Pasin-Pin®

The orthodontic
mini-implant

The digital laboratory
Orthodontics and sleep medicine

Clinical guide

Important information
for first-time users

Implant placement in the upper jaw

Median placement
parallel to median palatal suture

Pros:
- Optimal method for narrow jaws
- Simplifies laboratory work

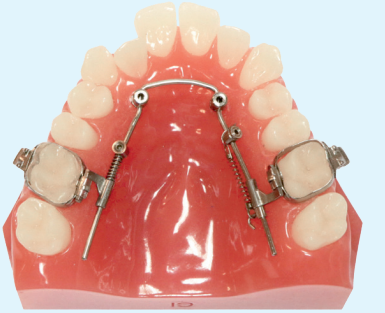
Cons:
- Need for a T-Plate

Paramedian placement
lateral to median palatal suture

Pros:
- No plate necessary
- Identical implant insertion and alignment of the slots, as compared to hybrid palatal expansion

Cons:
- Involves more laboratory work than the use of a plate

M4 position
lateral to median palatal suture



Pros:
- No plate necessary
- Simplifies laboratory work

Cons:
- High mucous membrane thickness
- In narrow and high palates, implant insertion may be more difficult

Suggested implant lengths

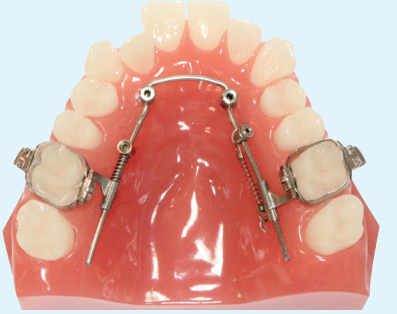
Median placement
parallel to median palatal suture

- anterior screw 2.0 x 10.0 mm
- posterior screw 2.0 x 8.0 mm

Paramedian placement
lateral to median palatal suture

- 2 screws 2.0 x 10.0 mm

M4 position
lateral to median palatal suture



- 2 screws 2.0 x 12.0 mm

Planning before insertion

Median placement
parallel to median palatal suture

Paramedian placement
lateral to median palatal suture

M4 position
lateral to median palatal suture

Caution!

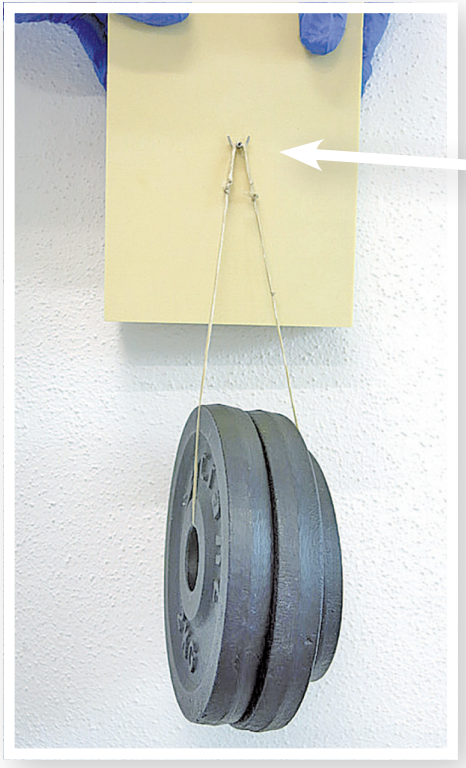
The implants must be inserted parallel to each other in all directions!

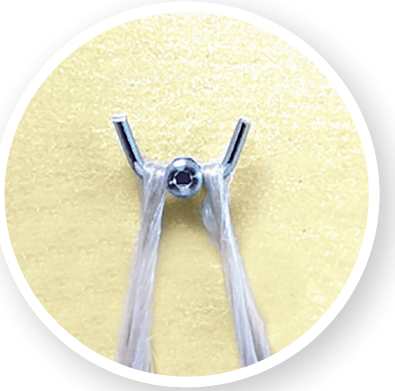
Problem prevention

The following problems may arise when the implants are not inserted parallel to each other:

- The silicone impression may be difficult to remove from the mouth
- Laboratory work may be more complicated
- Biomechanical stress may lead to fracturing of the sensitive pin flanks
- Placement of the appliance on the patient may be more difficult

Pasin-Pin under stress





The Pasin Pin with a cap and 1.1 mm wire is a very stable device.

