

Prosthetic V.

Complete denture

Edentulous jaws

- The transfer of occlusal forces – mucosal only.
- Tissue supported (born) denture.
- Made usually of the acrylic resin - methylmetacrylate.

Sequence of operation

- Taking impression (alginate the best choice)



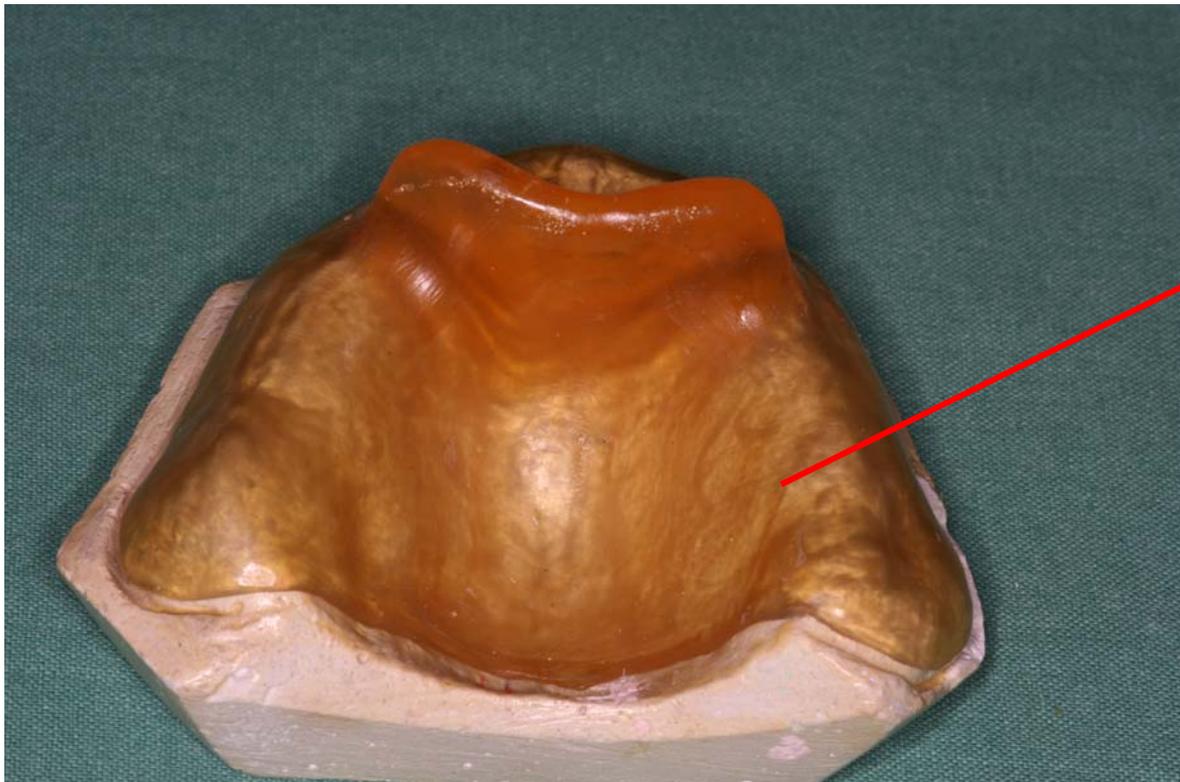
Sequence of operation

- Pouring: gypsum model



Sequence of operation

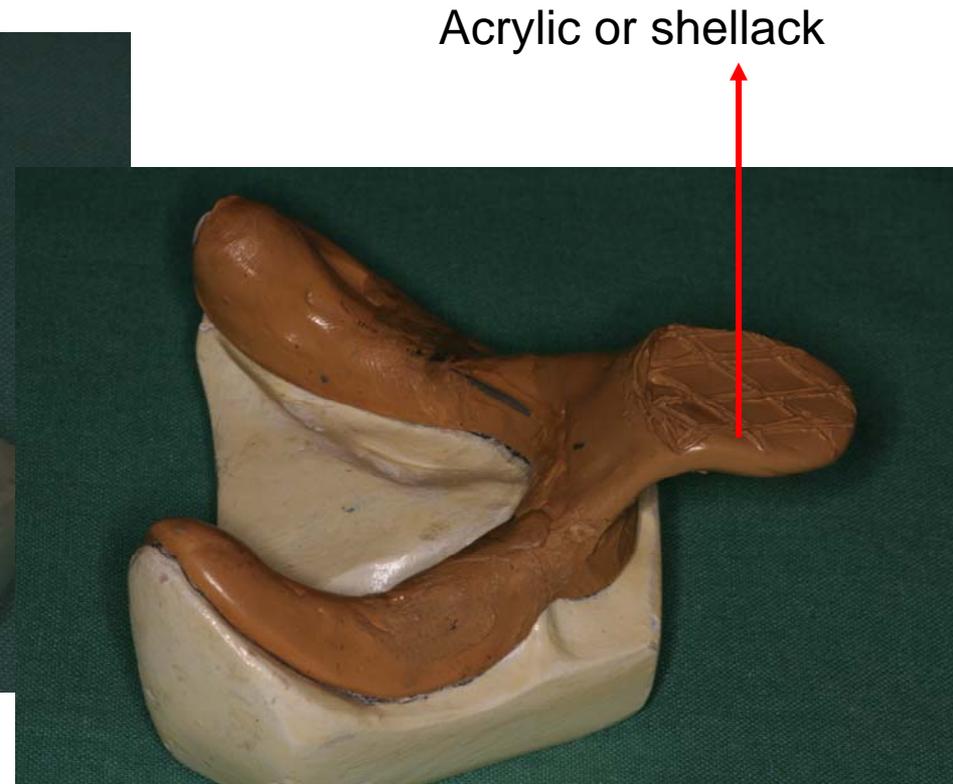
Fabrication of the individual impression tray



Acrylic or shellack

Sequence of operation

Fabrication of the individual impression tray



