

**The Giroform<sup>®</sup> system outsmarts plaster expansion and is scientifically proven to be the most accurate model making system on the market.**

- **Precise**  
Maximum precision by counteracting plaster expansion
- **Fast**  
Models made in six minutes and ready to use after just 40 minutes
- **Cost-effective**  
The simplified production process saves time and material and achieves reproducible results
- **Universal**  
Can be used for saw-cut master models, opposite models, two-part models, anatomical casts, diagnostic models and partial impressions



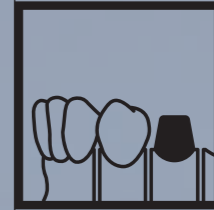
# giroform® system

The fitting accuracy of dental prostheses is largely dependent on the precision of the models. Yet this is the very area in which the natural expansion of the plaster constitutes the greatest source of error. The effects of plaster expansion are evident in the patient's mouth in problems with the fit of prosthetic work, such as tension areas.

Giroform® is the model system which outsmarts the expansion of the dental arch plaster and ensures accurate reproduction of the patient's mouth.

The Giroform® system provides dental technology with a perfect and demonstrably the most accurate model making system on the market. By employing standardized and optimized procedures Giroform® guarantees permanent and reproducible quality.

**Saves time, saves material.  
Simple procedures and maximum precision.**



Model production

# giroform® system

Precision, economy, speed and no adverse effects of plaster expansion: maximum quality with the Giroform® system.



## Giroform® system components

### + PLUS POINTS FOR YOU AT A GLANCE

#### + Precise

- \_ Plaster expansion eliminated thanks to individually drilled based plate and segmentation of dental arch
- \_ Segments reset in correctly drilled position free of expansion

#### + Fast

- \_ Model made in just six minutes
- \_ The base is ready with the base plate

#### + Cost-effective

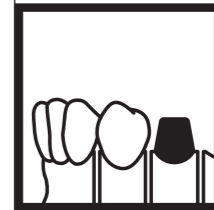
- \_ Less plaster required for the dental arch, no plaster required for the base
- \_ The entire base plate is cheaper than the corresponding amount of base plaster
- \_ Base plates, secondary plates and metal discs suitable for multiple use

#### + Universal

- \_ Can be used for saw-cut master models, opposite models, two-part models, anatomical casts, diagnostic models and partial impressions

#### + Simple

- \_ Simple procedures
- \_ Entire system user-friendly with ergonomic design

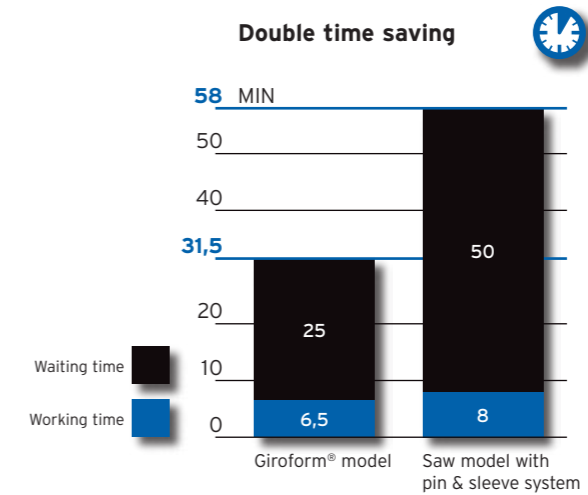


Model production

## Fast

### Giroform® - the system which saves double the time

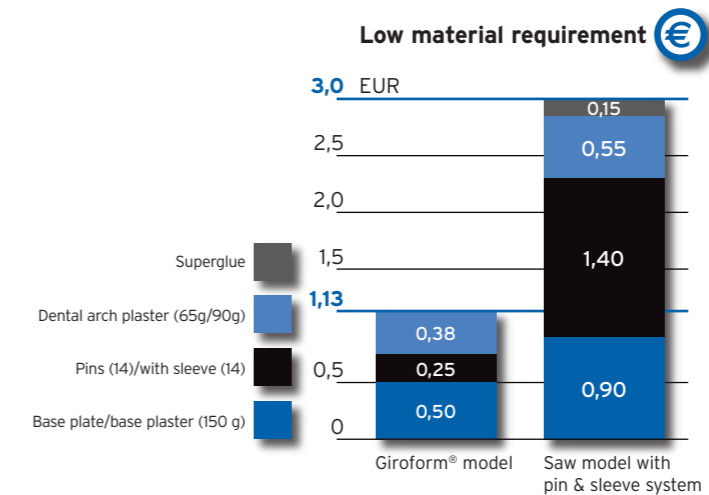
- \_ The actual time required to make the model is just 6-7 minutes
- \_ The base is manufactured
- \_ The model can be worked on after only 40 minutes

