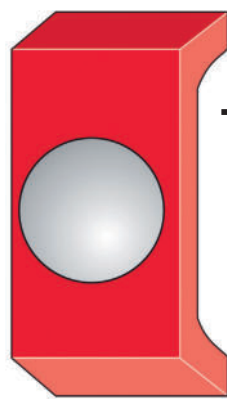


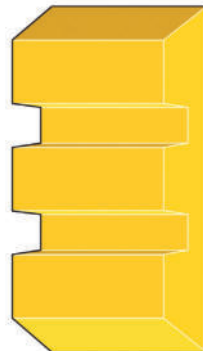
# TK-Snap and TK-Fric System

## Permanent friction guarantee for telescope crowns

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**TK-Snap**



**TK-Fric**

---

### Your advantages at a glance:

- Reduction of telescope crown wear
- Ideal for periodontal Pre-damaged stumps
- Safe friction even with clinically short crowns
- Can be processed with all dental alloys
- Ideal for non-precious metal constructions
- Particularly suitable for One-piece-casting technique
- Used in the system of „Marburger Doppelkrone®“
- Easy processing by prefabricated secondary parts
- The patient gets an optimal feeling of safety through the click on during insertion



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

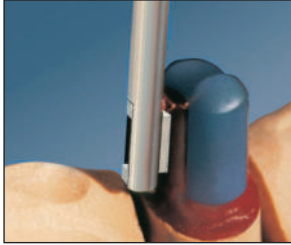
**Phone** +49 2330 80 69 4-0  
**Fax** +49 2330 80 69 4-20

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EN ISO 13485



# Information for use

## Manufacture of primary telescopic crown



►1

The wax is scraped back for the TK-Snap system at the primary crown in the approximal area. The primary part is fixed with the parallel holder and is modeled flush with surface. The transition from the occlusal surface to the approximal surface must be rounded off in the region of the primary part in order to allow the friction element to slide slightly over.



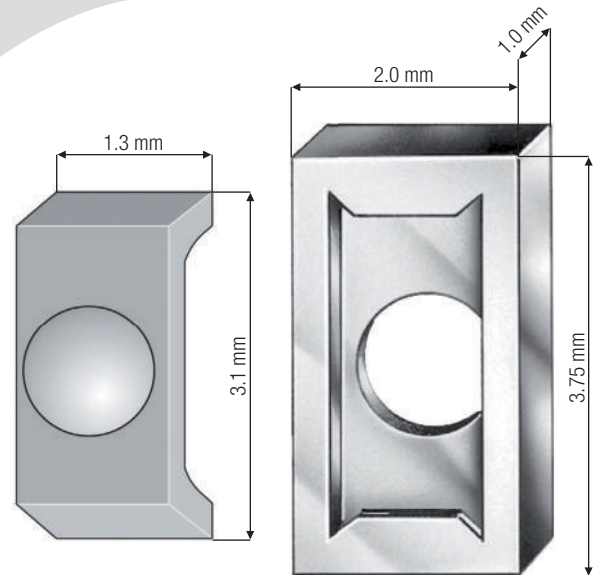
►2

Now the primary telescopic crown can be embedded. The retaining pins of the primary part can remain on the crown, since it is easier to remove them later in metal. This hole is not required for the TK-Fric system, which is an advantage for the compatibility of both systems.



►3

The depth of engagement of the TK-Snap cast element is 0.3 mm. Should this measure be undershot by-milling, the bore depth can be restored using the TKR milling cutter.

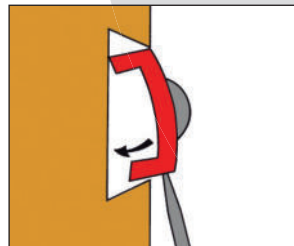


## Secondary crown in the lift-off technique



►4a

During the modeling of the secondary crown, a window is excavated in the area of the snap hole, in which the secondary part is positioned exactly above the bore of the primary part with the aid of the centering element. The secondary part is modeled into the secondary crown and is covered from the outside with a wax platelet. This avoids liquid wax flowing into the secondary part uncontrolled.



►5a

After casting, all residues of the investment materials must be removed from the secondary part. Only after completion, the TK-Snap or the TK-Fric element is inserted into the secondary part.

# Information for use

## Secondary crown in One-piece-casting technique



►4b

The placeholder is fixed with wax to the primary crown, the centering knob being exactly in the bore of the primary crown. In the case of a TK-Fric work without a bore in the primary crown, the placeholder with its rear side is tangential to the primary crown.



►5b

The duplicate model made of investment material is produced in the usual way. Thereby, the edges in the area of the placeholder must not be damaged.



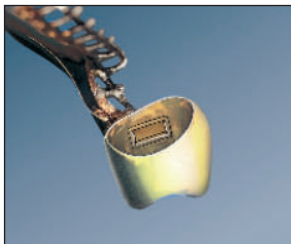
►6b

The model casting is modeled together with the crowns and the placeholder is integrated.



►7b

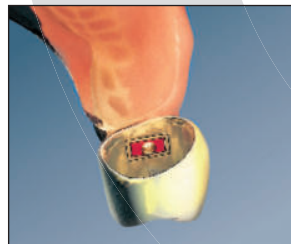
When working out the model casting, care must be taken to ensure that no investment material residues remain in the holder for the abutment. These can hinder the exact seat of the secondary part.



►8b

Should adaptation difficulties occur when inserting the secondary part into the receptacle, the edges of the secondary part could be slightly rounded with a rubber polishers.

The gluing of the secondary part can take place both before completion and afterwards. The secondary part is bonded with the proven Si-tec adhesive.



►9

Finally, the friction element TK-Snap or TK-Fric is inserted into the secondary part. The friction elements are not glued in since they hold in the secondary part through retention. If the TK-Snap or TK-Fric system is inserted only prophylactically, the receiving recess is closed by the TK-inactive. If friction is reduced, a TK-Snap or TK-Fric element can alternatively be inserted.



►10

When using the TK-Fric system, three different friction intensities are available for controlling the friction:

- The white element with slight friction
- The yellow element with medium friction
- The red element with strong friction



### Important note:

Only for removable dentures. The patient must be informed that the denture must be removed overnight for daily cleaning.

# Information for use

## TK-Snap and TK-Fric System

Ord.Nr.

	<b>Parallel Holder</b>	0122
	<b>Centering device</b>	0106
	<b>TKR milling cutter</b> for the reworking of the receiving recess	0123
	<b>Primary part</b> for the preparation of the receiving recess in the primary crown <b>Primary part</b> for the production of resilience telescopes	0101 0101L
	<b>Secondary part</b> made of residue-free combustible plastic	0102
	<b>Secondary part</b> HSL, castable up to 1400°C to all precious metal alloys (not for NE alloys)	0402
	<b>Secondary part</b> Co-Cr-Mo, for One-piece-casting technique	0302
	<b>Placeholder</b> for One-piece-casting technique	0303
	<b>TK-Snap</b> with titanium ball	0103
	<b>TK-Snap</b> of full plastic	0104
	<b>TK-inactive</b>	0105
	<b>TK-Fric</b> white, slight friction	0191
	<b>TK-Fric</b> yellow, medium friction	0192
	<b>TK-Fric</b> red, strong friction	0193
	<b>Instrument box TK-Snap</b> 1x Tweezers 1x Parallel holder 1x TKR milling cutter 1x Centering device	0120
	<b>Si-tec Adhesive</b> for bonding the secondary parts in One-piece-casting technique	0850

# TK-Snap round

## Completely closed spring bolt system



**TK-Snap round**

### Your advantages at a glance:

- Permanent friction guarantee
- Space-saving through round shape
- Perceptible click during inserting
- Ideal for periodontally previously damaged stumps
- Safe hold even with short friction surfaces
- Can be processed with all dental alloys
- Ideal for non-precious metal constructions



