bench**MASTERY**

600 STEP-BY-STEP MODEL POURING

Pour professional models using wonderfill

Filler saves time and money without compromising accuracy.

by Ellen Gambardella, CDA, M.Ed.

Over the years, I have poured numerous models while continually striving to make this task as efficient and easy as possible. Therefore, I would like to share my experiences with different approaches for obtaining the perfect model.

Most of us have spent valuable time at the model trimmer or have

used lab burs to remove excess stone from a model. I have experimented with various techniques such as using alginate, wax, wet paper towels, Play-Doh and Wonderfill to fill the tongue area and voids in the impression in hopes of minimizing the finishing time.

I have found that using alginate

impression material to fill the tongue area is quite time-consuming. This requires mixing the alginate, inserting it in the tongue area and waiting for it to set. Once this is completed, additional time is needed to decontaminate work surfaces and equipment, such as bowls and spatulas.

Another method uses wax that



Wonderfill

Features

- Saves time and money by creating accurate models quickly and easily
- Formulated to require no setup time
- Is water-soluble and requires little cleanup

Dental Creations

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CIRCLE RS #36



 Form a domed bridge in the tongue area.

Fig. 1 Form a domed bridge in the tongue area.



With Wonderfill in the tongue area, pour plaster/stone.

Fig. 2 With Wonderfill in the tongue area, pour plaster/stone.



After plaster/stone fully sets, pop out non-sticky Wonderfill.

Fig. 3 After plaster/stone fully sets, pop out non-sticky Wonderfill.



 Using only water & a brush, remove the slight residue that might remain.

Fig. 4 Using only water and a brush, remove the slight residue that might remain.

has been heated and manipulated to fill the area. I have noticed this procedure may not make a complete seal with the tray. Stone or plaster penetrates those unsealed areas, resulting in an uneven surface. Again, more wasted time is spent finishing the model.

A different technique is to place wet paper towels in the tongue area. Oftentimes, this method produces an irregular stone surface, which requires additional time at the model trimmer to smooth the area.

I have tried using Play-Doh as a filler. Although it filled the tongue area, it resulted in stained models, and the Play-Doh adhered to the stone, making it difficult to clean off the surface of the model. This unattractive appearance does not present well to patients and sends a negative message about the office.

Undercuts also add to the demise of models. Patients with mandibular tori may produce large undercuts, which must be filled prior to pouring models. If this is not done, separation of the impression from the model becomes difficult and may result in a fractured model. If this happens, the model may have to be poured again. The results are too well known: Frustration escalates, productivity declines, materials are wasted and the entire process is delayed.

After experiencing these disappointing results, I asked myself: How can I save time and money without compromising the accuracy and profes-

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TOM ZALESKE ON WONDERFILL AND WONDERFORMER

Don't let its lack of sophistication fool you into believing this product has no value. That should be the "tag line" for a pair of products I stumbled across last year and started using in my removable prosthetic laboratory shortly afterward.

The products I am referring to are Dental Creations' http://wonderfill.com/ Wonderfill and its counterpart the Wonderformer.

Like most laboratories I am always looking for ways to remain accurate, save time and simplify http://www.dentalproductsreport.com/lab/article/easy-entry techniques that are common and necessary to produce a quality end product. Conventional boxing and beading of impressions is a tedious technique that must be performed to complement and maintain the clinical efforts to impress border depth and thickness (border mold), and transfer those dimensions to a master model. Inversion of the impression in this technique also ensures the stone poured into the boxed area is intimate to the impressionby means of gravity http://www.dentalproductsreport.com/lab/article/science-behind-removables.

The common, time-intensive technique uses rope wax, sticky wax, and boxing wax to establish a land area, imitate sulcus http://www.dentalproductsreport.com/lab/ article/adding-anatomical-accuracy>, and a box to hold the stone pour together. The technique balances on the adhesion tenacity of the wax to the impression material, as well as the speed and dexterity of the technician in using and melting multiple waxes together to fabricate a "sealed" box into which lab stone is poured. Generally it takes about 20-30 minutes to prepare using the conventional wax method.

