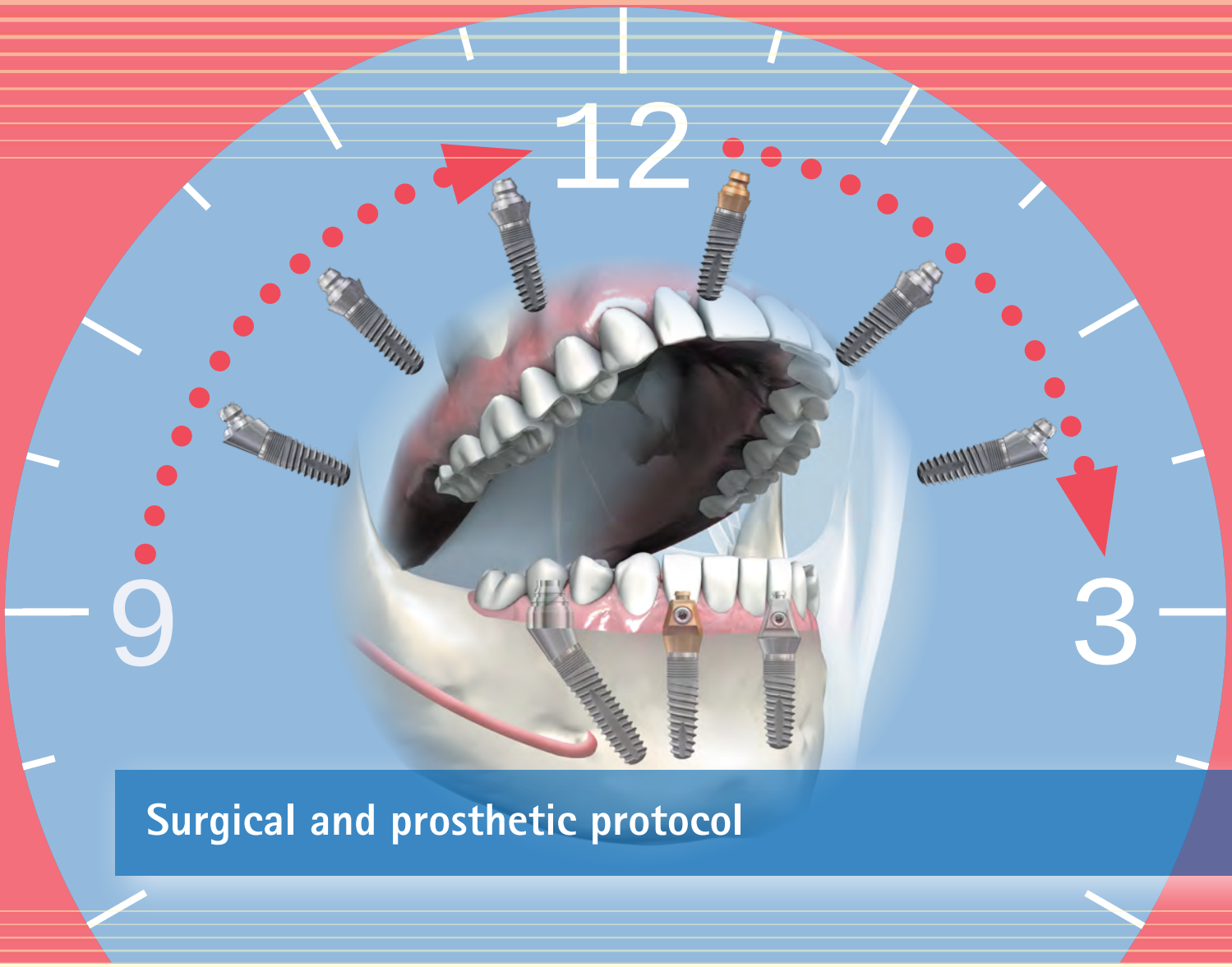
SKY
IMPLANT SYSTEM

SKY fast & fixed manual

Immediate restoration – transversally and occlusally screwed restorations

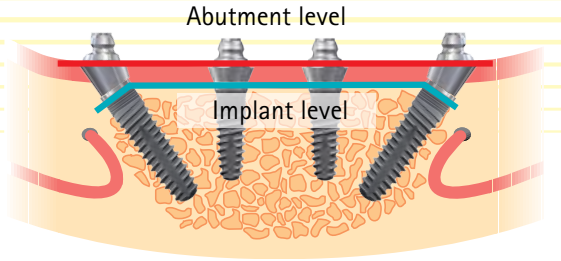


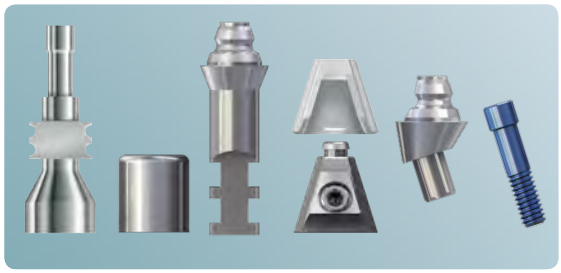
Surgical and prosthetic protocol

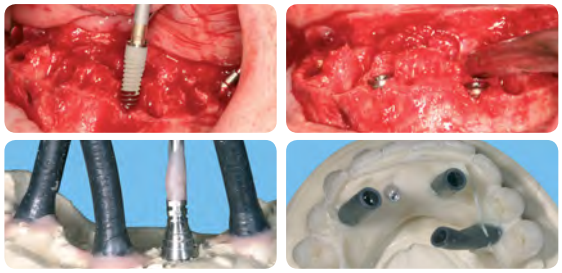
3rd edition

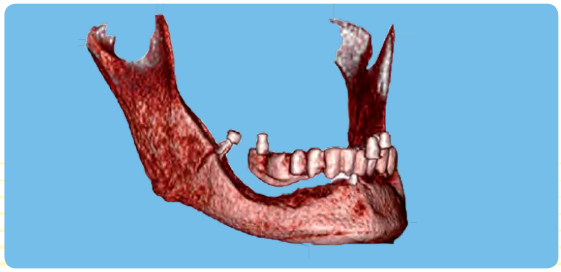
bredent
medical

SKY fast & fixed contents

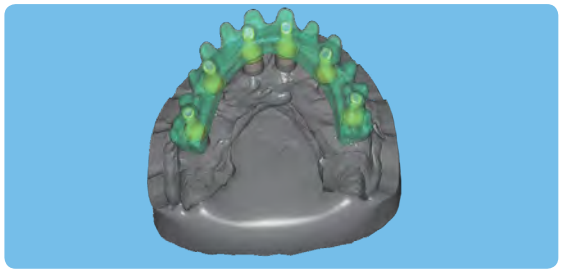








Protocol for final restoration



Final removable restoration

General information

SKY fast & fixed treatment

In the dental market, the optimally coordinated "Made in Germany" system solutions and treatment concepts by the bredent group been attracting significant attention for almost 40 years amongst dentists and dental technicians.

By using innovative materials and technologies, these system solutions and treatment concepts have enabled the dental team, consisting of implantologists, prosthetic specialists and dental technicians, to produce and maintain high-quality, cost-effective aesthetic prostheses that ensure peridontal hygiene.

This approach is reflected in the company values defined in 1995:

- capable
- spirit of partnership
- innovative

...gapless...
Aesthetic single-tooth restorations

For patients with good residual dentition, in whom implant restoration is used to close gaps, e.g. where there is loss of a single tooth.

...tempting...
Stable teeth: immediately!

SKY fast & fixed treatment for patients who are about to lose their teeth and feel as though they are too young to wear a removable prosthesis, whether implant-supported or not.

Equality of men and women is a matter of course for the bredent group.
In this manual, however, we have refrained from differentiating between male and female. For the purposes of clearer reading, male and female patients, doctors, dental technicians and dental hygienists are referred to in the male form.

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The SKY fast & fixed treatment has been developed in collaboration with experienced implantologists, prosthetic specialists and dental technicians.

With this complete treatment for immediate restoration in incipient edentulous jaws, you have at your fingertips an easy-to-use system that achieves aesthetic results, increases profits for the practice and laboratory as well as the benefits for the patient, and has fulfilled the desire of over 20,000 patients for firmly fixed teeth since 2007. These treated patients, with the appropriate indication, all left the practice happy and satisfied after only one procedure. Thanks to the SKY fast & fixed treatment, these patients regained their lost joie de vivre.

SKY fast & fixed treatment is:

- quick - largely after only one procedure - implant-supported and fixed
- reproducible - standardised protocol. A provider of surgery and prosthetics
- affordable - regaining of joie de vivre for your patients at a fair price

We will gladly inform you of the application possibilities of the SKY fast & fixed treatment and its advantages in terms of the benefits for your patients and your success in a one-to-one discussion. This manual explains, in detail, the surgical and prosthetic procedure involved.

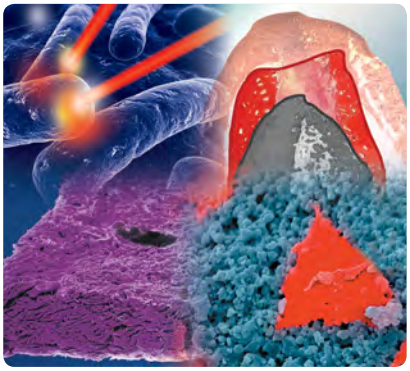
Please do not hesitate to contact us should you have any queries.

...in the thick of it... Quality of life in old age

Edentulous patients who have often resigned themselves to their supposed fate, are given a new quality of life with an implant restoration. With either an economic hybrid prosthesis or an expensive removable bridge.

Template-guided implantation

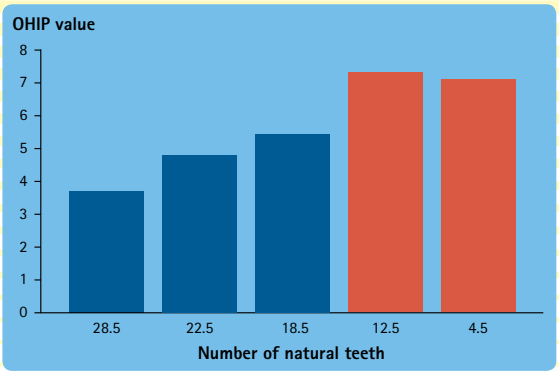
The SKYplanX implant planning system enables the implant position to be determined before the operation and to be transferred securely and precisely into clinical practice.



Regeneration

Prior to successful implantation, tooth extraction and bone augmentation are often necessary. For this, bredent medical offers you:

- materials for bone stabilisation
- materials for repairing atrophied bone
- treatment concepts, to control inflammation



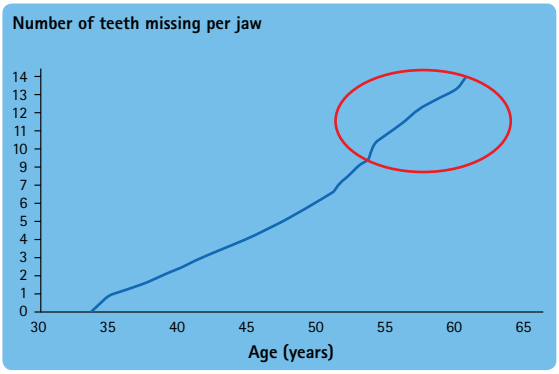
Source: Steele et al.: How do age and tooth loss affect oral health impacts and quality of life? A study comparing two national samples.

Cause of tooth loss

The DMS IV oral health study from 2005 showed clearly that chronic infections such as periodontitis are amongst the most widespread oral diseases in adults.

As a result, periodontitis is today considered to be a widespread problem as it is the main cause of tooth loss. The patient group in the age range of 40 to 60 in particular, i.e. those who are middle aged, are frequently affected by moderate to severe periodontitis diseases.

Many patients have severely reduced residual dentition. The 50 plus generation in Germany on average have only 4 or 5 teeth per jaw and are edentulous at 64.



Source: KZBV 2008

Patient-oriented treatment

Patients who are on the verge of becoming edentulous are particularly keen on the SKY fast & fixed treatment. This patient group in particular is worried about becoming edentulous together with a total prosthesis on the one hand but are frightened of long, tedious surgical procedures on the other hand and yet still wish for a fixed restoration. Removable prostheses scream "You are old!". Implant-anchored removable prostheses do not meet their needs; they want a fixed restoration as quickly as possible.

You can certainly fulfil these wishes with SKY fast & fixed treatment, with a temporary restoration right up to the day of implant insertion. Satisfied customers would gladly recommend this treatment.

Developed by practitioners

The clinical experiences of Drs. Georg Bayer, Frank and Steffen Kistler and the dental technical expertise of dental technician Stefan Adler were incorporated when developing this innovative treatment concept. SKY fast & fixed treatment enables extraction, implantation and immediate dental technical restoration with a fixed prosthesis to be carried out in just one day. Major augmentation measures are not required.

A predictable result

As a result of the reduced number of implants and the avoidance of augmentations together with a high level of standardisation of the processes in practice and in the laboratory, SKY fast & fixed is a treatment that is both financially accessible to a large number of patients and creates a high contribution margin per practice hour for the laboratory.

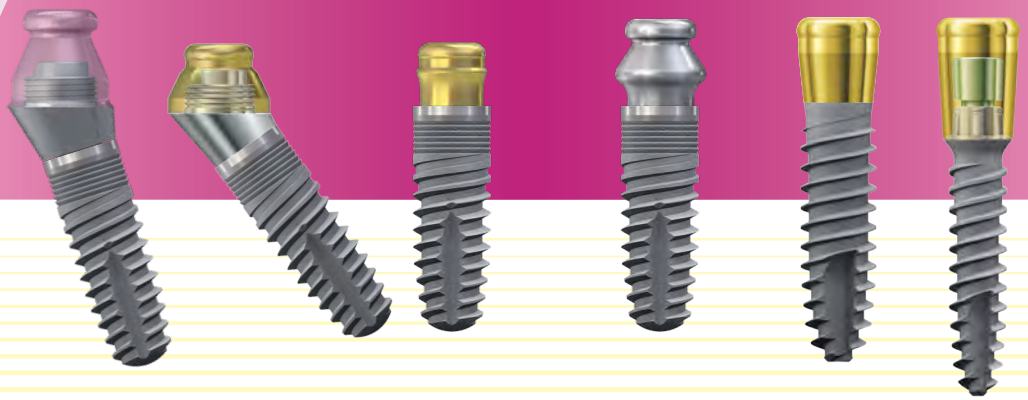
Restoration options, for example, for an edentulous jaw

Extensive surgical and prosthetic treatments

Fixed immediate restoration with SKY fast & fixed

optimum price-performance relationship

Removable restorations

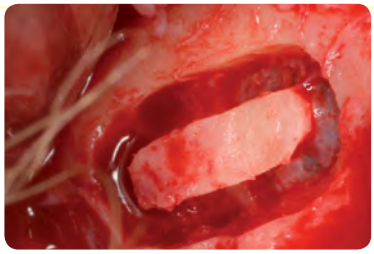


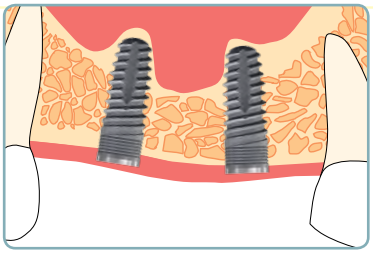
When it comes to possible implant restorations for an edentulous jaw, the treatment team can cater to the patient's individual requirements and opportunities. From a hybrid prosthesis to mucosa-supported, implant-anchored and fixed restorations - all options are available. In addition to the financial aspect, the treatment duration and the worry of becoming edentulous are also deciding factors for many patients.

Presentation of a problem

Severely atrophied jaw

- Patient has residual dentition not worth saving
- Patient is worried about becoming edentulous
- Patient refuses a conventional prosthesis



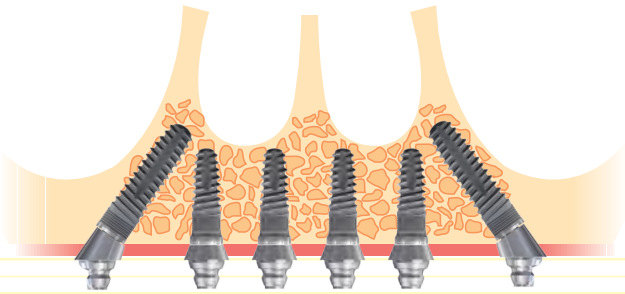


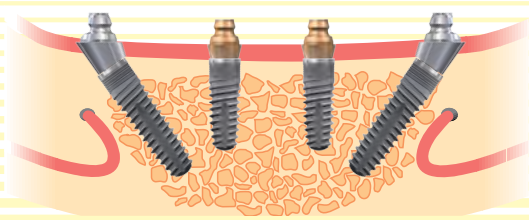
Solutions to date

1. Augmentations
   - Increased risk of complications
   - No immediate loading possible, i.e. the patient is edentulous for at least 6 months
   - Several operations required in this context

2. Implant-retained prostheses
   - No posterior support
   - Immediate restoration possible in the mandible only in the case of rigid Ledermann interlocking
   - Does not comply with the patient's wish

Problem solution





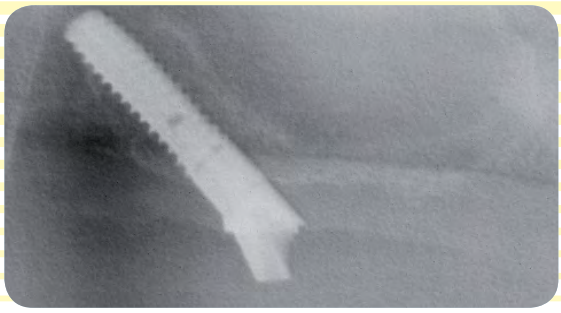
The principle of the interlocked immediate restoration is not new. It was successfully introduced into implantology by Ledermann in the 1980s. Four interforaminally fitted implants were interlocked with a bar immediately after insertion and restored using a removable prosthesis.

Dr. Malo, Lisbon (Portugal), developed this concept further. The emergence profile in the region of the second premolars is shifted due to implants fitted at an angle. This enables a fixed screwed provisional restoration on a broad support base.

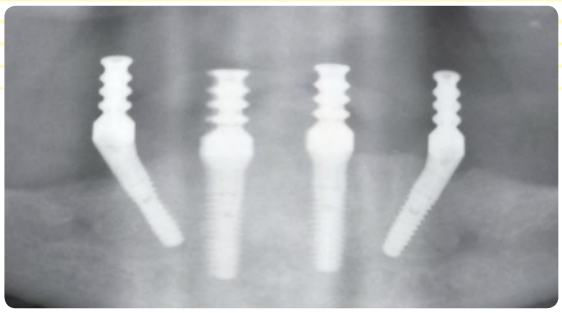
By using this tried-and-tested concept:

- the local bone is used to an optimal extent
- critically anatomical regions are protected
- the number of implants is reduced
- a fixed bridge is enabled as an immediate restoration

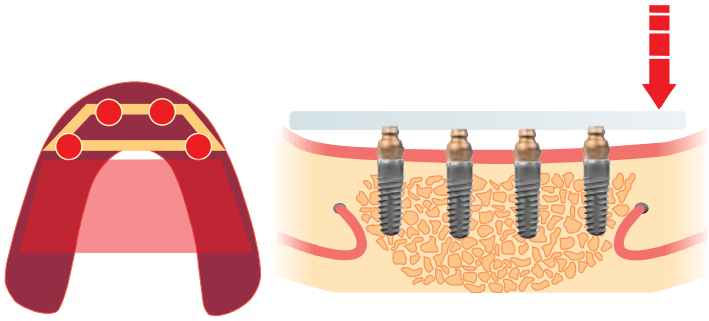
Problem solution



In the maxilla, too low a bone level in the region of the maxillary sinuses often prevents implantation. Distalisation of the definitive abutment is carried out in the region of the first molars by the blueSKY implants inserted on an angle along the maxillary sinus and therefore enables optimum posterior-supported restoration.

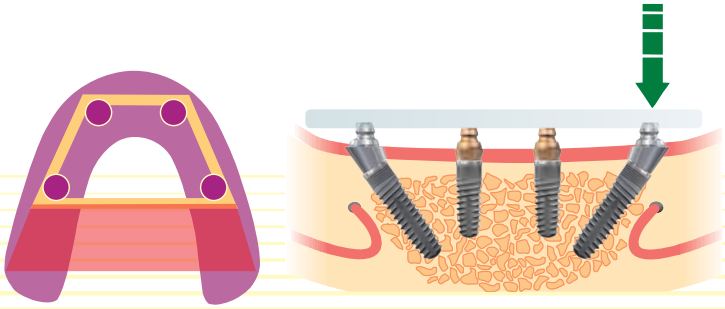


In the mandible, the residual bone level over the mandibular canals for implants with static adequate length is often too low, even in patients who have been edentulous for a long time. Possible implant positions are therefore restricted to the region between the foramina mentalis.



Interforaminally fitted implants

Interforaminal fitting of four implants creates a short supporting polygon with long extensions which may lead to unfavourable leverage and application of forces in the implant. The intended axial load is not achieved.



