Lecture 2 Dental Equipment Technologies Dr.Muna Merza

**Agar-agar melting machine, Flask cooling and Burn-out furnace**

**Agar-agar melting machine (Gelovet):**

It is a device used to soft gelatin duplication materials (Agar - Agar materials) and then poured in the opening of the duplication flask. it's used in chromium-cobalt lab, it consists of:

A. Upper lid

B. Control panel

C. Legs

D. Main switch

E. Spout

F. Tap

G. Mixing fan

Icon

Description automatically generated with low confidenceDiagram

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**Casting ring:**

It's a piece of stainless steel or plastic, cylindrical in shape used to hold the investment available in a variety of diameters and highest to accept patterns of various sizes and shapes.

The casting ring use to:

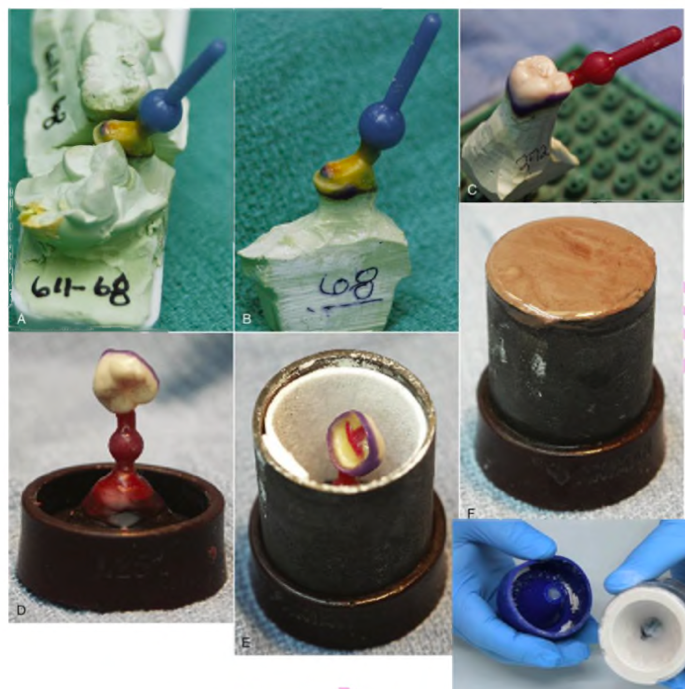
1- Hold the investment during the setting.

2- Restricted the expansion of the mold.

**Sprue base (crucible former):**

It's the base on which the sprue pattern is a position to hold it in place during the investing procedure it is also term crucible, since, its form a depression in the investment which is used to hold the metal during melting procedure, if it’s made of rubber or plastic, its different size to fit various size & types of casting ring. Universal cone





**Burn-out Furnace:**

Is an electric furnace is used in the dental laboratory in (crown & bridge and chromium-cobalt construction) chiefly for:

1 wax elimination.

2) Heating investment models.

A picture containing indoor, appliance, open, door

Description automatically generated

**There are several types of this furnace called firing furnace, this furnace consists of:**

A. On-Off switch

B. Control panel

C. Temperature display

D. Time display

E. Door

F. Hearth

G. Muffle

H. Ventilation Tube

I. Current pickup

Diagram

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