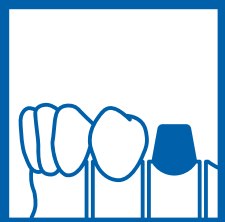




AMANNGIRRBACH



# Giroform

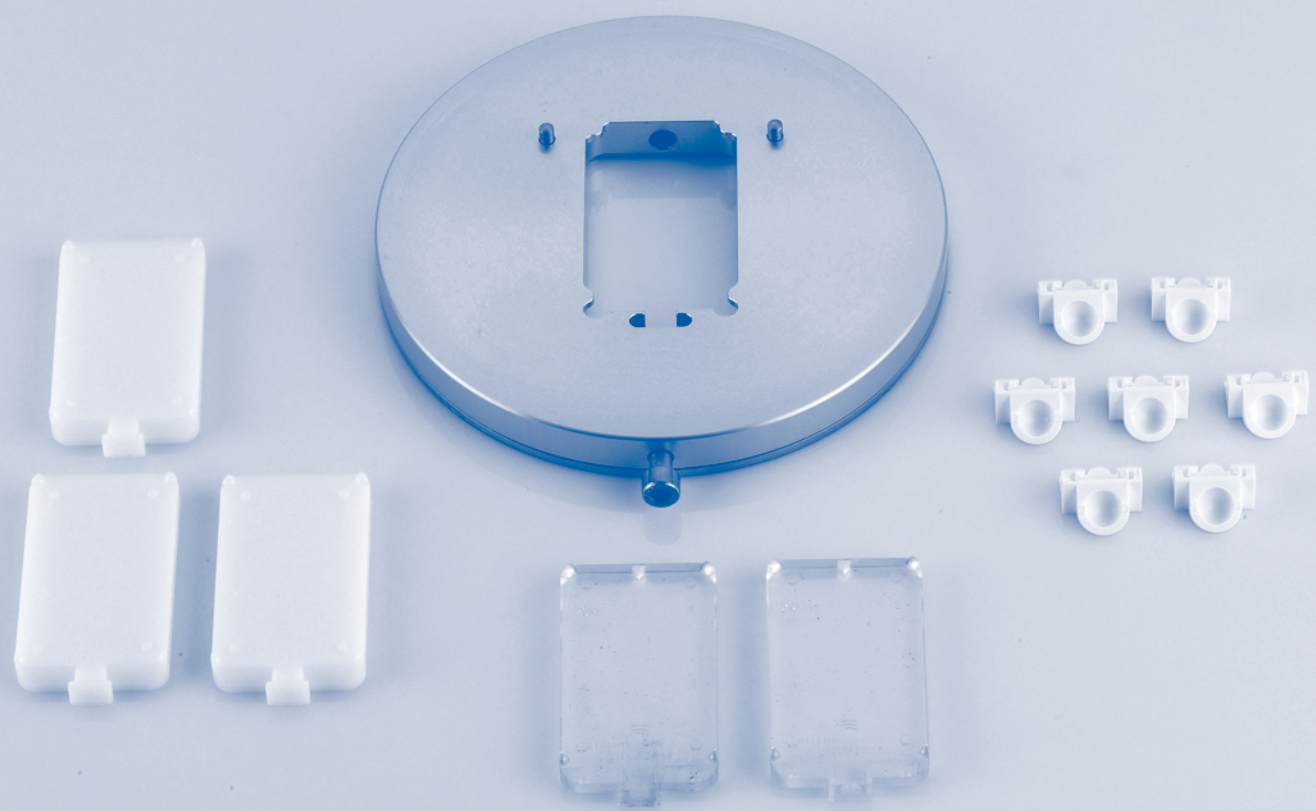
## Quadrant plate

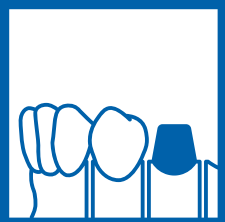
\_ General impression taking

page: 3 - 10

\_ Triple tray impression

page: 11 - 17



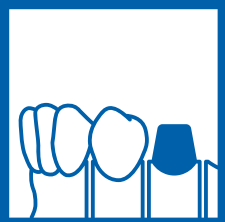


# Giroform

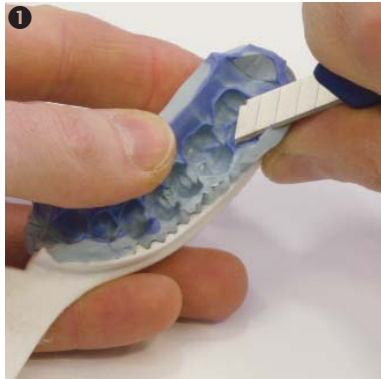
## Quadrant plate

### \_ General impression taking





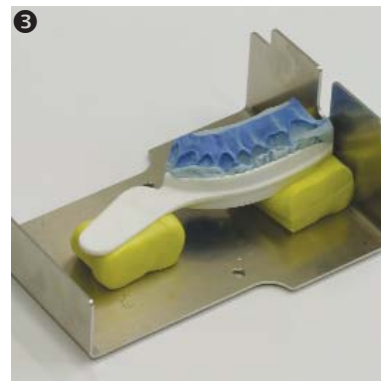
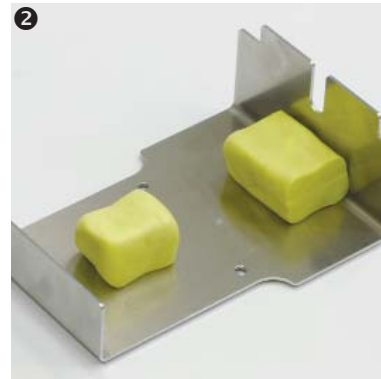
## PLACEMENT OF THE IMPRESSION



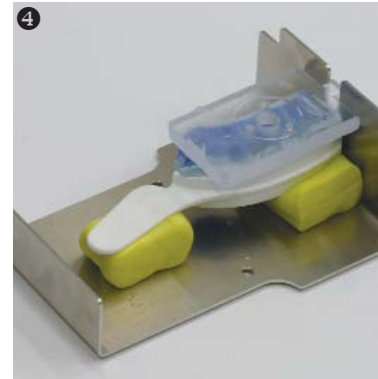
Trim all unnecessary parts of the impression (reflection, palatal roof) in order to obtain a dental arch which is as low as possible but still stable enough.