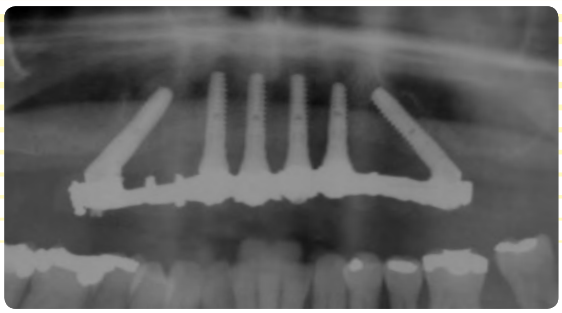
Implants fitted according to SKY fast & fixed

The emergence profile of the implants is shifted in a posterior direction due to implants fitted at an angle and an extensive supporting polygon is therefore created. Extensions are shortened. Applying force to implants that are fitted at an angle is reportedly more beneficial than vertically fitted implants in restorations with cantilevers.

The torsion applied to the mandibular superstructure lies outside the SKY fast & fixed implant beds. The rigid primary interlocked construction is not affected by torsion during mastication.

Patient-oriented treatment

The patient wishes to have fixed teeth for a better quality of life and health with good nutrition. He trusts the decision of his treating dentist regarding the number of implants and the extent of surgical measures that are required. The patient usually assesses the success and the quality of treatment using the implant-based prosthetic restoration, as he is able to assess the quality of the restoration in comparison to his wishes using aesthetic, haptic and functional characteristics.



Patient wishes:

- Few visits to the practice
- Short treatment time
- No extensive surgical measures
- Avoidance of alveolar ridge abutments
- No removable temporary restorations
- Calculable costs

SKY fast & fixed bridge restoration in the maxilla

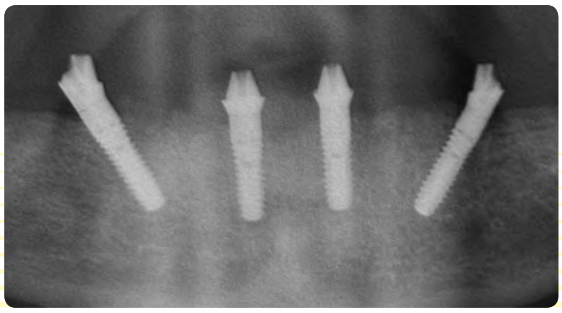
- Six implants

  Palate-free restoration
- Avoidance of sinus lift
- Reduction in treatment time
- Reduction of costs

SKY fast & fixed bridge restoration in the mandible

- No uncementing or loosening of the distal abutments as the implant beds are outside the distortion area applied to the mandibular superstructure
- Four implants

  No nerve lateralisation
- Fixed bridge restoration
- Reduction of costs



Team concept

Dr. Jörg Neugebauer, Dr. Frank Kistler, Dr. Georg Bayer

"SKY fast & fixed treatment is very interesting for our practice as it enables processes to be standardised on the one hand and work in aftercare to be more simplified on the other, as the occurrence of pressure points, which causes an unplanned visit to the practice for the patient, is prevented by using a fixed bridge.

We have also determined that patients will gladly wait longer for the final restoration, but also prefer high-quality restorations."

The spatial overview when fitting angled implants requires a sensitive procedure carried out with constant checking.

The manufacture of a fixed bridge in a short time frame presents a challenge for any dental technician that can be overcome by standardisation and using modern materials and techniques. A routine is set up even after a few restorations, which also leaves room for details.

Stephan Adler (DT)

The prerequisites

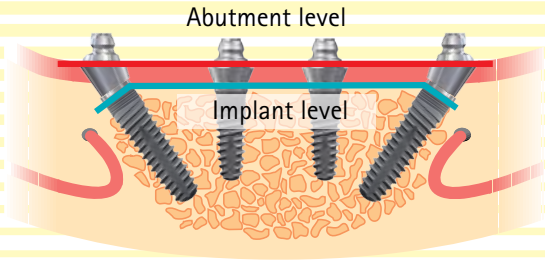
for successful use in practice are:

- an experienced implantologist with good surgical knowledge
- a flexible dental technician who can adapt himself rapidly to any situation. The dental technician laboratory should ideally be situated in close proximity to the practice

The bredent group would like to thank the following for the images and support, without which a comprehensive and practical manual could not have been possible:

Dental Hospital, Drs. Georg Bayer, Frank and Steffen Kistler, Dr. Jörg Neugebauer and DT Stephan Adler Landsberg am Lech, D / Dr. Tilo Bartels, Claus Küchler (MDT) Munich, D / Dr. Eugenia Michailidou DDS,MS, Athens, GR / Praxis am Moritzplatz Dr. Lara Müller; Miller & Schmuck Laboratory, MDT Miller, Augsburg, D / TopDent, Dr. Florian Obadan, Alexandria, RO / Dr. Guillaume Reys, Sélestat, FR / DT Pascal Flajolet, Molsheim, FR / Dental Hospital Dr. Ryssel and Partner, Crailsheim, DE / Dr. Wilhelm Spurzem, Bensheim; Oliver Heinzmann (MDT) Heppenheim, DE / OpusDC Dental Clinic, Drs. Margit and Michael Weiss, Axel Schröder Ulm, D / Mario Parra (MDT), Alicante, ES

SKY fast & fixed principles



Work level

Using SKY fast & fixed restorations, the work level is increased from the implant shoulder to the level of the SKY fast & fixed abutments. The following parts used are consequently no longer referred to as an abutment, but rather as copings, e.g. impression coping or prosthetic coping.

- **Implant level**

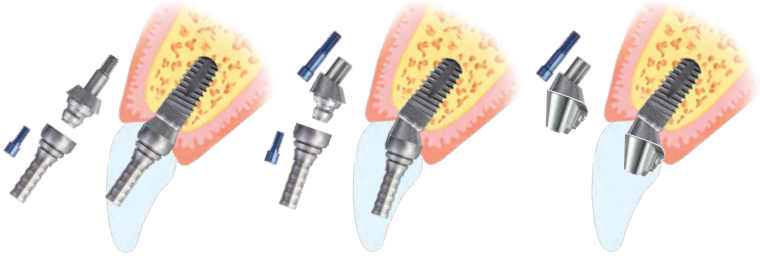
  With SKY classic and blueSKY systems, the taking of an impression and the fitting of abutments is carried out at implant level. The abutments are fixed securely in six positions using 3.5 mm-long Torx®.

- **Abutment level**

  With the SKY fast & fixed abutments, taking an impression and restoration using copings at abutment level are carried out without anti-rotation protection, as this is not necessary in the case of interlocked work.

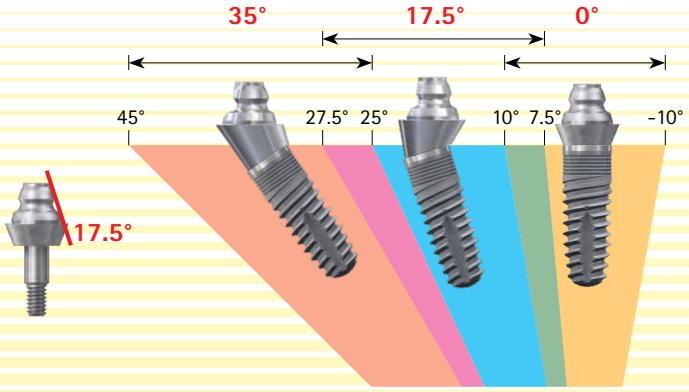
Angulation compensation

In the anterior maxilla, the anatomical situation can cause the screw openings to protrude labially when using the straight SKY fast & fixed abutments.



To avoid this problem, 17.5° or 35° abutments can be used to shift the screw channel of the occlusally screwed prosthetic coping in an oral direction.

Alternatively, the prosthetic coping can be used with transversal screws.



Divergence compensation using an outer cone

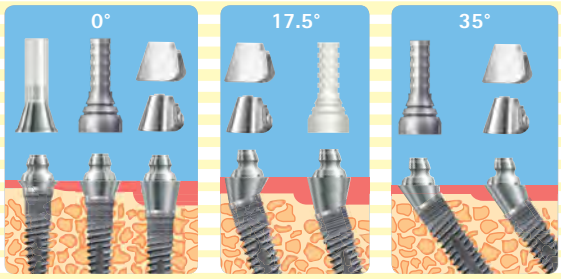
By using a 17.5° outer cone for SKY fast & fixed abutments, compensation with divergent implants is possible. Maximum compensation here is 35°, however we recommend not exceeding the following angulations for biomechanical reasons:

0° → -10° - 10°

17.5° → 7.5° - 27.5°

35° → 25° - 45°

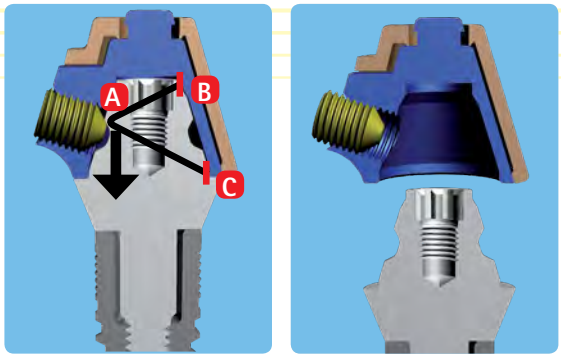
SKY fast & fixed – SKY uni.cone – occlusal and transversal screw retention



Allow yourself prosthetic freedom

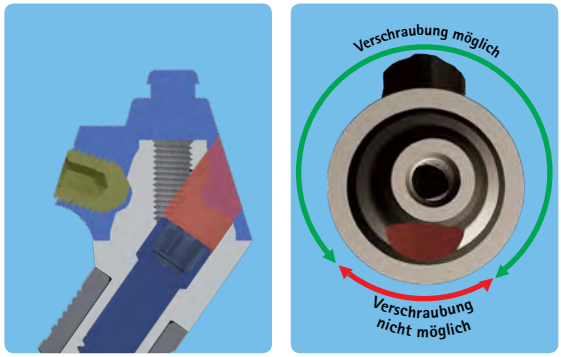
The SKY fast & fixed and SKY uni.cone abutments with horizontal circumferential groove gives you all the options for your screw-retained prosthetic restoration:

- Occlusal or transversal screw retention with just one abutment!
- As a bonding base for all framework materials
- "Passive fit" is always achieved, regardless of the material, as the substructure is bonded in situ.



Self-centring transversal screw retention

Transversal screw retention is a bolting principle. The thread for the bolt screw is located in the bridge framework. The bolt screw (A) and the cylindrical surfaces (B and C) form a compact unit. The prosthetic coping is fixed using a triple point attachment with the bolt screw (A) and the short cylindrical surfaces (B and C) to avoid tilting. At the same time, the short cylindrical surfaces ensure that the coping is self-centred when it is fitted. Thanks to the slightly inclined position of the bolt screw, the prosthetic coping is bolted perfectly to the abutment platform when the screws are tightened.



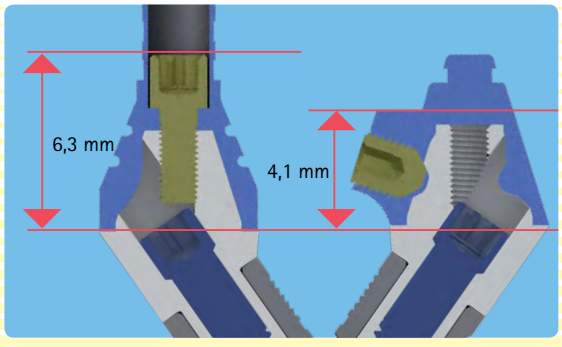
Simple use of transversal retention

A click that can be easily heard and felt indicates reliable fit when the framework is attached or removed. Bolts screws are not removed from the framework after loosening when inserting or removing the restoration, which significantly reduces the risk of swallowing.

Positioning of the screws

In the case of the straight SKY fast & fixed and SKY uni.cone abutments, free 360° positioning of the transversal screws is possible thanks to the circumferential horizontal ridge.

The horizontal ridge on the angled SKY fast & fixed abutments are interrupted by the screw channel (predominantly vestibular). The bolt screws cannot take hold here. This information is not communicated when taking an impression as the SKY fast & fixed impression copings and analogues are not rotationally symmetrical. This information can be passed on to the laboratory using a photo or a drawing. The screw channel is not usually located in the relevant area.



Minimum height of the prosthetic copings

The straight SKY fast & fixed and SKY uni.cone abutments are single pieces and are screwed directly into the implant. The angled SKY fast & fixed abutments are screwed in using SKY prosthetic screws. Occlusally screwed copings are fixed using SKY fast & fixed prosthetic screws.

Shortening of the prosthetic copings

In the case of a small oral opening or unfavourable heights, a construction height more than 30% lower can be achieved using transversal screw retention (4.1 mm to 6.3 mm).

Ordering information for screws, instruments and drills

Screws

In two of the posters presented at the SKY Meeting 2012, Dr. Stephan Wentaschek, MSc. from the University of Mainz illustrated how pre-stress is significantly reduced by repeatedly tightening the screw. A high level of pre-stress is the decisive factor, which is essential for connecting the implant and the abutment. He therefore recommends that different screws are used in the laboratory and the clinic, in order to prevent screw loosening.

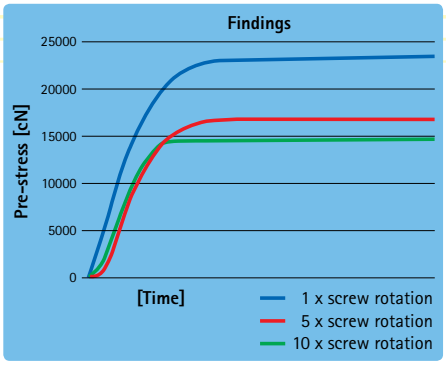
These results can be transferred to the recall. In this case, we recommend that the screws are replaced when the abutment is removed for cleaning.

Rotations per minute and torque

SKY fast & fixed abutments / SKY uni.cone — **25 rpm** — **25 Ncm**

SKY fast & fixed and SKY uni.cone
Scanning and impression copings — **25 rpm** — **10 Ncm**

SKY fast & fixed und SKY uni.cone
prosthetic screw — **25 rpm** — **18 Ncm**



Repeatedly tightening the screws reduces pre-stress by up to 40%.

Clinical screws

SKY prosthetic screw 2.2
blue, 6 pieces

REF SKY-PS22

SKY fast & fixed / SKY uni.cone
Screw M 1.4
blue, 6 units

REF SKYFFSPK

SKY fast & fixed / SKY uni.cone
transversal screw
6 units

REF SKYUFTS9

Laboratory screws

SKY laboratory screw PS22
grey, 10 units

REF SKYLPS22

SKY fast & fixed / SKY uni.cone
Laboratory screw M 1.4
grey, 10 units

REF SKYFFLPK

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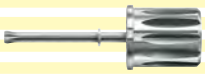
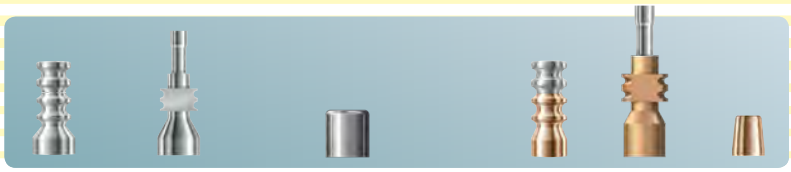
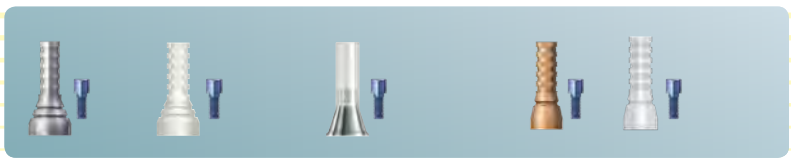
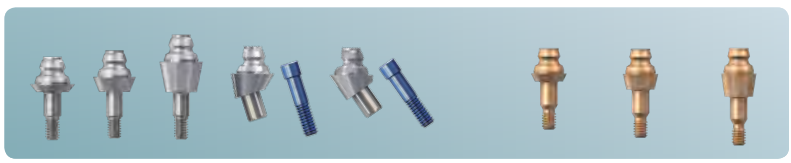
Required SKY instruments



SKY prosthetic key





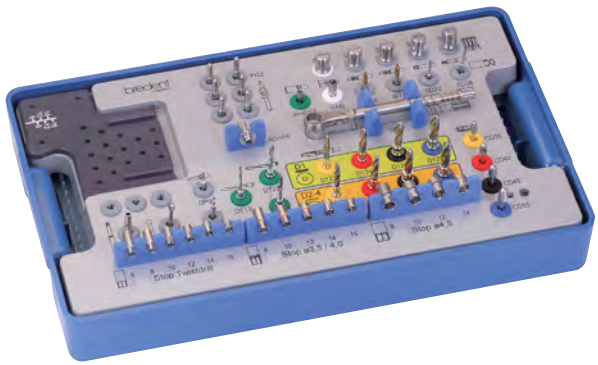


Prosthetic key abutments

Only one screwdriver is required for all occlusal screws in SKY prosthetic components. Available in two lengths as a hand-held screwdriver for use with a ratchet or a bit for the contra-angle handpiece.

- Prosthetic key ratchet short (REF SKY-SD16)
- Prosthetic key ratchet long (REF SKY-SD25)
- Prosthetic key contra-angle handpiece short (REF SKY-SD22)
- Prosthetic key contra-angle handpiece long (REF SKY-SD28)

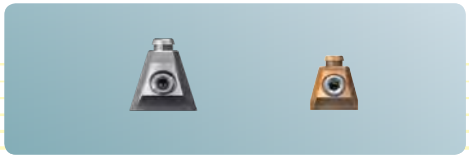
These instruments are all contained in the OP Tray SKY OT21.



Available as an option for the SKY OP Tray OT21

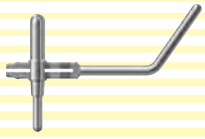
REF 310W0106

Screwdriver
Inbus 0.9 for transversal screw retention*



Transversal screws are provided with an Imbus 0.9.

In the SKY ratchet, it is used together with an adapter (SKYADAP6).



REF SKYFFS35

SKY fast & fixed angulation aid set 35°

SKY fast & fixed angulation aid

The angulation aid consists of a parallel indicator and a movable component with which the distance and a 35° angle can be estimated.

The angulation aid is placed in the pilot hole and facilitates orientation when preparing the angled cavities.

Drill and drill stops

		L6	L8	L10	L12	L14	L16
Twist drill 	REF	SKYXST06	SKYXST08	SKYXST10	SKYXST12	SKYXST14	SKYXST16
Drill 3.5 / 4.0 	REF	–	SKYS0840	SKYS1040	SKYS1240	SKYS1440	SKYS1640
Drill 4.5 / 5.5 	REF	–	SKYS0845	SKYS1045	SKYS1245	SKYS1445	–

Bone burr 800-1,000 rpm

REF SKY-DR41 — 4.1

Twist drill 800-1,000 rpm

REF SKYDT13L — 1.3

REF SKYDT23K — 2.25 short

REF SKYDT23L — 2.25 long

Pilot drill 800-1,000 rpm

REF SKY-DP06 — 3.5 short

REF SKY-DP08 — 3.5 long

Drill for hard bone 300 rpm

REF SKYD1235 — 3.5

REF SKYD1240 — 4.0

REF SKYD1245 — 4.5

REF SKYD1255 — 5.5

Drill for soft and medium-hard bone 300 rpm

REF SKYD3435 — 3.5

REF SKYD3440 — 4.0

REF SKYD3445 — 4.5

REF SKYD3455 — 5.5

Crestal drill 300 rpm

REF SKYCD35n — narrowSKY 3.5 N

REF SKYXCD35 — blueSKY, SKY classic 3.5

REF SKYXCD40 — blueSKY, SKY classic 4.0

REF SKYXCD45 — blueSKY, SKY classic 4.5

REF SKYXCD55 — blueSKY, SKY 5.5

SKY drill extension

REF SKY-DV12

Implant and abutment selection

Angled implants posterior:

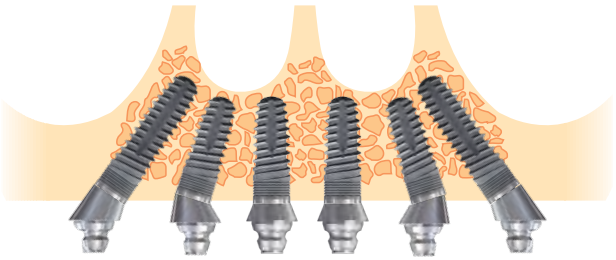
Use of the following implants is proven in both the maxilla and the mandible:

- blueSKY 4.0 length 16 mm
- blueSKY 4.5 length 14 mm

In the case of very narrow jaws,

- blueSKY 3.5 length 16 mm

can also be used successfully. Use of narrowSKY is not possible as the 35° abutments have a regular platform.



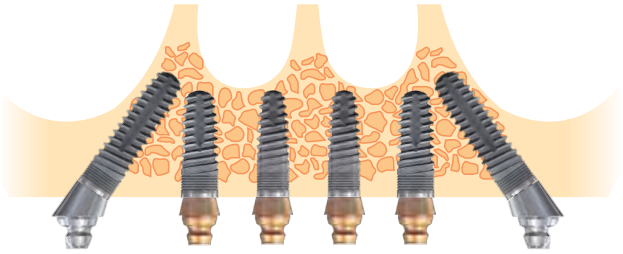
Maxilla (anterior):

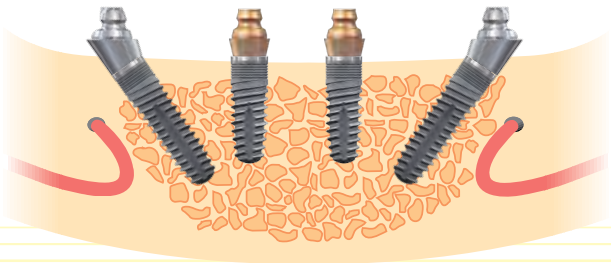
All blueSKY implants can be used regardless of the bone width or height. Usually:

- blueSKY 4.0 length 12/10 mm are used.

