

# IMPRESSION TRAYS

**IN COMPLETE DENTURE PROSTHESIS WE MAKE TWO IMPRESSION :**

**PRIMARY IMPRESSION**

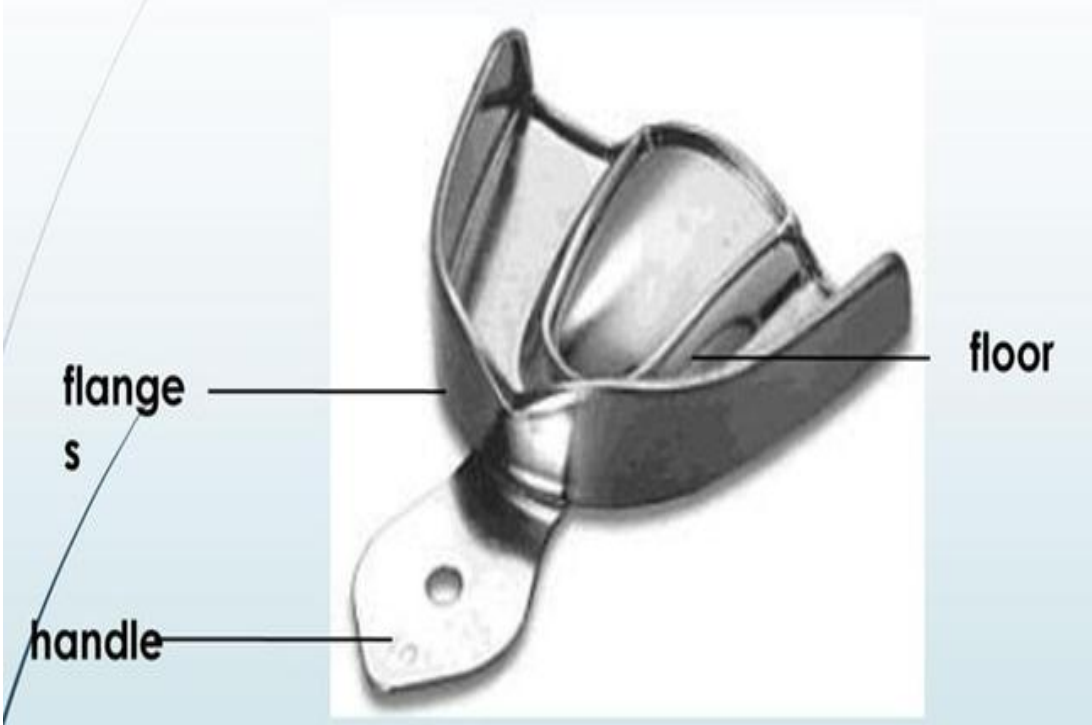
**FINAL IMPRESSION .**

**TO MAKE IMPRESSION WE SHOULD HAVE IMPRESSION TRAY.**

# IMPRESSION TRAY

- It is used to carry, confine and control the impression materials from the patient mouth while making impression. The tray facilitate insertion and removal of impression materials from the patient mouth.
- Impression tray consist of two main parts:-
  - 1-Body:
    - Floor.
    - Flanges.
  - 2-Handle:

Extension from the union of the floor and labial flange.  
It is L in shape so that not interfere with lip.



- ⦿ There are **upper tray** for maxillary arch.
- ⦿ **Lower arch** for mandibular arch.

The **difference** between them is that:

- The **upper tray** has **palatal portion**.
- The **lower tray** has **lingual flange**.



# TYPES OF TRAYS

- ⦿ Stock tray.
- ⦿ Special tray.

## Stock tray

used for several patients and used for making primary impression . They are made from different materials and variety of sizes and shapes to fit different mouths.



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# TYPES OF STOCK TRAY

- ◉ Stock tray for edentulous patient.
- ◉ Stock tray for dentulous patient.

The difference between them in that flanges for edentulous patients have short flange, oval and narrow floor.

while for dentulous patients have long, wide and flat floor.



⦿ Stock tray classified into:-

**-Perforated:** used with **alginate** impression material.

**-Non perforated:** used with **impression compound**.



- ◉ Stock tray classified into:
- ◉ Perforated
  - Perforated with rim lock.
  - Perforated without rim lock.
- ◉ Non perforated
  - With rim lock.
  - Without rim lock.

