



Smile in a Box® - Surgical Procedures for
Straumann® Dental Implant Systems

Basic Information

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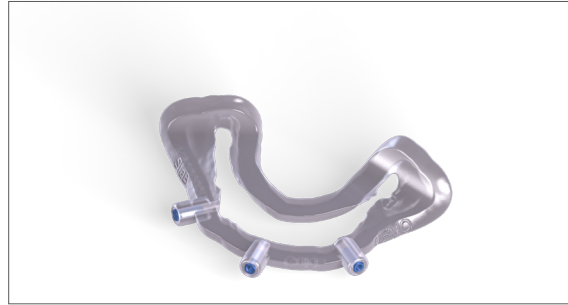
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1. Guides and temporary restorations overview

1.1 Procedure using sequential pin-supported guides



Template Fixation Pin Guide



Surgical Guide with Cut Profile



Pin-Supported Drill Guide



Temporary Restoration

1.2 Procedure using stackable guides



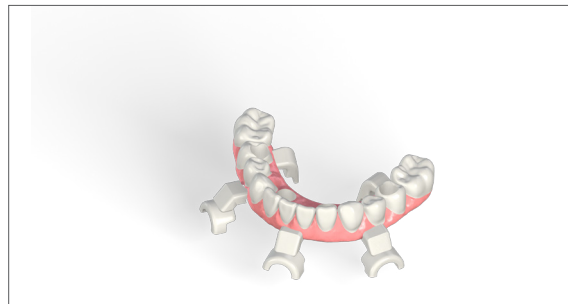
Template Fixation Pin Guide



Surgical Guide with Cut Profile



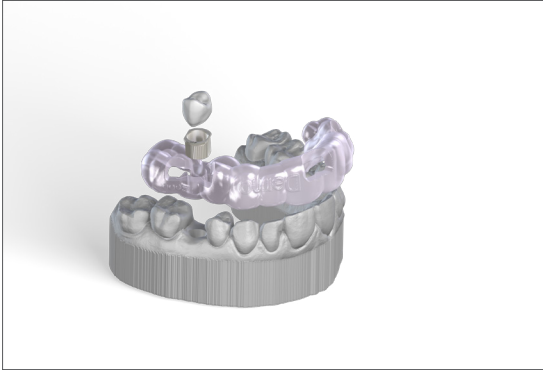
Stackable Drill Guide



Temporary Restoration

2. Surgical procedures

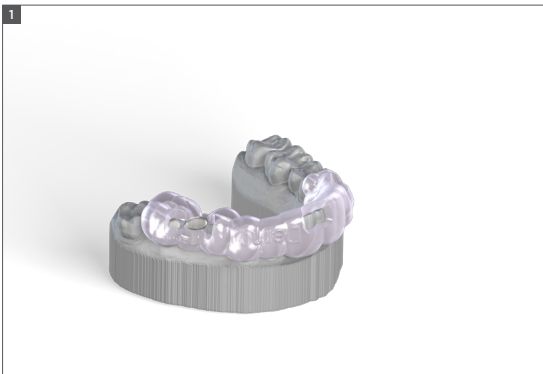
2.1 Single-tooth or multi-tooth surgical procedure



Materials

- ☐ Straumann® Surgical guide(s) according to your order
- ☐ Straumann® instruments and Straumann® Guided Surgery Cassette for the corresponding chosen implant system
- ☐ Straumann® immediate temporary restorations (crown, bridge) or customized Healing Abutments (if applicable)
- ☐ Auxiliaries provided by clinician (e.g. provisional cement)