All abutments can be used on blueSKY, e.g. SKY fast & fixed 0° and 17.5° or SKY uni.cone abutments, these are equipped with a platform switch for blueSKY.

narrowSKY implants can only be used in connection with SKY uni.cone abutments as the SKY fast & fixed abutments have a regular platform.

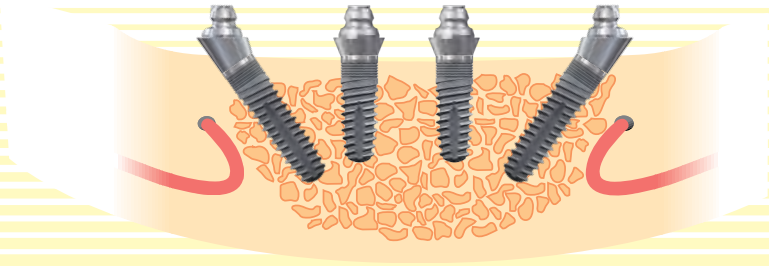




Mandible (anterior):

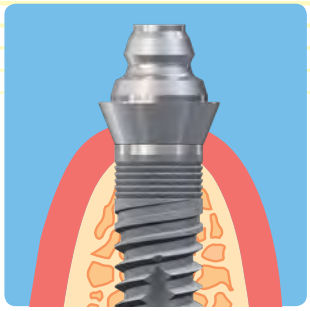
In the front of the mandible, it is usually recommended that the SKY uni.cone abutments are used as the final restoration can also be finished in an aesthetically optimal manner due to the narrow gingiva emergence profile.

blueSKY and narrowSKY implants can be used with SKY uni.cone abutments.



SKY fast & fixed abutment system

blueSKY
SKY classic



SKY fast & fixed abutments

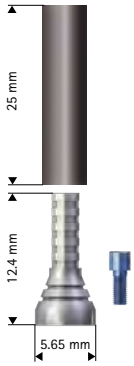
The SKY fast & fixed titanium prosthetic coping provides the basis for the fast and secure restoration of temporary bridges, which are occlusally screwed using SKY fast & fixed abutments. The one-piece straight abutment is screwed directly in the implant and is now available in gingiva heights of 1, 2, and 4 mm. All abutments have the same cone, which can reconcile divergences of +/- 10°.

SKY fast & fixed / SKY uni.cone
Laboratory screw M 1.4
grey, 10 units

REF SKYFFLPK

SKY fast & fixed / SKY uni.cone
Screw M 1.4
blue, 6 units

REF SKYFFSPK

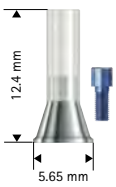


SKY fast & fixed titanium prosthetic coping
with screw M 1.4
Silicone tubing

REF SKYFFPKT

SKY fast & fixed
Plastic burnt-out prosthetic coping
with screw 1.4

REF SKYFFPKK



SKY fast & fixed
Castable prosthetic coping
with screw 1.4
HSL

REF SKYFFPKH

Technical data:
Melting range 1770 - 1800 °C
CTE 9 $10^{-6}K^{-1}$
Material: Pt 90% / Ir 10%
Weight: 0.59 g

SKY fast & fixed abutment 0°
Height 1 mm
with integrated screw

REF SKYFT001

blueSKY

SKY fast & fixed abutment 0°
Height 2 mm
with integrated screw

REF SKYFT002

SKY fast & fixed abutment 0°
Height 4 mm
with integrated screw

REF SKYFT004

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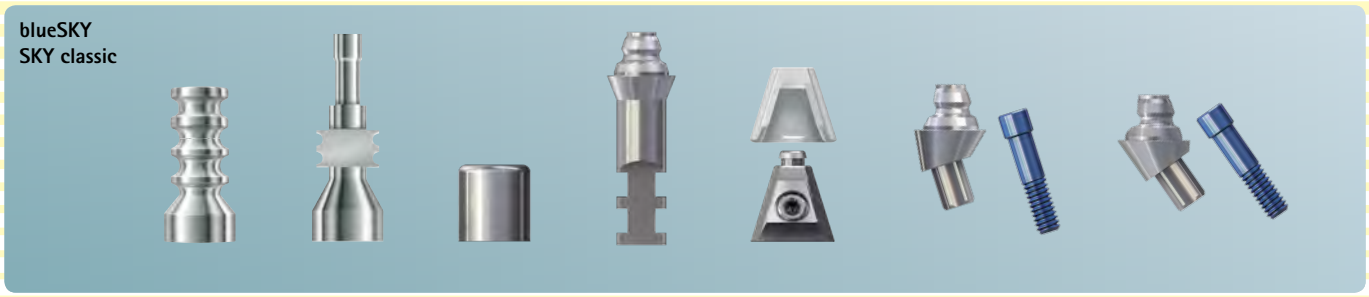
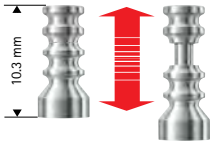
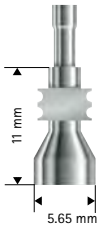




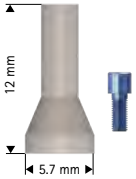
SKY fast & fixed impression coping
Closed tray
with captive screw

REF SKYFF0AK



SKY fast & fixed impression coping
Open tray
with captive screw

REF SKYFFA0L

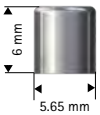


SKY fast & fixed scan coping
Intraoral/extraoral
with screw 1.4

REF SKYFSCIE

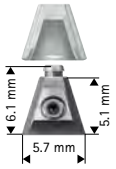
SKY fast & fixed
Laboratory analogue

REF SKYFFTLA



SKY fast & fixed
Gingiva former

REF SKYFFGF2

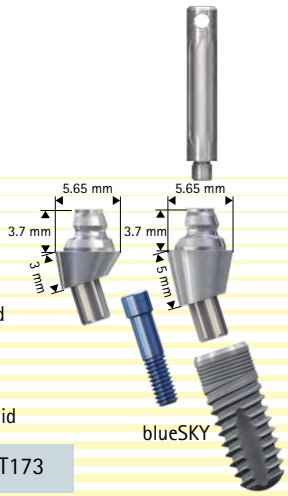


SKY fast & fixed
prosthetic coping screwed transversally
with transversal screw and
plastic modelling aid coping

REF SKYFTPKS

SKY fast & fixed / SKY uni.cone
transversal screw
6 units

REF SKYUFTS9

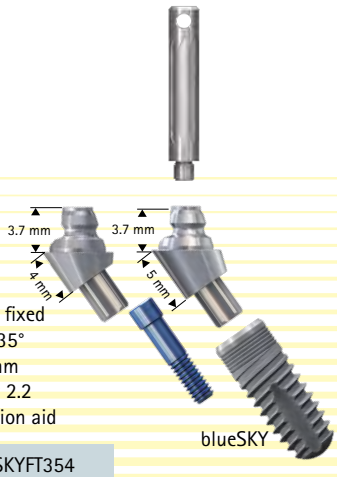


SKY fast & fixed
abutment 17.5°
Height 3 mm
with screw 2.2
with insertion aid

REF SKYFT173

SKY fast & fixed
abutment 17.5°
Height 5 mm
with screw 2.2
with insertion aid

REF SKYFT175



SKY fast & fixed
abutment 35°
Height 4 mm
with screw 2.2
with insertion aid

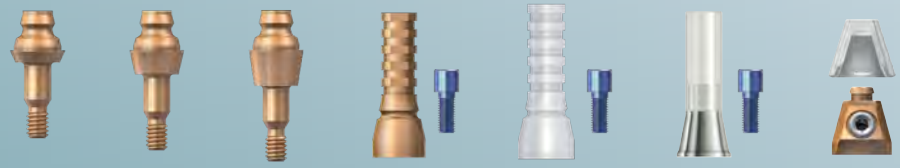
REF SKYFT354

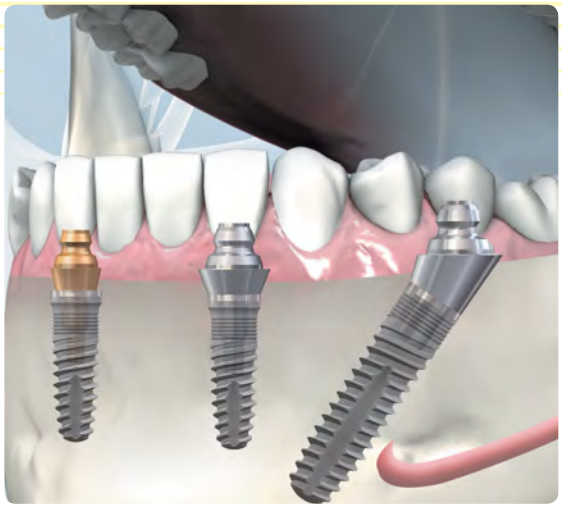
SKY fast & fixed
abutment 35°
Height 5 mm
with screw 2.2
with insertion aid

REF SKYFT355

SKY uni.cone abutment system

narrowSKY
blueSKY
SKY classic

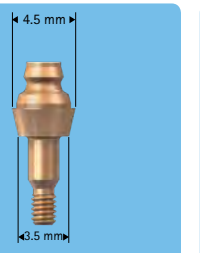




In addition to the SKY fast & fixed abutment system, we now also offer SKY uni.cone abutments with a reduced diameter. Simple and quick high-quality aesthetic restorations can be fitted into atrophied jaws that can be both occlusally and transversally screwed.

The SKY uni.cone components are anodised rose gold for improved differentiation in the patient's mouth and in the laboratory. One typical application for SKY uni.cone is its combination with SKY fast & fixed in the mandible. Implants set posteriorly are attached to the angled SKY fast & fixed abutments and the SKY uni.cone abutments are set on the straight abutments at the appropriate height.

A platform switch is achieved when using SKY uni.cone abutments with blueSKY implants.

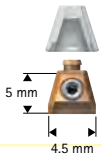


SKY uni.cone abutment

narrow platform

SKY fast & fixed abutment

regular platform



SKY uni.cone
Transversally screwed prosthetic coping
with transversal screw and
plastic modelling aid coping

REF SKYUCPKS

SKY fast & fixed / SKY uni.cone
Laboratory screw M 1.4
grey, 10 units

REF SKYFFLPK

SKY fast & fixed / SKY uni.cone
Screw M 1.4
blue, 6 units

REF SKYFFSPK

SKY fast & fixed / SKY uni.cone
transversal screw
6 units

REF SKYUFTS9

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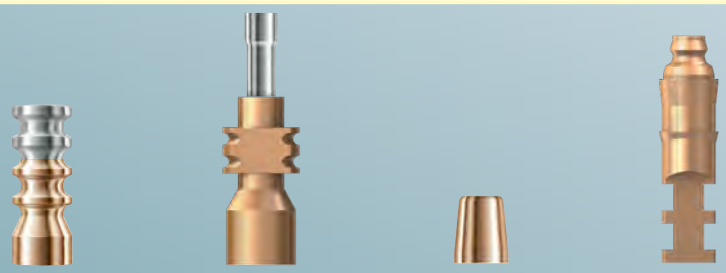
narrowSKY
blueSKY
SKY classic

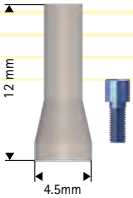


SKY uni.cone impression coping
Closed tray
with captive screw

REF SKYUCAGL

SKY uni.cone impression coping
Open tray
with captive screw

REF SKYUCAOL



SKY uni.cone scan coping
intraoral/extraoral
with screw 1.4

REF SKYUSCIE

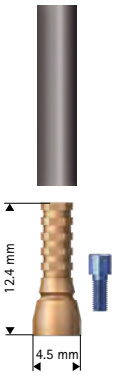
Material: PEEK
Torque: 10 Ncm

SKY uni.cone
Laboratory analogue

REF SKYUCTLA

SKY uni.cone
Gingiva former

REF SKYUCGF2

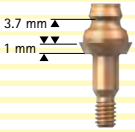


SKY uni.cone
Titanium prosthetic coping
Silicone tubing

REF SKYUCPKT

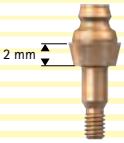
SKY uni.cone
Plastic prosthetic coping
with screw 1.4

REF SKYUCPKK



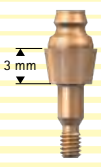
SKY uni.cone
Abutment 0°
Height 1 mm

REF SKYUC001



SKY uni.cone
Abutment 0°
Height 2 mm

REF SKYUC002



SKY uni.cone
Abutment 0°
Height 3 mm

REF SKYUC003

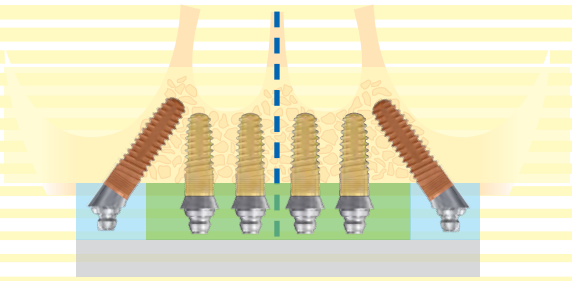
narrowSKY

blueSKY

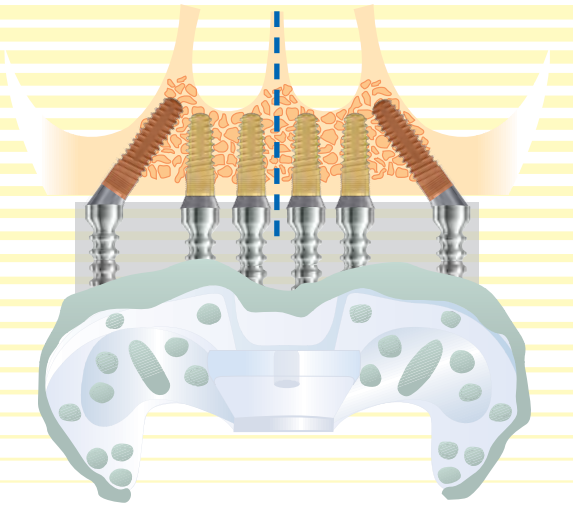
SKY classic

Overview of product use in a normal case

Surgery



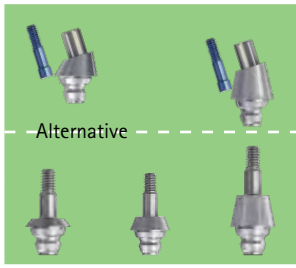
Impression taking



Posterior abutments REF

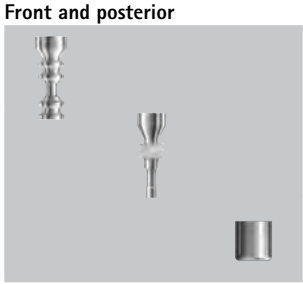
REF	
SKYFT354	2 units
SKYFT355	

Anterior abutments REF



REF	
SKYFT173	4 units
SKYFT175	
SKYFT001	
SKYFT002	
SKYFT003	

Front and posterior REF



REF	
SKYFFOLA	6 units
SKYFFAOL	
SKYFFGF2	

	Ø 3.5	L 10	L 12	L 14	L 16
		bSKY 3510	bSKY 3512	bSKY 3514	bSKY 3516

Maxilla/mandible front — Posterior

	Ø 4.0	L 08	L 10	L 12	L 14	L 16
		bSKY 4008	bSKY 4010	bSKY 4012	bSKY 4014	bSKY 4016

Posterior abutments REF

REF	
SKYFT354	2 units
SKYFT355	

REF

REF	
SKYFFOLA	2 units
SKYFFAOL	
SKYFFGF2	

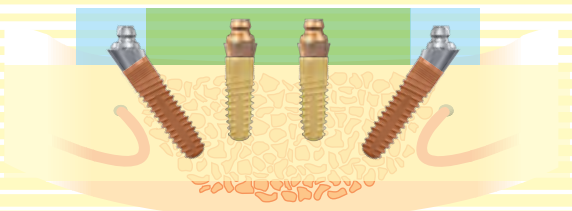
Anterior abutments REF

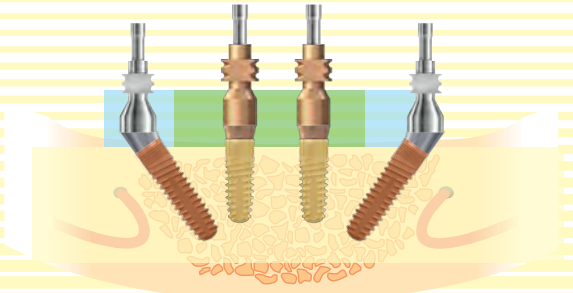
REF	
SKYUC001	2 units
SKYUC002	
SKYUC003	

REF

REF	
SKYUCGF2	2 units
SKYUCAGL	
SKYUCAOL	

Posterior Front Posterior





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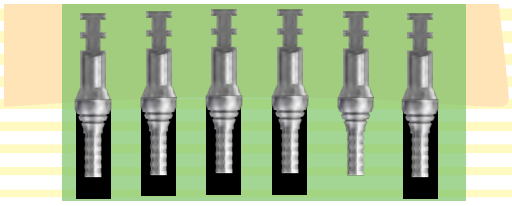
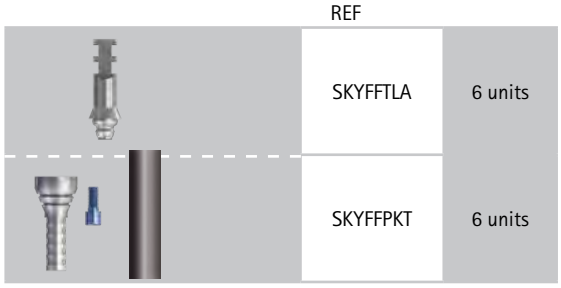
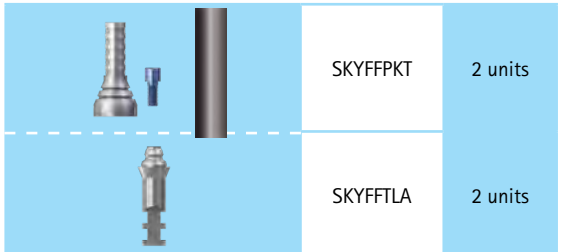
Temporary restoration





REF		
SKYFFTLA		6 units
SKYFFPKT		6 units

Ø 4.5	L 08	L 10	L 12	L 14
	bSKY 4508	bSKY 4510	bSKY 4512	bSKY 4514



REF		
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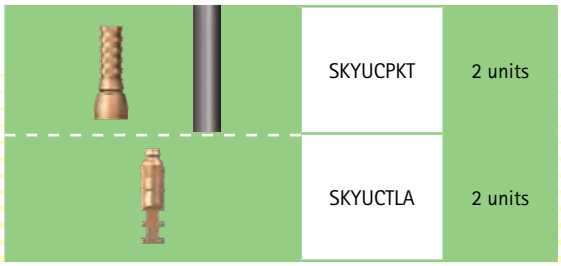
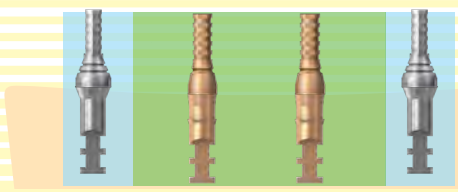
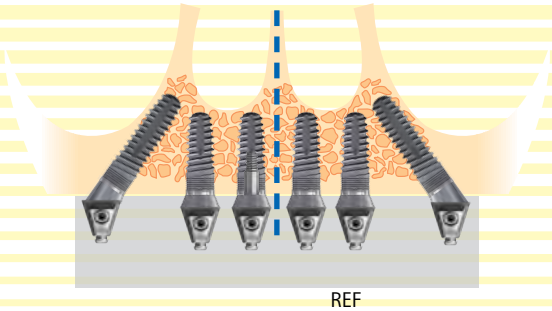
SKYFFTLA		2 units

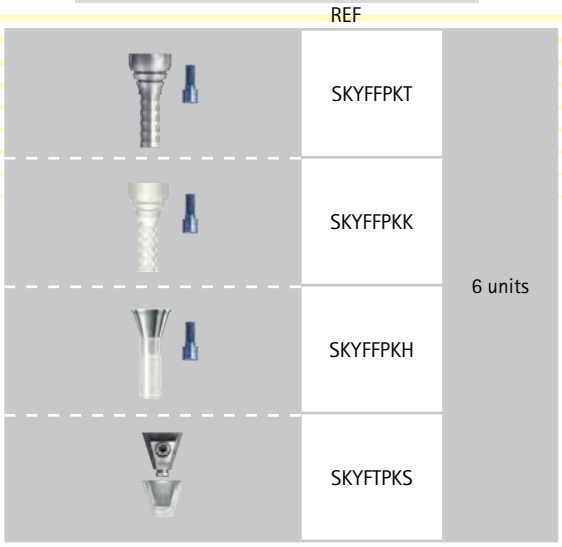


SKYUCPKT		2 units
SKYUCTLA		2 units



Final restoration





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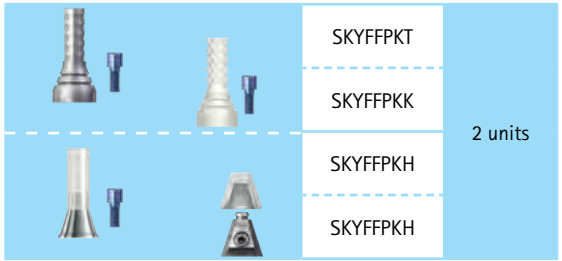
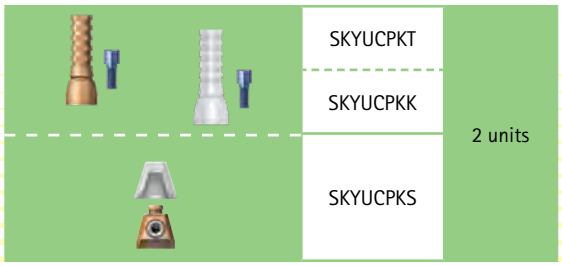
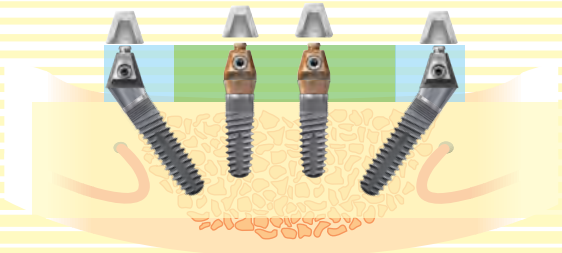
SKYFFPKK		
SKYFFPKH		
SKYFTPKS		