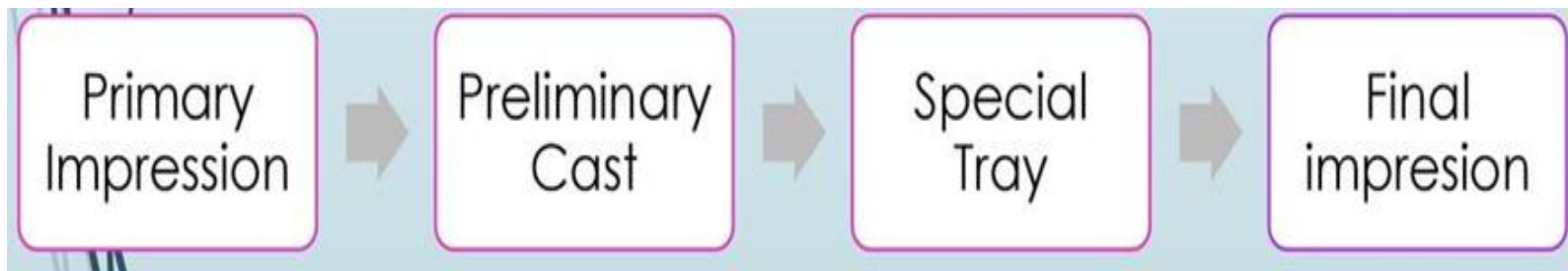


# SELECTION OF STOCK TRAY

- The type of impression materials.
- Size of the arch.
- Form of the arch.
- Must cover all the anatomical landmarks.
- Give a sufficient space to impression materials.




# SPECIAL TRAY

- ◉ Individualized impression tray constructed on the primary cast. the ridge show variations of shape and size, so special tray is constructed because the stock tray can fit the ridge in an arbitrary manner.





# ADVANTAGES OF SPECIAL TRAY

- ◉ Economy in impression materials.
- ◉ More accurate.
- ◉ Minimize tissue displacement and dimensional changes  Correct extension.
- ◉ The work with special tray is easier and quicker.
- ◉ More adapted to oral vestibule  better retention.
- ◉ Less bulky  more comfortable for the patient

# MATERIALS USED FOR SPECIAL TRAY CONSTRUCTION

- ◉ Cold cure acrylic.
- ◉ Visible light cure acrylic.
- ◉ Shellac base plate.
- ◉ Impression compound(some time).
- ◉ Heat cure acrylic (rarely).





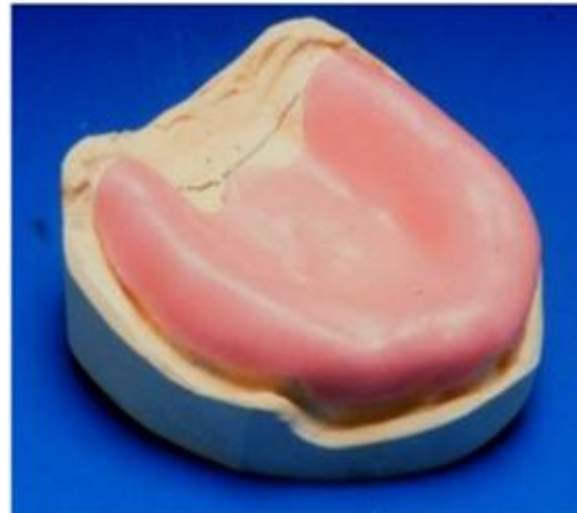
# TYPES OF SPECIAL TRAY

- ◉ Spaced special tray.
- ◉ Closed fitted acrylic resin.

◉ Spaced

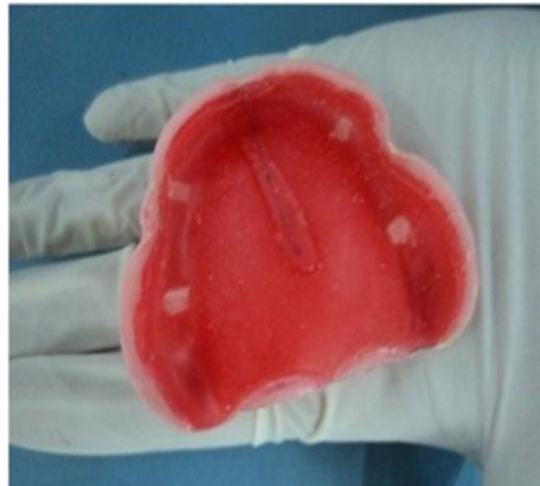
--Without stops.

The wax sheet is adapted on the cast, then a uniform layer of acrylic is adapted on it.