**NOTE:**

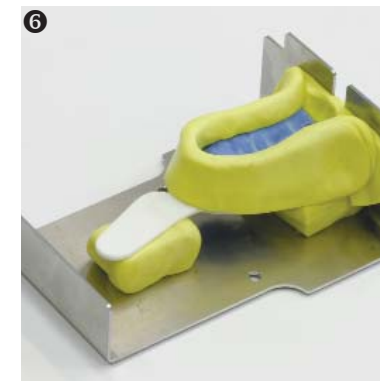
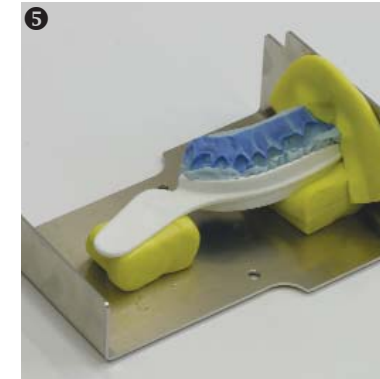
Heating of the blade facilitates trimming of extremely viscous polyether materials (Impregum, Permadyne, etc.).



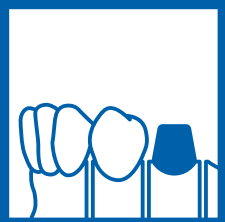
Position the impression tray in the dorsal area on a transversal rim and in the area of the tray handle on a cube sized 2 x 2 cm, both out of Giroform Putty (576461).



Insert the dove tail of the clear adjustment plate - with split retention looking upwards - into the groove of the carrier and guide it downwards. Align the impression tray on the Putty.

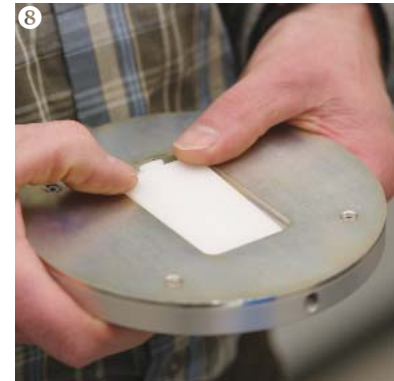


Use Giroform Putty to build up the margins of the impression and to block out undercuts.