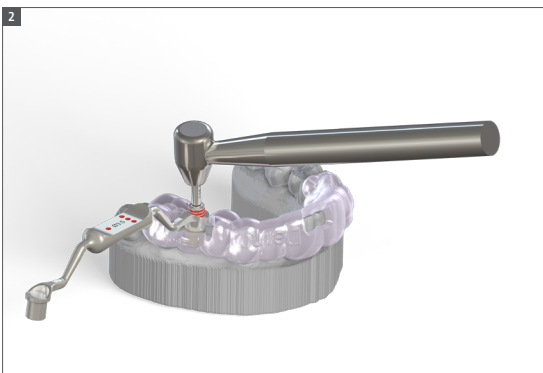
General procedure



Step 1 – Seating the Surgical Drill Template

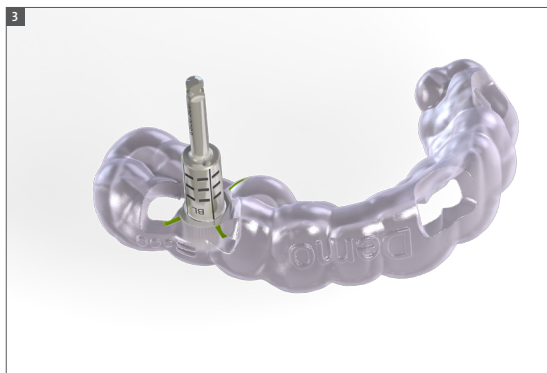
Place the Surgical Drill Template on the patient's dentition. Verify the fit through the inspection windows and check the fit around those areas in which the guide is seated on the patient's teeth.

Note: The guide is designed to fit the digital master model that was provided. An accurate scan is crucial for the surgical outcome.



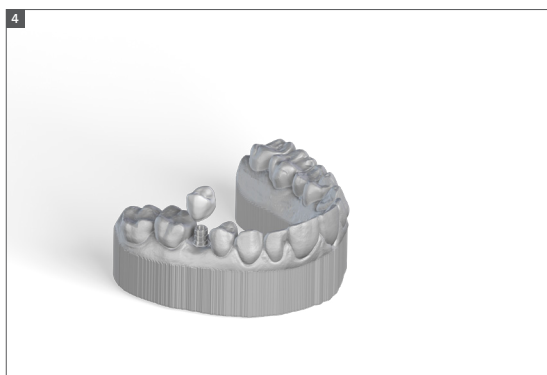
Step 2 – Guided implant bed preparation and implant insertion

Perform the guided implant bed preparation and implant insertion according to the case-specific treatment protocol.



Step 3 – Guided indexing (if applicable)

Guided indexing is possible for immediate loading cases. The indexing marks on the Surgical Drill Template indicate where to align the rotational marker of the insertion tool to obtain the planned position of the temporary crown, bridge, or custom healing abutment.



Step 4 – Immediate temporary restoration (if applicable)

Place the provided temporary restoration at the implant site (where applicable). Bond the temporary restoration to the provided Variobase® Abutment.

Place the temporary restoration in the patient's mouth.

2.2 Full-arch procedure

2.2.1 Guided osteotomy and placement of Template Fixation Pins (Template Fixation Pin Guide)

Template Fixation Pin Guide



Materials

- ☐ Straumann® instruments and Straumann® Guided Surgery
Cassette for the corresponding chosen implant system
- ☐ Straumann® Template Fixation Pins
- ☐ Straumann® Drill for Template Fixation Pin
- ☐ Straumann® Template Fixation Pin Guide

General procedure

1



Step 1 – Seating the Template Fixation Pin Guide

Proceed to seating the Template Fixation Pin Guide on the patient's current configuration.

a. For a fully edentulous patient

Verify the occlusion by asking the patient to bite firmly. The occlusion on the surgical guide must be identical to the occlusion of the appliance used for the CT scan. A bite index can be used to stabilize the occlusion.

b. For the dentate patient

Verify the fit of the guide through the inspection windows and the periphery of the interface.



Step 2 – Pin fixation procedure

Prepare the anchoring sites by drilling until the stop of the drill touches the sleeve, using the Drill for Template Fixation Pins. Insert the Fixation Pin after completing the drilling for the corresponding site.

- The Fixation Pins must be fully inserted, with the pin heads in contact with their respective pin sleeves.
- It is recommended to alternate left and right sites when preparing the anchoring sites.
- Stable anchoring of the Template Fixation Pin Guide is crucial for the surgical outcome.

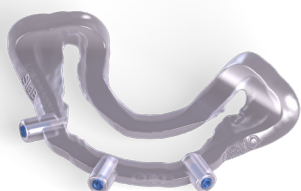


Step 3 – Removing the Template Fixation Pin Guide

Remove all pins and retrieve the Template Fixation Pin Guide.