Sequence of operation

Ranging with the special low – fusing wax (the functional tray)



This procedure is done in the patient. The tray must be accurate without any excess, the wax makes the tray more precise patient moves with his/her lips and cheeks – the function is important

After this procedure the tray is called the functional tray

Sequence of operation

Functional impression

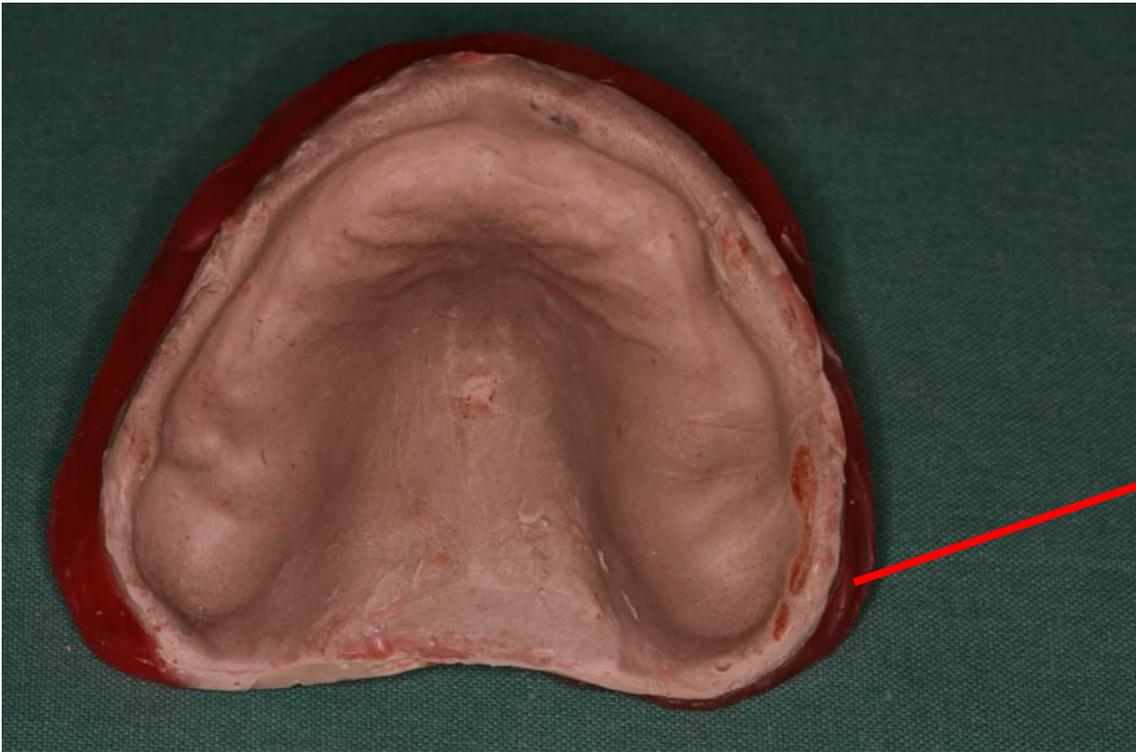


The impression after that is called the functional impression. During this procedure patient is moving with his/her lips and cheeks again.