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

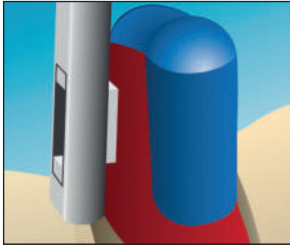
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**Fax** +49 2330 80 69 4-20

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EN ISO 13485

**CE 0044**

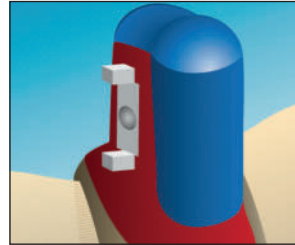
# Information for use

## TK-Snap round



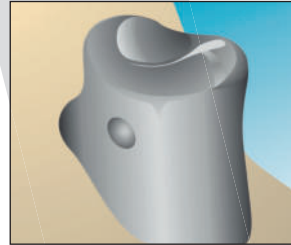
►1

The wax is scraped back for the TK-Snap system at the primary crown in the approximal area. The primary part is fixed with the parallel holder and is modeled flush with surface. The transition from the occlusal surface to the approximal surface must be rounded off in the region of the primary part in order to allow the friction element to slide slightly over.



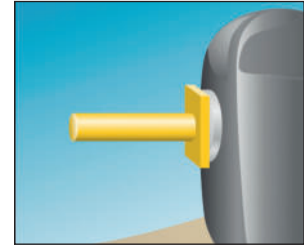
►2

The primary telescopic crown can be embedded now and cast. The retaining pins of the primary part can remain on the crown, since it is easier to remove them later in metal.



►3

The engagement depth of the „TK-Snap round“ element is 0.3 mm. Should this measure be undershot by re-milling, the bore depth can be restored with the TCR cutter.



►4

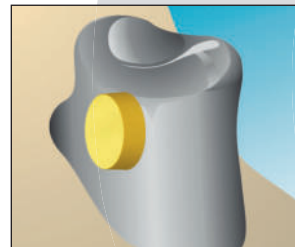
### Lift-off technique

During the modeling of the secondary crown, a window is excavated in the area of the snap bore, in which the secondary part is positioned precisely above the bore of the primary part by means of the centering device. The secondary part is modeled in the secondary crown and is covered from the outside with a wax platelet. This avoids liquid wax flowing into the secondary part uncontrolled.



►5

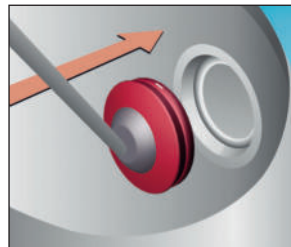
After casting, all residues of the investment materials must be removed from the secondary part to ensure the secure fit of the TK-Snap round.



►6

### One-piece-casting technique

When applying the one-piece-casting technique, the placeholder is fixed with wax to the primary crown wherein the centering head lies exactly in the bore of the primary crown. The duplicate model is then produced, on which the secondary crown is modeled together with the model casting.



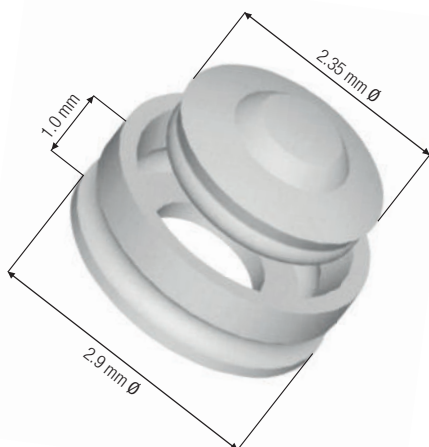
►7

Only after completion, the TK-Snap round element is inserted into the secondary part.

## TK-Snap round

Ord.Nr.

<b>Parallel Holder</b>	0122
<b>Centering device TK-Snap round</b>	0206
<b>TKR milling cutter</b> for the post-machining of the receiving recess	0123
<b>Primary part</b> for the preparation of the receiving recess in the primary crown	0101
<b>Secondary part round</b> made of residue-free combustible plastic	0202
<b>Secondary part round</b> HSL, ready for casting up to 1400°C to all precious metal alloys (not for NE alloys)	0242
<b>Secondary part round</b> titanium, for the one-piece-casting technique	0252
<b>Placeholder</b> for one-piece-casting technique	0253
<b>TK-Snap round</b> with titanium ball	0203
<b>TK-Snap round</b> Full plastic	0204
<b>TK-Snap round</b> inactive	0205
<b>Si-tec Adhesive</b> for bonding of the secondary parts in one-piece-casting technique	0850



# TK-Soft and TK-Soft mini

## Fine-adjustable friction element for all parallel-walled dental constructions

**TK-Soft**



**TK-Soft mini**



### Your advantages at a glance:

- Ensuring permanent activation by integrated metal screw connection
- Can be processed with all common materials in dental technology
- Especially suitable for non-precious metal constructions
- Can be used in lift-off and One-piece-casting technology
- Can be used in telescopic crowns, bar systems and attachments like the "Herdecker hybrid crown"
- Ideal for new productions of secondary constructions
- Self securing by dowel effect



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

**Phone** +49 2330 80 69 4-0  
**Fax** +49 2330 80 69 4-20

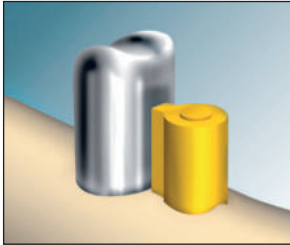
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# Information for use

## TK-Soft and TK-Soft mini

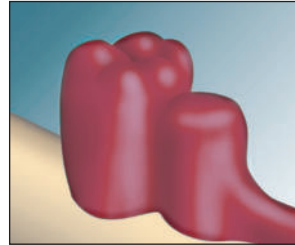


►1

The TK-Soft placeholder is fixed with wax or glue to the finished milled primary telescopic crown.



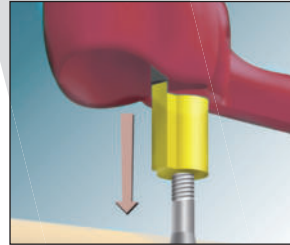
With the TK-Soft mini, the narrow side of the placeholder must be fixed to the primary crown.



►2

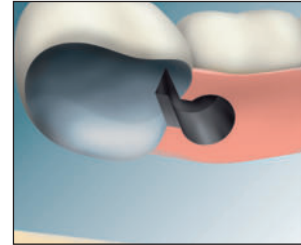
### Lifting-off technique

When the lift-off technique is used, the secondary telescopic crown is made of modeling plastic and the placeholder is modeled. The placeholder does not have to be insulated since it does not bond with the modeling plastic.



►3

The placeholder remover is screwed in into the placeholder and is pulled out basally from the modeled crown. Since the placeholders are deformed by the screwing of the placeholder remover, the placeholders can only be used once.



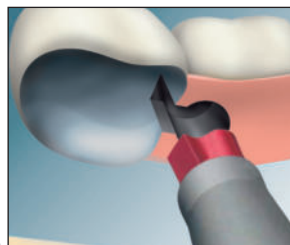
►4

The model casting is prepared without consideration of the TK-Soft. In this case, the TK-Soft receiving channel should only be reworked very carefully, otherwise the secure fit of the TK-Soft / TK-Soft mini is not guaranteed. Only after completion, the TK-Soft / TK-Soft mini element is inserted into the receiving channel. It is self securing by its dowel effect and is not glued.

## TK-Soft and TK-Soft mini

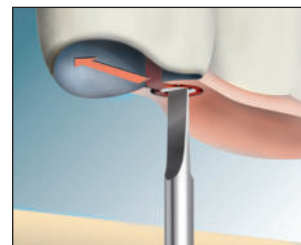
Ord.Nr.