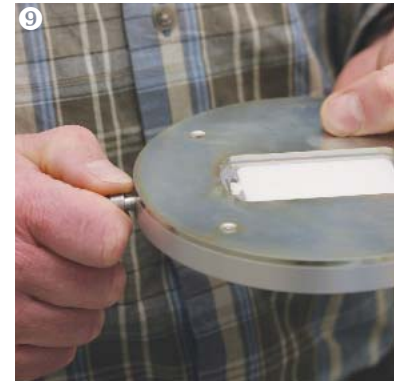


Trim the Putty parallelly to the plane of the impression carrier.

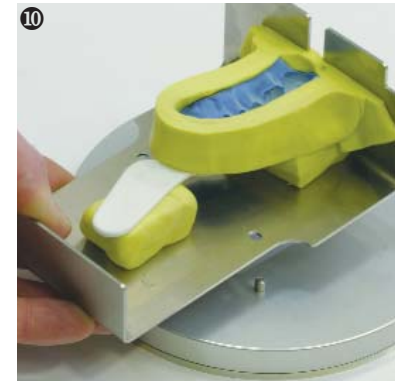
**TIP:**  
Place the clear adjustment plate with inserted pin on the aligned impression to check the height of the dental arch. The retention tip of the pin should not touch the impression (distance: approx. 3 mm).



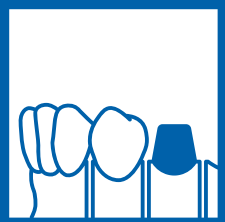
Insert the plinth plate into the plate support from the bottom. First, press the frontal groove of the plinth plate against the spring bolt; then the have the dove-tail engage at the opposite side.



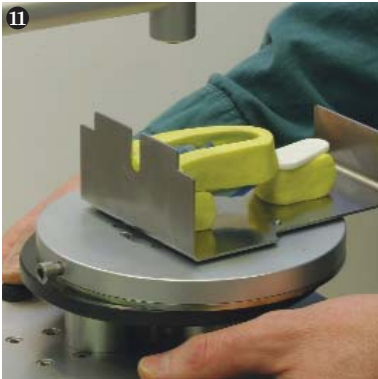
Tighten the fixing screw by hand.



Position the carrier with impression on the plate support. Both metal nozzles on top of the plate support clutch at the two drill holes of the impression carrier. Then put the plate support with impression carrier onto the magnetic table of the Giroform Pin Drill.



## LOADING THE PINS INTO THE DRILLED PLINTH PLATE



Adjust/define the drilling position by means of the laser beam.

### ATTENTION

Ensure that the laser beam is within the dimensions of the quadrant plate. Each removable segment must be furnished with 2 pins (rotation!).

**Tip:** In case of ill spatial conditions, set only 1 pin and mill a guidance groove into the plate.



### IMPORTANT:

Plan all adjacent teeth as single segments since the expansion of a long row of adjacent teeth limits the approximal area.

Pressing of both triggers at the same time automatically fixes the plate reception electro-magnetically and initiates the drilling process.

### ATTENTION:

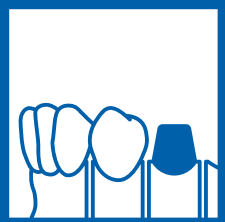
If the laser beam (= drilling position) is aligned outside the dental arch, i.e. in the area of the plate holder or of the retention disc, the burr might break.



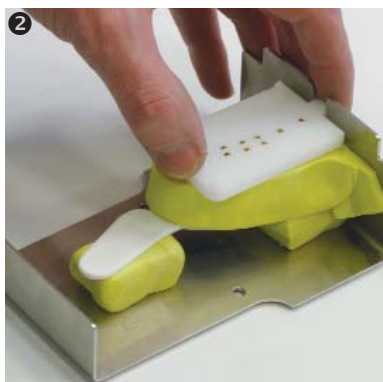
Place the Giroform plinth plate, with split retention looking downwards, in your hand. Hold the pins at the retention tip, and push the tapered part into the drill hole.

### TIP:

Friction depends on the forces applied when inserting the pin. (Push it in with your thumb; "pricking" indicates that both playless friction and removable reposition of the pin are ensured.)



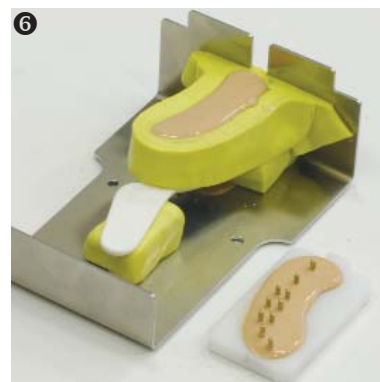
## CASTING AND WORKING



Put the Giroform plinth plate furnished with pins on the impression to check if the plate flatly rests on the putty. Spray a separating agent on the impression, then rinse it. Mix super stone in the appropriate mixing ration and under vacuum.