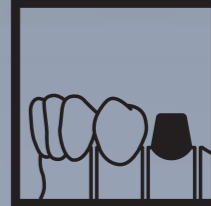


## Cost-effective

### Giroform® - the system that saves time and material

- \_ Reduction in amount of plaster required for dental arch by waxing out
- \_ The metal disc is already fixed into the premium base plate
- \_ Multiple use of base plates, secondary plates and metal discs
- \_ Base plaster no longer required
- \_ The base plate is cheaper than the base plaster
- \_ No adhesives, guide sleeves or shell moulds required



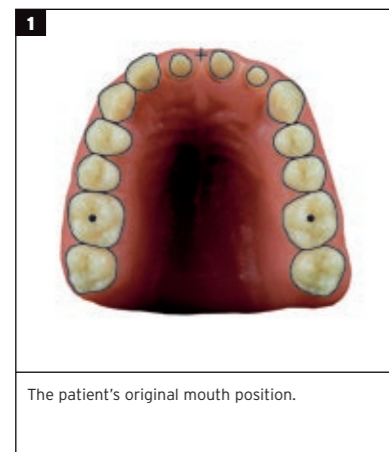


## Precise

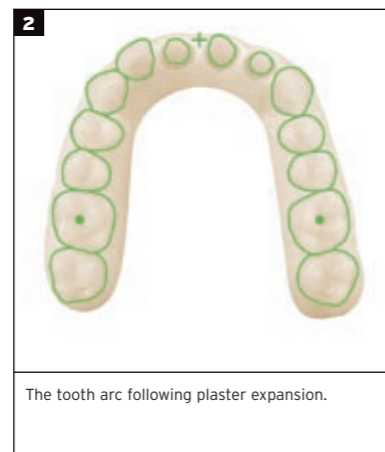
**Giroform - the most accurate system on the market for making models**

- \_ Form-stable base plate
- \_ Precision engineering in the  $\mu$ -range
- \_ Avoids problems associated with plaster expansion
- \_ Perfectly-shaped fit of base plate and secondary plate

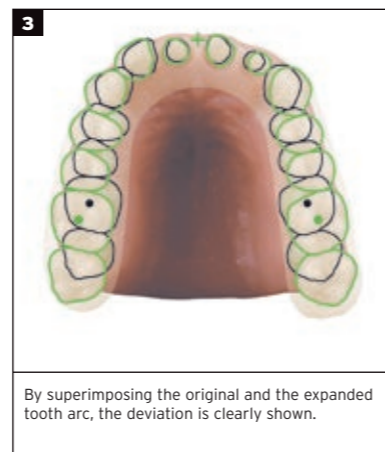
### UNDESIRABLE PLASTER EXPANSION IN MAKING THE MODEL



The patient's original mouth position.

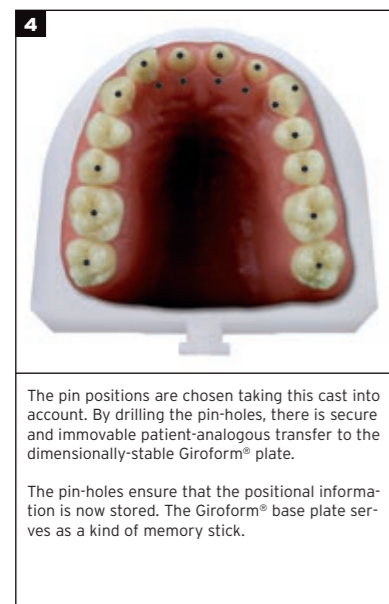


The tooth arc following plaster expansion.



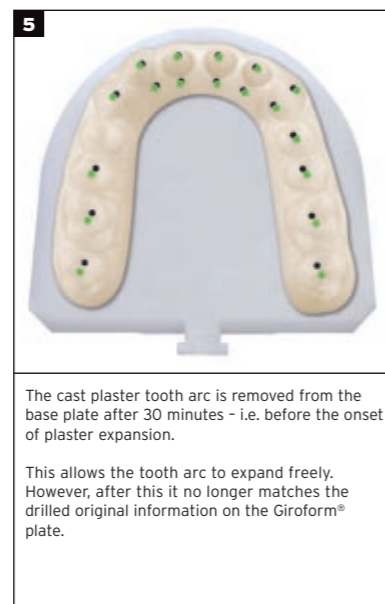
By superimposing the original and the expanded tooth arc, the deviation is clearly shown.