The most suitable material is the zinkoxideeugenol paste.

Sequence of operation

Ranging of the impression with the wax



The border of the functional impression must be protected using the wax strip

Sequence of operation

Bite template



The bite template is fabricated as usual
The base is made of shellack or acrylic,
the wall of wax.

Sequence of operation

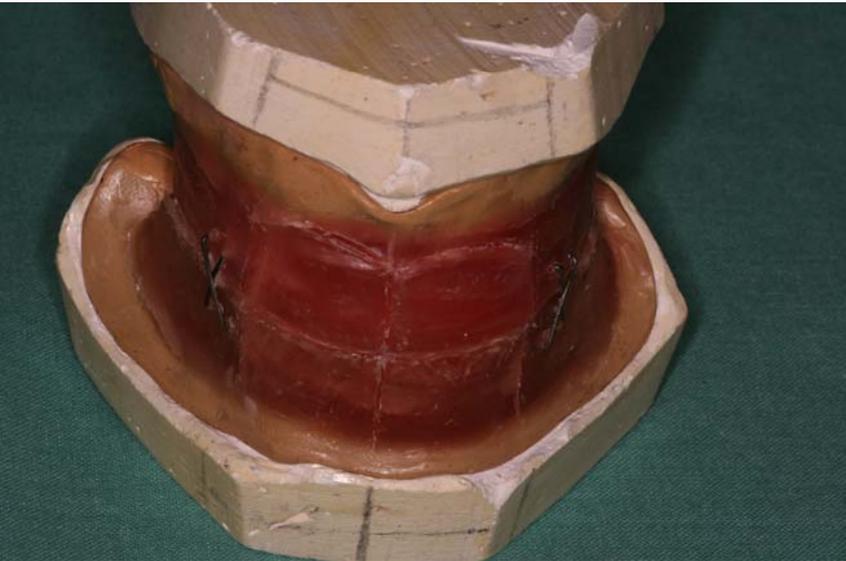
Bite template



The bite template is fabricated as usually
The base is made of shellack or acrylic,
the wall of wax.

Sequence of operation

Registration of the intermaxillary relationship.



The procedure consist of two steps

1. Vertical relationship

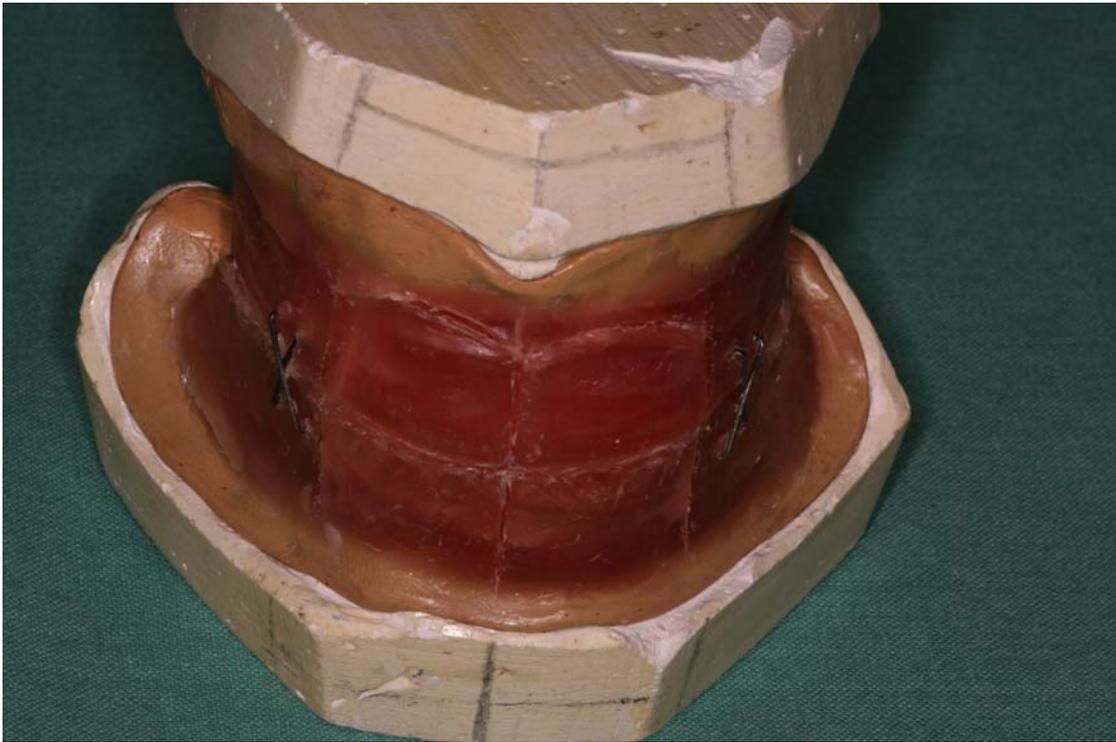
The neck of the patient is perpendicular to the horizontal plane. The occlusal plane must be parallel to the bipupilar line in the frontal area and to nasoauricular line in the posterior area.