<b>TK-Soft Systemkit</b> 6x Friction elements 6x Placeholders 1x Placeholder remover 1x Activating instrument 1x Mounting aid	2000
<b>TK-Soft Refill Pack</b> 6x Friction elements 6x Placeholders	2010
<b>Individual parts</b> Friction elements Placeholders Placeholder remover Insertion aid TK-Soft Activating instrument	2001 2005 2022 2023 2024
<b>TK-Soft mini Systemkit</b> 6x Friction elements 6x Placeholders 1x Placeholder remover 1x Activating instrument 1x Mounting aid	2100
<b>TK-Soft mini Nachfüllpack</b> 6x Friction elements 6x Placeholders	2110
<b>Individual parts</b> Friction elements Placeholders Placeholder remover Insertion aid TK-Soft Activating instrument	2101 2105 2022 2123 2024



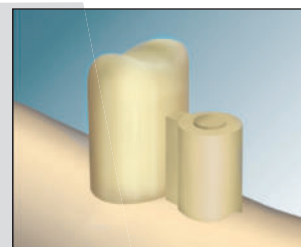
►5

Use the mounting aid to grasp the TK-Soft friction element easily and securely. Place it in the prepared receptacle of the secondary part in the frictional position. With the pressure applicator on the opposite side of the insertion aid, a long-term stable and precise snug fit of the active element TK-Soft is achieved by metered pressure application.



►6

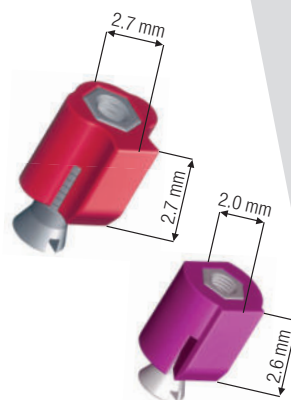
If necessary, the friction of the telescope can be individually adjusted by turning the activation screw slightly.



►7

### One-piece-casting technique

When using the one-piece-casting technique, the placeholder is blocked out in the basal area and the model is prepared for duplication. On the duplicate model of investment material, the crown can now be modeled together with the model cast.

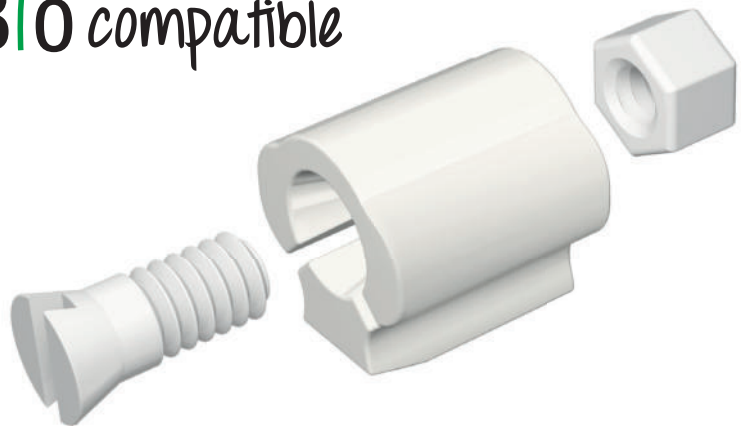




## TK-Soft® **Ceram**

Fine-adjustable friction element made off Zirconium/plastic for all parallel-walled dental constructions

  
100% BIO compatible



### Your advantages at a glance:

- MCS harmless, free of metall and allergen
- Ensuring permanent activation by integrated zirconium screw connection
- Can be processed with all common materials in dental technology
- Especially suitable for metalfree constructions
- Can be used in lift-off and One-piece-casting technology
- Can be used in telescopic crowns, bar systems and attachments like the "Herdecker hybrid crown"
- Ideal for new productions of secondary constructions
- Self securing by dowel effect
- STL-Data in the downloadsection



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

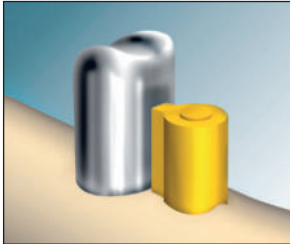
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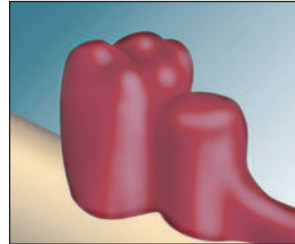
# Information for use

## TK-Soft® Ceram



►1

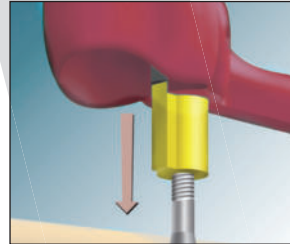
The TK-Soft placeholder is fixed with wax or glue to the finished milled primary telescopic crown. With the TK-Soft mini, the narrow side of the placeholder must be fixed to the primary crown.



►2

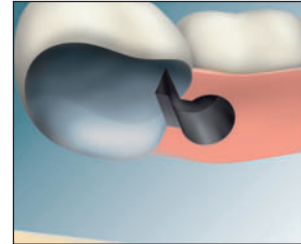
### Lifting-off technique

When the lift-off technique is used, the secondary telescopic crown is made of modeling plastic and the placeholder is modeled. The placeholder does not have to be insulated since it does not bond with the modeling plastic.



►3

The placeholder remover is screwed in into the placeholder and is pulled out basally from the modeled crown. Since the placeholders are deformed by the screwing of the placeholder remover, the placeholders can only be used once.



►4

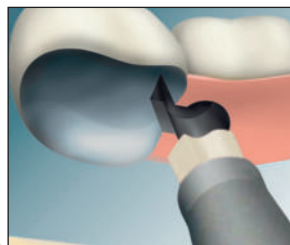
The model casting is prepared without consideration of the TK-Soft® Ceram. In this case, the TK-Soft® Ceram receiving channel should only be reworked very carefully, otherwise the secure fit of the TK-Soft® Ceram is not guaranteed. Only after completion, the TK-Soft® Ceram element is inserted into the receiving channel. It is self securing by its dowel effect and is not glued.

## TK-Soft® Ceram

Ord.Nr.

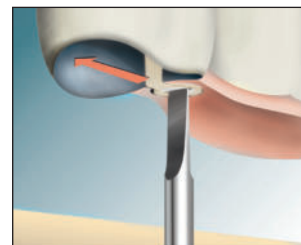
<b>TK-Soft® Ceram Systemkit</b> 6x Friction elements 6x Placeholders 1x Placeholder remover 1x Activating instrument 1x Mounting aid	2400
<b>Individual parts</b> Friction element Placeholder Placeholder Remover Insertion aid TK-Soft® Activating instrument	2401 2005 2022 2023 2024

01/18



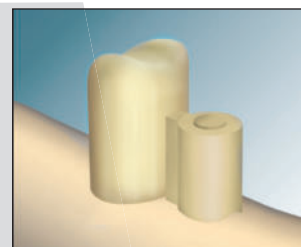
►5

Use the mounting aid to grasp the TK-Soft® Ceram friction element easily and securely. Place it in the prepared receptacle of the secondary part in the frictional position. With the pressure applicator on the opposite side of the insertion aid, a long-term stable and precise snug fit of the active element TK-Soft® Ceram is achieved by metered pressure application.



►6

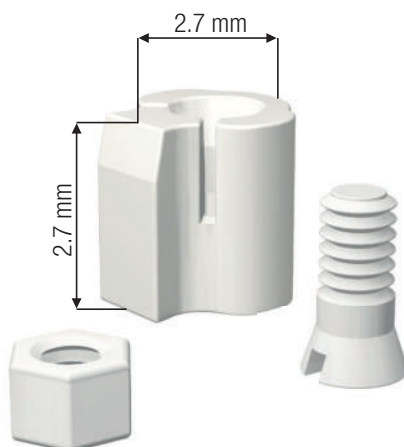
If necessary, the friction of the telescope can be individually adjusted by turning the activation screw slightly.