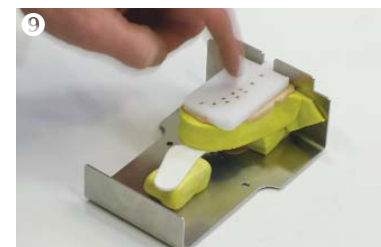
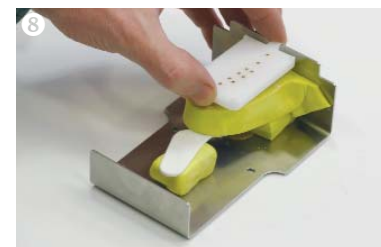
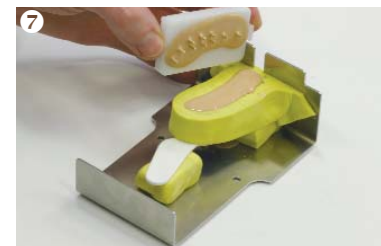


Pour the plaster mush into the impression preventing bubbles (the use of a vibrator is highly recommended). When all teeth and the preparation area are completely covered, take the impression carrier from the vibrator and fill the impression above the brim with plaster.

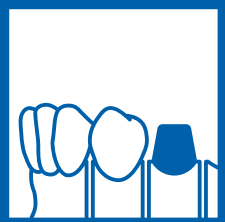


Wet the pin retentions and the rest area of the plinth plate in the area of the dental arch with plaster.

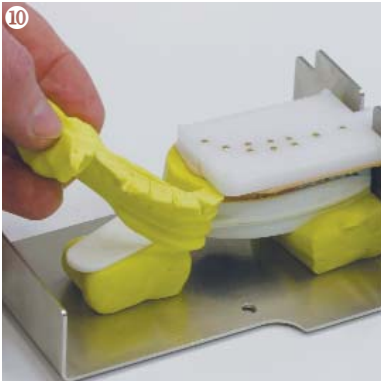
**Important:** Do not wet the plate with plaster when vibrating since the vibrations might loosen the pins.



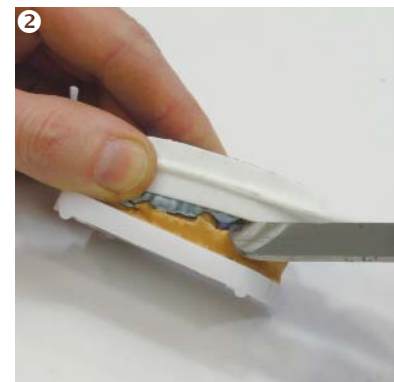
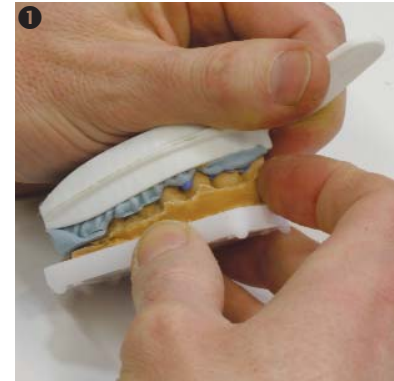
Position the plate in the dovetail guidance and lower it into the plaster mush until it flatly rests on the impression or on the putty.



## DIVESTING AND DRY TRIMMING



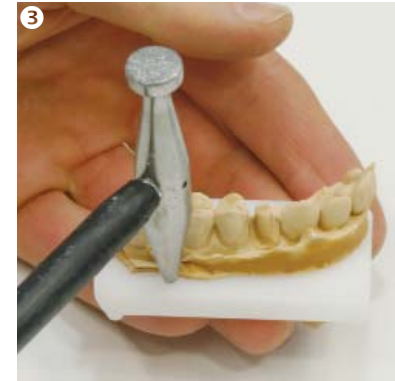
Detach after 20 or max. 35 min by removing the vestibular putty sleeve. Then, lift off the impression from the impression carrier.



Divesting: Remove the impression by hand and see to it that the dental arch remains on the quadrant plate.

