

GILVEST HS

Investment for crown and bridgework for all alloys and pressable ceramic, for use in speed and overnight technique.

Mixing ratio

Powder : Liquid 100 g: 24 – 26 ml

Processing

- Provide requisite amount of Liquid
- Pour in the powder
- Mix thoroughly for 30 seconds
- Agitate for 1 minute under vacuum
- Maintain the vacuum for another 30 seconds

Adjust the mould to the lowest agitation setting while filling it. Once the casting muffle has been filled, no further agitation is performed.

Processing time aprox. 5 minutes

If metal rings are being used, line them with nonwoven as follows:

Muffle size 1 and 3 1 nonwoven insert
Muffle size 6 2 nonwoven insert

If you are casting without rings, you must use a packaging which is smooth on the inside. Overlapping edge, e.g. in the case of magnetic packagings, must be greased with Vaseline.

1) Speed casting alloys

Preheating

25-30 minutes after filling up, the mould can be placed inside the oven, which is already preheated a temperature of 850-900 C.

Important

In the case of ovens with floor heating, make sure there is sufficient clearance (approx. 1 cm) between the mould and the floor plate.

Preheating times

Muffle size	1	min. 35 min
size	3	min. 45 min
size	6	min. 60 min

In each case at final temperature. For each additional ring increase the preheating time for another 10 minutes.

Concentrate admixtures for metal rings and ringless casting:

- 50 % Onlays, inlays, conicals crowns
- 65 % Gold casting, crown and bridges
- 75 % secondary parts and baked ceramics
- 100% Non-ferrous metal alloys

The concentrate admixture figures are for guidance only – they depend on the type of alloy involved.

2. Overnight heating alloys

During the heating over night the liquid concentration should be reduced by 5% to 10% according to alloy and application, as the full setting expansion is reached.

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Burnout

After hardening place the mould into the cold oven. At 290 C and 580 C the temperature should be maintained for 30 – 45 minutes, depending on the size and the number of the moulds. Hold the final temperature, recommended for the alloys, 30-45 minutes.

Heating rate app. 3-5 C/min
Maximum temperature 1200 C
 Cast without delay.

3) Pressable ceramic

Wax-mount the wax object on the base if the pressing cylinder in the usual manner.

Lightly coat the pressing cylinder with Vaseline to ensure the pressing cylinder can be removed easily and reliably after the embedding compound has hardened.

Extreme accuracy must be observed when preparing the embedding compound to ensure the required degree of expansion and therefore maximum fit accuracy.

Mixing Ratio

40-60% for inlays, onlays
 60-70% for individual crowns

A higher concentration of Gilvest Liquid increases the total expansion.

Mixing the embedding compound

Pour the embedding liquid in corresponding concentration and quantity into the mixing vessel, add a corresponding quantity of embedding compound and blend briefly on the vibrator. Then mix by machine for 1 minute under vacuum.

Muffle set: 100 g max. 3 equivalent wax parts
 200 g max. 5 equivalent wax parts

Embedding the Pressing Cylinder

Embedding is conducted in the usual manner. Allow the cylinder to harden in atmosphere for at least 15 to 17 minutes for 100 g muffles and 17 to 19 minutes for 200 g muffles and after removing the plastic base of the cylinder, place it in the preheating furnace set to a temperature of 850 C.

Preheating time

100 g cylinder	45 minutes
200 g cylinder	60 minutes

The required press ceramic material is then added to the cylinder in the ceramic press furnace in the usual manner.

Cooling and Removing the cylinder

After the cylinder has cooled it is removed and cleaned abrasively according to usual techniques for the pressable ceramic.

Warning

This embedding compound contains quartz and cristobalite. So avoid inhaling the dust!

Do not open the oven during the heating-Phase as the arisen wax-steams might catch fire in the air.

The recommendations are given to the best of our knowledge after careful control. We guarantee the quality of our products. Any further liability cannot be accepted since the proper application of our products is outside of our control.