►7

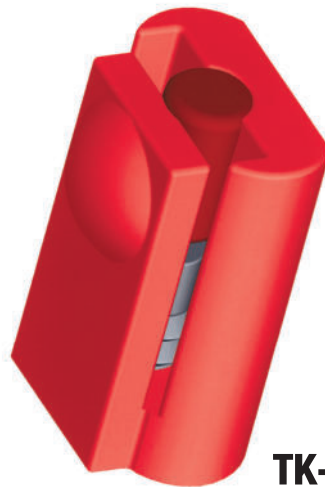
### One-piece-casting technique

When using the one-piece-casting technique, the placeholder is blocked out in the basal area and the model is prepared for duplication. On the duplicate model of investment material, the crown can now be modeled together with the model cast.



# TK-Nano-Snap

## The small adjustable retention element



**TK-Nano-Snap**

### Your advantages at a glance:

- Fine adjustable pull-off force
- Good installation possibility also in the front tooth area
- Can be processed with all the materials customary in dental technology
- The patient gets an optimal feeling of safety through the click on during insertion
- Safe function even with short friction surfaces



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

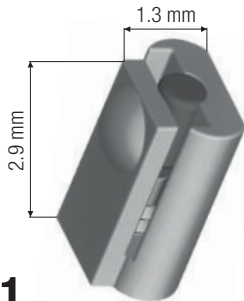
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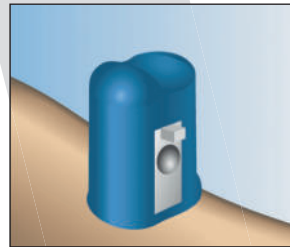
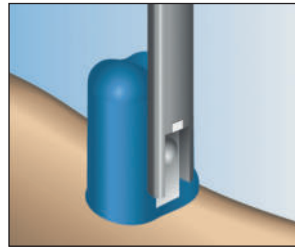
# Information for use

## TK-Nano-Snap



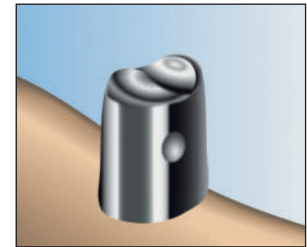
►1

The wax is scraped back for the TK-Nano-Snap system, at the primary crown in the approximal area. The primary part is placed as low as possible at the cervical edge with the parallel holder and is modeled flush with surface. The transition from the occlusal surface to the approximal surface must be rounded off in the area of the primary part in order to allow the TK-Nano-Snap element to slide slightly over.



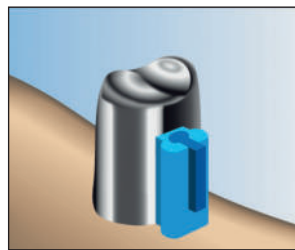
►2

Now embed and pour the primary telescopic crown. The retaining pin of the primary part can remain on the crown, it is easier to remove it later in metal.



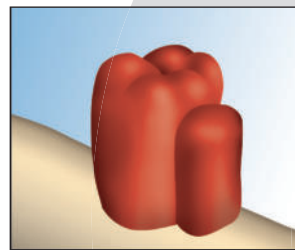
►3

The engagement depth of the TK-Nano-Snap element is 0.3 mm. Should this measure be undershot by re-milling, the bore depth can be re-milled with the TKR milling cutter.



►4

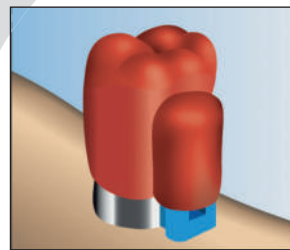
Place now the placeholder in the approximal area, in which the TK-Nano-Snap is to be inserted later.



►5

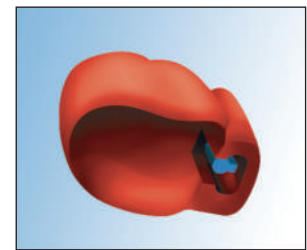
### Lift-off technique

The TK-Nano's placeholder is integrated into the secondary crown before embedding during modeling. Make the cap from the modeling plastic for better removal of the placeholder.



►6

When removing the secondary crown, the placeholder is divided into two parts.

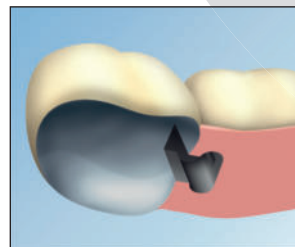


►7

The part of the placeholder remaining in the secondary crown must be removed before embedding.

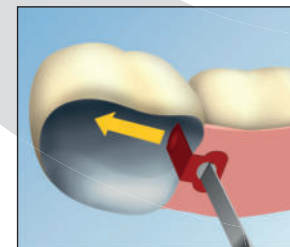
## TK-Nano-Snap Ord.Nr.

<b>TK-Nano-Snap Systemkit</b> (4x primary part, 4x placeholder, 4x TK-Nano-Snap, tool)	2200
<b>TK-Nano-Snap Refill Pack</b> (4x primary part, 4x placeholder, 4x TK-Nano-Snap)	2210
<b>Individual parts</b>	
Primary part	2201
TK-Nano-Snap	2202
Placeholder	2205
Activation instrument	2224
Parallel Holder	0122
TKR milling cutter	0123



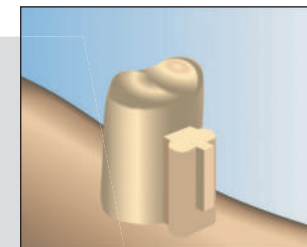
►8

The model casting is prepared without consideration of the TK-Nano-Snap. If necessary, rework the receiving channel of TK-Nano-Snap gently and chamfer the basal edge for easier insertion of the TK-Nano-Snap element slightly.



►9

The TK-Nano-Snap element is inserted into the receiving channel only after its completion. It is self-locking by its retention surface and is not glued. The retention strength can be individually adjusted by turning the screw.



►10

### One-piece-casting technique

When applying the one-piece-casting technique, the placeholder is fixed with wax to the primary crown and blocked out basally, the centering knob being exactly in the bore of the primary crown. The duplicate model is then produced, on which the secondary crown is modeled together with the model casting.

## Quick-tec system

To restore perfect friction in telescope crowns



**Blue -**  
normal friction



**Green -**  
increased friction



**Gold -**  
normal friction

### Your advantages at a glance:

- Two frictional strengths to choose from
- Simple and fast incorporation
- Secure attachment by Si-tec Adhesive
- Easy exchange is possible
- Applicable with all dental alloys
- Inexpensive alternative instead of new manufacture of telescope crowns



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

**Phone** +49 2330 80 69 4-0  
**Fax** +49 2330 80 69 4-20

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# Information for use

## Quick-tec system



►1

The necessary milling in the telescopic crown is performed with the two abrasive wheels supplied. It has proved to be a good idea to carry out the milling first with the diamond grinder and then to work out the edges in the receiving recess cleanly with the hard metal milling cutter. The correct depth of the trough is reached when the rotating shank causes a bare point. When milling, cool the tools well.



►2

Since the receiving recess is only 0.9 mm deep in the center and protrudes to the edge, the connection between the secondary crown and the prosthesis base is not weakened. A milling of the crown wall into the plastic area is not a problem, since the receiving recess is closed again by the Quick-tec element. Depending on the desired friction increase, choose: Quick-tec blue / gold for normal friction or Quick-tec green for increased friction.



