



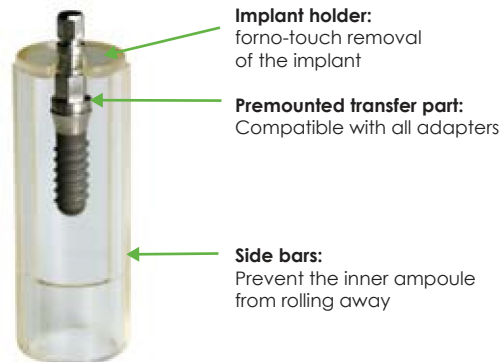
6. IMPLANTATION

Ampoules

SLA Ampoule

Bioconcept implants are supplied in ampoules.

- The sterile ampoule of SLA guarantees its sterility.
- A premounted transfer part makes it easier to remove and handle the implant.



Transfer part

The handling of transfer aids in the SLA implant holder are the same for all independent of color. The transfer part consists of the following parts:

- Holding screw
- Ring
- Hexagon



If an implant is screwed correctly into a correctly prepared implant bed, the maximum force acting on the transfer part is about 35 Ncm. To avoid bone damage (bone necrosis or bone splitting) in the event of incorrect use (e.g., excessive tightening resistance with an inadequate drilling depth), the transfer part is provided with a breaking point (break at about 100 Ncm). If the transfer part breaks during the tightening process, part of the transfer screw remains in the adapter and the other part in the implant. The part in the implant can be unscrewed easily with the aid of a forceps. For this eventuality, it is advisable to keep a used sterile transfer part in stock as an aid. This can also be used for subsequent vertical correction of the implant position if it is screwed onto the implant again. Ensure sufficient countering with the adapter in the ratchet and the holding key. **Subsequent correction of vertical position can interfere consider ably with the primary stability of the implant.**

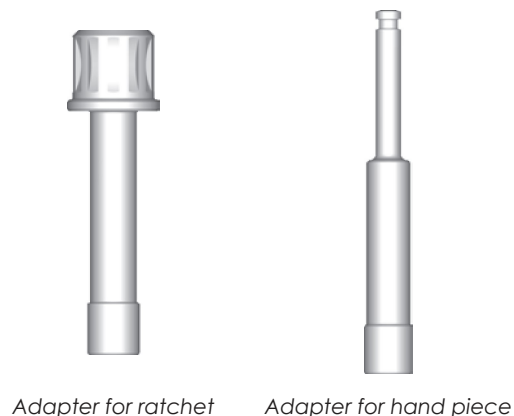
Surgical auxiliary instruments

Adapter

The implant can optionally be inserted mechanically or manually. There are 2 adapter versions, each in 3 different lengths:

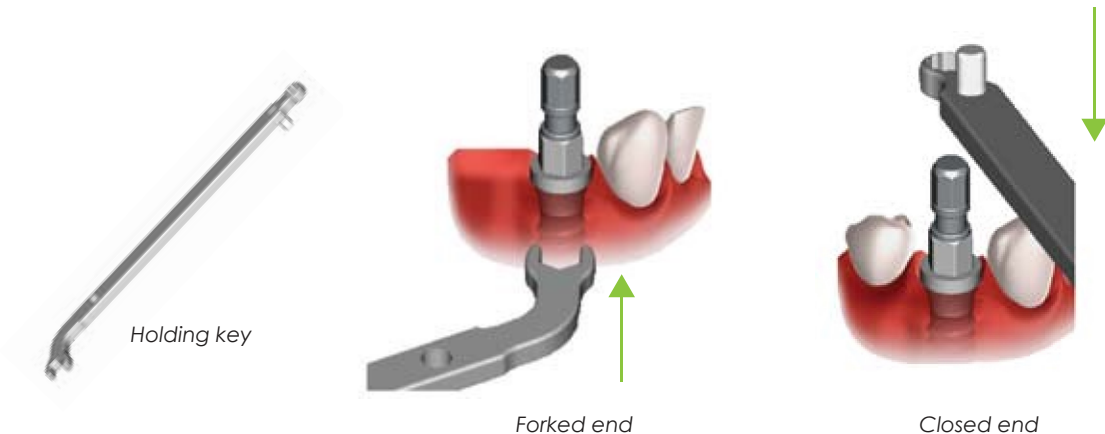
Holding key

When loosening the transfer part from the implant, the holding key is used for stabilizing (countering) the hexagon. The transfer part is loosened only with the ratchet or hand piece (counter-clockwise).