2.2.2 Ridge adaptation (Surgical Guide with Cut Profile) (If applicable)

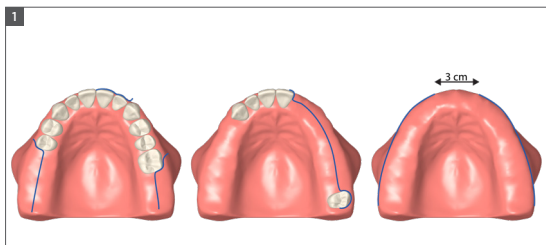
Surgical Guide with Cut Profile



Materials

- ☐ Straumann® Surgical Guide with Cut Profile
- ☐ Straumann® Template Fixation Pins
- ☐ Bone reduction surgical tools (left to the clinician's discretion)

General procedure



Step 1 – Raising the flap and extracting the terminal dentition

Separate the flap along the region planned to be reduced, and extract all failing teeth (for dentate patients).

Important: Some teeth might be used to provide additional support for the subsequent surgical guides. Make sure to study carefully the case-specific documents before extracting the teeth.

Step 2 – Seating the Surgical Guide with Cut Profile

Seat the surgical guide in the mouth of the patient. Select a predefined anchoring entry point, and insert a pin through the guide into the corresponding anchoring site. Verify the stability as the remaining pins are inserted.

Note: Stable anchoring of the guide is crucial for the surgical outcome. The Fixation Pins must be fully inserted, with the pin heads in contact with their respective pin sleeves.

Important: Verify any planned anatomical contact points (e.g. posterior bone supports or molar supports).

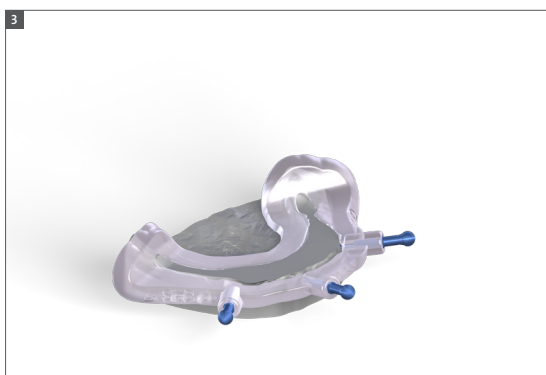
Step 3 – Bone reduction

Reduce the bone to the Surgical Guide's cut profile.

Note: Make sure to preserve the bone around every anchoring entry point while reducing the crestal bone. Consult instructions for use for more information.

Step 4 – Guide removal

- a. Stackable guide procedure: leave all pins and the Surgical Guide with Cut Profile in place, in preparation for the next step.
- b. Sequential pin-supported procedure: remove all pins and retrieve the Surgical Guide with Cut Profile.



2.2.3 Implant bed preparation (Drill Guide)



Materials

- ☐ Straumann® Template Fixation Pins
- ☐ Straumann® instruments and Straumann® Guided Surgery Cassette for the corresponding chosen implant system
- ☐ Straumann® Drill Guide
- ☐ Auxiliaries provided by clinician

General procedure



Step 1 – Seating the Drill Guide

a. Procedure for using a stackable Drill Guide

Fit the Drill Guide onto the Surgical Guide with Cut Profile. Verify that the surgical guide is fully seated and ensure an intimate fit between both guides performing the surgical procedure.



b. Procedure for sequential pin-supported Drill Guide

Seat the Drill Guide in the mouth of the patient. Select a predefined anchoring entry point, and insert a pin through the Drill Guide and into the corresponding anchoring site. Verify the stability of the guide as the remaining pins are inserted.



Step 2 – Guided implant bed preparation

Proceed to the guided implant bed preparation according to the case-specific treatment protocol.



Step 3 – Guided insertion and indexing (if applicable)

The indexing marks on the Drill Guide indicate where to align the rotational marker of the insertion tool to achieve the planned position of the angled abutments.

Step 4 – Removing the guides

a. Procedure for using stacked surgical guides

Remove the Drill Guide. Leave all Fixation Pins and the Surgical Guide with Cut Profile in place, in preparation for the next step.

b. Sequential pin-supported procedure

Remove all pins and remove the Drill Guide.