As an alternative you may place the tip of a plaster knife between the impression material and the plaster. Then, turn the blade to remove the model from the impression. Therefore, prop up the back of the blade on the tray margin so that the tip levers the model out of the impression.

**IMPORTANT:**  
Do not exceed the maximal divesting time of 35 min since otherwise irreparable dimensional deviations occur due to the plaster expansion, thus resulting in a high risk of breaking the dental arch.

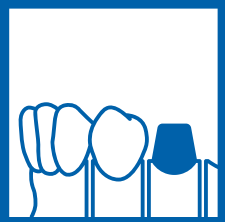


Place the model flat in your hand with the split retention looking downward, hit it with a hammer on the dorsal area of the plate until the dental arch comes off.



Use a handpiece with a mandrel (815300) and an arbor band of grit 120 (815330) to drytrim the dental arch in the vestibular and palatal area.



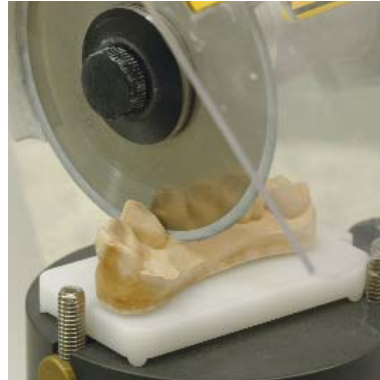


## SAWING OF THE MODEL



Reposition the trimmed dental arch on the plinth plate without applying pressure. Between the dental arch and the plinth plate a gap of approx. 2 mm is visible resulting from the plaster expansion. The advantage is that you see the pins when sawing.

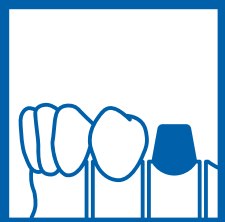
Fix the plinth plate in the model table of the Diacut model saw (171800). Align the model table in accordance with the cutting direction. The saw cuts as defined.



Effect the saw cuts as defined. The linear expansion stress resolves; the segment drops onto the plate and rests tightly.



Clean all model segments with a brush and reposition them tightly on the cleaned plinth plate.



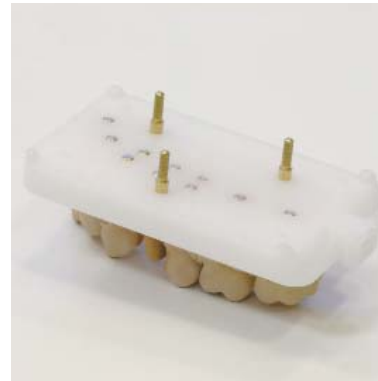
### MOUNTING OF THE QUADRANT PLATE



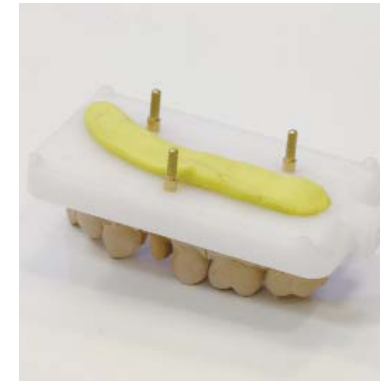
Remove the model segments from the quadrant plate and insert them into the plate reception upside down. Drill three holes into the bottom of the quadrant plate.



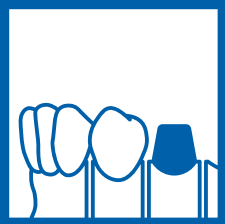
Set 3 pins into the model plate.



Reposition the model segments on the model plate.



Cover the pin tips of the model segments with putty and apply articulating plaster on both the model and articulation side. Close the articulator without pressure.

