY prosthetic assortment





The torque ratchet in the SKY prosthetic case for practices ensures that all prosthetic components of the SKY System can be tightened permanently and reliably. The case contains two screwdrivers – short and long – for fixation of all abutments as well as the screwdriver for the SKY ball head attachments. The screwdrivers for the SKY Locator® and for transverse screwing are used with the adapter and the ratchet.

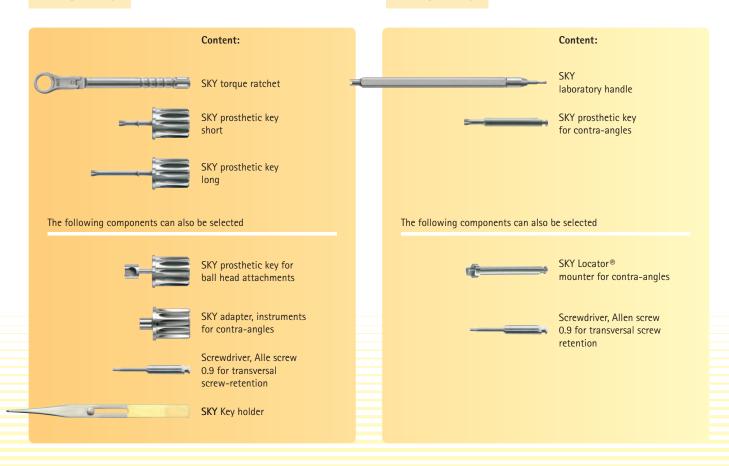
The long laboratory handle contained in the SKY prosthetic case for laboratories enables perfect handling and use of the screws on the master models. Appropriate latch-grip screwdrivers are securely held in the adapter for contra-angles and can be exchanged easily. As a result, the SKY abutment screws of the SKY Locator® and the transversal screw can be easily fastened and unfastened. The screwdriver for the SKY ball head attachment is located at the other end of the laboratory handle.

#### SKY prosthetic assortment practice

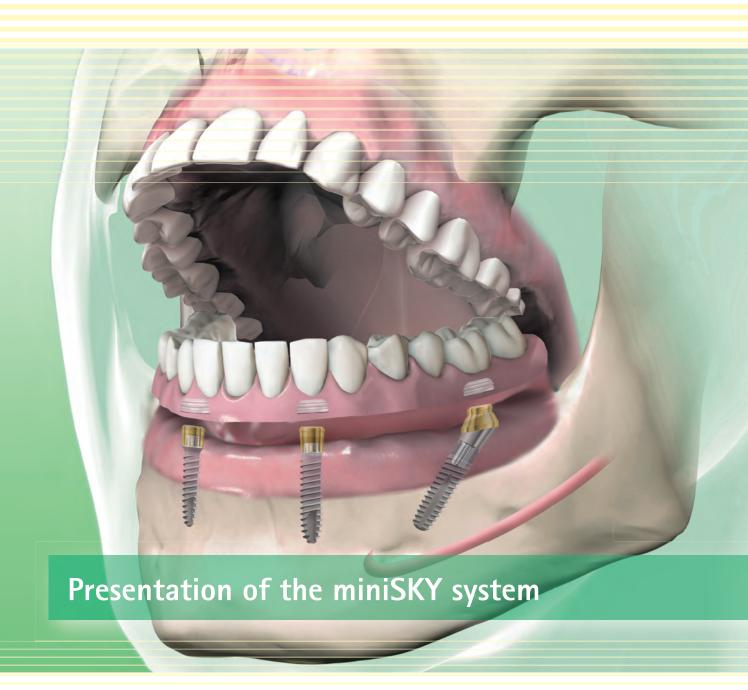
REF SKYPET10

#### SKY prosthetic assortment laboratories

REF SKYPET20









# miniSKY Implant system

# The solution for badly atrophied jaws and narrow gaps



#### Problems in older patients who have already lost their teeth:

- Severely atrophied jaw
- Prosthesis will no longer hold
- Eating difficulties
- Fear of major surgical interventions
- Fear of social isolation