The shape of the holding key is specially designed for different oral situations:

- Forked end: when spaces are normal, the forked end is attached directly to the hexagon.
- Closed end: when the interdental space is limited, the closed end must be placed on the hexagon over the transfer part. To do this, the ratchet and adapter or hand piece must be removed.



Ratchet

The ratchet of the Bioconcept® Dental Implant System is a two-part lever arm instrument with a rotary knob for changing the direction of force.

The ratchet is required for the following operations:

- Manual thread tapping
- Manual placement of implants into their final position in the implant bed

The ratchet is supplied with a service instrument, which is used to loosen the headed screw. After loosening, the ratchet bolt can be removed from the body of the ratchet. It must be disassembled for cleaning and sterilisation.

Implantation procedure

SLA

Opening the sterile ampoule

- Open the safety cap of the sterile ampoule.
- Drop the inner ampoule onto a sterile towel. Avoid contamination with non-sterile parts.

Please note

Grip the lid like a syringe.

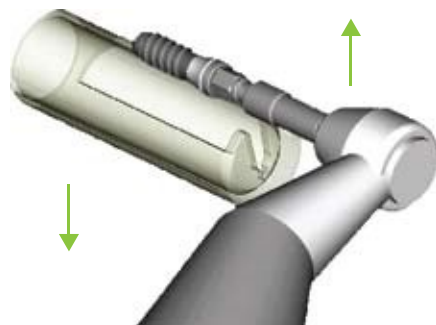
- Detach the implant carrier from the lid: either by pressing the release button over a sterile surface, or by pulling it off manually.

Placing the implant–Mechanical placement

Note

Mechanical placement with the aid of the hand piece

- Grasp the closed part of the inner ampoule. A click is heard when the hand piece adapter is attached correctly.
- Pull down the inner ampoule. At the same time, lift the implant out of the inner ampoule (while supporting your fore arms).

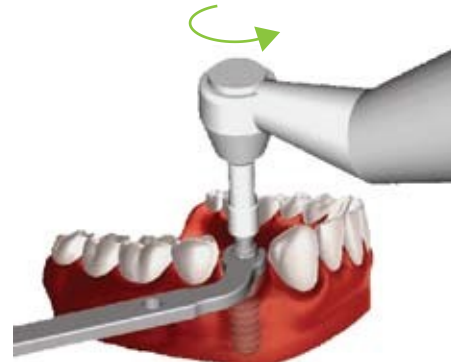




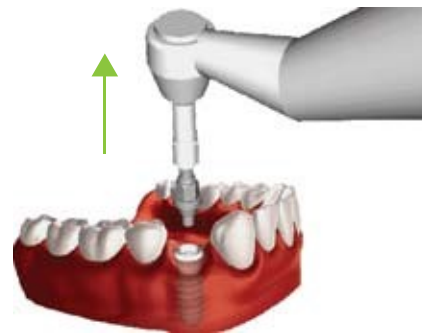
- Move the implant into final position with a maximum of 15 rpm, turning it clockwise. When the floor of the bone cavity is reached, there is a palpable increase in resistance.



- Before removing the transfer part, set the motor on the hand piece to "Reverse". During the first few turns, hold the implant with the holding key and remove the transfer part.



- Remove the holding key and then remove the transfer part with the adapter completely from the implant.



Placing the implant—Manual placement

Note

The following procedure is the same for and SLA implants.

Manual placement with the aid of the ratchet and appropriate adapter

- Grasp the closed part of the inner ampoule. A click is heard when the hand piece adapter is attached correctly.



- Pull down the inner ampoule. At the same time, lift the implant out of the inner ampoule with a slight twisting movement (while supporting your forearms).

- Insert the implant into the implant bed with the aid of the adapter.



- Attach the ratchet (the clockwise arrow on the rotary knob signals the direction of insertion). Then, attach the pivot of the holding key and bring the implant into final position with slow movements of the ratchet.
- Remove the holding key and change the direction of the ratchet (the arrow on the rotary knob now points counter-clockwise).
- Use the holding key to counter the hexagon and loosen the transfer part counter-clockwise using the ratchet



- Remove the holding key, hold the bottom of the adapter and remove the ratchet from the adapter.
- Completely remove the transfer part from the implant using the ratchet adapter.