### HOW DOES GIROFORM® SOLVE THIS CHALLENGE?



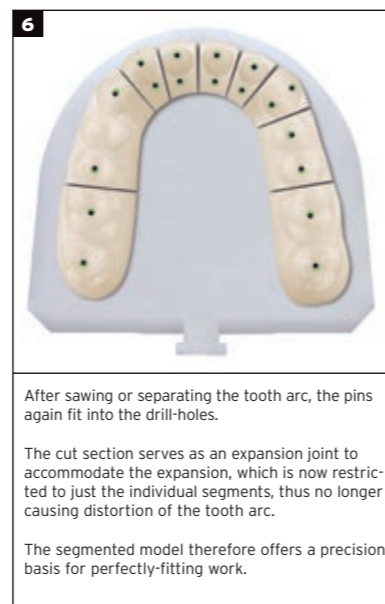
The pin positions are chosen taking this cast into account. By drilling the pin-holes, there is secure and immovable patient-analogous transfer to the dimensionally-stable Giroform® plate.

The pin-holes ensure that the positional information is now stored. The Giroform® base plate serves as a kind of memory stick.



The cast plaster tooth arc is removed from the base plate after 30 minutes - i.e. before the onset of plaster expansion.

This allows the tooth arc to expand freely. However, after this it no longer matches the drilled original information on the Giroform® plate.



After sawing or separating the tooth arc, the pins again fit into the drill-holes.

The cut section serves as an expansion joint to accommodate the expansion, which is now restricted to just the individual segments, thus no longer causing distortion of the tooth arc.

The segmented model therefore offers a precision basis for perfectly-fitting work.



**Defeat expansion with Giroform® = Eliminate tensions from prosthetic work**

# Giroform® system components

Perfectly formed, quality appearance, unbeatable performance.

## giroform® pin drill



**Drill position easily located**  
Laser beam

**Safe, swift and easy to operate with unrestricted choice of position**  
Plate support automatically anchored magnetically when drilling starts

**Fast finishing, easy to use - accurate identical drill holes**  
Semi-automatic

**Automatic drill cutting**  
Identical drill holes in plates

**Optional quick-set drill positions**  
Ergonomics

**0.5 seconds per drill hole**  
Drilling at the push of a button

**Robust, practical and aesthetic**  
Stainless steel housing

## giroform® base plate

**Saves working time (base plaster, sleeves and moulds)**

Base plate ready-to-use and available in three sizes

- L for standard cases
- XL for exceptionally large arches
- Quadrant for sectional impressions

**Multiple-use of premium plates for opposite models and classic plates**

three drill holes for pin fixing if working without a metal disc

**Cost savings**

low-priced reusable metal discs for classic base plates

**Screw fitting no longer required saving time**

premium base plates incl. metal discs

**No expensive special M8 screws required**

small hole

**Split cast checked for scientifically verified geometry**

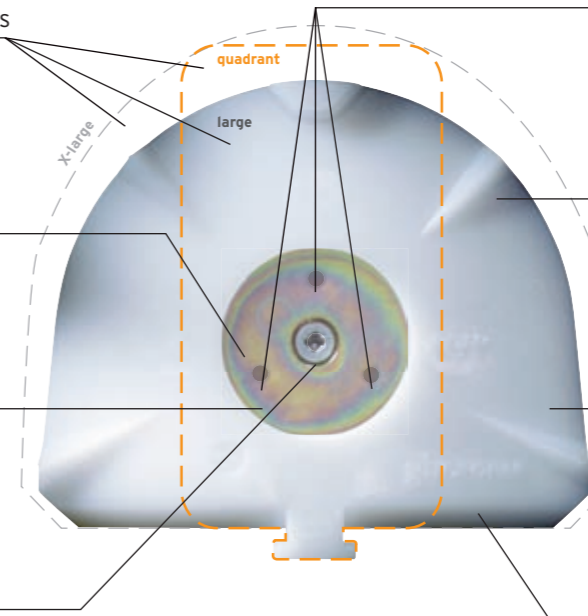
triangular split cast with wedge tapering to centre