The wax walls must be plain cut, the height is according to the free position of the mandible.

After that the height is reduced – 2 mm. This is a vertical relationship

Sequence of operation

Registration of the intermaxillary relationship



The procedure consist of two steps

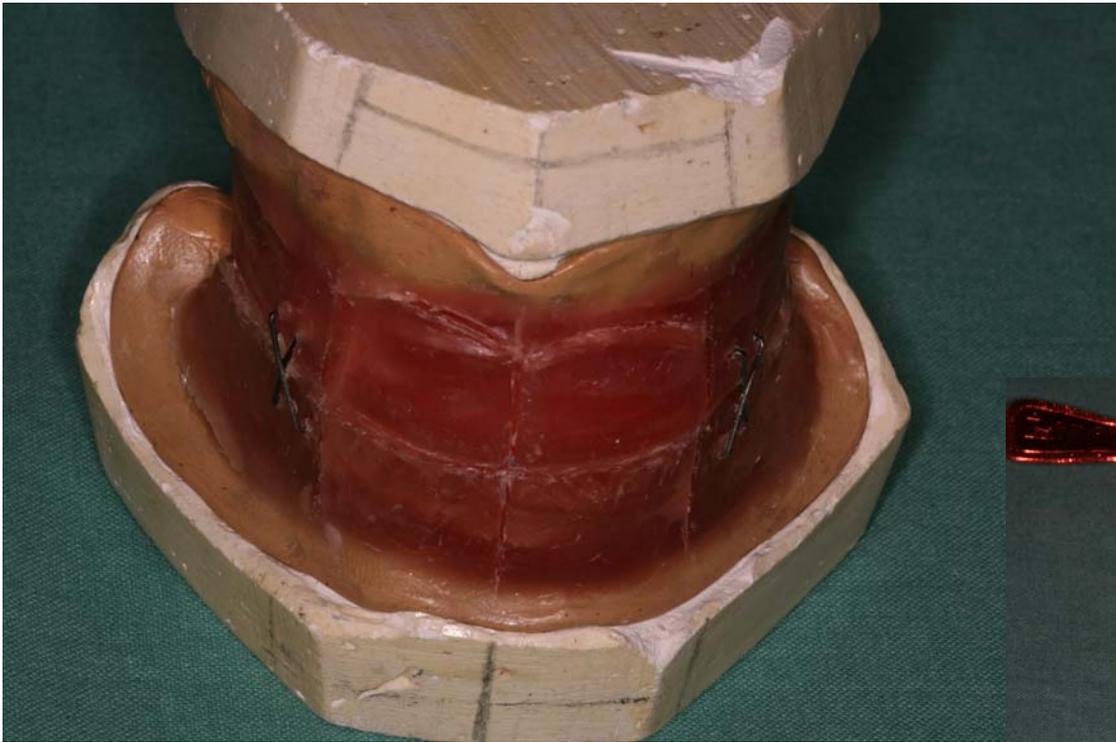
2. Horizontal relationship

The head of the patient is bent backward and he/she swallows. This can help us to find the horizontal Relationship.

After these procedures the wax walls must be put together (with paperclips or wax or other material).