#### miniSKY for prosthesis fixation:

- mini¹SKY with ball head and O-ring or precious metal matrix
- mini<sup>2</sup>SKY with locator



#### Problems in patients with very narrow tooth gaps:

- Narrow edentulous space
- Aesthetic restoration required
- Low bone level despite remaining teeth

#### mini<sup>2</sup>SKY for aesthetic restoration of narrow gaps:

- Two implant diameters and one implant platform
- Semi-transgingival implant avoids a second operation
- Conical outer connection ensures a secure and long-lasting connection

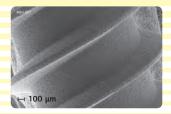


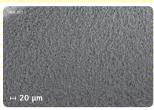
#### miniSKY diameter-reduced implants



The mini¹SKY and mini²SKY Implantate feature the proven osseo connect surface (ocs®) of the blueSKY implants to ensure fast and reliable osseointegration.

The SEM photos show the uniformly rough surface which provides ideal preconditions for the apposition of osteoblasts, which is supported by the exceptional hydrophilic properties of the implants.





#### miniSKY - Technical data







- Cortical relief
- Central stabilization
- Special tip



- Implant Platform 3.2 mm
- Implant diameter 2.8 mm und 3.5 mm
- Self-tapping thread
- Titanium grade IV, cold-formed
- Double thread

# mini<sup>1</sup>SKY Implant system

# mini<sup>1</sup>SKY – Fixation of prostheses in severely atrophied jaws



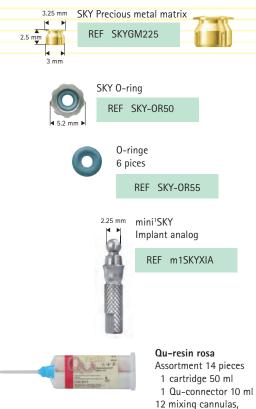


#### Fixation of prostheses on mini<sup>1</sup>SKY with

- SKY precious metal matrix
- SKY o-ring matrix

#### Note

In this case, it is necessary to wait for the osseointegration of the implants, prior to loading.



size 1, blue REF 540 0116 1





#### mini<sup>1</sup>SKY - Impression and model production



Initial situation



When making an impression of the mini¹SKY implants, the o-ring (SKY-OR55) is placed over the ball head



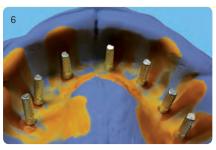
The torx of the mini<sup>1</sup>SKY implants and the o-rings is then fully molded using the impression material, brecision implant light (580 BL050).



At the same time, the impression material brecision implant heavy (580 BH38 0) is added to an impression tray and applied to the area being molded.



Once the impression material has cured, it is possible to carefully remove the impression tray. The o-rings remain in the impression. The torx of the mini¹SKY implants is clearly recognizable and aids repositioning of the laboratory analog.



When repositioning the implant analog (m1SKYX-IA), it is necessary to bear in mind that the torx geometry in the impression material corresponds with the orientation of the torx from the implant analog



Using a gingival mask, Multisil-Mask hard (540 0113 4), the implant analog must be blocked,



ensuring that the exact position of the implant analog is maintained during model fabrication.



Control using a bridge framework has resulted in a high level of precision between the initial model and the model from the impression.