►3

The dry and grease-free walls of the receiving recess are coated thinly with Si-tec Adhesive. With the adapter, the Quick-tec element can be secured and inserted into the receiving recess. Remove adhesive excess before curing and align the Quick-tec element. Now allow the adhesive to cure according to the processing instructions.



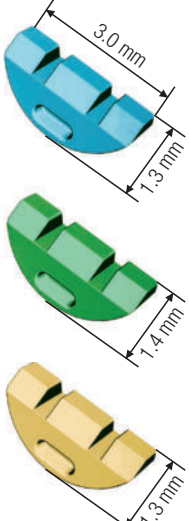
►4

When inserting the prosthesis for the first time, the Quick-tec elements should be coated with vaseline. So the elements slide better on the primary crown along. If the achieved friction is too strong, a piece of the middle pin of the Quick-tec element can be carefully removed with a rubber polisher.

## Quick-tec system

Ord.Nr.

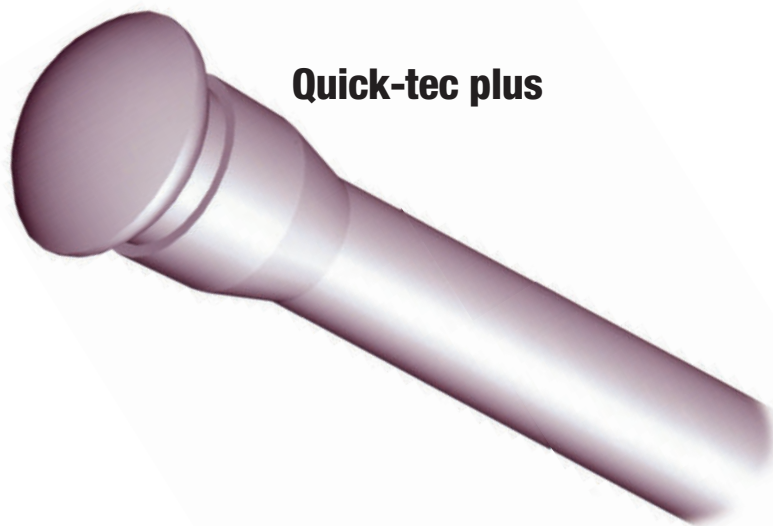
Ord.Nr.

	<b>Quick-tec System Kit</b> 12x Friction elements blue, normal friction 6x Friction elements green, increased friction 1x Adapters 1x Diamant grinder 1x Hard metal milling cutter	0600	<b>Quick-tec Test Set gold</b> 6x Friction elements gold, normal friction 1x Adapters 1x Diamant grinder 1x Hard metal milling cutter	0670T
	<b>Quick-tec Test Set</b> 4x Friction elements blue, normal friction 2x Friction elements green, increased friction 1x Adapters 1x Diamant grinder 1x Hard metal milling cutter	0600T	<b>Individual parts</b> Friction elements blue, normal friction Friction elements green, increased friction Friction elements gold, normal friction Adapters Diamant grinder Hard metal milling cutter Si-tec Adhesive (for gluing the friction elements)	0601 0602 0603 0621 0623 0624 0850



## Quick-tec plus

The repair element for telescopic crowns,  
RS attachment and thrust distribution arms



Quick-tec plus

### Your advantages at a glance:

- Minimum space requirements
- Usable without gluing
- Easy and quick installation
- Optimal friction behavior
- Long-time stable friction element
- Can also be used in the vestibular area



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

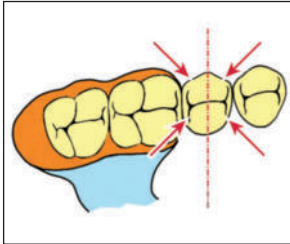
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**Fax** +49 2330 80 69 4-20

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# Information for use

## Quick-tec plus



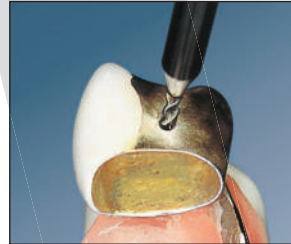
►1

When using the Quick-tec plus element in a closed row of teeth, the ideal position is at an angle of approx. 45° to the oral vestibular axis. In the case of terminally telescopes, the installation is suitable in the approximal range. It is important that the position of the Quick-tec plus element lies on a parallel surface.



►2

At the selected position, a recess is milled with the centering drill. This facilitates the applying of the HM spiral drill. The wall thickness of the telescope must not be less than 0.5 mm.



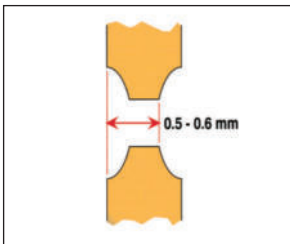
►3

Now a receiving hole is drilled into the secondary part at the prick-punched point with the HM-spiral drill. Resulting burrs must be removed inside and out with a rubber polisher.



►4

The countersink grinder is used to grind a recess into the inner side of the secondary telescope. The correct depth is reached when the continuous shank abuts on both sides and marks a bare place.



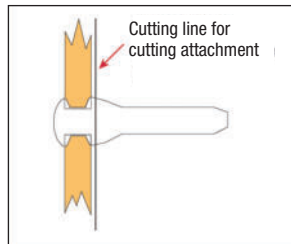
►5

For wall thicknesses of more than 0.6 mm, an appropriate removal has to be carried out from the outside with the countersinking grinder in order to achieve a drilling depth of 0.5 to 0.6 mm. Burrs produced must be removed.



►6

Pull the Quick-tec plus element through the borehole from the inside to the outside until it is able to overcome a resistance, snap into place and rest against the inner wall of the crown. (Autoventil Principle)



►7

Cut off the outwardly protruding part. A small part of the retention thickening must be remained in order to keep the Quick-tec plus element secure.



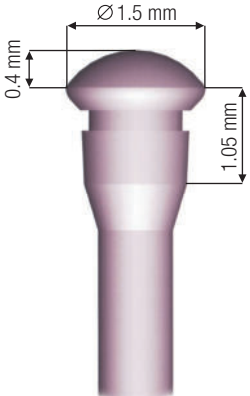
►8

The result: A barely visible bore, closed by a precision friction element. For the inconspicuous installation in the veneer area we recommend Quick-tec plus elements in tooth color.

## Quick-tec plus

Ord.Nr.

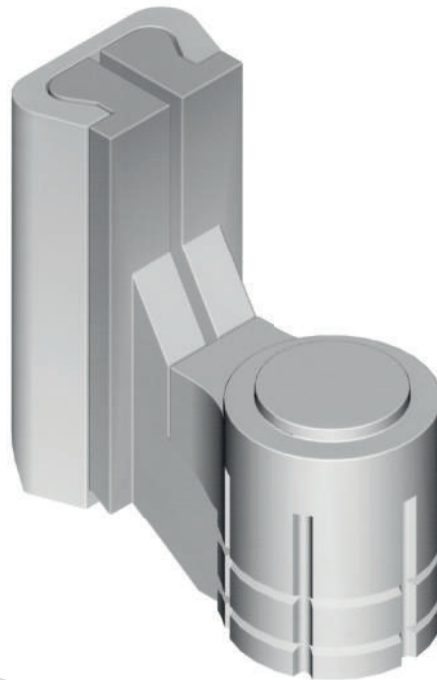
Ord.Nr.