P-Screw Holder vs. P-Screwdriver

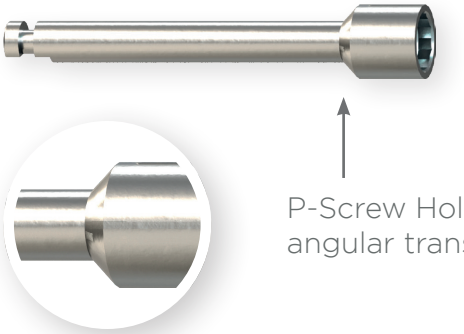
What is the difference?

The implant is inserted with the „P-Screw Holder“

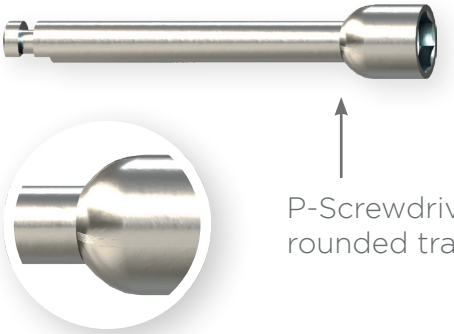
The screw holder is available in different lengths.
This instrument ensures a safe, sterile removal of the Pasin-Pin from the packaging and a secure hold during implantation.

The slot is aligned with the P-Screwdriver

This instrument helps to align the implant after insertion.
Unlike the screw holder, the screwdriver does not exert any frictional or tensile forces during removal from the implant screw.



P-Screw Holder:
angular transition



P-Screwdriver:
rounded transition

Rotational stability

Pasin-Pin Fix Cap

The cap must be screwed on manually. The Fix Cap has a fine thread and can be screwed on without any exertion of force. If manual screwing proves difficult, the cap may be tilted. In this case, please immediately unscrew the cap, because otherwise the thread may be destroyed.

Rotational stability

The Pasin-Pin, the laboratory-made appliance and the Fix Cap form a unit that is rotationally stable. This is especially important when unscrewing the cap or the appliance, since unintentional unscrewing of the implant must be prevented.

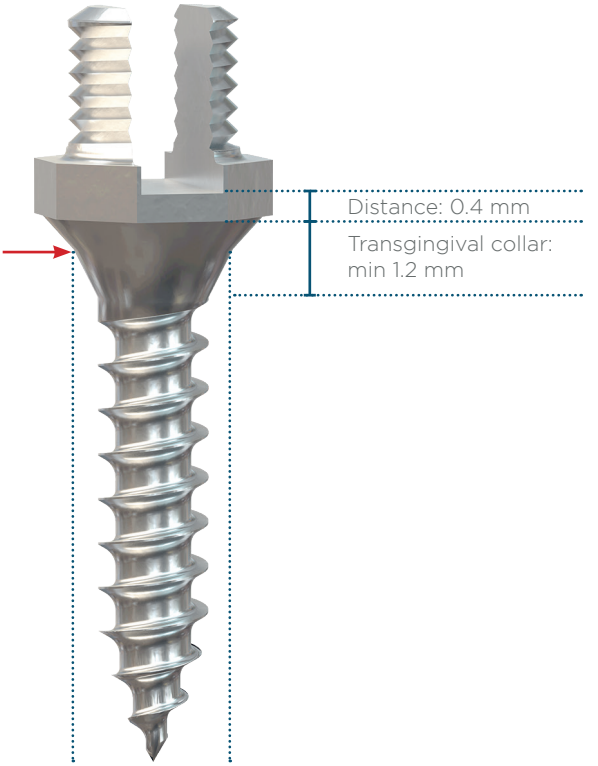
Caution!

Directly after implant insertion, the patient will leave the dental office with mounted Fix Caps. Please be sure to screw on the caps lightly. Do not excessively tighten them! To mount the orthodontic appliance at the following appointment, the caps will have to be removed. When unscrewing excessively tightened caps, the implants may also be unintentionally unscrewed at the same time!

Implant insertion depth

The Pasin-Pin has a transgingival collar that is min. 1.2 mm high.
If the implant is inserted down to the level of the octagon, a distance of only 0.4 mm will result between wire/plate and gingiva.
This small distance of 0.4 mm between the transgingival collar and the anchoring wire ensures low leverage and shearing forces and prevents early implant lass. However, practice has shown that this small distance from the wire to the gingiva complicates the fabrication of orthodontic appliances in the laboratory.