**Safe pin guide and consistent drilling depth**

perfect coordination of plate material, pins and drill

**No secondary plaster expansion on model, no adverse influence on precision**

dimensionally-stable base plate



**Individual segments checked at a glance**  
Plane surface of the base plate



**Multiple use of used, drilled base plates for opposite models and the fixed metal discs as retention discs for anatomical casts**  
Reusable base plate and metal plate



**Slanting facilitates insertion in drill plate holder and removal from articulator**  
inclined plane on rear of plate



**Plaster improves grip in articulator during use and can be easily removed again after use**  
Optimized retention pattern on rear of secondary plate

## giroform® secondary plate



### Stability and comfort

- \_ Split cast check enables passive (non-magnetic) precision fit to the base plate
- \_ The balanced magnetic force and high material strength prevent deformation
- \_ The retention pattern on the rear has been optimized to provide excellent grip for the plaster during insertion in the articulator but also its easy removal after use



## giroform® quadrant plate



### Straightforward and versatile

- \_ The standardized plate size is ideally suited to partial impressions - both left or right quadrant casts. No more trimming or grinding required
- \_ Drill holes for pins can be positioned at underside and will thereby facilitating insertion, casting and removal from the articulator
- \_ The Vertex adapter enables direct connection to Vertex articulators



## giroform® pins



### Precise and economically priced

- \_ Precision brass pin
- \_ With smooth finish on tapered section for accurate fit in base plate hole
- \_ With active retention area for perfect grip in dental arch plaster
- \_ Reasonably priced



## giroform® duplication flask

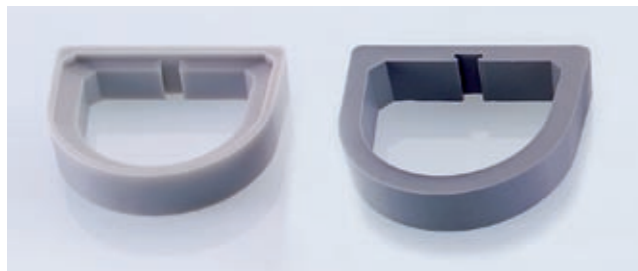


### Versatile and durable

- \_ Universal solution for individual segments, several segments or entire dental arch
- \_ Ceramic firing pins allow duplicate casts to be made with refractory investment
- \_ Saves refractory investment and duplicating silicone by reducing duplication area
- \_ The extension of the labial area also allows duplication of protrusive anterior teeth

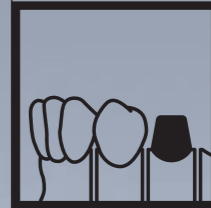


## giroform® base collar



### Clever and functional

- \_ The vestibular extension allows incorporation of mucobuccal folds and soft tissue on partial prostheses or full dentures
- \_ Used Giroform® base plates which have already been drilled can be used to make master casts



Model production



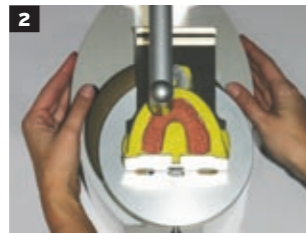
# Step by Step

From impression to finished cast - take the faster, cheaper and simpler way to high-precision models by using the Giroform® system.

## GIROFORM® MODEL PRODUCTION



1 Position impression (1 minute)



2 Drill base plate (1.5 minutes)



3 Fit pins (1.5 minutes)



4 Fill basing arch (1 minute)



5 Position base plate



6 Remove from mould after 30 minutes



7 Dry work on dental arch



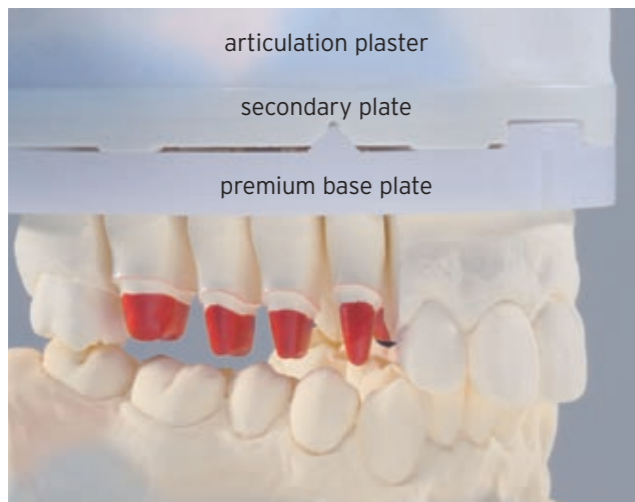
8 Saw model: visible gap between dental arch and base plate indicates expansion of plaster