	<b>Quick-tec plus Systemkit (transparent)</b> 16x Friction elements transparent 1x Countersink grinder 2x Centering drills 2x HM spiral drill	1400	<b>Quick-tec plus test set</b> 4x Friction elements transparent 2x Friction elements tooth-colored 1x Countersink grinder 1x Centering drills 2x HM spiral drill	1400T
	<b>Quick-tec plus Systemkit (toothcolored)</b> 16x Friction elements tooth-colored 1x Countersink grinder 2x Centering drills 2x HM spiral drill	1400ZF	<b>Individual parts</b> Friction element transparent Friction element tooth-colored Countersink grinder Centering drills HM spiral drill	1401 1401ZF 1423 1424 1425

# Ultra-tec attachments

The perfection of a decades proven attachment type

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## Your advantages at a glance:

- Self-cleaning matrix by basal tapered guide
- Double screwed union of the matrix in the threaded cap
- Can be placed adjacent to the residual limb by means of a cervical bevel
- Can be used intracoronally by means of a flat matrix



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

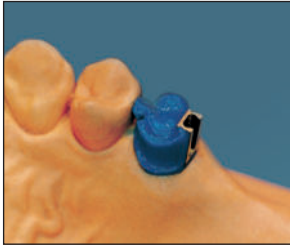
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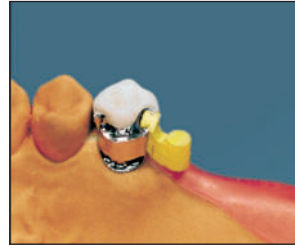
# Information for use

## Ultra-tec attachments



►1

The individually shortened matrix of the Ultra-tec attachment is modeled with the parallel holder adjacent to the residual limb at the cervical edge and parallel to the milled thrust distribution arm. A thrust distribution arm with interlock milling is absolutely necessary in free-end situations.



►2

Insert the placeholder into the matrix and shorten the occlusal area according to the length of the matrix. For the 90 ° version, the placeholder in the basal area has to be adapted to the gingival contour. Prepare now the model for duplication. The placeholder has a slight oversize and thus facilitates later fitting into the model casting.



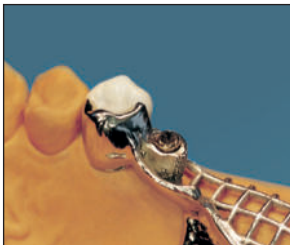
►3

Avoid the smallest damages when using a duplicate model made of investment material.



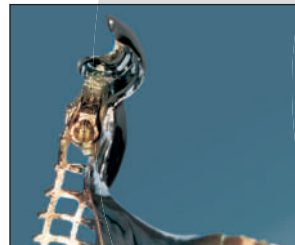
►4

Model the model casting and in the process coat the threaded cap of the Ultra-tec matrix with wax. But do not apply a wax occlusal, thereby an access for the subsequent soldering will be provided or when gluing, glue excesses flow out. Embed the model casting now and pour it.



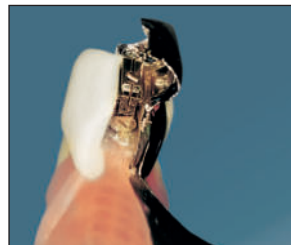
►5

After working out, the threaded cap can be soldered with the model casting. For soldering, the matrix is unscrewed from the threaded cap. To do this, the activating and fixing screws must be removed. For the production of a soldering model, the soldering aid is screwed in basal to fix the threaded cap. The screw threads must be protected against the inflow of solder and damage. The threaded cap is soldered with gold solder with a flow temperature of 800°C.



►6

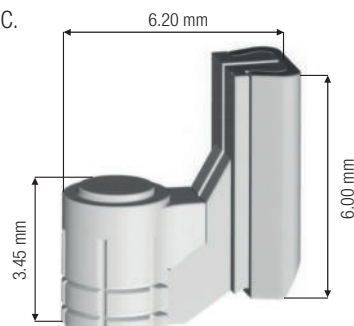
If the Ultra-tec attachment is to be glued, the surfaces to be glued of the threaded cap and the model casting must be sandblasted. The two attachment slats and screws must be kept free of glue and plastic. Coat the surfaces to be bonded and fix the crowns with the model casting on the model tension-free. Then allow the adhesive to cure.



►7

The friction can be adjusted by turning the activation screw to meet every patient's requirements for reliability.

Ord.Nr.



### Ultra-tec attachments

Ultra-tec 120° Ag/Pd, matrix die HSL  
Ultra-tec 120° Ag/Pd, matrix plastic  
Ultra-tec 90° Ag/Pd, matrix die HSL  
Ultra-tec 90° Ag/Pd, matrix plastic

1600-1  
1630-1  
1690-1  
1699-1

### Individual parts

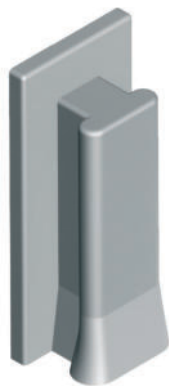
Matrix HSL, castable up to 1400°C to all precious metal alloys (not for NE alloys)  
Matrix made of completely (residue-free) combustible plastic  
Patix Ag/Pd, 120°  
Patix Ag/Pd, 90°  
Threaded cap Ag/Pd, 120°  
Threaded cap Ag/Pd, 90°  
Mounting screw Ti  
Activating screw Ti  
Universal parallel bracket  
Activation instrument  
Soldering aid  
Transfer matrix

1601  
1631  
1602  
1692  
1603  
1693  
1608  
1609  
1622  
1624  
1626  
1605

For initial equipment sets, please visit [www.si-tec.de](http://www.si-tec.de)

# SIM-tec attachments

The cost-effective alternative in attachment technology



**Primary part**



**Secondary part -  
normal friction**



**Secondary part -  
increased friction**

## Your advantages at a glance:

- Can be processed with all dental alloys
- Self-latching secondary parts
- A crown-close processing by T-shape
- Can be shortened to 2.9 mm
- Different Friction strengths available



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

**Phone** +49 2330 80 69 4-0  
**Fax** +49 2330 80 69 4-20

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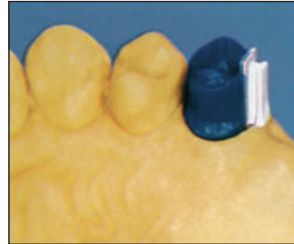
# Information for use

## SIM-tec attachments



►1

The primary part made of residue-free combustible plastic is modeled with the parallel holder next to the stump and parallel manner to the milled thrust distribution arm on the crown.



►2

When modeling the crown, the surface of the primary part must be kept free of wax.



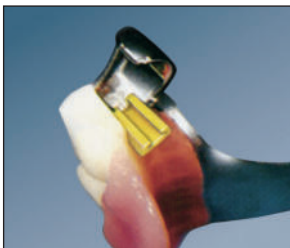
►3

After casting, the primary part can be shortened up to 2.9 mm. Round off the occlusal area, so that the secondary part can be more easily inserted. The attachment surfaces are carefully polished to remove very little material.



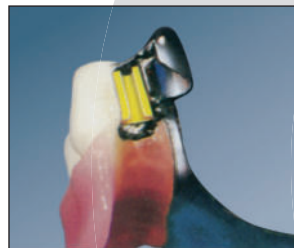
►4

For the production of the model casting, shorten the yellow secondary part according to the length of the primary part. Prepare the model for duplication and block thereby the basal area under the attachment.



►5

In the completed model casting, the secondary part with the insertion aid is inserted into the receiving opening. In this case, the retention lug of the secondary part must securely engage. If necessary, the receiving opening can be carefully reworked.



►6

The secondary part is held securely by the incorporated retention lug and is not glued.

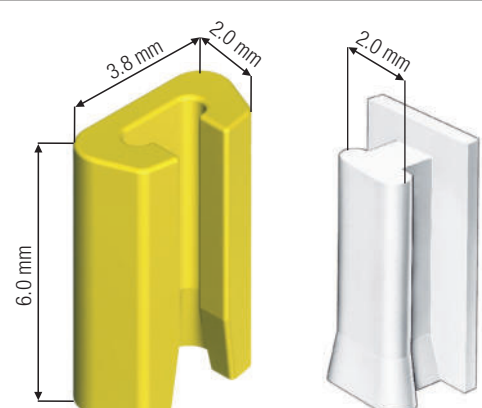


►7

Should a higher friction be desired, the yellow secondary part can be exchanged for a red secondary part.