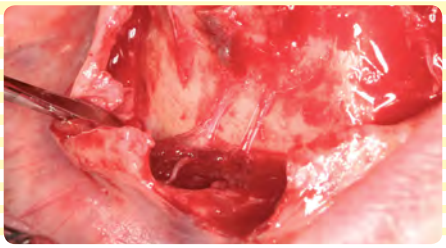
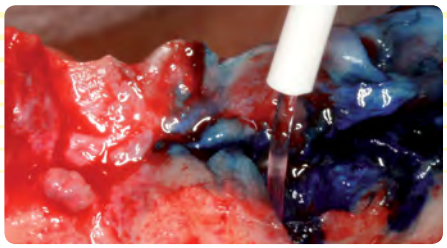
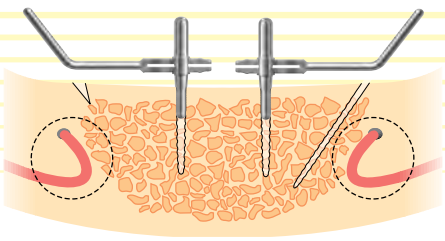
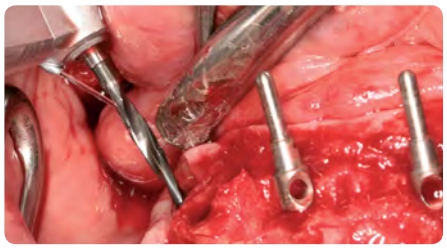
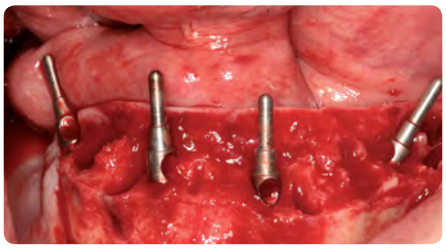
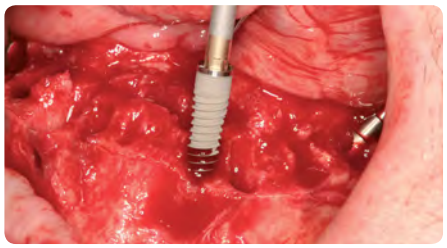
REF		
SKYFFPKT		2 units
SKYFFPKK		
SKYFFPKH		
SKYFFPKH		

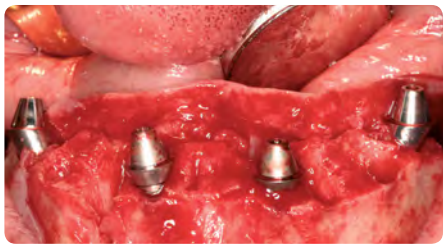
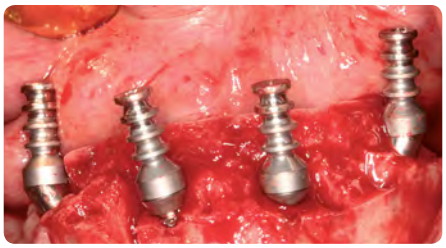
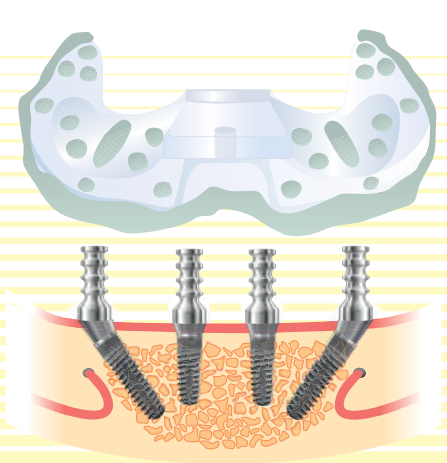


SKYUCPKT		2 units
SKYUCPKK		
SKYUCPKS		



Surgical protocol – Freehand implantation


Images: Dr. Steffen Kistler, Dr. Frank Kistler, Dr. Georg Bayer, Landsberg

The surgical protocol for SKY fast & fixed treatment is carried out in a standardised manner to a large extent. Surgical planning is carried out based on an accurate analysis of the anatomical conditions. After extraction of the residual dentition that is not worth saving, inflammatory tissue is thoroughly removed and the bone is evened out.

Infection management is also important, particularly during simultaneous removal of the last periodontal damaged abutment teeth. The antimicrobial photodynamic treatment according to the HELBO procedure is established for disinfection and analgesic prophylaxis after the procedure.

The nerve is depicted in the mandible. Beginning with the middle of the jaw, the central implants are fitted first. The parallel pins help with orientation when inserting the posterior implants with an angulation of 35°. The 0° and 35° abutments are subsequently screwed in. After screwing in the abutments, the wounds are closed. Taking an impression is carried out in a single phase at abutment level using a closed tray.

The gingiva former subsequently prevents swollen soft tissue from covering the abutments. Determination of the jaw relation is carried out using a mushbite. A second mushbite, which is taken before commencing the implantation, and a situation model serve as controls.

The patient is able to recuperate in the relaxation room until his fixed temporary restoration is inserted.

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Manufacture of a temporary restoration











An essential feature of the SKY fast & fixed treatment is the simple and secure manufacture of the fixed temporary restoration.

In combination with the visio.lign veneering system from bredent, the dental technician is able to manufacture a suitable temporary restoration in a short time, without requiring extensive preparations.

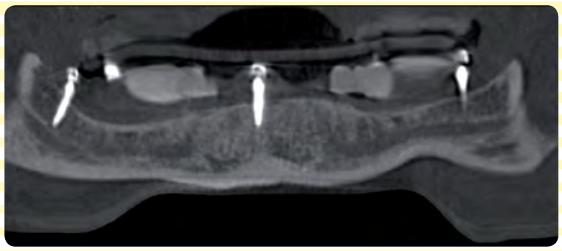
After manufacturing and shaping, the restorations are created using visio.lign veneers. Due to the design of the veneers, very little manual reworking is required. The set-up is transferred to a matrix. After conditioning of the veneers, the body of the bridge is completed.

When manufacturing the restoration, place holders ensure that only the prosthetic coping is integrated. The others are set in polymerising resin in the mouth free of tension later. The restoration is then polished in the laboratory.

On the day of surgery, the patient is able to leave the practice with a fixed and attractive temporary restoration and can immediately engage in social interactions without significant restrictions.

! The procedure described in this document must only be carried out using treatment components and instruments from the bredent group. Please observe the General Terms and Conditions of Business and ordering information from bredent or bredent medical. Subject to changes.

Preparation and planning



mini¹SKY

Documentation of a template-guided implantation on mini¹SKY FRP supported scan and OP templates, planned with SKYplanX.

The starting situation

Patient with edentulous mandible and low residual bone height over the nerve.

Fixed reference point (FRP)

3 mini¹SKY FRP implants are inserted into the mandible to fix the scan and drilling templates. These implants also serve to stabilise the interim prosthesis.

X-resin

Manufacture of the scan template

The scan template is created using the radiopaque plastic X-resin CT/DVT on the basis of the prosthetic set-up, so that the prosthetic requirements can also be taken into account during implant planning.

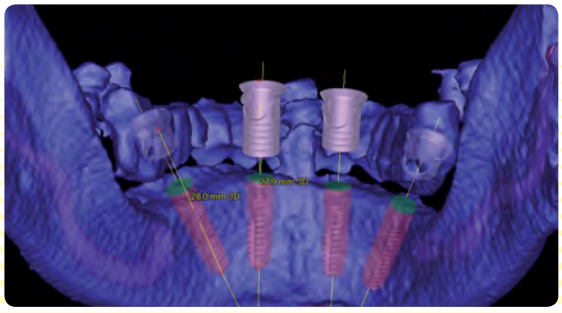
mini¹SKY
Planning matrix

The mini¹SKY planning matrices are incorporated into the scan and drilling templates to enable them to then be fixed securely and firmly to the mini¹SKY FRP implants.

3D planning

The implant position can be optimally designed and planned to aesthetic and prosthetic specifications in the SKYplanX implant planning software, taking into account the amount of bone available.

3D resin



3D resin

Special plastic for the manufacture of drill templates in the field of dental implantology. Can be autoclaved as it possesses short-term resistance to heat up to 138 °C, which prevents the penetration of bacteria and pathogens into the drill wound and benefits healing of the implants.

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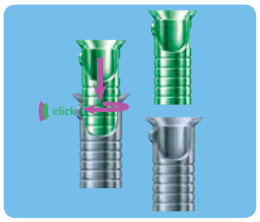
Surgery and temporary restoration

Manufacture of the drilling template

For every implant planned in the implant planning software SKYplanX, parameters are calculated which describe the exact position of the implant to a defined plane of reference. These parameters can be transferred precisely using the SKY5X transfer table to position the SKYplanX drill sleeve appropriately in the drilling template.

mini[1]SKY FRP implants can be used to ensure the drilling template is positioned securely in the patient mouth. This is particularly recommended for edentulous jaws.



Drilling guide

The SKYplanX drill sleeve system with depth stop ensures secure guiding of the drill in terms of direction and depth. The window mounted in the SKYplanX drill sleeve facilitates insertion of the drill even in narrow space conditions.

Fitting of the temporary restoration

By using mini[1]SKY FRP implants, it is also possible to position the temporary restoration securely and in the correct position after it has been manufactured, prior to the operation, on the basis of the drill template. The titanium prosthetic coping can be fixed with no tension using Qu-resin. After removing the excess and polishing, the temporary restoration is fitted.

Documents for 3D planning:

- SKYplanX REF 269 0D
- SKYplanX instruction manual for drills and sleeves REF 292 0D
- mini[1]SKY FRP REF 298 0D
- Documentation for template-guided implantation (Drs. Margit & Michael Weiss and Guido Gäßler (MDT)) REF 000 336 0D

Freehand implantation in the mandible

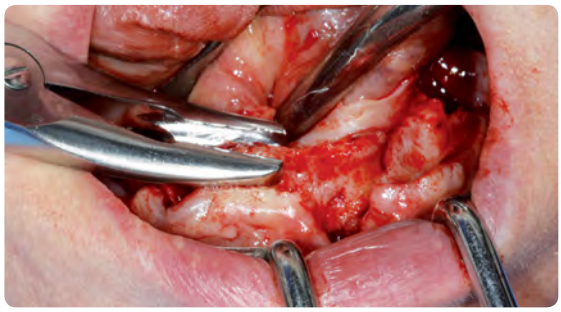
Surgical procedure

The surgical protocol corresponds, in principle, with the SKY implant system. The individual steps are described below as an example.

The planning is carried out in 3D format using a DVT scan. The procedure is carried out freehand.

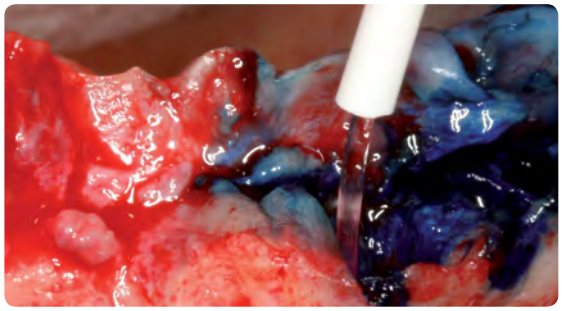
Initial situation:

Residual dentition not worth saving.



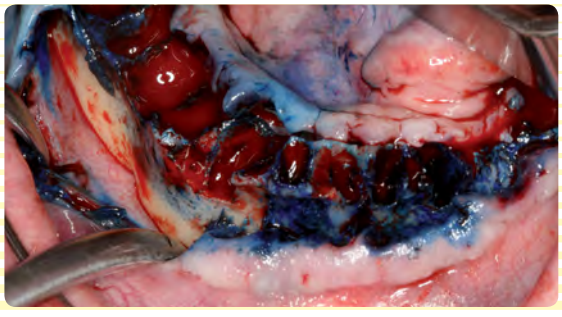
After extraction, inflammatory tissue is thoroughly removed and the bone is evened out.

HELBO *Blue Photosensitizer®*

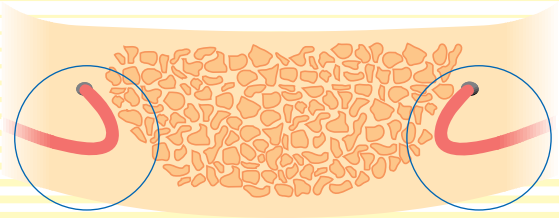


Infection management is also important, particularly during simultaneous removal of the last periodontal damaged abutment teeth. The antimicrobial photodynamic treatment according to the HELBO procedure is established for disinfection and analgesic prophylaxis after the procedure.

HELBO *TheraLite Laser®*



Visualisation of the mandibular nerve



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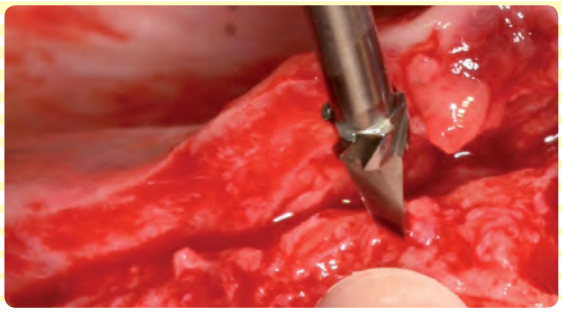
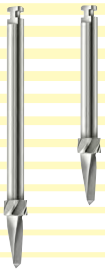
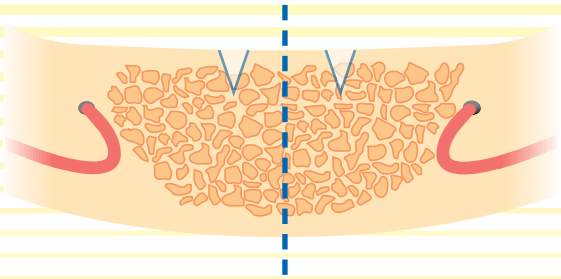
Surgical procedure

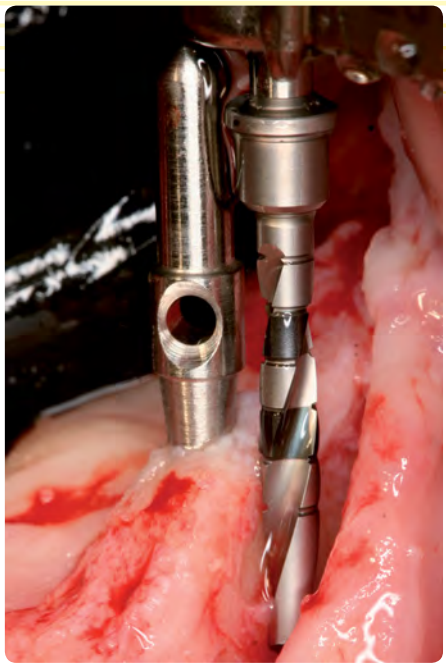


Pilot drill
800-1,000 rpm



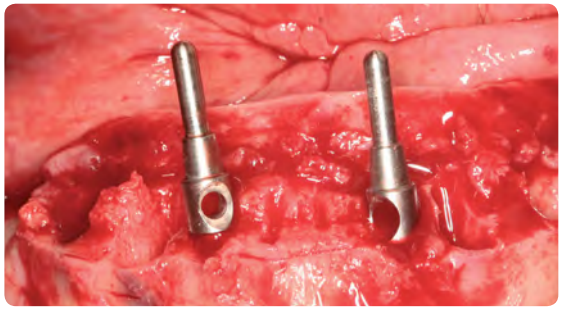
Determination of the midline and the position of the first implant using the pilot drill





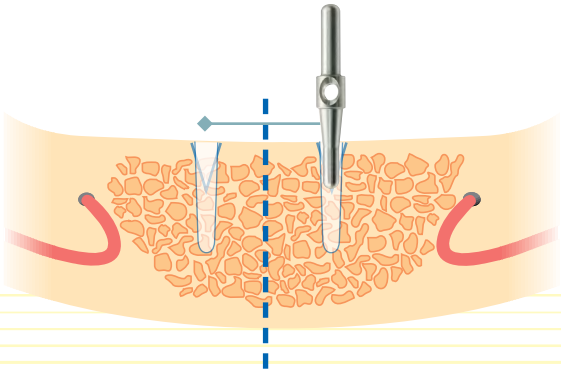
Twist drill
800-1,000 rpm

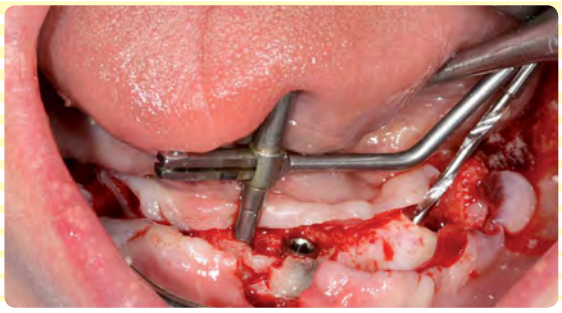
The 2.25 mm diameter twist drill with depth markers can be used with or without depth stop for straight positions. The parallel indicators are positioned after each drilling for better orientation.



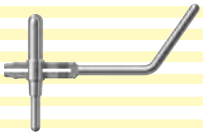
Parallel indicators

Position of the vertical implants

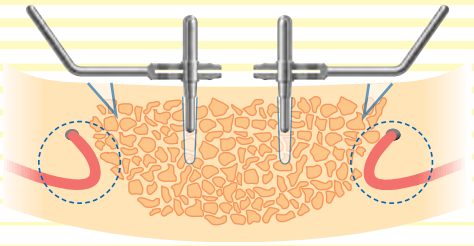


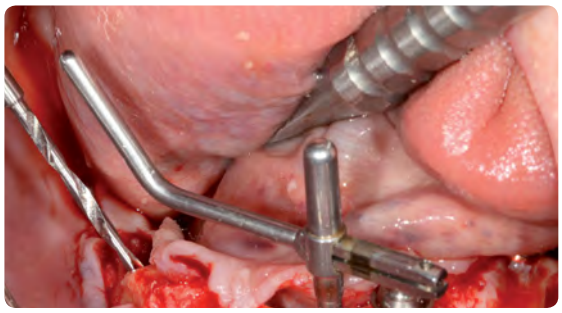


Angulation aid



The posterior implants are fitted using almost the same intervals as in the front. The angulation aid shows an angle of 35°. It assists orientation when positioning and angling the implants.





Twist drill 1.3
800-1,000 rpm

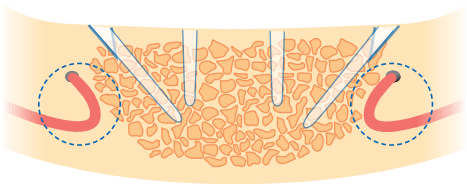
Drilling of the implant cavity paying attention to the mandibular nerve.

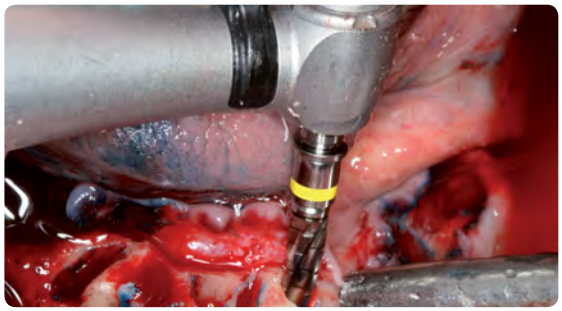
To be noted when preparing the maxilla:

Orientation on the maxillary sinus

- Pilot hole based on planning and measurements
- Puncturing and probing

Taking of a control image with a gauge is recommended after pilot drilling.





Twist drill
800-1,000 rpm

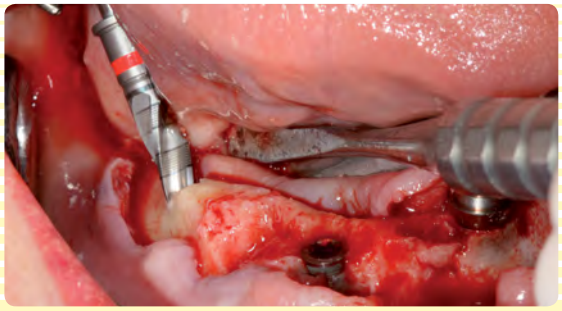
Recommendation:

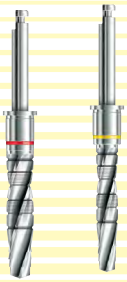
Determine the depth and direction between 25° - 45° using the 1.3 mm twist drill and take a control image.