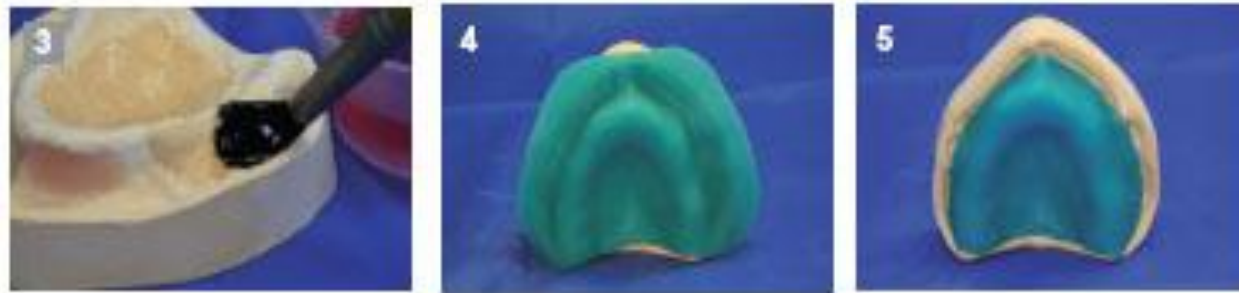
--With stop

4 stopper 2- at anterior area and 2- at posterior area made on the wax sheet after adapted on the cast. Then a uniform layer of acrylic resin adapted on it.



## ⦿ Closed fitted special tray

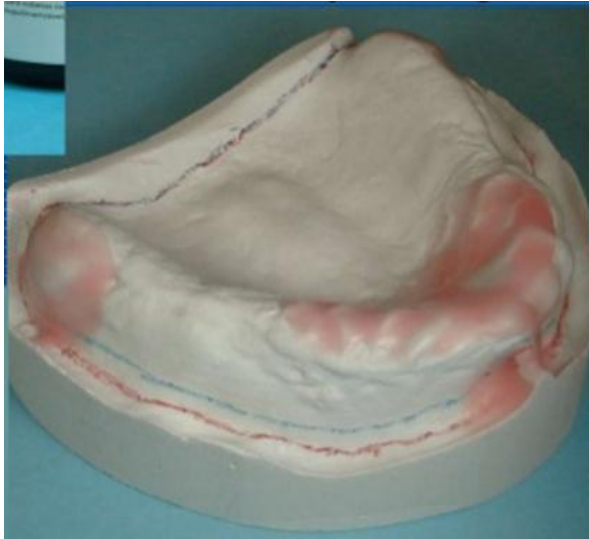
We used only separating medium on study cast then a uniform layer of acrylic resin adapted on it.



## ⦿ Techniques for construction of special tray

- Finger adapted dough method.
- Sprinkle-on acrylic method.

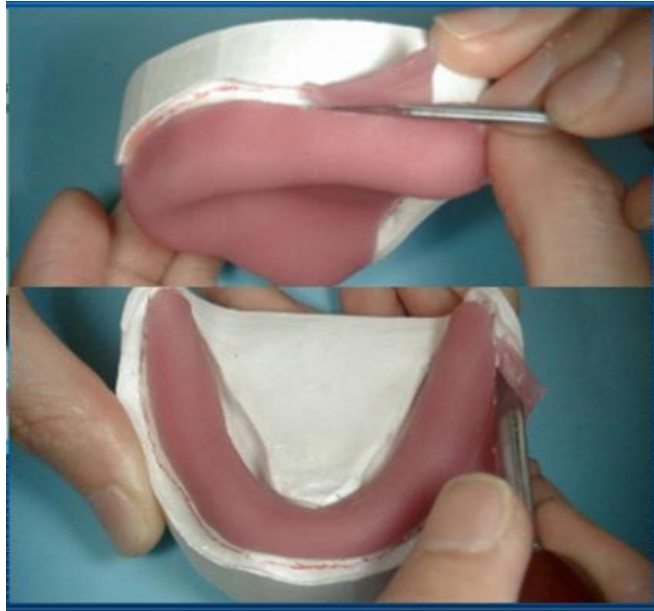
# FINGER ADAPTED DOUGH METHOD











# SPRINKLE-ON ACRYLIC METHOD

Build up labial flange by alternating polymer and monomer addition



# CRITERIA FOR SPECIAL TRAY CONSTRUCTION

- ⦿ The tray must not impinge upon movable structures.
- ⦿ The border must be under extended the (2mm).
- ⦿ The posterior limits must slightly over extended to insure inclusion of the posterior details.
- ⦿ Should be rigid with sufficient thickness
- ⦿ Must have handle for manipulation.
- ⦿ Must be smooth and should have no sharp edges which would injury the patient.



Thank you