9 The linear expansion tension is released; the segments drop back flush with base plate. The saw cut "eliminates" the expansion



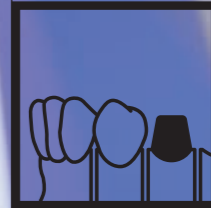
10 Ready for production after 40 minutes



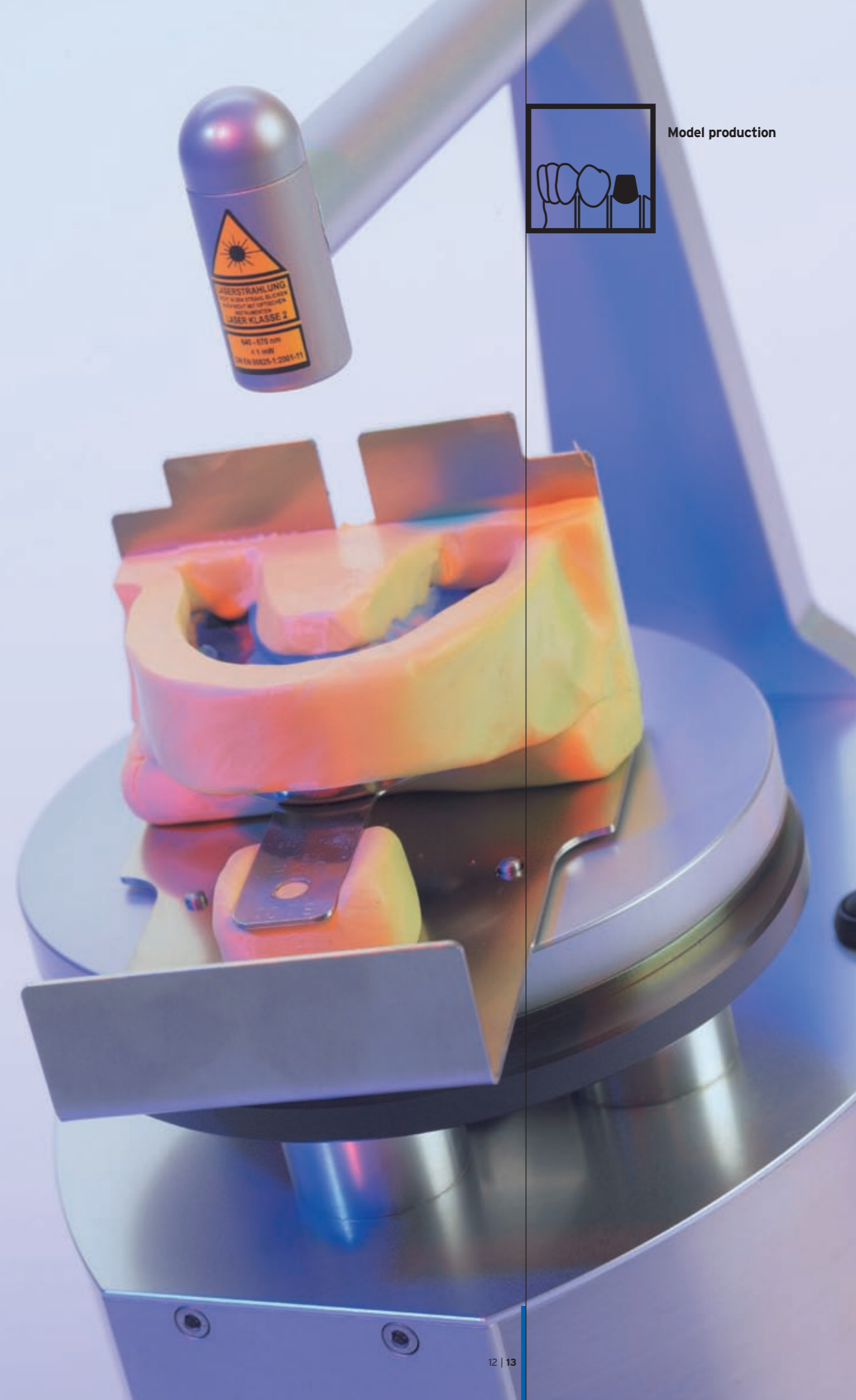
The high-precision production of the components ensures that the base plate fits perfectly on the secondary plate without leaving a gap. The strength of the material prevents the secondary plate from warping despite the plaster expansion.