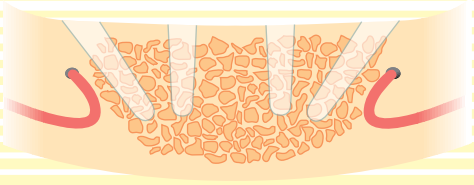
In accordance with the surgical protocol for SKY implant systems, the cavity is then enlarged:

- 2.25 mm twist drill with short SKYDT23K and long shaft SKYDT23L
- Final drill for soft and medium-hard bones SKYD3435
- Final drill for soft and medium-hard bones SKYD3440

Final drill for soft and medium-hard bones
300 rpm







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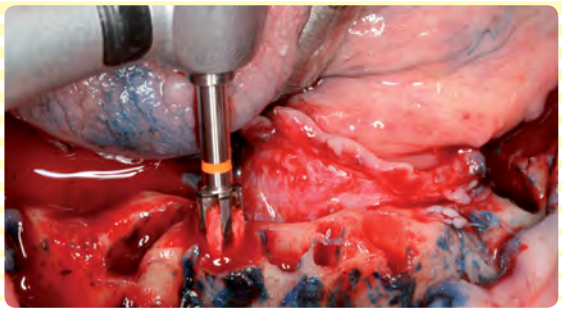
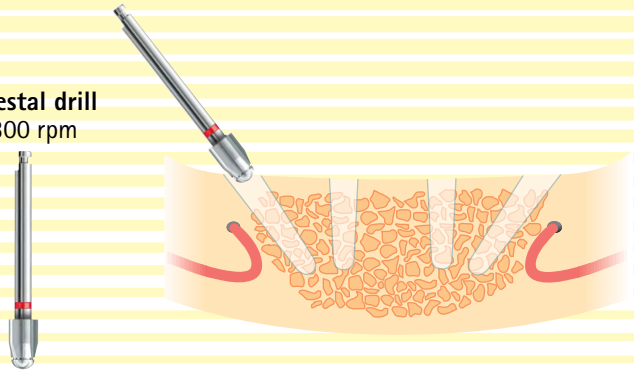


Crestal drill
300 rpm



Bone burr
800-1,000 rpm

The cortical region is prepared using the appropriate crestal drill.

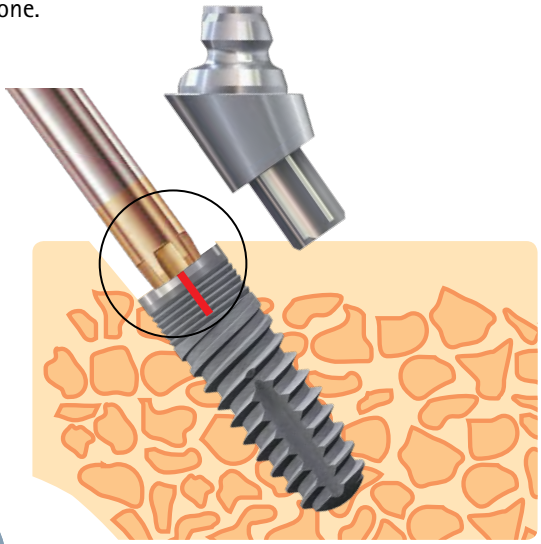
SKY fast & fixed abutments are wider than the prosthetic platform. To ensure correct positioning of the abutment, disruptive crestal bone must be removed using the bone burr.

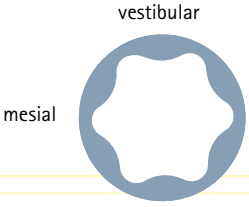
The recommended primary stability for blueSKY implants is in the region of 30 – 45 Ncm.

In the case of higher torque, the implant must be unscrewed and the cavity enlarged with the appropriate final drill for hard bone.

SKY TK screwdriver

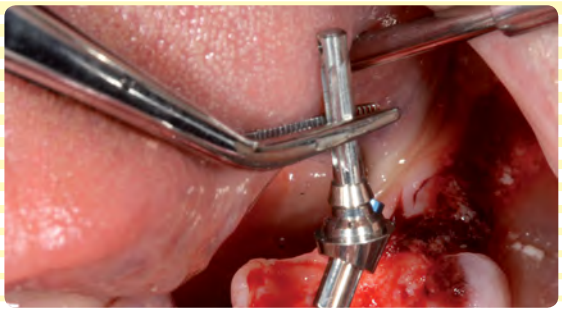
The mesial implant edge should be at the level of the bone.

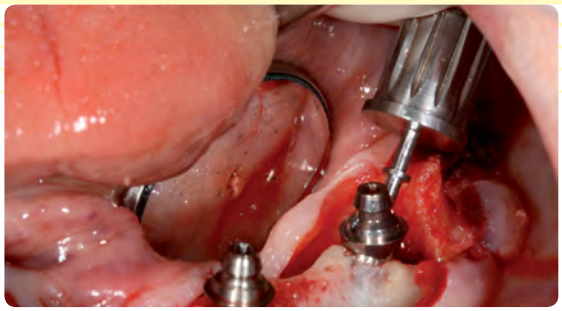


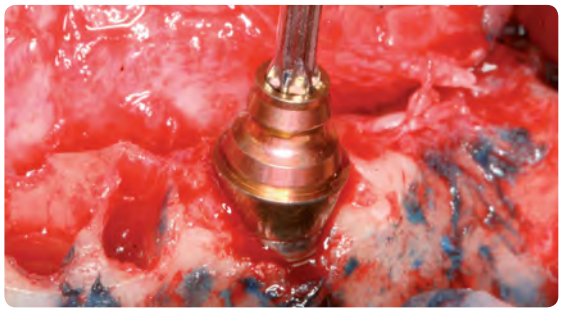


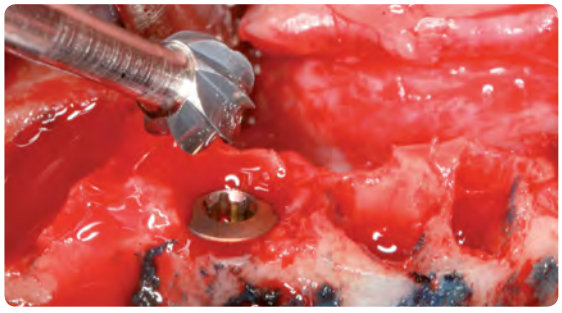
The position of the Torx® head in the implant is important for the alignment of the screw channel in the 35° abutment, i.e. it needs to be checked when inserting the implant. The Torx® position is clearly identifiable at the insertion instrument.

Surgical procedure

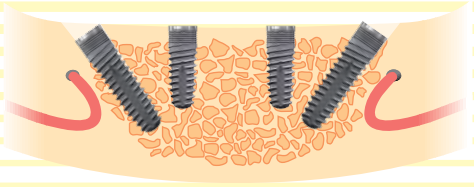








SKY fast & fixed
35° abutment with
insertion aid



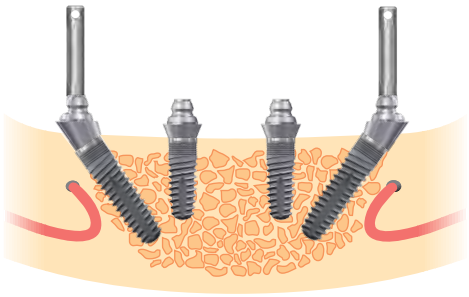
Inserting the abutments

An insertion aid makes inserting the angled abutments easier. At the same time, they permit the position of the abutments to be checked, which makes rapid correction possible.

Despite the six possible positions, if no parallel position is possible, adjustment of the implant using an insertion tool is recommended. The abutment is subsequently fixed using the blue standard screw.

SKY fast & fixed
Abutment 0°

SKY uni.cone



The straight abutments with integrated screw are placed on the screwdriver and can therefore be inserted securely.

Abutment torque 25 Ncm!

SKY uni.cone abutments can also be used instead of straight SKY fast & fixed.

The corresponding SKY uni.cone components are used in the subsequent prosthetic steps!

If the abutment cannot be fitted flush on the abutment, remove it again and screw in the cover screw. The cavity can now be prepared again in the crestal region without damaging the implant platform.

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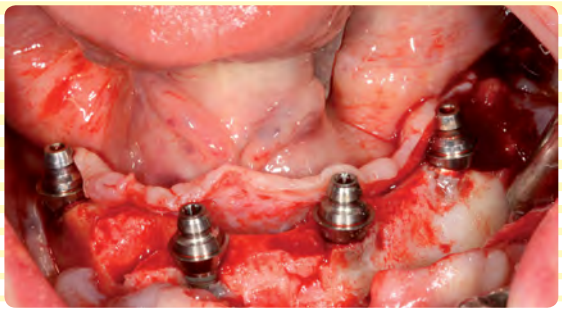
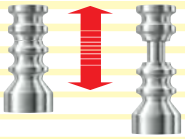
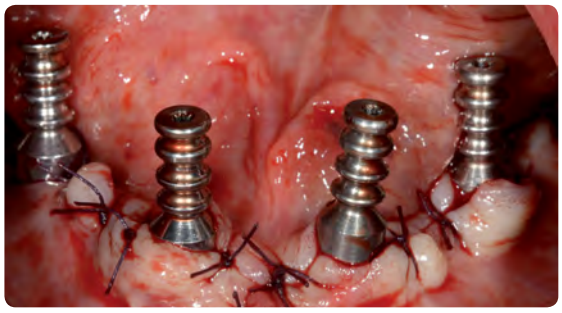
Impression taking and bite registration



SKY fast & fixed
Impression coping
Closed tray



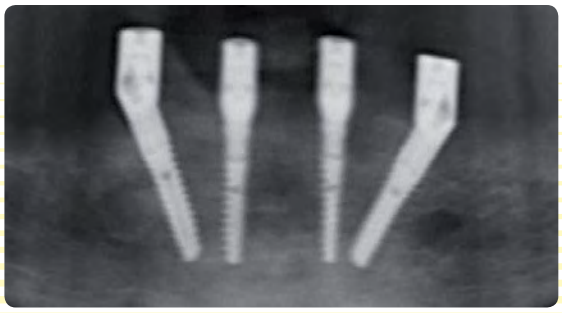
SKY fast & fixed
open tray

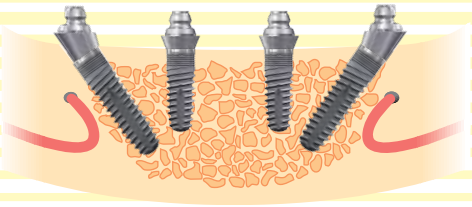


breciform D
Single-use impression tray

brecision implant heavy

brecision Putty soft

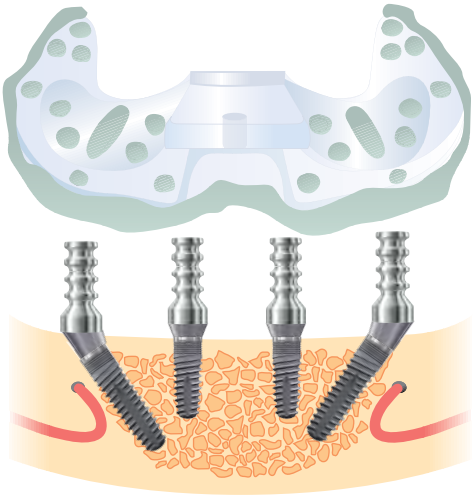




Screwing on of impression copings

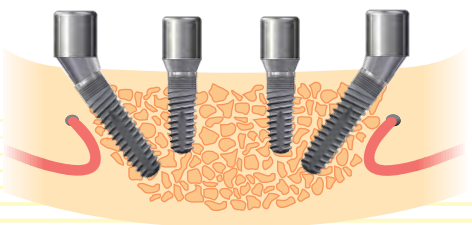
Before the wound is closed with a suture, the impression coping is screwed on. Impression copings for open impression taking can also be used when taking an impression for a temporary restoration.

Closed impression taking with the customisable breciform D single-use impression tray is recommended. It is important for the dental technician to include the palate and tuber region in the impression.



Bite registration

Bite registration is carried out over the impression coping when it is possible in terms of height. A mushbite prior to commencement of the operation is useful as a check after articulation of the model.

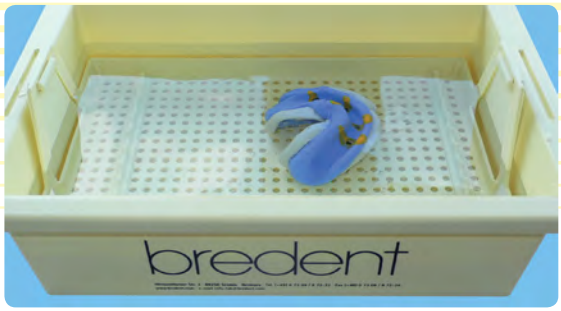


Until the patient is fitted with the temporary restoration, the SKY fast & fixed gingiva former offers the patient excellent comfort and prevents swelling gingiva from covering the abutment.

! When taking a control image after the operation, correct positioning of the abutment is to be ensured! The abutments usually remain screwed in, even in final restorations.

New manufacture of a temporary visio.lign restoration

Fitting of the temporary restoration is ideally carried out on the day of implant insertion or within 72 hours at the latest for immediate loading. Adjustment of a prepared restoration to the implant positions and mucosa conditions is usually time consuming. Revision of existing prostheses is also time-consuming and without knowledge of the quality of materials and processing, the risk of breakage is high and it should therefore be avoided. Experience has shown that new manufacture of a temporary restoration as described below represents the recommended method.



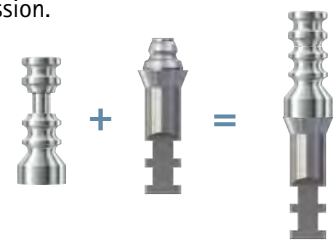
Dentaclean

Disinfection

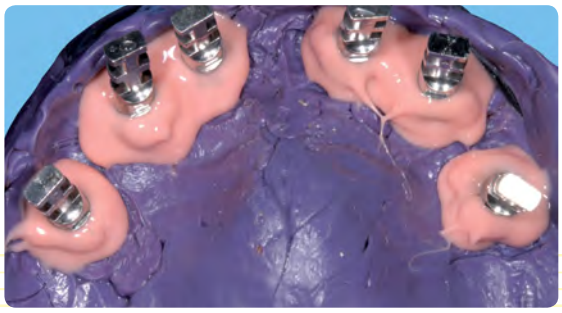
Dentaclean impression and prosthesis disinfectant takes effect in just one minute!

Repositioning of the impression abutments

After cleaning the impression copings, they are screwed onto the laboratory analogues and repositioned in the impression. A thin moistening layer of Vaseline facilitates repositioning of the impression copings in the impression.



The analogue corresponds to one implant with a screwed on abutment.



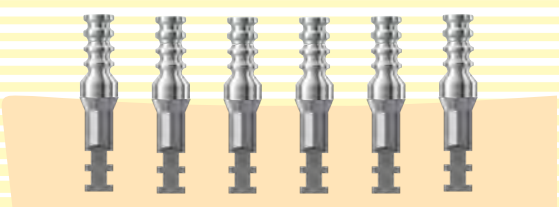
Multisil-Mask soft

Gingiva mask

The analogues are coated with Multisil-Mask soft. This prevents chipping of the plaster around the abutments and therefore the loss of important information regarding the gingival situation.

Exakto-Rock S

Exakto-Rock S, a rapid curing, dimensionally-stable, formaldehyde-free super-hard class IV plaster, is recommended for the manufacture of the plaster model.



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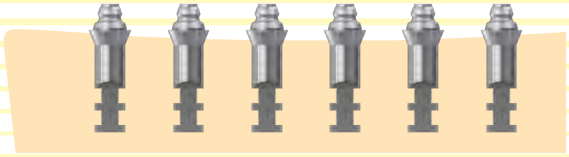
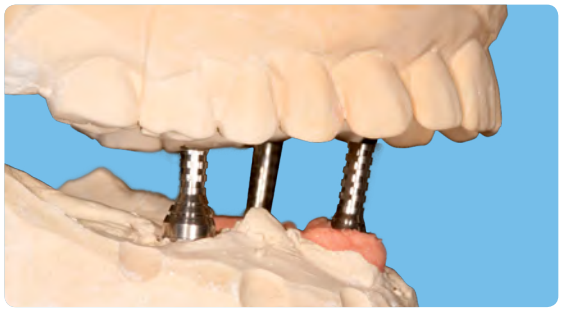
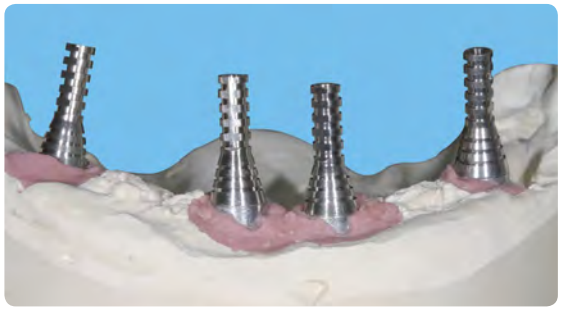
Creation

The models are created using a mushbite. A second mushbite over the palate and tuber region, taken before commencement of the implantation serves to check the articulation.





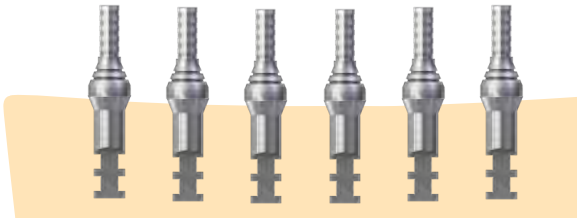
The analogues stand straight regardless of the angle of the SKY fast & fixed abutments used for the patient. The position of the abutment shoulder is transferred. Changing the angle is only possible by changing the abutment and taking of another impression!

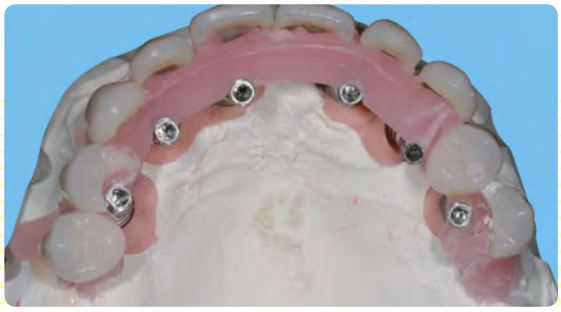


SKY fast & fixed titanium prosthetic coping

Adjustment of the prosthetic copings

The impression copings are unscrewed and replaced with prosthetic copings. The height is checked in the articulator and, if necessary, shortened using a separating disc.





Setup

The setup is produced using novo.lign veneers from the visio.lign veneer system.

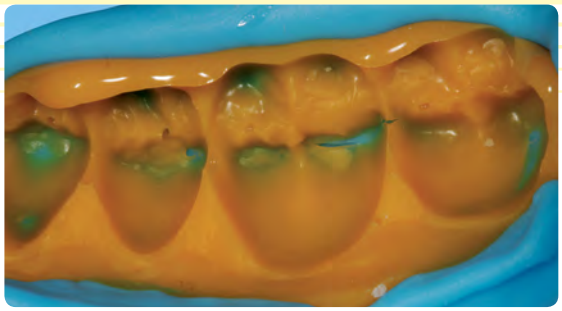
! In general, temporary restorations for immediate loading are manufactured without extensions.

New manufacture of a temporary, fixed restoration

Haptosil D

Setup

The 1 mm narrow thickness of novo.lign veneers enable rapid setup and provide enough space for a stable bridge body.



Matrix

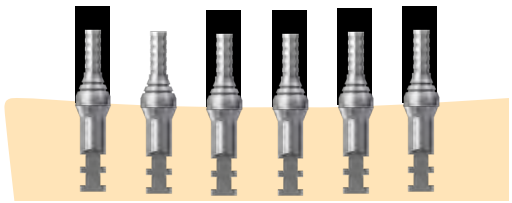
A matrix is taken from the setup using Haptosil D.

If a soft silicone is applied directly to the teeth in advance (visio.sil fix), the approximal spaces are well filled and the veneers hold well in the matrix without adhesive.

To ensure positioning of the restoration with no tension, only one prosthetic coping is incorporated on the model. The other three are fixed into the patient's mouth, similarly to...

visio.sil fix

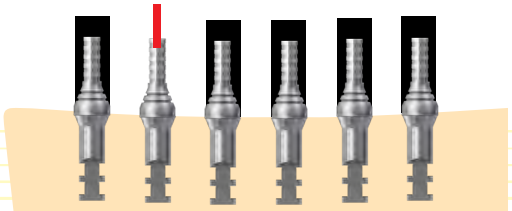
Place holder



...bonding using galvano technology. Silicone tubes are pulled over the prosthetic copings as a place holder. These are contained in the prosthetic copings packaging.

In this case, the screw channel was closed using a long screw.

Closure of the screw channel



The screw channel is closed around the prosthetic coping that has been processed. The work is prepared for completion.

