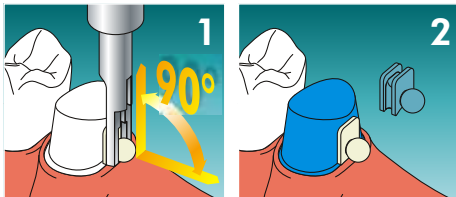


# Processing instructions V1-Attachment according to Vignano®

## Patrx Preparation

**1.** When determining the direction of insertion, align the master model at a right angle to the ridge of the jaw.

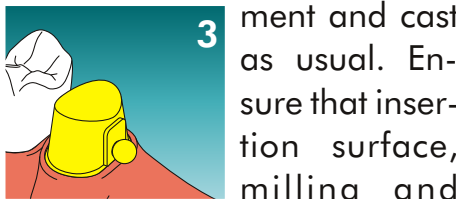


**2.** Model the crown as usual in wax.

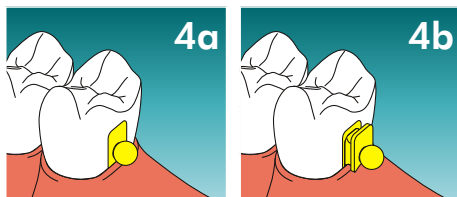
Set the patrx (POM or wax) in close proximity to the stump by use of a parallel mandrell, affix it to the base of the crown and include it in the crown moulding.

The insertion surface results from the shape of the patrx (no milling required).

**3.** Invest the crown moulding with in-worked primary element and cast as usual. Ensure that insertion surface, milling and ball are absolutely free of wax residues. Prepare as usual, no work on primary element is required.



**4a** and **4b**: Diagrams showing the crown being prepared for ceramic firing, with the matrix element in place.



**4.** Prepare the crown for ceramic firing as usual. Full facings can be implemented, except for the parallel

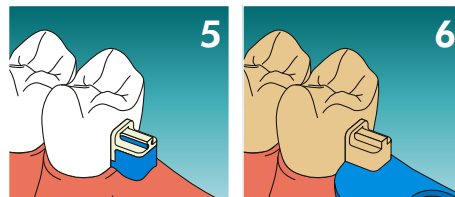
border surface of the patrx.

After facing, polish the primary element initially with a silver wire brush and then high gloss polish with polishing paste and a soft brush.

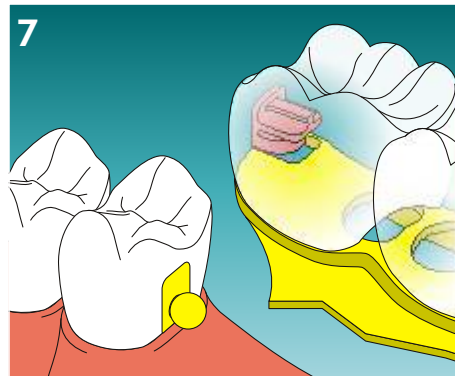
Caution: No material may be removed from the ball (polishing without loss of material)!

## Matrix Preparation Matrix (POM)

**5.** Fit the matrix onto the patrx and block out the undercuts as shown in figure 5. Then duplicate the model.



**6.** Prepare the casting pattern as usual, but leave out the patrx area from the waxing procedure.

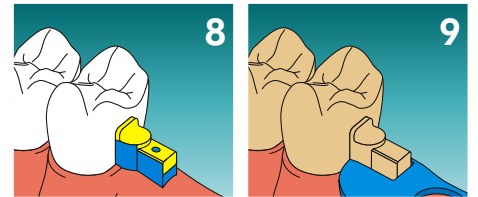


**7.** Set the matrix onto the patrx and apply a thin wax coat around the matrix' side up to the jaw.

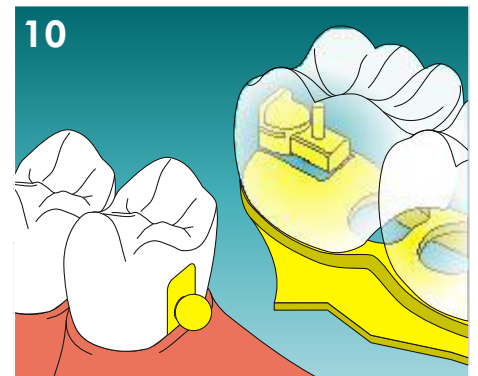
Set the casting pattern into place and affix the matrix to it by use of acrylic. Complete the denture as usual.

## Matrix non-precious alloy (enclosed version)

**8.** Fit the matrix onto the patrx, block out the undercuts and apply a thin wax coat around the sides. Fill also the drill hole located in the retention (no pin inserted).