O-ringe 6 pieces

REF SKY-OR55



brecision implant heavy Impression material blue 1 x 380 ml

5 x dynamic mixers
1 x bayonet ring yellow

REF 580 BH38 0



2 x 50 ml Multisil-Mask hard in cartridges 24 mixing cannulas

REF 540 0113 3

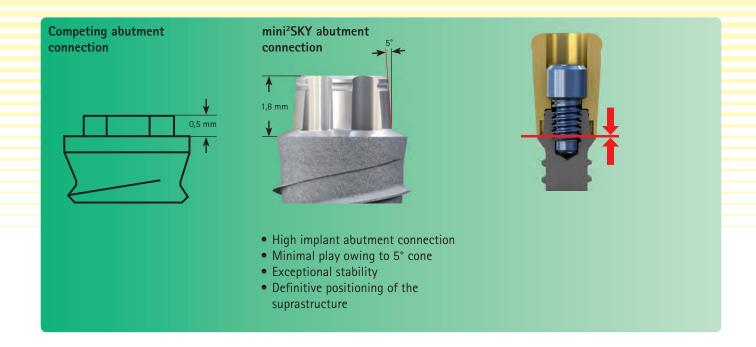


brecision implant light Impression material orange 2 x 50 ml 10 mixing cannulas yellow 10 Intra-oral tips

REF 580 BL05 0

# mini<sup>2</sup>SKY Implant system

#### mini<sup>2</sup>SKY Implant abutment connections



#### Semi-transgingival healing



#### Gentle for patients

- Transgingival healing
- Only one surgical intervention which can often be carried out in a minimally invasive manner



#### mini<sup>2</sup>SKY - Impression and model fabrication







#### mini<sup>2</sup>SKY Gingiva former

The mini<sup>2</sup>SKY gingiva former completely covers the high precision torx and supports and ideally molds the soft tissue.

In order to mould mini<sup>2</sup>SKY implants, the mini<sup>2</sup>SKY impression abutment open tray (m<sup>2</sup>SKYPA1) is screwed onto the implants and moulded according to the standard procedure for the opentray technique.

In order to produce the master model, the mini<sup>2</sup>SKY implant analog (m<sup>2</sup>SKYXIA) is screwed to the mini<sup>2</sup>SKY impression abutment and the model is manufactured from super-hard stone.

Transgingival healing with a prefabricated or individual gingiva former spares the patient a second intervention.

mini<sup>2</sup>SKY is supplied with a gingiva former for healing. A cover screw is therefore <u>not</u> supplied.





## mini<sup>2</sup>SKY abutments

#### mini<sup>2</sup>SKY Locator® abutment









miniSKY Locator® height 2 mm 1 pieces

REF m2SKYLC2



miniSKY Locator® height 4 mm 1 pieces

REF m2SKYLC4

Material: Titanium TiN-coated Torque: 20 Ncm



Locator® Prozessing set 2 sets

REF LOCLAB20

Additional Locator® accessories – see page 41

The mini<sup>2</sup>SKY Locator<sup>®</sup> is available in heights of 2 mm and 4 mm and provides special protection against rotation for simple placement of the mini<sup>2</sup>SKY Locator<sup>®</sup> on the external precision torx of the mini<sup>2</sup>SKY implant to avoid screw loosening.

The appropriate retaining screw is used for fixation. This ensures that the load is distributed via the precision torx in the implant and the screw is protected from overloading. The original Locator® retention inserts 20° can be used for this procedure.



## mini<sup>2</sup>SKY - Restoration of narrow gaps









mini<sup>2</sup>SKY MD-Abutment titan REF m2SKYMDT

Material: Titanium Torque: 20 Ncm

mini



mini<sup>2</sup>SKY MD-Abutment BioXS

REF m2SKYMDB

Material: BioXS Torque: 20 Ncm

The high precision torx® ensures optimal load distribution of the abutment in the implant, which prevents screw loosening and guarantees the longevity of the connection.

## mini<sup>2</sup>SKY abutments

#### mini<sup>2</sup>SKY Individual abutment





With the new mini<sup>2</sup>SKY uni.fit abutment, laboratory-produced individual abutments can be manufactured on mini<sup>2</sup>SKY, which means that optimal aesthetics can be achieved even in narrow gaps. The individual abutments are cemented in the laboratory on the very low titanium base.