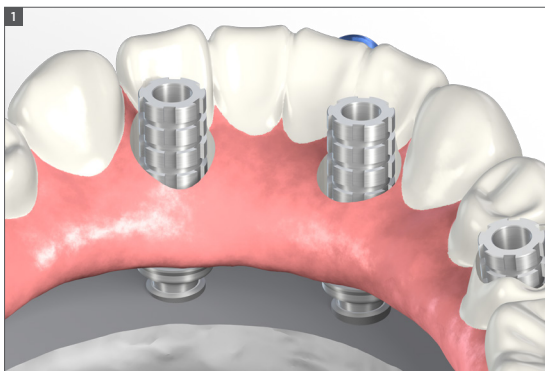
2.2.4 Immediate loading with temporary restoration (If applicable)



Materials

- ☐ Straumann® temporary TAN copings
- ☐ Straumann® temporary restoration
- ☐ Pickup and conversion materials (left to the clinician's discretion)
- ☐ Auxiliaries provided by clinician

General procedure

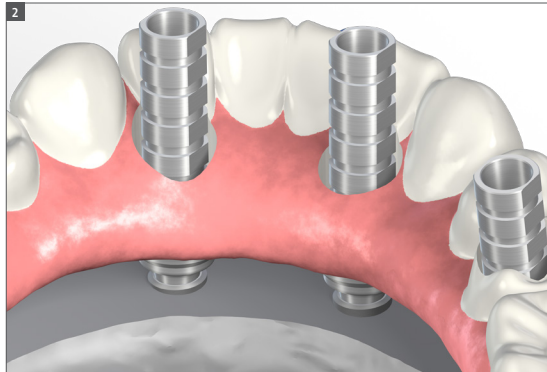


Step 1 – Abutment placement

Place the Straumann® screw-retained abutments on the implants and the temporary copings on the abutments.

The insertion of a rubber dam is recommended to protect the underlying tissue and abutment interface during the luting stage.

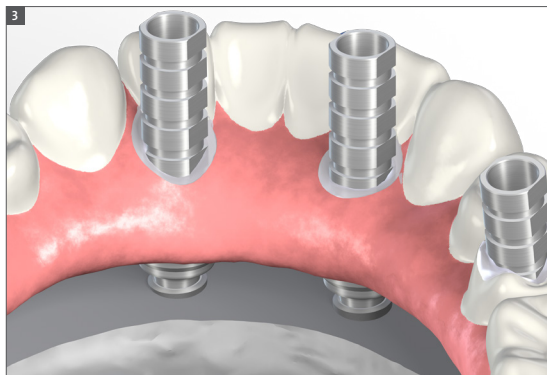
Protecting the screw channels by packing them with Teflon tape or cotton is also recommended.



Step 2 – Guided occlusion verification

Establish the occlusion by seating the prosthesis over the Temporary TAN Copings.

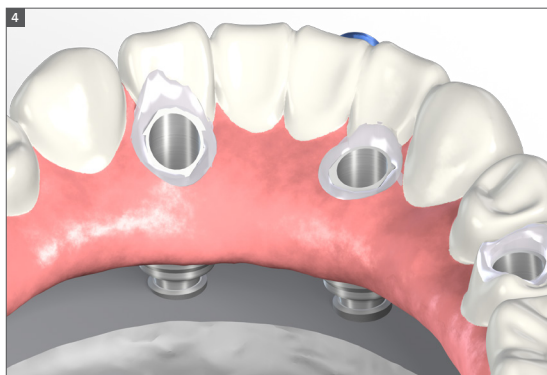
The openings of the temporary restoration may need to be enlarged to facilitate proper seating of the prosthesis over the copings.



Step 3 – Pickup

Proceed with the fixation of the Temporary TAN Copings to the temporary restoration using flowable acrylic or provisional crown material. Once completed, retrieve the provisional restoration from the patient's mouth and start the chairside conversion.

The Temporary TAN Copings will need to be trimmed to create a smooth occlusal surface.



Step 4 – Final adjustments and suture

For stackable guide procedure: remove all pins and remove the Surgical Guide with Cut Profile.

Place protective caps on the screw-retained abutments, and perform any needed ridge adjustments or grafting procedures prior to suturing.

The temporary prosthesis is usually finalized at this time.



Step 5 – Delivery of the temporary restoration

Deliver the temporary restoration in the patient's mouth. Verify the established occlusion, perform any adjustments if necessary, protect and seal the screw channels.

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