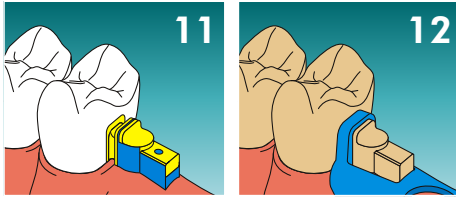
**9.** After duplicating mould the casting pattern by omitting the patrx area. Cast and prepare as usual.



**10.** Set the matrix with inserted retention pin onto the patrx and waxcoat it thin around the sides.

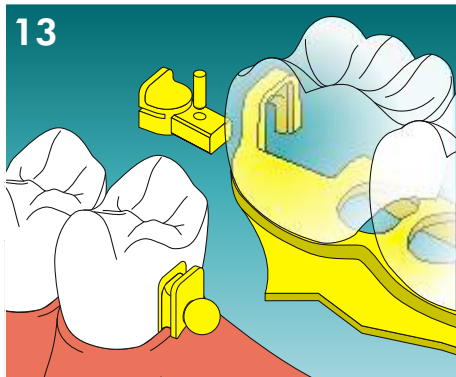
Further proceeding according to step 7. The matrix is retained mechanically in the denture material.

**Matrix non-precious alloy  
(enclosed version with inte-  
grated milling)**



**11.** Set the matrix onto the matrix, block out the undercuts towards the jaw and apply a thin wax coat around the matrix, leaving out the milling of the matrix. Seal the drill hole in the retention.

**12.** After duplicating, prepare the casting pattern (leave out the matrix area from the waxing procedure) and shape a load distribution clasp to the milling of the matrix. The load distribution clasp can be free-ended at the buccal side (open or closed version).

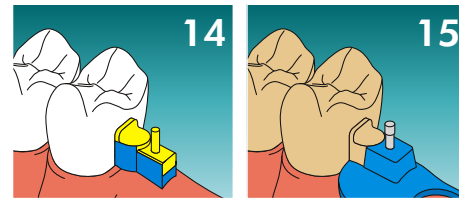


**13.** Cast and prepare the casting pattern. Fit the load distribution clasp to the milling of the matrix. For electrolytic polishing protect the underside of

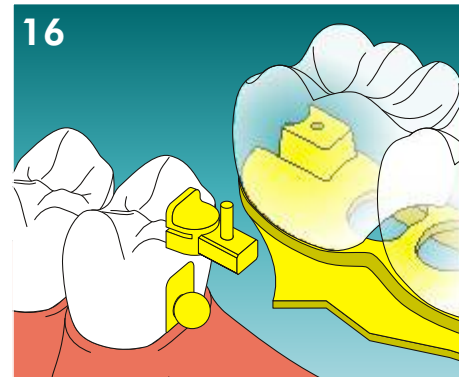
the clasp by covering with wax. Further proceeding according to step 7 and 10. The matrix is retained mechanically in the denture acrylic.

**Matrix non precious alloy  
(pinned version )**

**14.** Fit the matrix onto the matrix, block out the undercuts towards the jaw and apply a thin coat of wax around the matrix. Insert a metal pin into the drill hole of the retention.



**15.** After duplicating, replace the metal pin by a pre-fabricated ceramic pin and prepare the casting pattern as usual (leave out the matrix area).



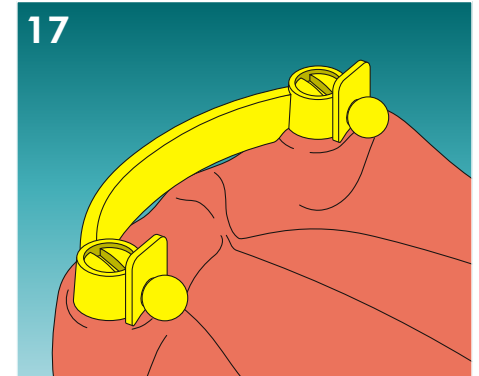
Apply a approximate 0.5 mm thick wax coat to the retention part of the matrix.

**16.** When casted and finished, connect the casting pattern to

the matrix by use of a metal pin.

**Implant Preparation**

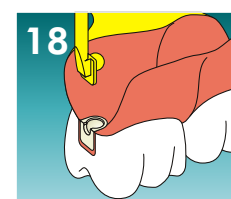
All previously described versions can also be used for implants.



The denture's insertion direction can be freely defined independent of the implant's direction. The matrices can easily be connected to the secondary implant construction (casting-on, soldering, laser-welding).

**Procedures for Repair  
and/or Preparation of a  
new casting pattern**

Fit the seating tool into the denture's matrix. Wax it lightly at the basal side and prepare



the master model in the usual way.

Remove the used matrix

and replace it by a new one, or prepare a new casting pattern with the new matrix.