Sequence of operation

Registration of the intermaxillary relationship

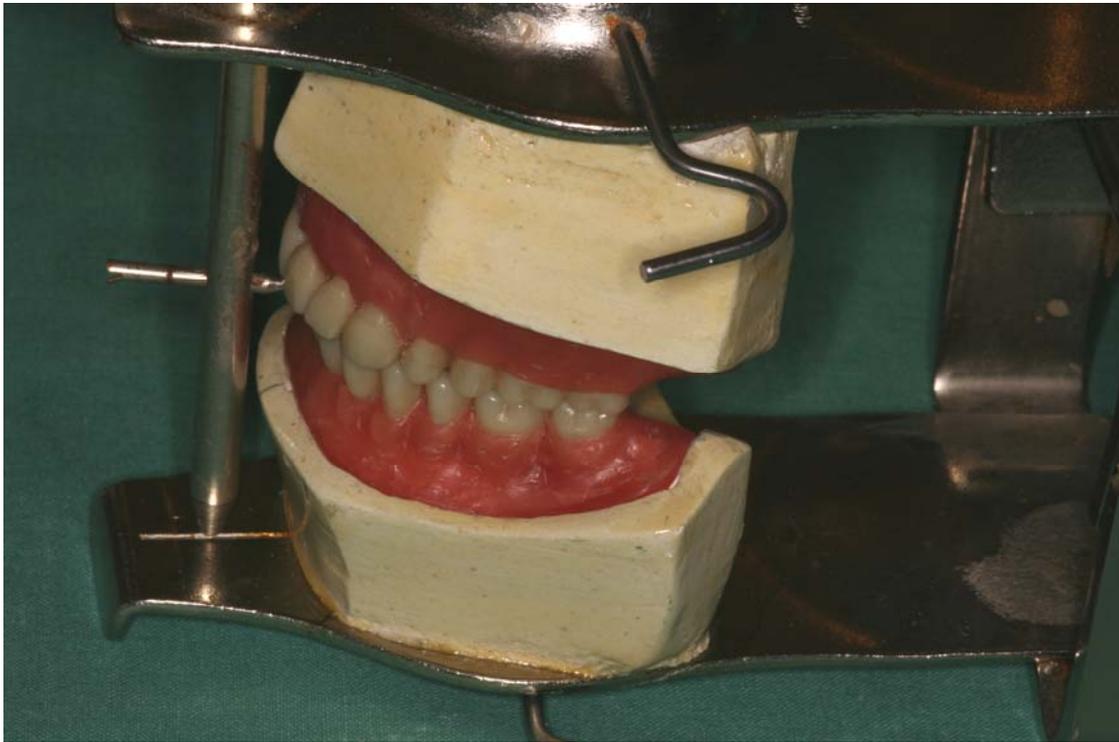


After the registration the colour of teeth is chosen using the colour card



Sequence of operation

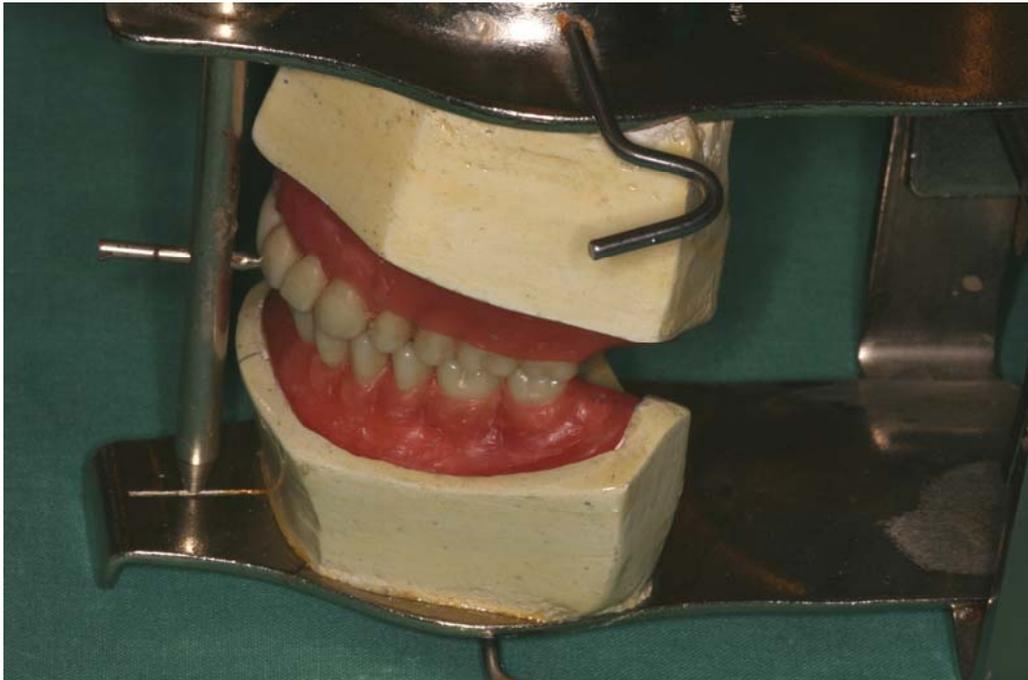
The wax pattern of the denture is made



This is made of wax – base and acrylic teeth are built according to the registrate using the articulator or occludor.

Sequence of operation

The wax pattern of the denture is tried out in the patient.



The dentist must check the colour, the form and the position of artificial teeth.

Sequence of operation

The wax pattern is flaked into a four parts flask using gypsum



The teeth are insulated with a special silicone material.

The flask is closed and filled with the gypsum completely

Sequence of operation

- After the hardening of the gypsum the flask is opened and the wax removed



The wax is removed using hot water. A thin tin foil is put on some places, esp. on palatal suture in order to unload them. The insulating Agent based on alginate is used.