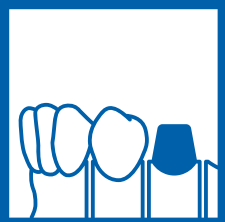


# Giroform

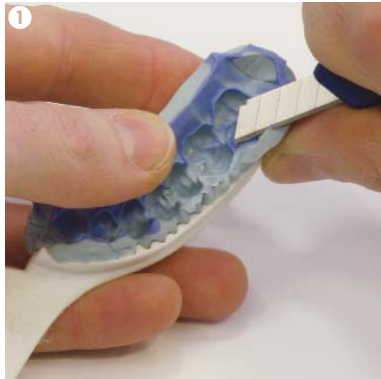
## Quadrant plate

### \_ Triple tray impression





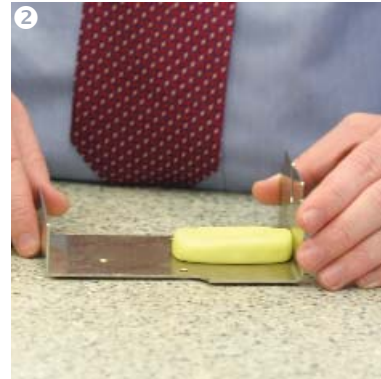
## PLACEMENT OF THE IMPRESSION



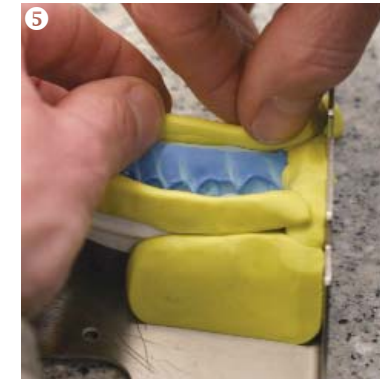
Trim all unnecessary parts of the impression (reflection, palatal roof) in order to obtain a dental arch which is as low as possible but still stable enough.

**NOTE:**

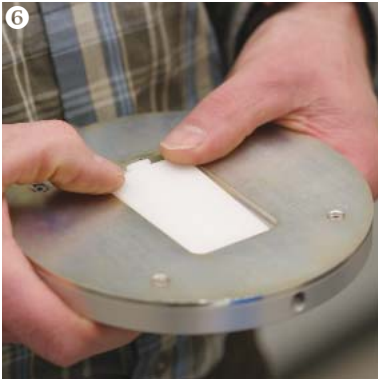
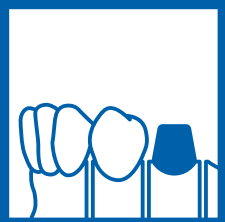
Heating of the blade facilitates trimming of extremely viscous polyether materials (Impregum, Permadyne, etc.).



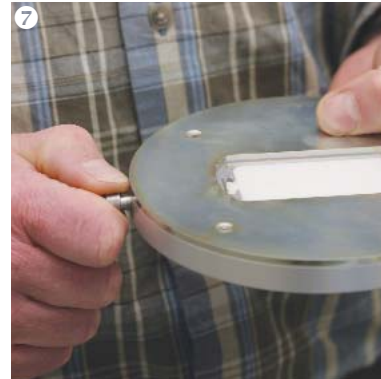
Position the impression tray by means of a cube out of Giroform Putty (576461). Insert the dove tail of the clear adjustment plate - with split retention looking upwards - into the groove of the carrier and guide it downwards. Adjust the impression tray on the putty.



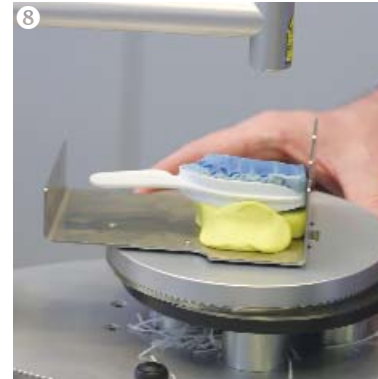
If necessary, use putty to build up the margins of the impression and to block out undercuts.



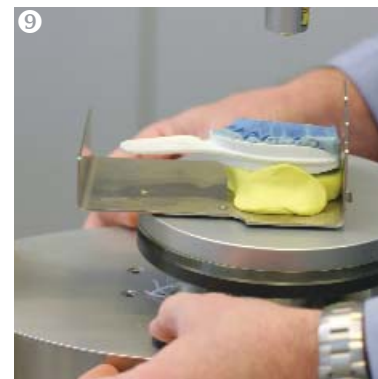
Insert the plinth plate into the plate support from the bottom. First, press the frontal groove of the plinth plate against the spring bolt; then the have the dove-tail engage at the opposite side.



Tighten the fixing screw by hand.



Position the carrier with impression on the plate support. Both metal nozzles on top of the plate support clutch at the two drill holes of the impression carrier. Then put the plate support with impression carrier onto the magnetic table of the Giroform Pin Drill.



Adjust/define the drilling position by means of the laser beam.

**ATTENTION**

Ensure that the laser beam is within the dimensions of the quadrant plate. Each removable segment must be furnished with 2 pins (rotation!).  
Tip: In case of ill spatial conditions, set only 1 pin and mill a guidance groove into the plate.