## SIM-tec attachments

Ord.Nr.

	<b>SIM-tec Systemkit</b> 10x SIM-tec primary parts 8x SIM-tec secondary parts yellow, normal friction 2x SIM-tec secondary parts red, increased friction 1x Parallel holder 1x Insertion aid	1200E
	<b>Individual parts</b> SIM-tec primary part SIM-tec secondary part yellow, normal friction SIM-tec secondary part red, increased friction Parallel holder Mounting aid	1201 1202 1203 1222 1223



# The HHK - Herdecker hybrid crown

## The safety of the telescopic crown in the attachment technique



**HHK -**  
Herdecker hybrid crown

### Your advantages at a glance:

- Suitable for each dental alloy, no precious metal needed
- For lift-off technique and one-piece casting
- Only 3.7 mm in height
- Free choice of the friction elements due to modular system
- Mikro-adjustable adhesion
- Aesthetic comfort of the composite-metal-ceramic dental attachments
- Ideal as bridge sectioning attachment



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

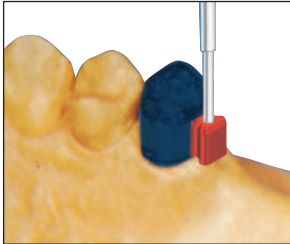
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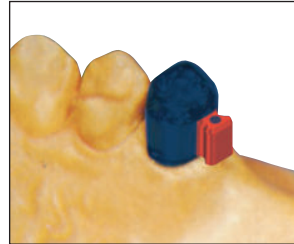
# Information for use

## Herdecker hybrid crown



►1

The universal primary part of the Herdecker hybrid crown is attached to the model crown with the parallel holder adjacent to the residual limb and parallel to the milled thrust distribution arm. The predetermined wall thickness of the universal primary part is to be transferred into the wax model.



►2

The guide surfaces of the universal primary part must be kept free of wax and the bore for the parallel holder is sealed with wax before embedding. The crown can be poured now into the desired alloy.

## Herdecker hybrid crown

Ord.Nr.

<b>Original equipment HHK</b>	2300
5x Universal primary parts - burnable plastic	
1x Parallel holder	
5x Universal primary parts - burnable plastic	2301
1x Parallel holder	2322

01/18

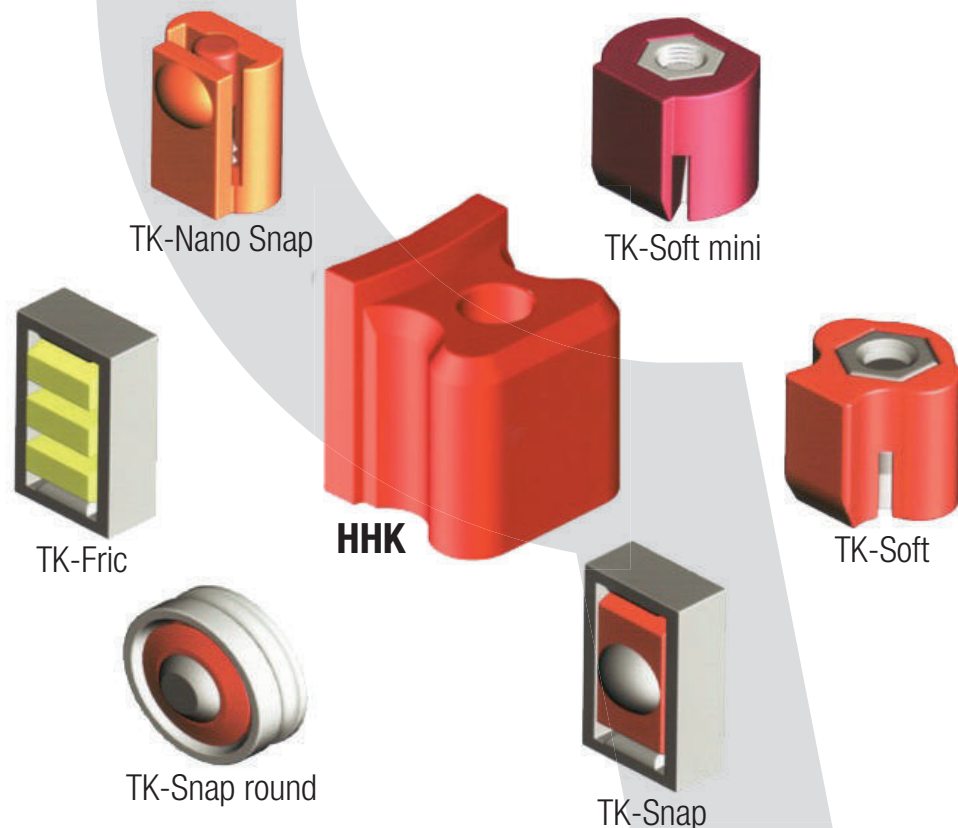


►3

Re-mill the thrust distribution arm and the guide surfaces of the universal primary part. The desired friction element is selected now. If elements from the TK-Snap system are to be used, a TK-Snap must be milled with the TKR-cutter. This must have a depth of 0.35 mm. This is achieved by positioning and holding the drill at a right angle to the milling axis. To the crown with the universal primary part, the corresponding placeholder for the friction element is placed distally and the model is prepared for duplication.

The further work steps can be found in the respective processing instructions of the selected friction element.

The HHK can be used with the following Si-tec® construction elements:

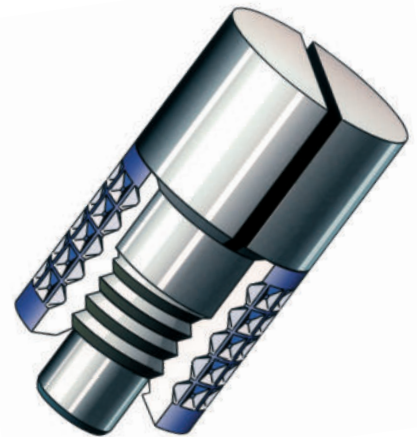


## Safe-tec II and Safe-tec V

The Si-tec latch made of titanium for screw connections and removable dentures



**Safe-tec II**



**Safe-tec V**

### Your advantages at a glance:

- Primary part can be poured into each alloy
- For bridge dividers and removable dentures
- Simple insertion and removal without auxiliary tool
- Clear locking of the bolt axis in the integration position
- Fixing the secondary part by simple bonding



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany

[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

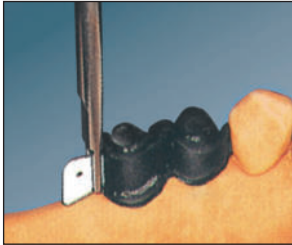
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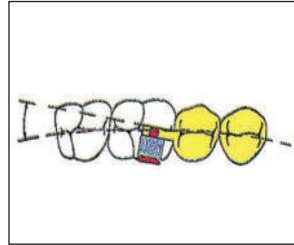
# Information for use

## Safe-tec II



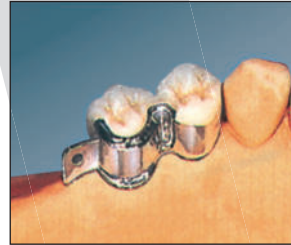
►1

The primary part is modeled with the parallel holder parallel to the insertion direction on the crown. In the cervical area, the primary part can be adapted to the gingival contour by grinding or can also be designed to be freely flushable. The placeholder D can be fixed as an orientation aid in the receiving opening of the primary part. Thus, the end position of the secondary part can already be recognized during modeling and positioning errors can be avoided. It is possible to process the Safe-tec latch in conjunction with telescopic cranes and bar constructions.