A second look

Over the years I had seen ads for the product Wonderfill but always thought of it as only tongue filler. While attending the 2011 FDLA Southern States Symposium, I noticed Dental Creations was offering free samples of Wonderfill to attendees. I remarked when handed the sample that the last time I used the product was with another sample I used to fill a tongue on a lower model. I mentioned it was a nice but rather one-dimensional product. At that point I was asked if I knew that boxing impressions in 5 minutes was possible when using a newer product, the Wonderformer, along with Wonderfill. Naturally, I said, "Tell me more." http://www.dentalproductsreport.com/cadcam-connection/article/dental-technician-our-most-valuable-tool>

What I found was the real game changer for Wonderfill comes from a complementary product: the Wonderformer, which when used with Wonderfill becomes an accurate, cost effective, time saving "system" for fabricating boxed impressions. The form is a latching metal box or former which, when used like a cookie cutter along with Wonderfill, boxes an impression that is ready to pour in 5 minutes.

The benefits of boxing and beading impressions include:

- Replicates border molded areas of impression in shape and width
- Maintains border dimensions during flasking by providing uniform land area
- \bullet Ensures intimate adaptation and condensing of poured stone to impression
- · Controls the base thickness of master models

Since realizing the accurate, cost effective, time and material savings of these products when used together, versus the time intensive conventional method, I have started boxing all the impressions in my lab—regardless if they are border molded or just for an opposing model—to take advantage of the esthetic and accuracy of pour aspects this technique and these products lend.

I also like having the ability to scale production of boxed models up or down without large consumption of hours in a day to do so. The conventional method for 11 models based on 25 minutes each is about four hours. The "Wonder" method for 11 models based on 5 minutes each is about 55 minutes.

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sional appearance of my models? There is an answer: Use the product Wonderfill. Prior to pouring the models, I always verify that the impression has been properly disinfected. Confirm the disinfectant solution has remained on the impression as well as the tray for the amount of time recommended by the manufacturer. Because Wonderfill is water-soluble, it is important to eliminate any excess disinfectant solution from the tray prior to filling the tongue area. This dryness will create a tight seal between the Wonderfill and the tray, which prevents plaster or stone from infiltrating the area.

I remove the desired amount of Wonderfill from the tub and then manipulate the material with my fingers to form a domed bridge in the tongue area.

Once this is completed, I start pouring the model by adding small amounts of stone to the most distal surface of one side of the impression and continue adding small increments to the same area. Next, I rotate the impression to guide the flow of the stone around the arch. Be sure to keep the stone moving through the anatomical depressions from one side, through the anterior and into the opposite side.

When the impression is totally filled and the stone has completely set, I pop out the non-sticky Wonderfill.

Because Wonderfill is watersoluble, non-sticky and won't stain, it makes cleaning the model very easy. I just rinse the models under cool running water, and the surface looks pristine.

I discovered that in one quick, simple step, I could fill the tongue area and

voids in seconds by using Wonderfill. This water-soluble product is ready for placement and manipulates easily to conform to all locations, i.e. tongue area, missing teeth, undercuts caused by bubbles or voids created by tori.

I like that this innovative tongue and void filler requires no mixing or preparation, no set up time and no cleaning time. Moreover, it is simple to use and quick to apply.

Think about the effect on your practice if there was reduced time spent in the lab, a decreased repeat of procedures and less wasted products. To accomplish a positive impact on your practice, both clinically and financially, I recommend using Wonderfill as part of your pouring technique. In my opinion, when you add up Wonderfill's time-saving results, convenience and ease of use, it equals satisfaction.

ABOUT THE AUTHOR

Ellen Gambardella, CDA, M.Ed., is an award-winning educator and professional speaker. In a nationwide search, Ellen was selected as the "most effective dental assistant educator in the United States" and is the recipient of the "Teacher of the Year" award in Massachusetts. Ellen has lectured nationally and internationally. She may be reached at ellengambardella@gmail.com.

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