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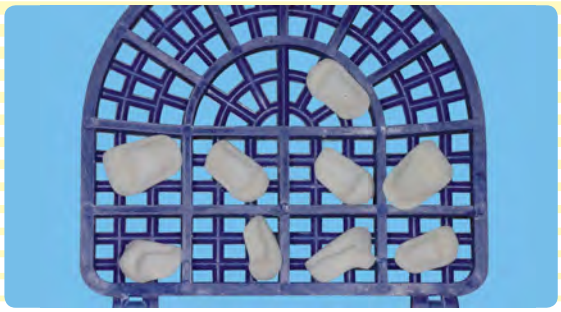


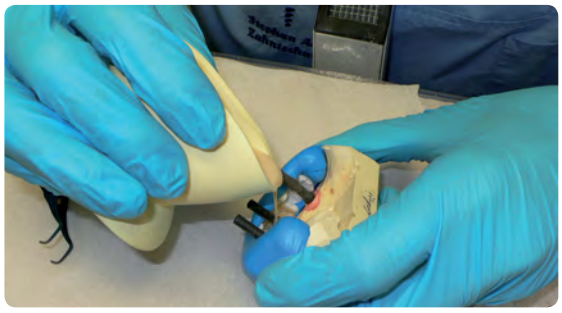
Conditioning of novo.lign veneers

After they are cleaned, novo.lign veneers are blasted using 110 my blasting abrasive at 2.5 bar on the inside, and the resulting dust is removed using oil-free compressed air.

Steam blasting would leave a moisture residue and compromise bonding.

Using bredent adhesives or visio.link increases the bonding strength.

top.lign breformance
Liquid Cold Curing



Filling of the bridge body

After insulating the model, the matrix is fixed to the model.

The bridge body is filled with the cold curing top.lign breformance and polymerised in the pressure pot.

top.lign breformance Liquid Cold Curing is particularly characterised by its elasticity, fracture resistance and permanent colour stability.

Posi-boy

The perfect "third hand" to hold all models in any desired position.

The Posi-boy makes processing of cold polymerising plastics easier. The heavy metal base guarantees a fixed stand and the correct positioning, even in the pressure pot. As a result, the model is prevented from tipping over and the plastic from running out.

Completing the restoration

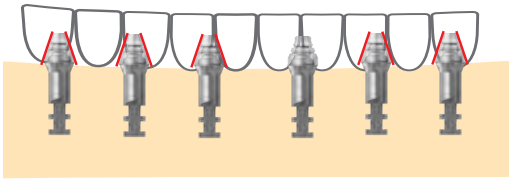
The silicone tubes can be simply pulled off. The screw of the coping affixed to the bridge body is loosened, and the restoration is removed.

The restoration is then processed and the occlusion is checked in the articulator.

Matrix drill

Using the bredent matrix drill, the space for the prosthetic copings is enlarged for a passive oral position.

Preparation for the patient



The restoration is fixed using the processed prosthetic coping. Tension-free oral fixation is possible due to the free space created by the place holder.

To make application of the Qu-resin easier, additional lateral grooves are ground into the top.lign breformance.

After the restoration is finished, all the parts are cleaned and remounted on the model.

Qu-connector

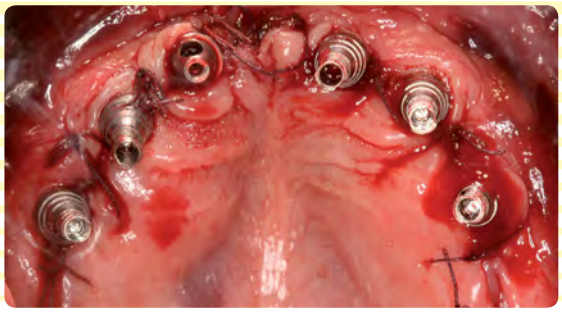
Qu-resin is a rapid-curing, autopolymerising prosthetic system plastic that is available in pink or dentine. It can be used both inside and outside the mouth. Qu-resin is available individually or in a set together with Qu-connector.

Prior to polymerisation of the remaining prosthetic copings, Qu-connector is applied to top.lign breformance and subjected to light polymerisation.

Qu-resin only bonds with top.lign breformance at the sites to which Qu-connector is applied, therefore any excess can be more easily removed.

The SKYFFLPK laboratory screws are generally used for work in the laboratory. The screws contained in the prosthetic copings pack are suitable for clinical use.

Insertion – practice



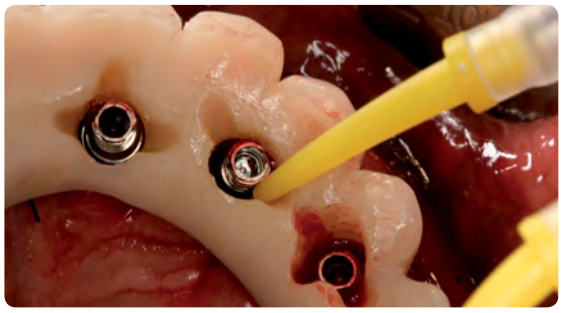
Tightening of the prosthetic copings

The impression copings and the gingiva former are exchanged for prosthetic copings. The position of the prosthetic copings that are already fixed in the restoration remain free.

Fixing of the restoration

The restoration is attached and tightened with the integrated prosthetic coping. To position the restoration with no tension, there must be no contact between the bridge body and the prosthetic copings that are not yet fixed.

The gingiva must not be compressed in doing this.



Qu-resin

Processing of the prosthetic copings with Qu-resin

Qu-resin is easier to apply thanks to the laterally ground grooves. After a brief curing period, the occlusion can be checked and the restoration removed for final polishing.

Polishing

Particular attention should be paid with a convex design and conscientious high-gloss polishing of the basal region for reasons of hygiene.

Products for the manufacture of the temporary bridge

The bredent group recommends the following products for simple and precise manufacture of the temporary restoration, as they are optimally designed for the requirements of SKY fast & fixed treatment.

	Item	REF	Packaging unit
	**breciform D range** Impression tray - single use Mandible/maxilla: S, M, L, XL	580 UOTS S	100-piece range per 10 impression tray pieces 10 pieces occlusal triangular stop 10 pieces occlusal bar stop
	**brecision implant heavy** Blue impression material with improved mixing cannula	580 BH38 0	1 x 380 ml 5 x dynamic mixer 1 x bayonet ring yellow
	**brecision Putty soft** Kneading silicone for oral use Kneadable base material	580 0002 4	3-piece set 250 ml base grey 250 ml catalyst white 2 measuring spoons
	**Dentaclean** **Impression and prosthesis disinfection**	520 0100 6	1000 ml concentrate
	**Exakto-Rock S** Synthetic super-hard class IV plaster, ivory	570 0SE5 2 570 0SE5 1 570 0SE5 0	1 x 2 kg 5 x 2 kg 10 x 2 kg
	**visio.sil fix** High-definition matrix silicone	540 0130 0	50 ml
	**Haptosil D** Kneading silicone for the laboratory Component A + B Component A + B	 540 0118 0 540 0119 0	 2 x 1,300 g 2 x 7,500 g
	**Matrix drill**	330 0078 0	1 piece
	**Qu-resin** Rapidly-curing, autopolymerising prosthesis repair plastic	540 0116 2	50 ml
	**top.lign breformance** A2 dentine material A3 dentine material Enamel 1 cutting glass. top.lign breformance liquid cold	 bre DA20 1 bre DA30 1 bre EN10 1 bre lcq0 1	 25 g 25 g 25 g 50 ml
	**Abraso Star K50 polishing paste** **Round brush Rodeo** 18 mm diameter **Abraso-Starglanz high-shine polishing paste**	520 0016 1 350 0096 0 520 0016 3	320 g 15 pieces 2 x 50 ml tube
	**Setup wax** Range SW 3, 4, 5	430 0149 0	220 g
	**novo.lign veneers** Please request our design selection brochure!	000 2020 D	1
	**Posi-boy** Model positioning base	360 0101 0	1 piece

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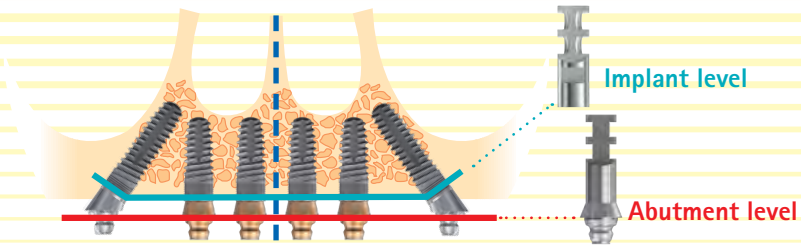
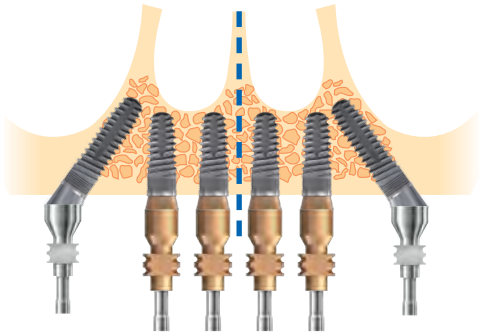
Taking an impression at abutment and implant level

The final restoration can be carried out using the SKY fast & fixed abutments at abutment level. In the event that final restoration is planned for implant level, additional SKY implant systems can be selected.



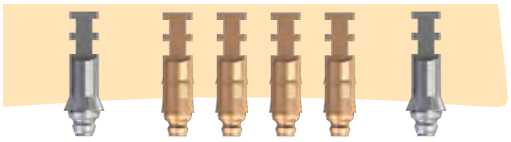
If the final restoration is carried out on this abutment level, no additional abutments are required. Exchange of the abutments is not required. This reduces the amount of work required and the use of materials, whereby time and money can be saved. Moreover, the gingiva attached to the abutment is not traumatised again.



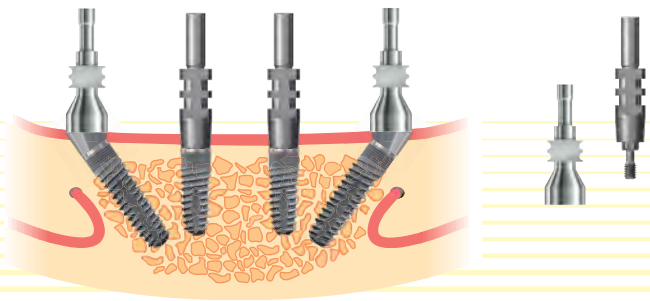
When taking an impression with SKY fast & fixed and SKY uni.cone impression copings, the position of the rotationally symmetrical abutment shoulder is transferred.

The SKY fast & fixed or SKY uni.cone laboratory analogue is used to manufacture the model. The laboratory analogue corresponds to the implant with screwed abutment.

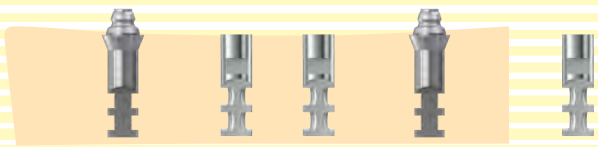
The construction is manufactured according to the manufacturing of the model with SKY fast & fixed or SKY uni.cone prosthetic copings.



Changing the abutment is not possible using this procedure, as the implant interface, the position of the Torx® and the implant shoulder are not transferred.

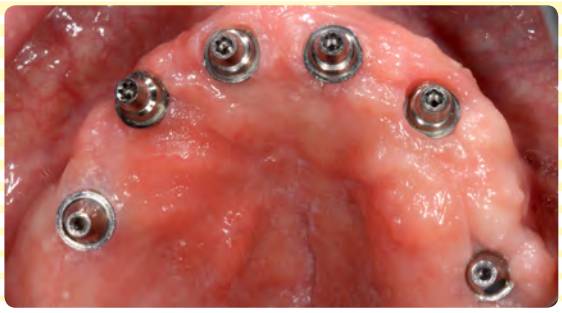


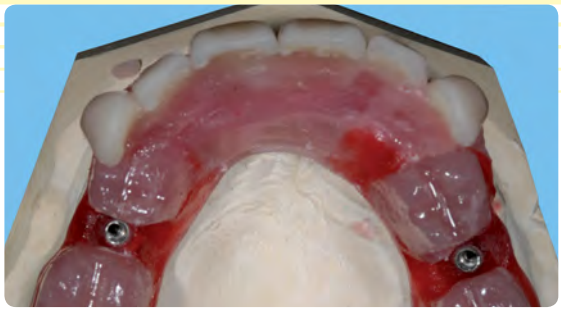
If the option to change the abutment is to be retained, the impression must be taken with the SKY impression abutments at implant level. Another height, angle or change of SKY fast & fixed to SKY uni.cone can thus be facilitated on the model.

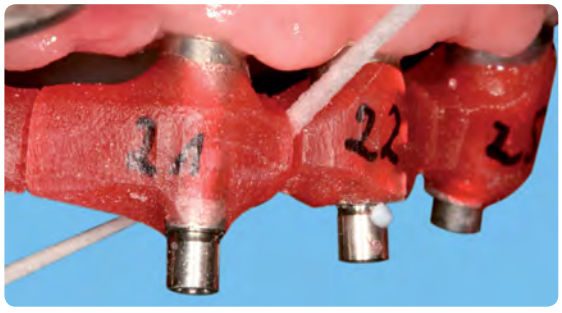


Taking an impression at abutment level is recommended with 35° SKY fast & fixed abutments due to the severe angulation, as clamping by the parallel implant interface can occur when removing the impression if the impression is taken at implant level.

Partially removable, metal-reinforced restoration







SKY fast & fixed impression coping
open tray

10 Ncm

A metal-reinforced restoration with materials from the visio.lign veneer system is an economic and permanent aesthetic restoration with outstanding security and stability properties.

If SKY fast & fixed abutments are to be used in the temporary as well as the final restoration, it is important that the selection of abutments is designed during the operation in such a way that no aesthetic problems occur in the final restoration, e.g. SKY uni. cone abutments in the front of the maxilla or SKY fast & fixed angled abutments 17.5°.

Initial model

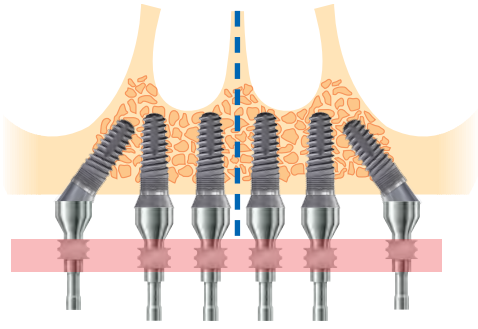
The bite registration and the individual tray are prepared with an initial model using an alginate impression.

Bite registration

A plastic base plate is fixed to two terminal SKY fast & fixed abutments. Oral positioning is therefore supported by bone and not mucosa. An anterior setup provides an initial idea of the aesthetics.

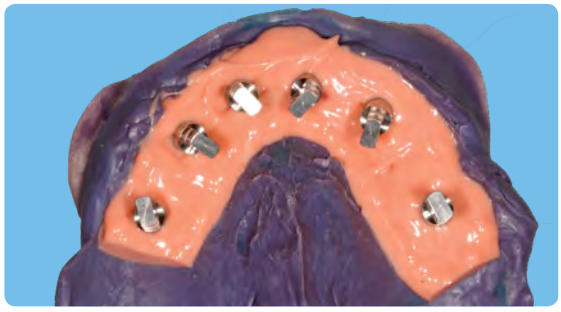
Open impression taking

The SKY fast & fixed impression copings for open impression taking are already interlocked with a plastic bar in the laboratory and separated again. Marking of the position helps to avoid mixups.



Taking an X-ray image to check the correct positioning of the impression copings is recommended.

After using dental floss to ensure that there are no undesired contact areas, the individual elements are interlocked. Open impression taking is carried out using customisable breciform D or a laboratory-manufactured individual tray.



Model manufacture

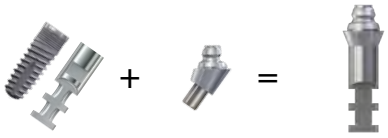
The SKY impression abutments and the SKY fast & fixed impression copings are fixed in the block.

SKY fast & fixed laboratory analogue
REF SKYFFTLA

The analogues should always be held with forceps while being screwed on to prevent the impression abutments from rotating in the impression.

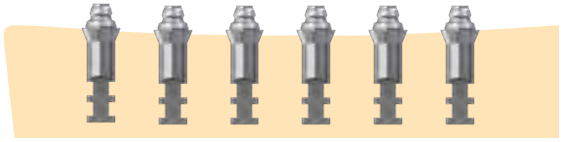
The choice of firmness, soft or hard, of the gingiva mask is dependent on the planned restoration and the method chosen by the dental technician. In this case, a removable soft gingiva mask with Multisil-Mask soft was manufactured.

Multisil-Mask soft

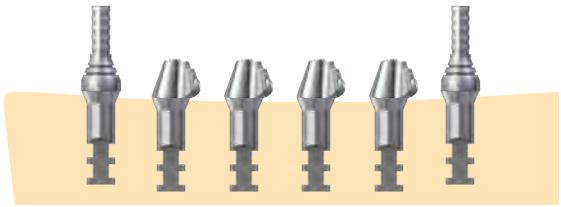


In a SKY fast & fixed impression, only the position of the abutment shoulder is transferred. The height and angulation of the abutments are not!

Use the SKY fast & fixed analogue to manufacture the model. The SKY fast & fixed laboratory analogue corresponds to the implant with screwed abutment.



SKY fast & fixed prosthetic coping
transversally screwed

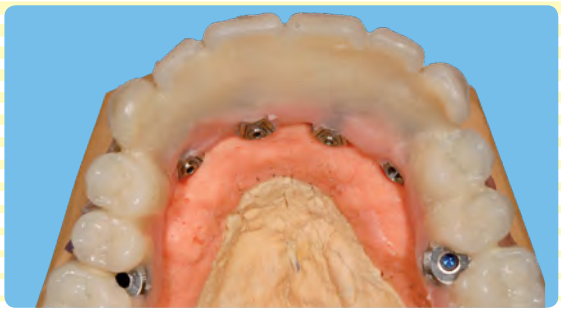


SKY fast & fixed titanium prosthetic coping

As the angulation cannot be changed when taking an impression at abutment level, prosthetic copings for transversal screwing are an important option.

Four prosthetic copings for transversal screwing have been combined in this case, with occlusally screwed prosthetic copings in region 6.

The prosthetic copings are the base for tension-free bonding of the framework, regardless of the material and manufacturing procedure.



Setup

The visio.lign veneer system is optimally suited to implant constructions with its excellent cushioning properties, particularly in the case of a reduced number of implants.

The setup is produced using novo.lign veneers. The aesthetic try-in provides the patient with the first view of his new fixed restoration. "Artificial" gingiva shorten the length of the crowns and also provide support for the cheeks and lips for an optimal aesthetic result. Cleaning options for the patient are checked with the dental hygienist on insertion.

Haptosil D

Matrix

The matrix is manufactured using high-definition and hard Haptosil D silicone. As a result, novo.lign veneers can be fixed without use of an aid.

visio.sil fix

Framework manufacture

The matrix with the novo.lign veneers facilitates correct positioning of the framework. The type of manufacture and choice of material depends on the patient case and the method planned by the prosthetic team.

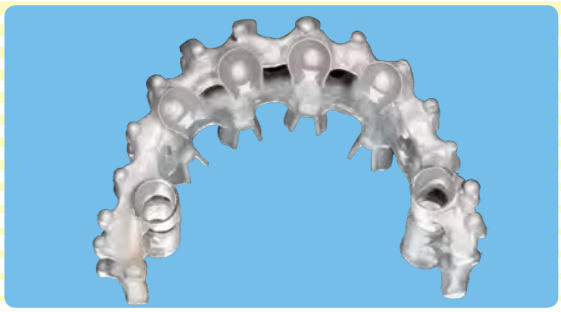
A cast non-precious metal framework was preferred for this case, for reasons of economy. The plastic for the modelling aid coping is contained in the transversally screwed prosthetic coping pack and facilitates the modelling of the framework.

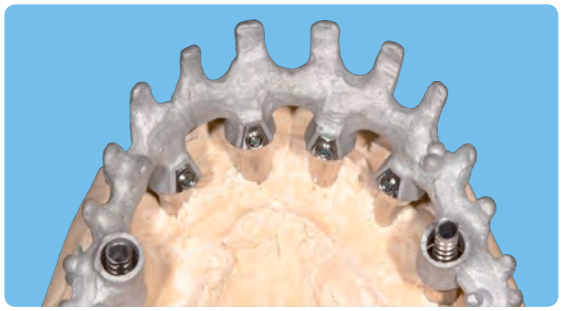
Investing and casting

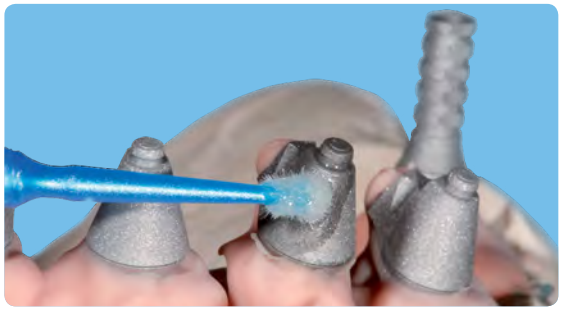
Spruing, investing and casting are carried out in accordance with the bredent casting technology protocol.

bredent Gießtechnik (bredent casting technology) ring binder
230 pages

novo.lign veneers offer an economic restoration with a predictable aesthetic result.
The soft bite is not just advantageous in restorations with a reduced number of implants.
The risk of chipping is reduced due to the security and stability properties of the visio.lign veneer system materials.







Brealloy

SKY fast & fixed prosthetic coping transversally screwed

MKZ Primer

DTK adhesive

Processing of the framework

After its processing, the framework must sit on the prosthetic copings with no tension.

In this case, four prosthetic copings are transversally screwed in the front and two occlusally screwed titanium prosthetic copings are used in the terminal position.

The prosthetic copings are bonded to the bridge framework in the next step.

Conditioning

The framework, the copings and abutment regions that are not to be conditioned can be protected using wax or silicone.