mini<sup>2</sup>SKY uni.fit abutment 1 piece

REF m2SKYUFA

Material: Titanium Torque: 20 Ncm



Modelling sleeve 10 pieces

REF UFCADMOD

#### **OP-Tray with drills and instruments**

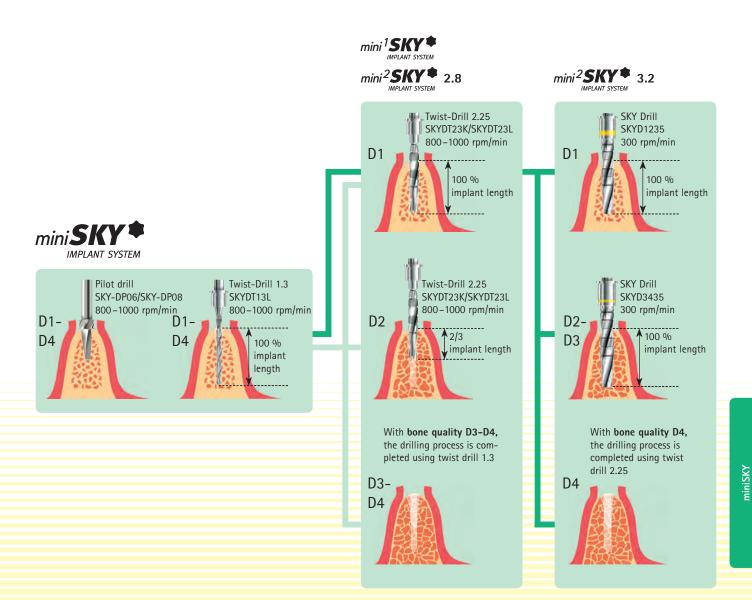
The miniSKY OP tray, OT 41, contains all of the drills and instruments needed for inserting the miniSKY implants.

All of the instruments can be easily assigned and identified by means of the images and order numbers.

The miniSKY OP-tray OT41 can be easily cleaned and sterilised. Owing to its small dimensions, it also fits on any operating table.

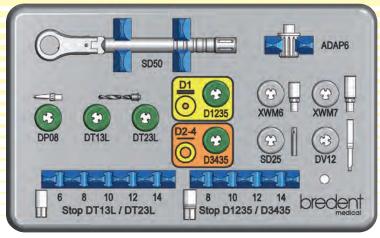


REF mSKY0T41



# Surgical and prosthetic instruments

#### Drills, drill stops, and tools

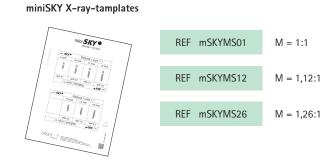


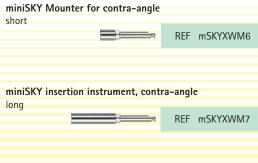
#### **Drill stops** Twist-Drill L6 L8 L10 L12 L14 REF SKYXST06 SKYXST08 SKYXST10 SKYXST12 SKYXST14 REF SKYS0840 SKYS1040 SKYS1240 SKYS1440 Drill Twist-Drill rpm/min. 800-1.000 Drill for hard bone rpm/min. 300

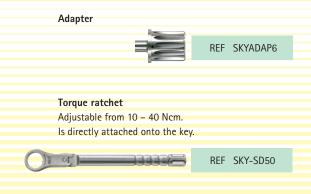












Dimensions in mm

# For your practice Posters advertising our treatments

Request the **print files** for your A1 size poster now free of charge, and advertise bredent medical's treatments in a humorous way in your practice.





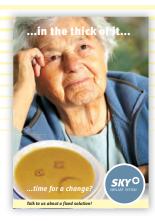
...gapless...

REF 0P0 201G B



...gapless... Version 2

REF 0P0 202G B



...in the thick of it...

REF 0P0 205G B



...in the thick of it... Version 2

REF 0P0 204G B



...tempting...?

REF 0P0 203G B



...tempting...? Version 2

REF 0P0 200G B



...bacterial infection

REF 0P0 210G B



...bacterial infection Version 2

REF 0P0 220G B

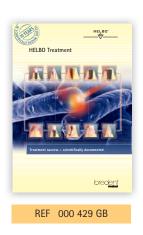
# Presentation of the system

SKY Implant system - prosthetically unique



## Other offers that may be of interest to you









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