

A Simple, Artistic and Efficient Modification of the Inversion Method

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Abstract

The simplest and fastest way of producing an acceptable and accurate cast is by adopting the two-pour or inversion method. This process is slightly cumbersome and messy due to difficulty of access. A much more efficient, easy and artistic way of accomplishing it is described by adopting a Rotating Cake Icing Table with a Silicone Baking Mat on top as an autoclavable non-stick barrier.

Key words: Cast, accurate, Inversion method, Two-pour, Cross infection prevention.

Introduction

One of the most critical steps in prosthodontics is pouring an accurate and durable cast (1, 2). In addition to maintaining a minimum cast height for strength, it is also important to have a circumferential thickness as the land area to protect the sulcular details from inadvertent damage (3).

Although beading and boxing is recommended and the use of base formers is suggested for fast and easy processing, one of the simplest methods of preparing accurate casts is the two-pour technique or the inversion method. (4,5) The impression is first poured face side up and subsequently inverted onto a second mix of plaster or stone on a flat surface and the sides are shaped up. The process is inherently clumsy and messy as the operator has to bend in all directions attempting to sculpt the base.

Materials and Methods

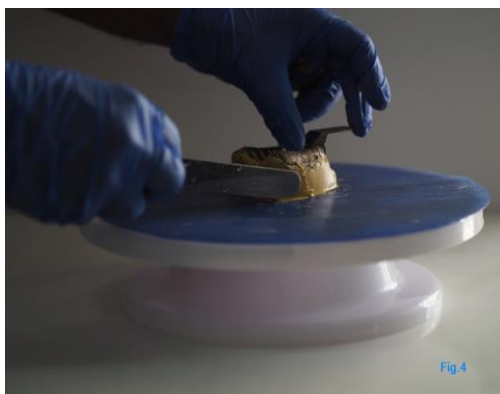
Described here is a simpler method involving the adaptation of a cake icing rotating table and a silicone baking mat cut in a circle to fit the top of the rotating table as a non-stick autoclavable barrier.

1. Rinse and disinfect the impression. Mix dental stone as per standard manufacturer recommended proportions and with the aid of a vibrator pour the first pour with the impression face side up.
2. After the first pour has set, invert it onto a patty of stone placed on the silicon mat on top of the rotating Icing Table. (Fig.1, Fig 2.)

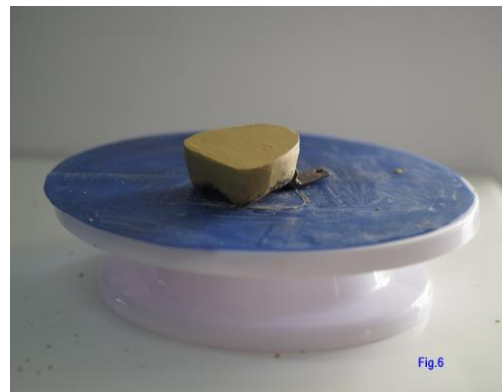
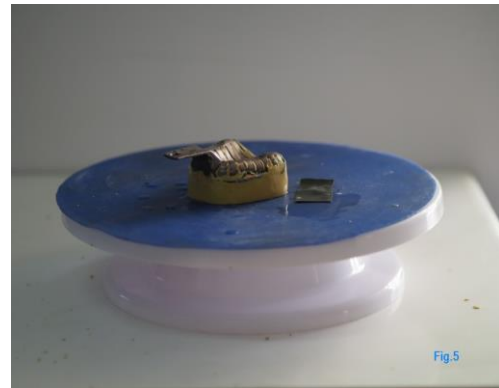
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3. Shape the sides with a flexible spatula while rotating the table clockwise or counter-clockwise as desired similar to a potter's wheel. (Fig. 3, Fig.4)



4. Once the stage of initial setting commences lift off the impression tray and cast from the silicone mat with ease for final smoothing of sides with a small piece of water emery paper. (Fig. 5, Fig 6.)



5. After the final set, remove the cast. Shape and smooth the land area using a utility knife as it is safer than a B.P. handle and blade and use water emery paper to smoothen the trimmed land area. (Fig.7.)



6. Rinse the silicone mat and autoclave to ensure ideal cross infection prevention and workspace hygiene.

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