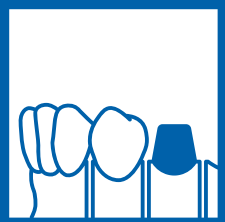
**IMPORTANT:**

Plan all adjacent teeth as single segments since the expansion of a long row of adjacent teeth limits the approximal area.

Pressing of both triggers at the same time automatically fixes the plate reception electro-magnetically and initiates the drilling process.

**ATTENTION:**

If the laser beam (= drilling position) is aligned outside the dental arch, i.e. in the area of the plate holder or of the retention disc, the burr might break.



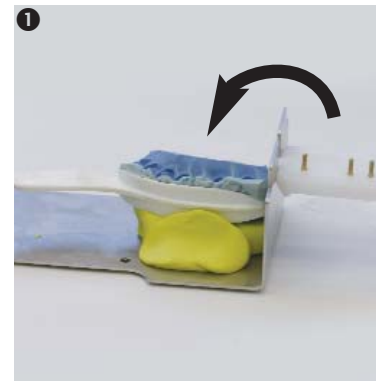
### LOADING THE PINS INTO THE DRILLED PLINTH PLATE



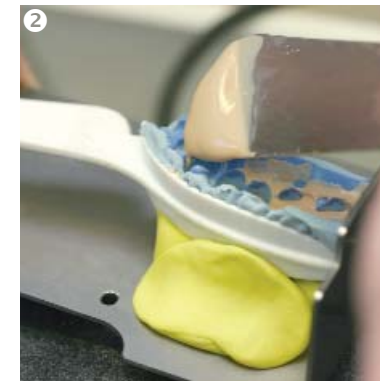
**TIP:** Friction depends on the forces applied when inserting the pin. (Push it in with your thumb; "pricking" indicates that both playless friction and removable reposition of the pin are ensured.)

Place the Giroform plinth plate, with split retention looking downwards, in your hand. Hold the pins at the retention tip, and push the tapered part into the drill hole.

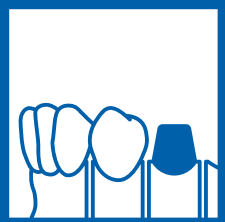
### CASTING AND WORKING



Put the Giroform plinth plate furnished with pins on the impression to check if the plate flatly rests on the putty. Spray a separating agent on the impression, then rinse it. Mix super stone in the appropriate mixing ration and under vacuum.

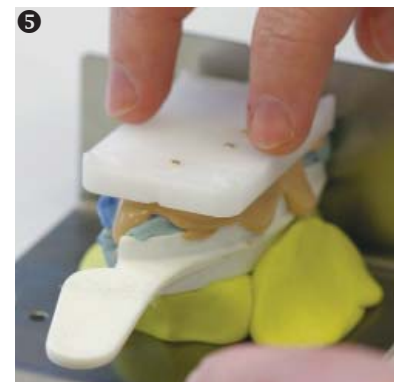
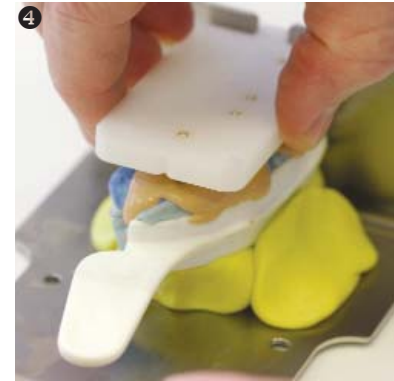


Pour the plaster mush into the impression preventing bubbles (the use of a vibrator is highly recommended). When all teeth and the preparation area are completely covered, take the impression carrier from the vibrator and fill the impression above the brim with plaster.



Wet the pin retentions and the rest area of the plinth plate in the area of the dental arch with plaster.

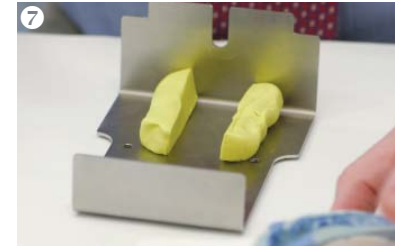
**Important:** Do not apply plaster to the plate while the vibrator is on since the pins will become loose.



