

5.2 OPEN TRAY IMPRESSION

Intended use

- Open tray impression technique

Characteristics

Simple

- Color-coded components corresponding to prosthetic connection
- Slender emergence profile accommodates space limitations
- Guide screw can be tightened either by hand or with the SCS screwdriver

Reliable

- High precision impression components give an exact replica of the intraoral situation
- Clear-cut tactile response from the prosthetic connection verifies proper seating of components

Note

Open tray impression procedure requires a custom-made tray with perforations. Impression posts are intended for single use only to ensure optimal fit and precise impression taking for each patient.

■ Prosthetic procedure: p. 36–37

■ Lab procedure: p. 38



5.2.1 Open tray impression – Prosthetic procedure

1



Step 1 – Positioning the impression post

- Ensure sufficient access to the implant site in order to avoid pinching in the gingival tissue. Be aware that the sulcus may collapse rapidly once the healing components have been removed.
- Clean the internal configuration of the implant thoroughly from blood, tissue, etc. prior to the impression procedure.
- Place the impression post accurately into the implant and hand-tighten the guide screw.
- In case of occlusal space limitation, the length of the impression post can be reduced by one retention ring after the guide screw has been removed.



Step 2 – Impression taking

- Make perforations in the custom-made impression tray (light cured resin) according to the individual situation so that the positioning screw of the impression post sticks out.

- Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber).

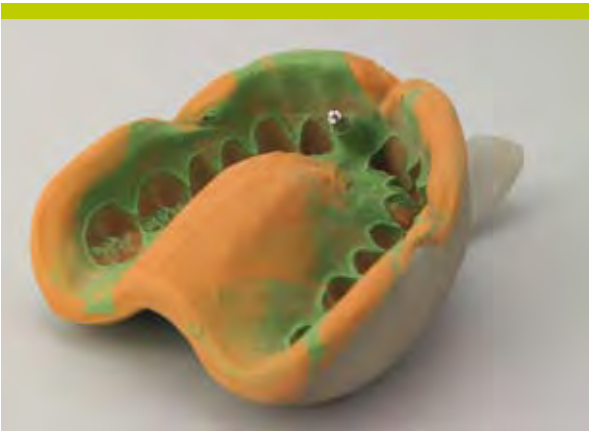
Note

Due to its low tensile strength, hydrocolloid is not suitable for this application.

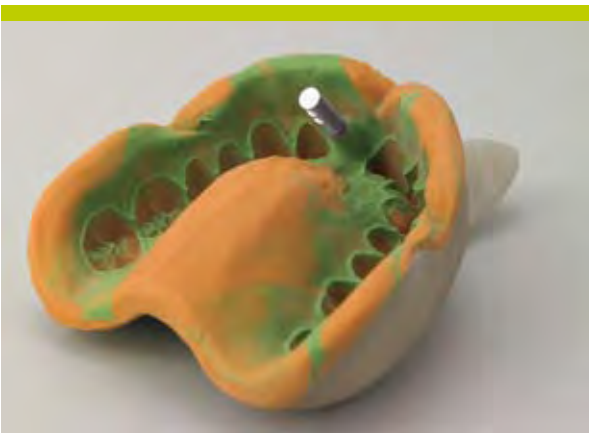
- Uncover the screws before the material is cured.
- Once the material is cured, loosen the guide screws and remove the tray.

5.2.2 Open tray impression – Lab procedure

1a



1b



1c



2



Step 1 – Analog repositioning and fixing

- Reposition and fix the analog in the impression using the guide screw. To avoid inaccuracies when connecting, the analog must be positioned exactly in line with the grooves of the impression post before screwing in.

Note

When tightening the screw, grasp the retentive section of the analog securely to prevent the impression post from rotating. This is especially important with a shortened post.

Step 2 – Fabricating the master cast

- Fabricate the master cast using standard methods and type 4 dental stone (DIN 6873). A gingival mask should always be used to ensure that the emergence profile of the crown is optimally contoured.

5.3 CLOSED TRAY IMPRESSION

Intended use

- Closed tray impression technique

Characteristics

Simple

- Color-coded components corresponding to prosthetic connection
- Slender emergence profile to accommodate space limitations
- No additional preparation (i.e. perforation) of tray required

Reliable

- High precision impression components give an exact replica of the intraoral situation
- Clear-cut tactile response from the prosthetic connection verifies proper seating of components

Note

Impression posts are intended for single use only to ensure optimal fit and precise impression taking for each patient.

■ Prosthetic procedure: p. 40–41

■ Lab procedure: p. 42



5.3.1 Closed tray impression – Prosthetic procedure

1a



Step 1 – Positioning the impression post

- Ensure sufficient access to the implant site in order to avoid pinching in the gingival tissue. Be aware that the sulcus may collapse rapidly once the healing components have been removed.
- Clean the internal configuration of the implant thoroughly from blood, tissue, etc. prior to the impression procedure.
- Place the impression post accurately into the implant and tighten the guide screw hand-tight (using the SCS screwdriver).

Note

Ensure that the lateral planar areas of the post are facing mesial and distal.

1b



- Place the polymer impression cap on top of the fixed impression post. Ensure that the color of the cap corresponds to the color of the positioning screw in the post and that the arrows are aligned with the oral-vestibular direction.
- Push the impression cap in apical direction until it clicks. The impression cap is now firmly seated on the impression post.

2a

**Step 2 – Impression taking**

- Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber).

Note

Due to its low tensile strength, hydrocolloid is not suitable for this application.

2b



- Once the material is cured, carefully remove the tray. The impression cap remains in the impression material and therefore is automatically pulled off from the impression post with the removal of the tray.

2c



- Unscrew and remove the impression post and send it together with the impression tray to the dental technician.

5.3.2 Closed tray impression – Lab procedure

1a



Step 1 – Analog fixing and impression post repositioning

- Mount the impression post on the analog using the guide screw. To avoid inaccuracies when connecting, the analog must be positioned exactly in line with the grooves of the impression post before screwing it in.

1b



Note

Ensure that the color code of the guide screw corresponds to the color code of the analog and that the color code of the analog corresponds to the color code of the polymer cap in the impression material.

1c



- Reposition the impression post in the tray.
- Smoothly push the impression post until you feel the tactile response of engagement. It is now firmly seated on the impression cap in the impression tray.

2



Step 2 – Fabricating the master cast

- Fabricate the master cast using standard methods and a type 4 dental stone (DIN 6873). A gingiva mask should always be used to ensure that the emergence profile of the crown is optimally contoured.