After blasting with 110 my aluminium oxide at 3 - 4 bar, clean in oil-free air jet or using a brush. Drip MKZ Primer onto a mixing plate or tray, brush the framework using a single-use brush and leave to dry for approximately 30 seconds.

Bonding

Oral bonding of the framework to the prosthetic copings compensates for inaccuracies and prevents the creation of tension.

After verifying the precision of the master model using a splint, bonding can also be carried out under laboratory conditions.

DTK adhesive is a dual-curing (light and autopolymerising), paste-like dual component material for the bonding of metal and zirconium oxide.

Bridge – transversally screwed

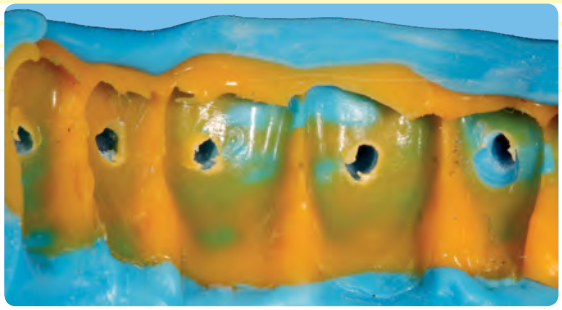
Transversal screw retention is also ideally suited for small bridges

- No occlusal screw hole
- Tension-free bonding possible
- Suitable for all framework materials
  - Zirconium
  - Titanium
  - NPM
  - Gold
  - High-performance polymers - BioHPP

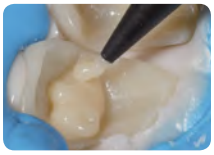
When taking an impression, we recommend bonding the framework into the mouth without interlocking the impression coping, to ensure a tension-free position.

After cleaning the bonding sites, the framework is also conditioned in the procedure described prior to application of the opaquer.

Matrix drill



Light channels are drilled using the matrix drill. These channels are required for optimum insertion of the light when fixing novo.lign veneers using combo.lign if no transparent silicone is used.



novo.lign veneers

After they are cleaned, novo.lign veneers are blasted using 110 my blasting abrasive at 2.5 bar on the inside, and the resulting dust is removed using oil-free compressed air.

Steam blasting would leave a moisture residue and compromise bonding. Application of the visio.link adhesive is essential for bonding.

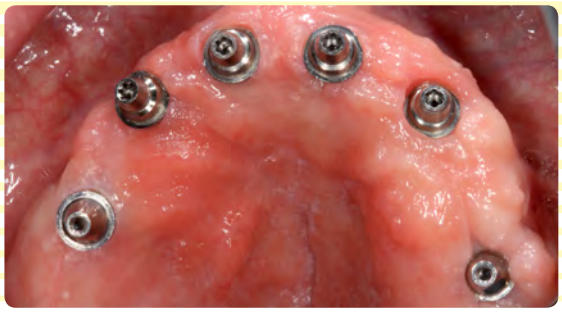
The novo.lign veneers are bonded to the bridge framework using dual-curing combo.lign.

The final form is made using crea.lign in different shades.

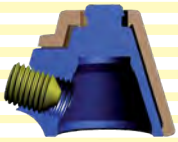
You can find more information on the visio.lign veneer system and its system components (e. g. novo.lign, neo.lign, crea.lign, combo.lign) at www.bredent.com.

Fitting of the work

The SKY fast & fixed transversally screwed prosthetic copings screws must not be unscrewed completely. This facilitates handling.



SKY fast & fixed prosthetic coping transversally screwed



Screwing and unscrewing is made easier by using the battery-operated CPS (Cordless Prostodontic Screwdriver).

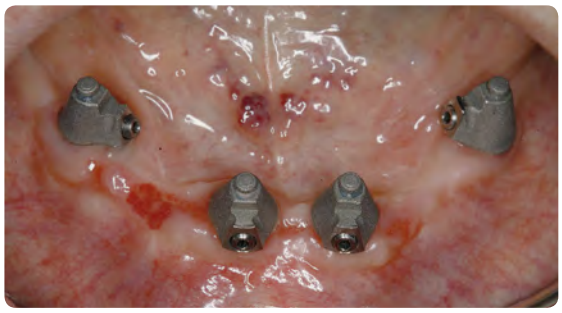
The occlusally screwed prosthetic copings and the lateral screws are tightened to 18 Ncm.

CPS

In addition to occlusion and articulation, the cleaning option with brushes and super floss is checked and the patient receives instruction.

Transversal screwing enables the bridge restoration to be removed easily by the dentist for cleaning or reworking.

Transversal screwing into the vestibular side



The prosthetic copings for transversal screwing can be positioned freely due to the circumferential ridge.

If the lip covers the artificial gingiva, the opening of the screw channel can also be set in a labial or vestibular direction. This facilitates handling for the practitioner. The patient has a smooth lingual surface and the tongue is not irritated.

BioHPP high-performance polymer as a framework material

for 2 press SYSTEM

bredent's experience and skills from over 10 years of using thermoplasts for the thermopress 400 injection moulding system have been incorporated into the development of the ceramic-strengthened high-performance polymer BioHPP - the new class of materials for framework, crown, bridge, primary and secondary reconstructions and individual SKY elegance titanium bases.

*for*2press

BioHPP granulate or pellets are processed using the *for*2press system in the low pressure compression-moulding process. By using the *for*2press system, the laboratory works with low investment in known manufacturing procedures.

Milling blanks

BioHPP is available as milling blank breCAM.BioHPP for processing in CAD/CAM procedures. The milling blanks can be processed in every milling machine when using a breCAM.Cutter (mill) especially developed for this purpose.

The "off peak" elasticity of BioHPP, which is similar to bone, reduces the introduction of pressure points on the implant and therefore ensures permanent secure retention of the restoration.

Moreover, BioHPP is free from metals and zirconium oxides and is thus ideally suited for metal-free restorations.

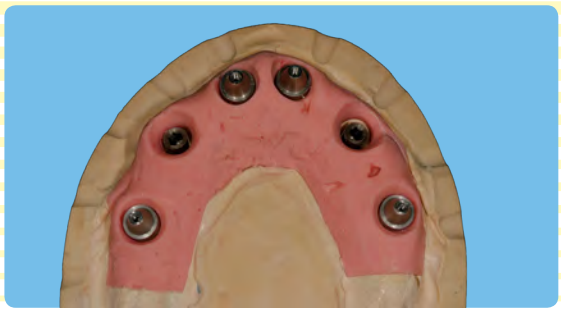
The framework can be bonded over the screwed SKY fast & fixed and SKY uni.cone prosthetic copings. This permits simple removal e.g. during follow-up checks or for corrections.

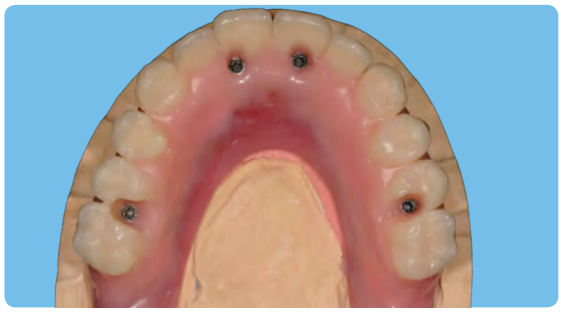
Veneering is carried out using a composite. The many years of experience in using the visio.lign veneer system has shown that disadvantages such as plaque affinity or staining of conventional plastic could not be confirmed.

Patients report a comfortable feeling when wearing the restoration and chewing.

When restoring atrophied jaws, the vertical bone loss leads to high volumes of material in the case of wide-span bridges. Using the BioHPP framework material and the visio.lign veneer system, even unusual cases can be handled, with no restrictions to aesthetics and significantly lighter in relation to comparable structures.

CAD/CAM-manufactured BioHPP framework with visio.lign veneers





Case description

Due to inadequate tooth replacement, the patient was treated using six implants and an immediate temporary restoration according to the SKY fast & fixed protocol using six implants in the maxilla. An impression was taken after six months and the model was manufactured for the final restoration.

An impression was taken after six months and the model was manufactured for a metal-reduced superstructure using pre-fabricated titanium components.

As the additional use of SKY fast & fixed abutments in region 3 was not secure, an impression was taken at implant level to leave the option for a change of abutment open.

Aesthetic try-in

For the aesthetic try-in, a screwed base was created from light-curing plastic in four positions. The information from the temporary restoration provides useful information for the final superstructure.

The dimensions of the aesthetic try-in are a preview of the final restoration. The labial design does not correspond to a set-up for a total prosthesis. A lip and cheek support would otherwise have been shown, which cannot be kept with the final restoration.

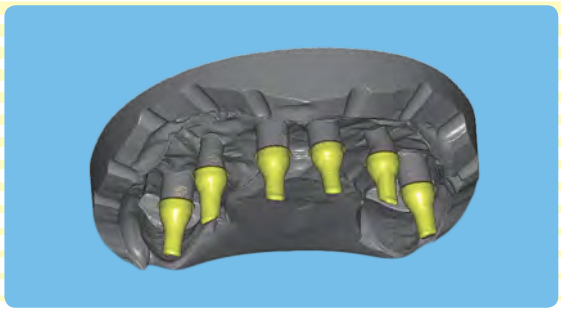
SKY fast & fixed Abutment 0°

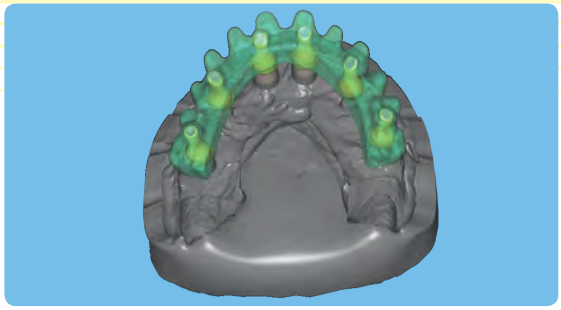
SKY fast & fixed titanium prosthetic coping

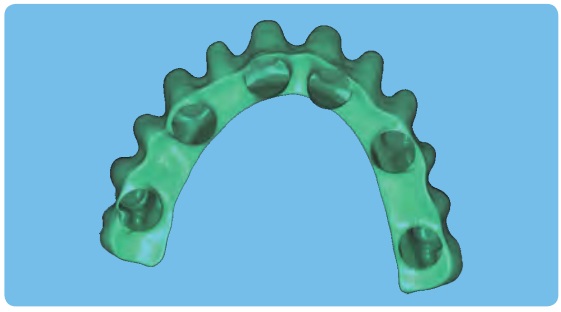
Selection of prosthetic copings

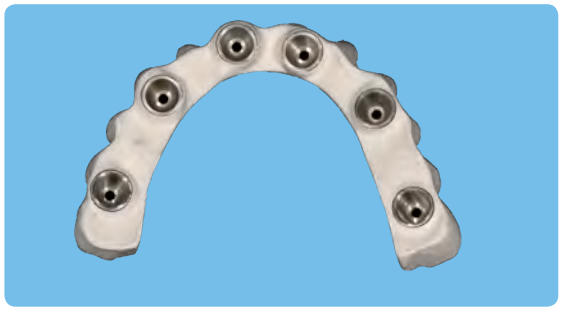
The novo.lign veneers on the aesthetic try-in are used for final veneering. As the veneers are fixed into the matrix, the selection of abutments or SKY fast & fixed or SKY uni.cone prosthetic copings can be checked.

In this case, occlusal screws should be used for the restoration. SKY fast & fixed abutments were also used in region 3.









SKY fast & fixed Scan coping

SKY fast & fixed prosthetic coping transversally screwed

SKY fast & fixed prosthetic coping titanium

DTK adhesive

Digitalisation

SKY fast & fixed titanium prosthetic copings are exchanged for scan copings for the digitalisation of the model.

Hard silicone injected into the matrix is an alternative to a scan of the matrix with veneers or the set-up. It shows the exact labial space requirement for the novo. lign veneers and therefore facilitates construction of the framework.

Construction

In the case of metal frameworks, the framework can be constructed directly onto the abutment, without the use of copings. When working with zirconium and polymer frameworks, bonding of the framework to occlusally or transversally screwed SKY fast & fixed titanium prosthetic restorations is recommended. The screw position in the SKY fast & fixed titanium prosthetic copings guarantees a permanent, fixed bond.

BioHPP milling blanks can be processed in every standardised milling machine when using a breCAM. Cutter (mill) especially developed for this purpose. The framework design is determined by the lowest material thicknesses of BioHPP.

Bonding

If interlocking of open impression taking is carried out with the control model, the SKY fast & fixed titanium prosthetic copings can be bonded into the BioHPP framework on the model. Alternatively they can be bonded in the patient's mouth.

DTK adhesive is a dual-curing (light- and autopolymerising), paste-like dual component material.

MKZ Primer

visio.link

Conditioning

Prior to bonding, the bonding sites of BioHPP and titanium copings are to be conditioned.

The titanium copings are blasted at 3 - 4 bar, BioHPP at 2 bar, with 110 my aluminium oxide and then cleaned in an oil-free air jet or using a brush.

Brush titanium coping with MKZ primer and leave to dry for approximately 30 seconds.

visio.link adhesive is applied thinly over BioHPP and cured in a light polymerisation device for 90 seconds (wavelength range 370 nm - 400 nm). The conditioned area should have a semi-matt finish after light curing.

Completion

Bonding of novo.lign veneers and completion with crea.lign is carried out in accordance with the visio.lign protocol.

Fitting of the work

When inserting the work, the temporary bridge is unscrewed and the final bridge is screwed onto the fast & fixed abutments. The low weight of the structure at only 15 g is noteworthy.

The information from the aesthetic try-in was implemented in a 1:1 ratio. Thanks to the previous work, the wide-span restoration fits with no reworking. The dental hygienist verifies the cleaning options and instructs the patient in cleaning.

! You can find more information on the visio.lign veneer system and its system components and BioHPP at www.bredent.com.

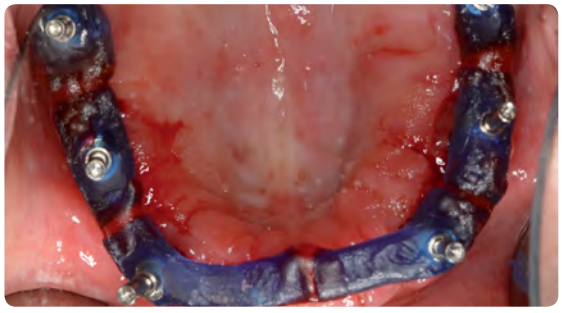
Final removable restoration with SKY fast & fixed abutments and SKY uni.cone

SKY fast & fixed treatment is designed for primary interlocked structures. In addition to occlusally and transversally screwed restorations, bars can also be manufactured using the abutments and prosthetic copings.

Amongst others, the advantage of a fixed temporary restoration is that the patient is given an idea of the level of care that is required for an implant-supported bridge structure.

If the patient desires a solution that is easier to clean, a removable restoration represents an alternative.

Compensation for unfavourable implant positions and improved support for lips and cheeks is often possible using a bar structure. Angled insertion or immediate loading is not a prerequisite.



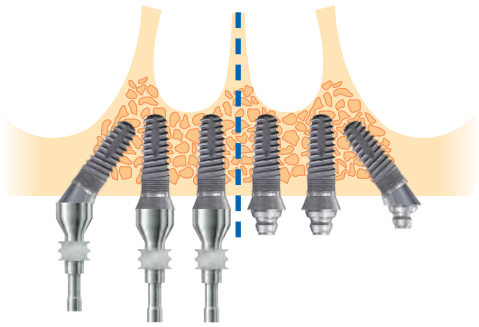
All types of bar structures are possible with the SKY fast & fixed and SKY uni.cone abutments. Tension-free primary interlocking can be implemented by bonding the occlusally and transversally screwed prosthetic copings, regardless of the material and manufacturing process.

Procedure

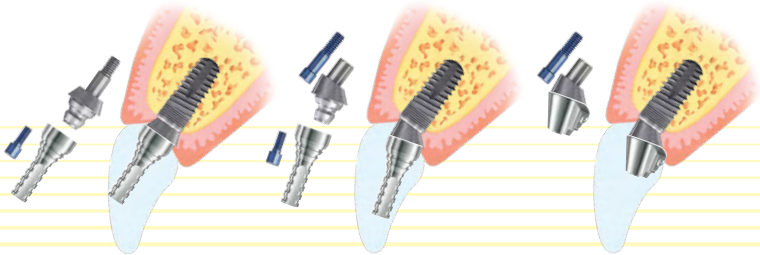
SKY fast & fixed

impression coping
open tray

10 Ncm

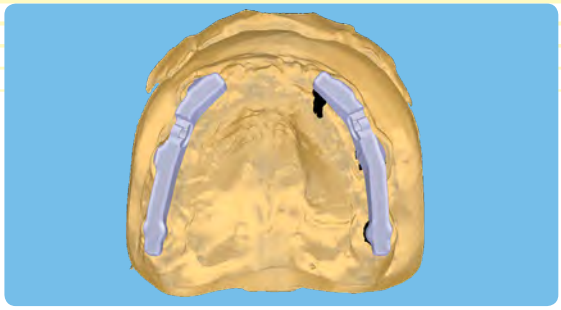


Taking an impression and manufacturing the model corresponds to the protocol for bridge structures stated in the manual. The height and angle of the SKY fast & fixed or SKY uni.cone abutments must be determined prior to taking an impression. If this is not possible, taking of an impression at implant level is recommended.

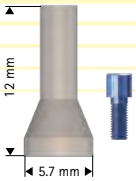


Prior to manufacture of the wax-up, the prevailing oral situation and the abutments to be used during the temporary restoration are to be clarified. The answers to these questions should be applied to the working model, to prevent uncomfortable screwing and unscrewing for the patient of abutments for the aesthetic try-in.

In the case described, SKY fast & fixed abutments in the temporary restoration are also used in the final work. A plastic base is manufactured, in which at least three prosthetic copings are processed. The wax-up can therefore be fixed securely and in the correct position during the try-in.



SKY fast & fixed Scan coping



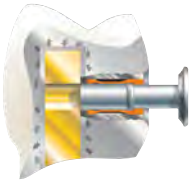
After the aesthetic try-in, a silicone key is manufactured from the wax-up. Using this, the required position of the bar in relation to the fitted novo.lign veneers and the abutments can be checked.

The choice of manufacturing procedure and material is decided by the team treating the patient, depending on the individual case situation.

Snap System locking pin

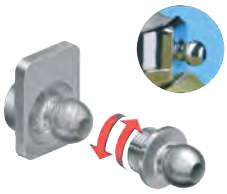
Manufacturing using the CAD/CAM procedure

For the purposes of scanning, SKY fast & fixed and SKY uni.cone scan copings are available, which can be used in place of the occlusally screwed prosthetic copings. The construction and manufacture is carried out in accordance with the selected procedure.



Two locking pins hold the secondary part securely on the 2° milled bar. Simple insertion and removal of the purely implant-supported "removable bridge" is possible for patients.

Vario-Kugel-Snap

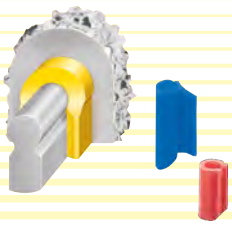


The secondary structure was also manufactured using a CAD/CAM process.

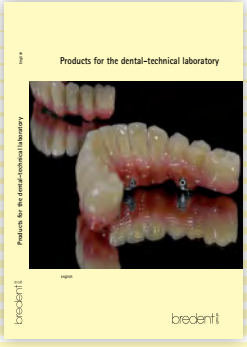
An overview of bar structures, auxiliary elements, attachments and bars is given in the bredent catalogue "Produkte für das zahntechnische Labor" (Products for the technical laboratory).

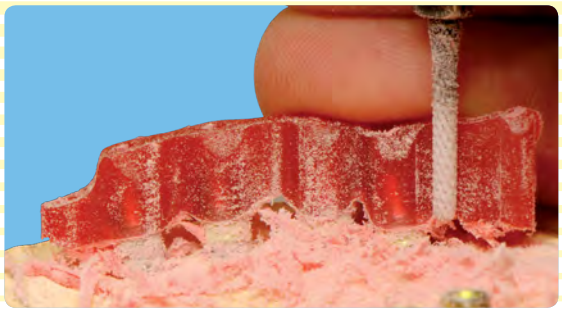
http://www.bredent.com/de/bredent/catalog/

Vario-Soft profile bar and attachments



This QR code takes you directly to the catalogue download





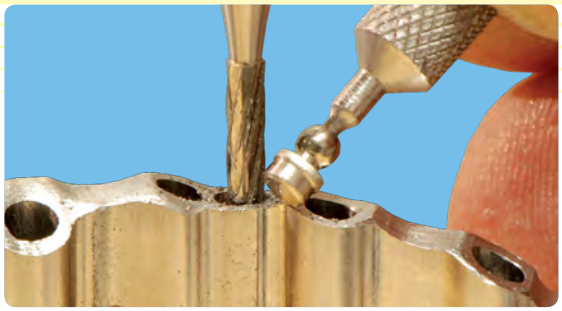
Wax bars

Manufacturing using the casting process

Modelling of the bar is carried out using wax bars or Pi-Ku-Plast modelling plastic. In the case of both materials, separation and renewed interlocking of the basic form is required to reduce tension.