►2

The starting angle of the primary part should differ slightly (approx. 15°) from the jaw course. As a result, during the finished work, the locking head is lowered in the distal region, which means that the tongue can be guided without disturbance and, at the same time, easier to open through the patient.



►3

The finished milled crowns with thrust distribution arm and interlock. In free-end situations a thrust distribution arm with interlock is necessary to compensate for leverage.



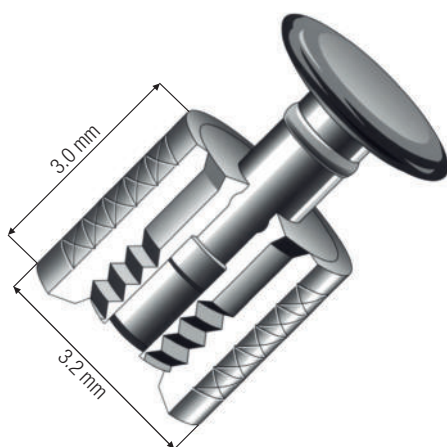
►4

When the Safe-tec is incorporated in a collar version, fix the placeholder D in the receiving opening of the primary part, block the placeholder in the cervical area and prepare the model for duplication.



►4a

When veneering the lingual or palatal surface, the placeholder D is shortened to approximately 1 mm, fixed in the receiving opening of the primary part, and the model is prepared for duplication.



### Lift-off technique

As a further processing variant it is possible to manufacture the secondary construction in the lifting-off technique. The placeholder F, which is also used in the completion process, is used as a modeling spaceholder. Further information can be found under position 4 in the processing manual Safe-tec V. By more or less strong turning of the functional part into the housing, the friction of the locking axis can be adapted to the individual wishes of the patients.

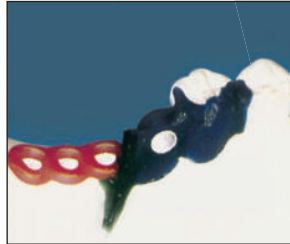
# Information for use

## Safe-tec II



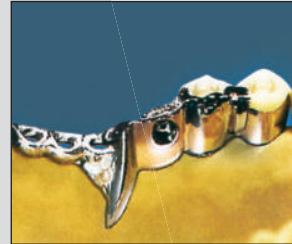
►5

For easy demoulding of the duplicate model, use a scalpel to cut the duplicating compound in the area of the placeholder. In the duplicate model made of investment material, avoid even the smallest damages.



►6

Model the casting model as usual. Adjust the latch element but do not cover it with wax.



►7

Work out the model casting and rework the receiving channel for the Safe-tec so that the secondary part can be inserted exactly into the receiving opening of the primary part.



►8

For bonding, sandblast the surfaces and protect the latch from the penetration of glue with vaseline. Apply the Si-tec Adhesive and insert the secondary part into the bridging secondary part until the interlock is exactly in the receiving opening of the primary part. Then allow the adhesive to cure tension-free on the model.



►5a



►6a



►7a



►8a

When veneering the lingual or palatal surface, the completion is carried out with the inserted placeholder F. The length of the middle part corresponds precisely to the length of the Safe-tec secondary part. After hardening the veneer material, the placeholder is pulled out with a rotary movement and the secondary part is glued into the resulting channel.

## Safe-tec II

Ord.Nr.

<b>Individual parts</b>	
Primary part, residue-free combustible	1331
Placeholder D + F	1306
Secondary part Safe-tec II, Titanium / plastic	1362
Functional part, titanium / plastic	1369
Housing, titanium	1353
Parallel holder	1222
Screw connection	1325
Si-tec Adhesive	0850
<b>Complete equipment</b>	
<b>Safe-tec II Original equipment</b>	1360-E
2 Latches - complete with tool	
<b>Safe-tec II single pack</b>	1360-1
1 primary part, 1 secondary part and 2 placeholders	



# Information for use

## Safe-tec V



►3

The finished milled crowns with thrust distribution arm and interlock. This is necessary if, at a later time, the bridge is to be extended to a removable free-end prosthesis in the event of loss of the terminal abutment tooth.



►4

For the modeling of the split bridge, insert the placeholder F, whose middle part exactly corresponds to the length of the Safe-tec housing, into the bore of the primary part. When using modeling plastic, the spacer must not be insulated. It can be pulled out of the model with a slight twisting motion.



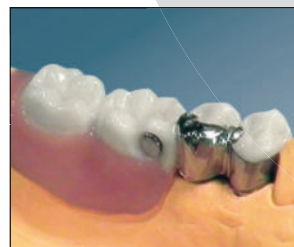
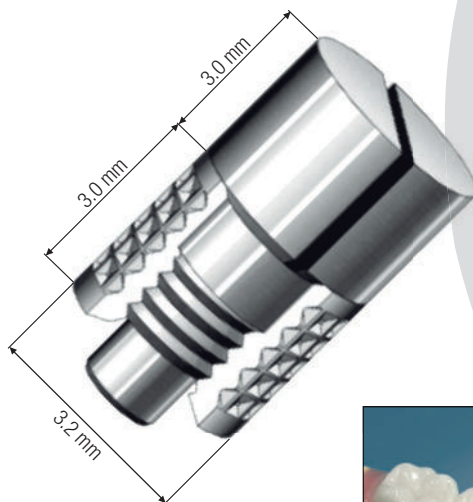
►5

After casting, the second bridge section is fitted and then prepared for the veneering. The Safe-tec V is glued into the bridge part only after the veneering. The placeholder F can be used during veneering.



►6

For bonding, sandblast the surfaces and protect the latch from the penetration of glue with vaseline. Apply the Si-tec Adhesive and insert the secondary part into the bridging secondary part until the interlock is exactly in the receiving opening of the primary part. Then allow the adhesive to cure tension-free on the model. The screw element can now be individually shortened and adapted to the tooth shape.



►7

In case of loss of terminally abutment tooth, the bridge construction can be removed after loosening the screw connection. A functional part can be screwed into the housing and the bridge can be reworked by adding a prosthesis saddle to a removable free-end prosthesis.

## Safe-tec V

Ord.Nr.

### Individual parts

Primary part, residue-free combustible  
Placeholder D + F  
Secondary part Safe-tec V, titanium  
Screw connection element titanium  
Housing, titanium  
Parallel holder  
Screw connection  
Si-tec Adhesive

1331  
1306  
1382  
1388  
1353  
1222  
1325  
0850

### Complete equipment

#### Safe-tec V Initial equipment

2 Screw connections complete with tool

#### Safe-tec V Single Pack

1 Primary part, 1 screw connection and 2 placeholders

1380-E  
1380-1



## Grazil braces

For cost-effective production of clasp prostheses



**Grazil braces**

### Your advantages at a glance:

- Simple standard solution for the patient
- Universally applicable
- Made of orthodontic steel
- Fast and uncomplicated processing



**Si-tec GmbH**  
Dental solutions  
Leharweg 2  
58313 Herdecke  
Germany



[www.si-tec.de](http://www.si-tec.de)  
[info@si-tec.de](mailto:info@si-tec.de)

**Phone** +49 2330 80 69 4-0  
**Fax** +49 2330 80 69 4-20

Zertifiziertes Qualitätssicherungssystem  
EN ISO 13485  
Certified Quality Management System  
EN ISO 13485

**CE 0044**

# Application example

## Grazil braces



► Grazil brace left



► Grazil brace right



► Grazil brace left



► Grazil brace right

Ord.Nr.

### Grazil braces

12x Grazil braces right  
12x Grazil braces left

0011  
0013