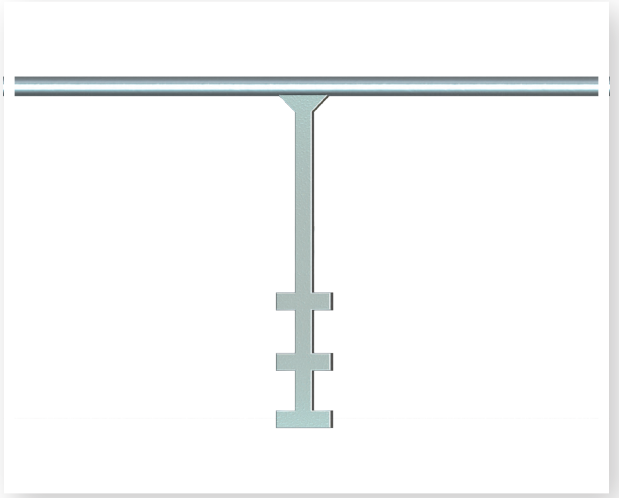
Recommendation:
We therefore recommend inserting the Pasin-Pin in the upper jaw with a distance of 0.5 mm between the octagon and the gingiva (see red arrow).



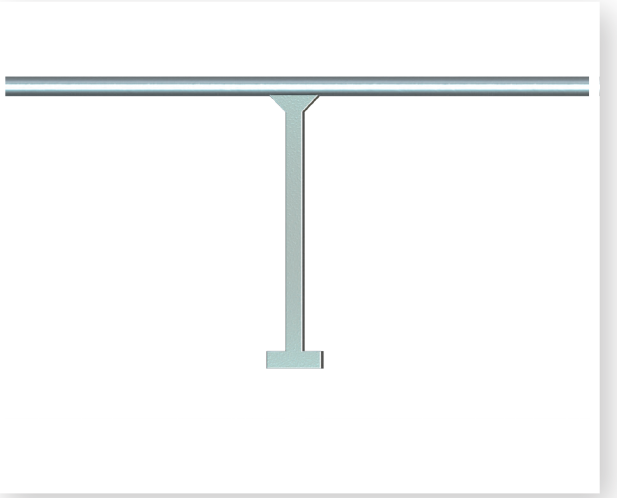
T-Plate

Individual shortening

An individualised T-Plate should have only one stop (pin).
In this example, the upper pin has been ground of, and the lower section has been shortened.



Prefabricated T-Plate



Individualized T-Plate

Silicone impression

We recommend:

- Two-step correction impression or
- Single-step double-mix impression with additional syringing of silicone around the implants

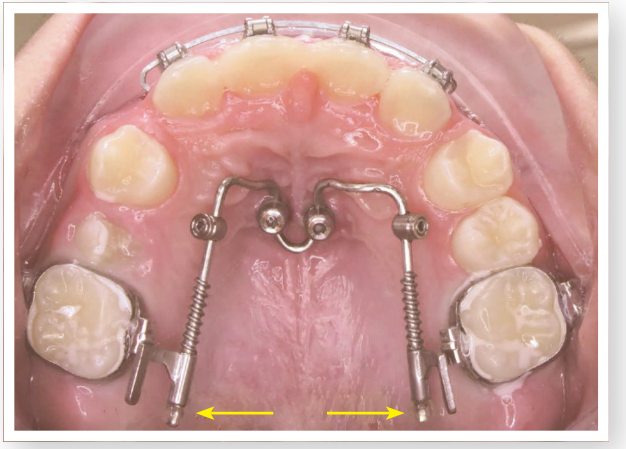
The laboratory analogs are inserted directly into the silicone impression.

Impression caps are not required for the Pasin-Pin System.

Distalization appliance

Clinical example

The implants are inserted in the region of the 3rd palatal rugae



Securing with Dentsply Triad gel

Mesialization and distalization in the lower jaw

Lip bumper made in the laboratory using a 1.1 mm round wire

Distalization system with bondable connector

Mesiallization system with bondable connector

Mesialization in the lower jaw

Clinical example

Hybrid-RME

Hybrid-RME

The expander arms are reduced to 1.1 mm in the anterior region and inserted in the Pin-Slot.

Soldering or laser welding is not required.

Clinical situation before expanding

Clinical situation after expanding

The digital laboratory

Orthodontics and sleep medicine

BBC Orthotec GmbH
Innsbrucker Str. 2
83435 Bad Reichenhall
Germany
Phone: +49 (0)8651 / 9650099
Fax: +49 (0)8651 / 9650098
E-Mail: lab@bbc-orthotec.de
Url: bbc-orthotec.de