Pi-Ku-Plast

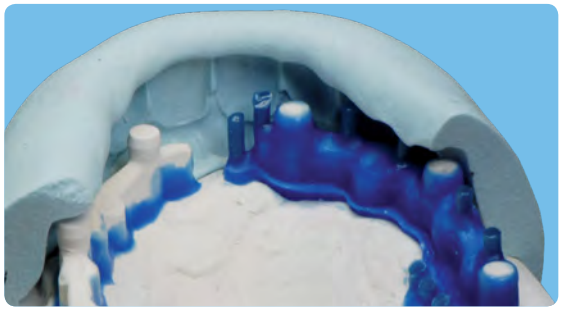
In principle, using occlusally or transversally screwed SKY fast & fixed or SKY uni.cone prosthetic copings is recommended as a bonding base for tension-free positioning. If bonding is carried out orally, the Sheffield Test is not required.

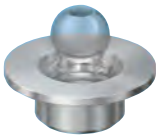


In this case, the bar was milled at 0°. The thread sleeves of the Vario-Kugel-Snap vks with replaceable stud can be bonded into the bar.

Vario-Kugel-Snap vks-oc, replaceable stud-head screw

Snapping in the restoration is an acoustic signal to the patient that it is securely positioned. The pull-out force can be adjusted using the replaceable Vario-Kugel-Snap matrices with adjustable retention force.

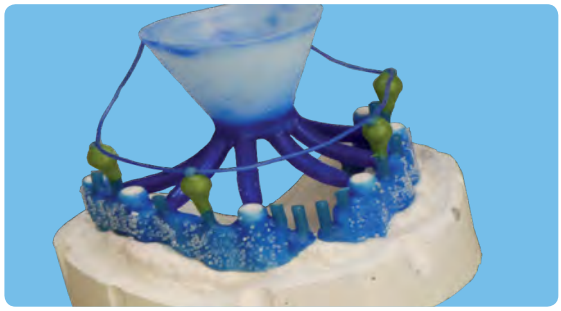




A duplicate model is manufactured for modelling of the secondary part in accordance with bredent's casting technology. The matrix that has been obtained from the aesthetic try-in also serves as a control here.

Vario-Kugel-Snap vks-oc, Matrices

bredent's casting technology enables restorations to be created economically using NPM. Gutter margins, e.g. for bars, or secondary friction parts can be manufactured to fit perfectly.



A bar structure, as in this case, can usually be designed without a palate. A restriction in the patient's perception of taste or phonetics can be avoided. For additional stability when wearing the restoration for the first time, a transversal frame can be made over the roof of the palate.

Completion is carried out in accordance with the visio.lign protocol.

bredent Gießtechnik (bredent casting technology) ring binder, 230 pages

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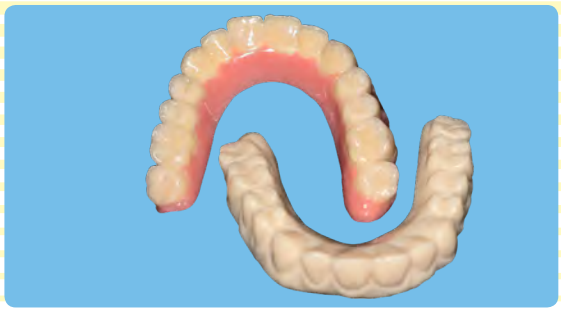
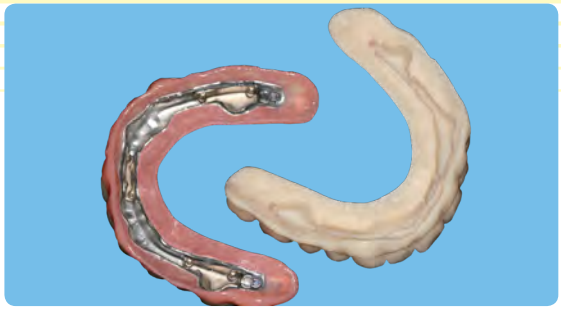
Interim prostheses



For removable restorations, patients are offered interim prostheses.

The patient thus has a replacement restoration at all times, which he can fix to the primary construction.



Interim prostheses are usually manufactured using plastic, without metal support.

Conventionally by duplicating and filling with cold polymerisate or milled in the CAD/CAM procedure.

With retention.sil, tensions, which occur when the plastic shrinks as it cures for example, can be balanced out. The interim prosthesis is ground out in the bar area. After application of bredent's Multisil primer, retention.sil is poured in and the interim prosthesis is set on the primary framework. The retention.sil hardens after approx. 5 minutes. After this time, the prosthetic restoration can be removed again and any excess can be trimmed away.

The interim prosthesis now offers tension-free positioning with a comfortable feeling when wearing.

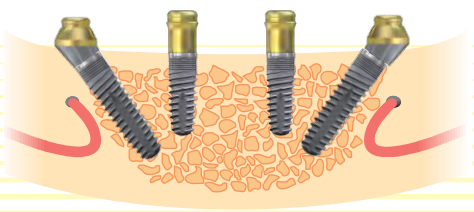
REF 580 RT SET

Contents:
retention.sil in 3 levels of hardness
mixing cannulas and pressing instrument

Hybrid prostheses

In addition to primary interlocked structures such as bridges and bars, mucosa-supported, implant-anchored hybrid prostheses are a widely-used form of treatment. In addition to better distal positioning with angled implants in the form of SKY fast & fixed, parallel positioning of the insertion direction is possible using the SKY Locator at an angle or SKY TiSi.snap abutments.

SKY Locator© 17.5° angled



SKY Locator© 35° angled

This makes insertion and removal easier for the patient and can help to avoid increased wear and tear.

More information can be found at www. bredent-medical.com

visio.lign veneer system

The visio.lign veneer system provides all components to create a lively dental design with natural surface structures and characteristics.

Pre-fabricated, multi-layer veneers are available for this in natural shapes and various sizes in the classic A – D colours.

Achieving a unique look with the veneers and individual freehand layering is possible using coloured composites and stains that are optimally coordinated with the visio.lign veneer system.

The visio.lign veneer system can be combined with all framework materials used in dental technology.

An aesthetic try-in with novo.lign veneers enables the patient to check the aesthetics prior to creation of the final restoration, to avoid extensive retrospective correction work for the practitioner and laboratory.

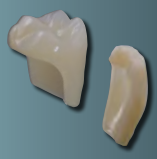
neo.lign full teeth sets, high colour stability and resistance to abrasion and resistance to plaque, as well as natural bite comfort all add up to make the visio.lign veneer system the better alternative, even to ceramic veneering.

novo.lign veneers and neo.lign full teeth are:

- 100% polymerised at 250 bar pressure and 120 °C
- purely microfilled (ceramic percentage <10%)
- high level of stability like a composite due to high-impact polymer
- elasticity module approx. 3000 Mpa

novo.lign veneers

Front and side teeth sets



neo.lign full teeth

Front and side teeth sets with chewing surface design across the system for all conventional occlusion concepts.

visio.link Adhesive

visio.link

For optimal adhesive bond between prosthetic plastics on a PMMA base, high impact PMMA composite materials (artificial teeth) and combo.lign.

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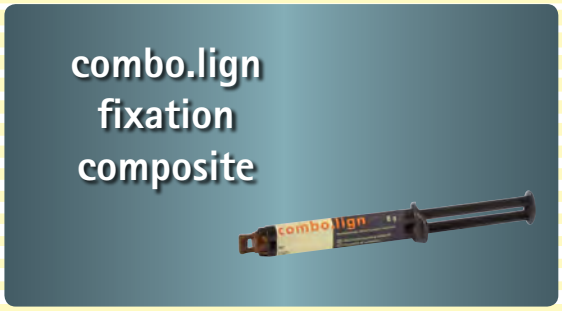


combo.lign

Dual-curing fixation composite, in the classic A - D colours, for optimal bonding between novo.lign veneers and the framework material.

crea.lign veneer material

- pourable, improved covering – seamless transition to veneering
- purely microfilled (contains no dental glass)
- optimal polishing properties for perfect surfaces
- low level of water absorption, ensures mechanical stability
- no plaque accretion

visio.lign veneer system

▶ Can be extended individually ▶ plaque resistant ▶ abrasion resistant ▶ aesthetic ▶ metal-free prosthesis
▶ Strong bonding ▶ gnathologically-compatible ▶ discolouration resistant

Indication and use of visio.lign primer

Material	Conditioning	Primer	Bond to
Ceramic • Silicate ceramic (CAD blanks/mark II/ Lithium (Di)silicate/glass ceramic • Press ceramic/veneer ceramic	**Oral:** roughen with a coarse diamond – with no water cooling. No contact with water! Clean with alcohol as required **Extraoral:** Sandblast using 110 µm Al-oxide.	**K-Primer** Apply twice and allow to vaporise REF APK25003	**Composite**
Metal/Titanium • CoCr (EMF/NPM) alloys • Titanium alloys **Zirconium** • Zirconium dioxide (aluminium oxide/spinel ceramic)	Zirconium max. 2 bar NPM/titanium/CoCr 3 - 4 bar	**MKZ Primer** REF MKZ02004	**Opaquer** **Zirconium liner**
Precious metal • Precious metal alloys (Au/Ag/Pt/Pd) • eco alloys (precious metal-reduced alloys)	2 bar	**MKZ Primer** REF MKZ02004 **MKZ EM activator** REF MKZEM004	**Opaquer**
Polymers/Composites • High-performance polymers BioHPP/BioXS (PEEK/PEKK) • Composites (veneer composite/ composite teeth) • PMMA material	2 bar	**visio.link** REF VLPMMA10 Apply thinly	**Opaquer Composite**

Allow to vaporise for approx. 15 seconds
Do not use any glass or ceramic veneers!

90 seconds Light polymerisation 370 - 500 nm

Apply a thin layer of composite/opaquer, polymerise with Halogen light or an LED lamp for 30 seconds.

Apply crea.lign composite in thin layers, remove the inhibition layer using alcohol. Polish with pre-polish and high-gloss polish.

(Overview design: Stephan Adler, Landsberg am Lech)

HELBO® photodynamic therapy (aPDT)

Pathogenic bacteria are the main cause of failures in dental medicine! Their habitat is the biofilm, as has been shown in different studies. A phenomenon called "Quorum Sensing" enables bacteria to communicate with one another and coordinate their activities. The more mature the biofilm, the more resistant the bacteria it contains. Mechanical cleaning and rinsing solutions are not adequate to destroy the bacteria within the biofilm and even powerful antibiotics rarely bring about lasting success. HELBO® treatment is able to combat bacterial infections.

Periodontitis | Peri-implantitis | Soft tissue and bone infection | Endodontitis | Caries | Immediate implantation | Wound healing problem

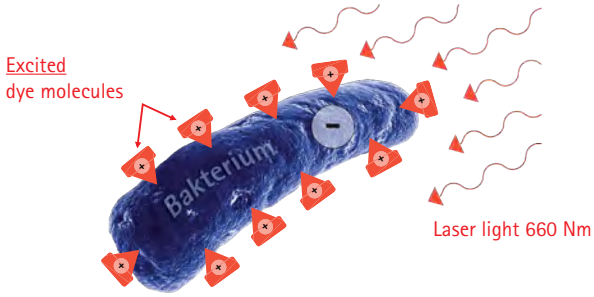
HELBO® antimicrobial photodynamic therapy (aPDT) is the unique system with sterile components and proven for the preservation of teeth and implants.

- **No pain.**
- **No side effects.**
- **No resistances.**

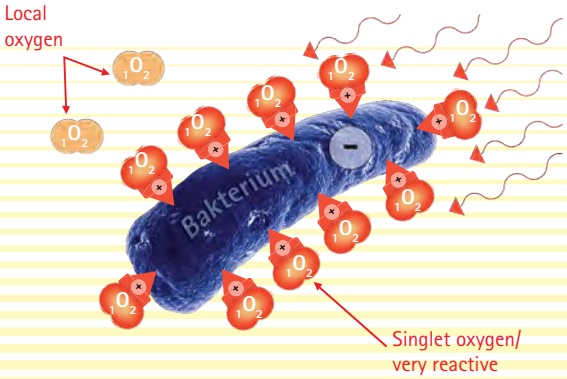
Success scientifically proven for more than 10 years.

1. Dye molecules adhere to the bacterial membrane.

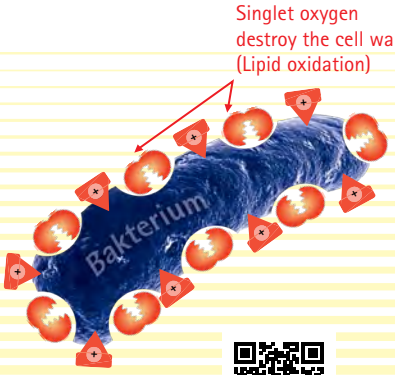
2. Laser light excites the dye molecules.



3. Reaction with oxygen leads to the formation of singlet oxygen.



4. Aggressive singlet oxygen oxidises the bacterial cell wall.



HELBO® treatment is proven to successfully combat bacterial infections.
Please find an overview of literature and further information at **www.bredent-medical.com** or **www.helbo.com**

www.bredent-medical.com www.helbo.de

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Frequently asked questions

What is the aim of SKY fast & fixed treatment?

The aim of SKY fast & fixed treatment is to treat the patient immediately with a temporary restoration with the least possible surgical effort, after only one procedure with the appropriate indication, which accommodates the masticatory requirements of a modern prosthesis. This means that augmentative procedures should be avoided during surgery and that the option is created to support the prosthesis in position 5 to 6 by setting the posterior implants at an angle.

To which user is the SKY fast & fixed treatment suited?

SKY fast & fixed treatment requires optimal coordination between implantologists, prosthetic specialists and dental technicians. It is important for successful restoration of the patient's teeth that the dental technician is nearby and actively contributes when bite registration is recorded. The treatment is only successful and economically integrated into practice when carried out in a team.

Area of application and indication

SKY fast & fixed is a surgical and prosthetic treatment for immediate restoration for patients on the verge of becoming edentulous or those who are already edentulous. In order to better support the temporary restoration, there is the option of setting the posterior implants at a 35° angle in a distal direction. This angulation is offset by special abutments.

To which patient is the SKY fast & fixed treatment particularly suited?

Patients with residual dentition not worth saving are particularly worried about being edentulous and wish to be supplied with a fixed prosthesis as quickly as possible, ideally after one procedure. SKY fast & fixed treatment gives you the opportunity to offer these patients a treatment that is simple to use, with an aesthetically predictable result, at a fair price.

How is the temporary restoration manufactured for the immediate restoration?

This manual provides a step-by-step guide to the manufacture of the temporary restoration and the materials required. We recommend following this tried and tested protocol, even if other manufacturing processes are possible.

Can the final restoration be used as an immediate restoration?

In the case of restorations for immediate restoration, extensions lead to unfavourable applications of force in the implant. The temporary restorations terminate in the distal implant position, usually in the region of the first premolar. Patients tolerate the shortened rows of teeth in the temporary restoration. In the final restoration, a restoration with 12 units can be used through two cantilevers in the premolar width following successful osseointegration of the implants!

What are my options for the final restoration?

SKY fast & fixed abutments are suitable for primary interlocked bridge and bar structures with occlusal or transverse screw retention. By using the appropriate prosthetic copings, all types of framework materials can be manufactured with no tension, by bonding in accordance with the Weigl protocol.

Contraindications:

SKY fast & fixed treatment **is not suitable for patients** who possess the usual contraindications for implantology, e.g. cardiac and circulatory problems, bruxism, osteoporosis, heavy smoker, alcohol abuse, diabetes, etc.

What are the clinical experiences with SKY fast & fixed treatment?

The original concept was developed by Dr. Malo from Lisbon (PT). He treated several thousand patients using this procedure, with great success. Further development and adaptation to the SKY implant system was carried out by the practice of Drs. Bayer, Kistler and Elbertshagen in Landsberg am Lech. The aim of cooperation was to establish a practice-oriented treatment that was simple to use, with aesthetic results and that was economically successful for the practice and laboratory.

How do the angled implants behave in the long term?

Immediate restoration of the implants with the corresponding abutments under sterile conditions is important for permanent bone retention. Using this measure, the problem of microgaps is reduced and permanent success is ensured. The abutment should also not be removed from the final restoration. In the cases treated to date, no increased bone loss has been determined.

SKY fast & fixed healing information for patients

- only a soft diet for the first few weeks
- no maximum mastication loading in the first six weeks
- in the event of loosening or a break in the restoration, seek immediate advice from your practice
- clean by rinsing with antiseptic mouthwash until the sutures are removed
- conventional cleaning with a toothbrush, interdental brushes, and superfloss after the sutures are removed

Important information for referrers in SKY fast & fixed cases

SKY fast & fixed treatment has been used for immediate restoration.

To avoid excessive surgical measures, implants have been set at a severely angled position. The screwed 35° abutments do not need to be removed for the final restoration and are located in position.....(please enter position).

Only the 35° abutment must remain screwed. In the case of 0° abutments, the regular SKY abutment system should be selected due to improved options for the final prosthetic restoration.

A mixture of SKY fast & fixed abutments and regular abutments from the SKY implant system will not cause any problems.

The SKY implant system possesses two prosthetic platforms. The abutments for the narrow platform are anodised rose gold for improved differentiation. These abutments can be used for both narrowSKY and the regular platform for SKY classic and blueSKY with platform switch.
Abutments with a regular platform can be used for all implant diameters of SKY classic and blueSKY. This makes selection of abutments and the prosthetic restoration simpler.

The SKY implant system contains only one screw driver for all occlusal screws (Torx® T6). Abutment restoration can be carried out rapidly without changing tools using one screwdriver.

For further information, please see the SKY fast & fixed manual and the SKY system presentation.

bredent medical is available at any time should you require advice. To request a catalogue or a visit from a regional manager, please call bredent medical on Tel. +49 (0) 73 09 / 8 72-4 40 or send a fax to +49 (0) 73 09 / 8 72-4 44.

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Notes

Videos on surgery and prosthetics

SKY fast & fixed – Surgery

Link to video:
http://youtu.be/uKPFX00EC0Y

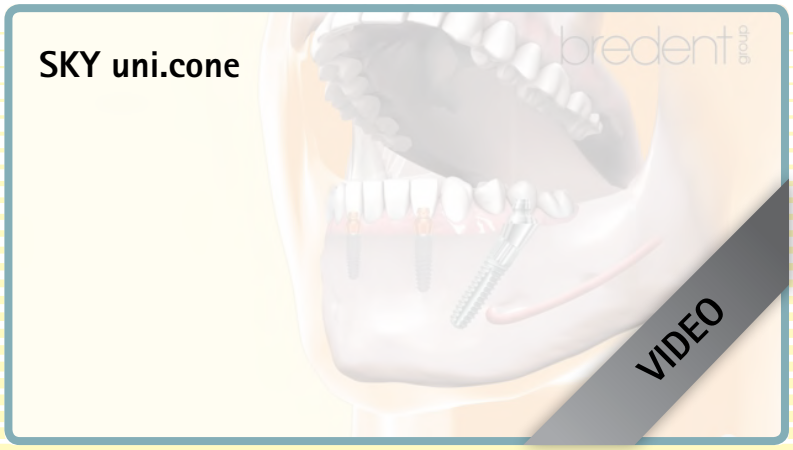
This QR code takes you directly to the video.

SKY fast & fixed – Prosthetics

Link to video:
http://youtu.be/idtlVWCjb5U

This QR code takes you directly to the video.

SKY uni.cone



Link to video:
http://youtu.be/k4EjehducTE

This QR code takes you directly to the video.

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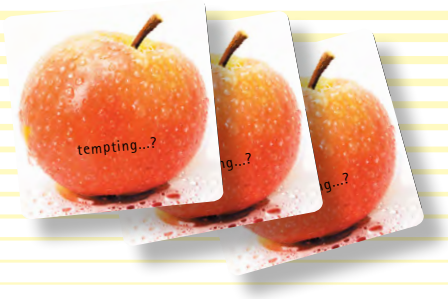
Information brochures for your waiting rooms/literature presentation

Information brochures

For your patients, we offer attractive information brochures and posters for SKY fast & fixed treatment. Please claim your free copies.



...attractive...

Immediate restoration for the edentulous jaw

Brochures

REF 000 342 GB

Cross-section model SKY fast & fixed

with nerve course, gingiva mask and temporary bridge

REF 590 ZMFF 2

Literature presentation

Immediate restorations with a reduced number of implants
Conceptual background and clinical results

Bayer/Kistler/Kistler/Adler/Neugebauer (Quintessenz publication)

In addition to the clinical and technical foundations of the SKY fast & fixed treatment concept, the book presents the various options available for the prosthetic restoration and the outstanding clinical results that have been achieved to date. 128 pages, 310 colour images

REF 9929710D

www.bredent.com/literatur

On this page you will find a bibliography.

Scientific Book

contains a collection of literature and poster publications on SKY fast & fixed treatment

Scientific Book 2012

REF 99297400

Scientific Book 2014

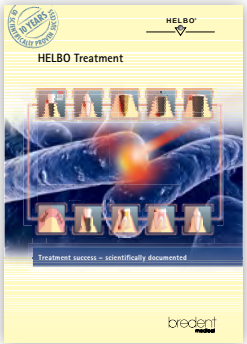
REF 9929750D

SKY fast & fixed manual

Immediate restoration - transversally and occlusally screwed restorations

Surgical and prosthetic protocol

Other offers that may be of interest to you



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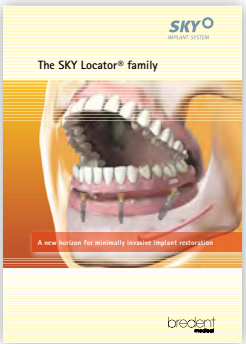

REF 000 399 GB

REF 000 705 GB

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