Sequence of operation

- After the hardening of the gypsum the flask is opened and the wax removed



The artificial teeth remain in one part of the flask

Sequence of operation

- After the hardening of the gypsum the flask is opened and the wax removed



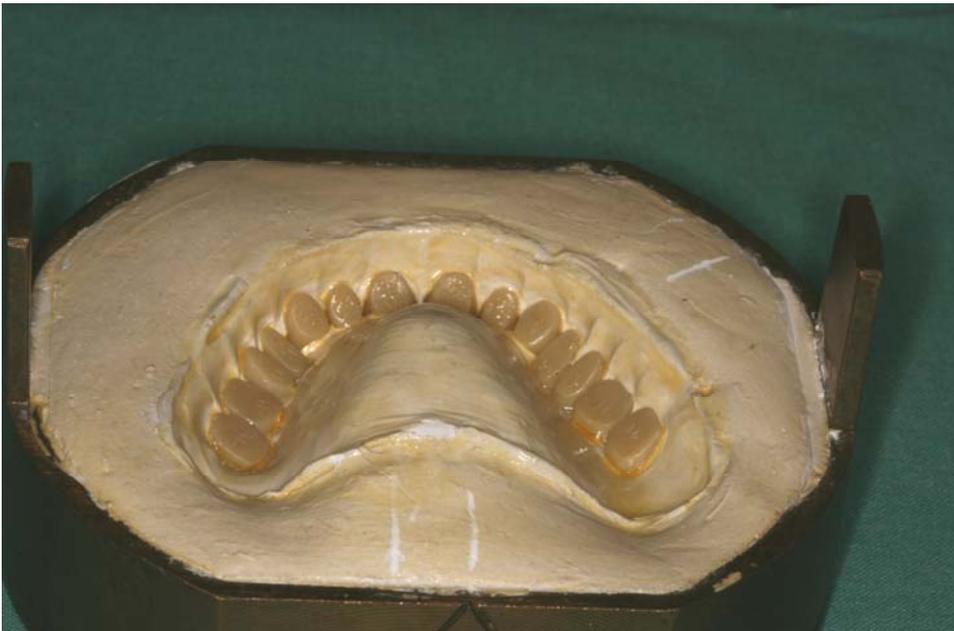
The artificial teeth remain in one part of the flask. The resin dough is put into the form

Sequence of operation

- The flask is closed and put into a special cleap.

The resin is polymerized using the 2,5 hours polymerization Schema:

1. During 1 hour reach the temperature 70°C,
 2. 30min interrupt heating
 3. During further 30 min increase the temperature – reach 100°C
 4. 30 min stay on 100°C.
- After that let the flask cool slowly.



The four parts flask



Sequence of operation

- The denture is taken out finished and polished using special burs, grinding and polishing pastes.



Sequence of operation

- The denture can be tried in.