The premium plate, base plate and secondary plate interlock together. The magnetic force is perfectly tuned, offering firm grip and yet easy separation.



Model production



# Ordering information



## Giroform® Pin Drill

176700 Giroform Pin Drill (100/115 V = 176700V100/V115)

Delivery volume: Tungsten carbide burr 176710, plate support - L 176712, impression carrier 176733, Tubular socket wrench 176702, holding pin 176703, screw driver for adjustment 176004

176710 Giroform-Tungsten Carbide Burr

176733 Giroform-Impression carrier

### Accessories:

176712 Giroform-attachment for plates L

176722 Giroform-attachment for plates XL

176711 Giroform-attachment for plates Quadrant

176062 Impression Carrier Diagonal, „Hydro“

### Technical Data

Dimension: 250 x 183 x 370 mm  
Weight: 9,6kg

Power supply: 230 (100/115)V/0,32W  
Speed: 2.800 min<sup>-1</sup>  
Laser class: 3A < 5mW



## Giroform® Starter Kit

576702 Giroform Starter Kit incl.:

176710 ① Tungsten carbide burr

176733 ② Impression Carrier 2x

321070 ③ NT-Cutter

359010 ④ Hammer with Aluminium handle

576450 ⑤ Giroform-Pins, 1,000 pkg.

576461 ⑥ Giroform putty 1 kg

576710 ⑦ Giroform base plate Premium +, 100 pkg.

5767501 ⑧ Giroform secondary plate 5x

576765 ⑨ Adjustment plate clear, 2 pkg.

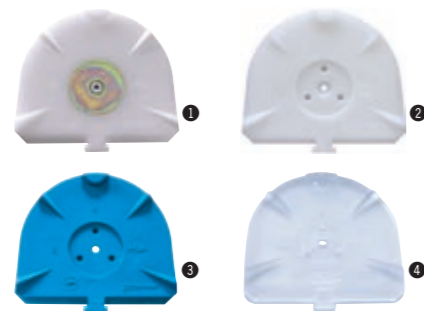
576950 ⑩ Giroform sleeve „kombi“

576805 ⑪ Giroform space retainer foil, 50 pkg.

815300 ⑫ Arbor band mandrel 2.35 mm

815330 ⑬ Arbor band, grain 120, 50 pkg.

990252 ⑭ Timer



## Giroform® Base Plates

100 pcs.

576710 ① Premium+ L

576745 Premium+ XL

576720 ② Classic L

576740 Classic XL

576726 ③ Classic L blue

576765 Adjustment plate L, 2e

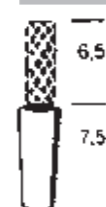
576766 ④ Adjustment plate XL, 2er



## Giroform® Pins

576450 1,000/pkg.

576451 10,000/pkg.



## Giroform® Magnet discs

576716 M3-Retention

Disk with screw  
Ø 25 x 1,0 100 pcs.

576717 Screw driver for  
Retention Disk



## Giroform® Secondary Plate

576750 with Magnet,  
50 pcs.



## Giroform® Adapter for Vertex®

Vertex® is a registered trademark of Dentsply Ceramco.

576790 Giroform

adapter for

Vertex articulators,

100 pcs.



## Giroform® Quadrant Base Plate

576770 Giroform  
Quadrant  
base plate, 100 pcs.

576771 Giroform  
adjustment plate  
for Quadrant, 2 pcs.



## Giroform® Duplication Flask

576670



## Giroform® Tungsten Carbide Burr

176710



## Giroform® Magnets and Sockets

512500 Magnets with  
Sockets and  
Retention Disks

512511 Magnets, 100 pcs.

512512 Sockets, 100 pcs.



## Giroform® Putty

576461 1kg

576465 5kg



## Giroform® Space retainer foil

Provides enough space for pins and magnet. Stabilizes the base plate in the area of the splitcast profile.

576805 50/Pkg.



## Giroform® Collar

576950 ① Base Collar

L- "Kombi"

576961 ② Base Collar

XL



## Giroform® Refractory Pin

Removable conical ceramic pins, inserted into the base plate, are used in refractory duplication. They can be accurately repositioned on the original model after firing.

576480 25 pcs.



## Giroform® Model Sticker

909032 1,000 pcs.