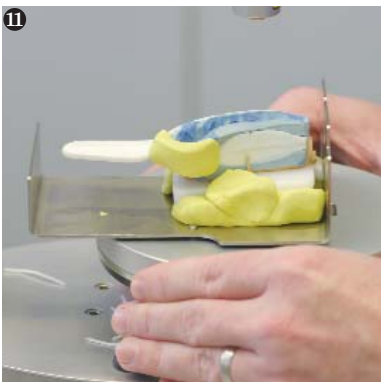
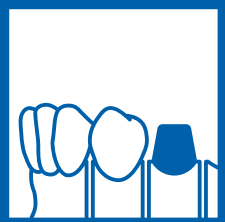
Position the plate in the dovetail guidance and lower it into the plaster mush until it flatly rests on the impression or on the putty.



Remove the impression from the impression carrier after 20-35 min.



Fix the impression incl. the quadrant plate with two strips of putty on the carrier and align it by means of the clear adjustment plate.



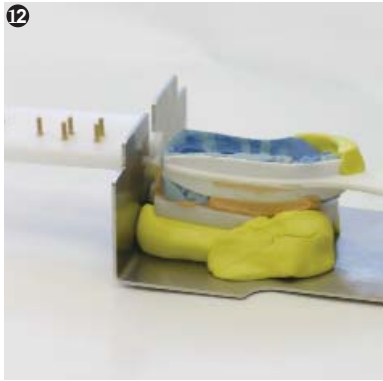
Reposition the carrier with the impression on the plate support. Put the plate support with impression carrier on the magnetic table. Adjust/define the drilling position of the opposite side of the impression by means of the laser beam.

**ATTENTION**  
Ensure that the laser beam is within the dimensions of the quadrant plate. Each removable segment must be furnished with 2 pins (rotation!).  
**Tip:** In case of ill spatial conditions, set only 1 pin and mill a guidance groove into the plate.

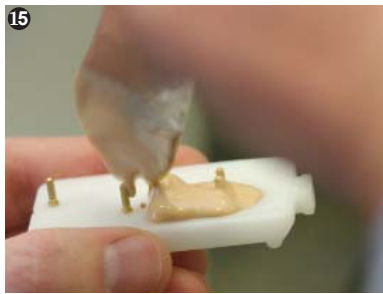
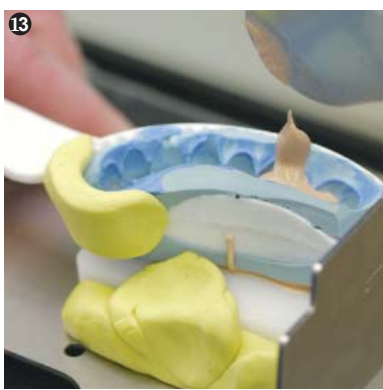
**IMPORTANT:**  
Plan all adjacent teeth as single segments since the expansion of a long row of adjacent teeth limits the approximal area.

Pressing of both triggers at the same time automatically fixes the plate reception electromagnetically and initiates the drilling process.

**ATTENTION:**  
If the laser beam (= drilling position) is aligned outside the dental arch, i.e. in the area of the plate holder or of the retention disc, the burr might break.

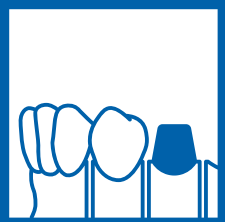


**Important:** Do not apply plaster to the plate while the vibrator is on since the pins will become loose.

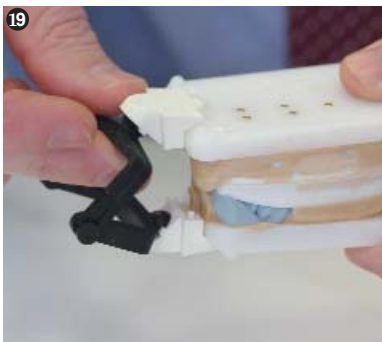


Pour the plaster mush into the impression. Wet the pinned quadrant plate with plaster and lower the impression. At the same time, insert the dove tail of the quadrant plate into the impression carrier.





17 Detach the impression from the impression carrier after 20-35 min and remove the putty.



20 Attach one Vertex adaptor each to the dove tails of the quadrant plates. Click in the Vertex articulator at the ball-shaped joints and apply a sufficient amount of glue. Have the glue set by means of Accelerator Spray.



21 Remove the models from the impression.



24 Softly hammer on the quadrant plate until the dental arch comes off. Then trim and cut.



26 Clean all parts of the dental arch with a brush and reposition them on the quadrant plate.