



ceraMotion One Touch: Magic in a jar

By Terence Whitty



Figure 1 (above). *ceraMotion One Touch* kit.



Figure 2 (right). *ceraMotion One Touch* kit showing glazes, body stains, 2D and 3D effect pastes.

Full contour monolithic restorations have skyrocketed to stardom in the dental profession and with the uptake of CAD/CAM, both chairside and in the lab, they are now often the restoration of choice. Zirconia and Lithium Disilicate are the most popular, the former being a true ceramic and the latter a Glass Ceramic. Both have been covered in depth by the author in recent issues of *eLABORATE*.

Once the restoration is milled and sintered or crystallised respectively, the next step is to finish the restoration using a variety of stains and glazes and sometimes, micro layering procedures are carried out.

Often this can be a long process as it may require various cycles of application and firing to achieve the desired effect. Various popular brands are on the market and have been used reliably but all suffer from the shortcomings of being multistep processing and in today's dental business environment, time is definitely money so the quicker the satisfactory outcome the better.

Enter *ceraMotion One Step* from Dentaaurum. Released at IDS 2017 in Germany, this product is a real game changer when it comes to the staining and glazing of all-ceramic restorations. It's a big call I will admit and even I was sceptical at first, but after using it only once, I was sold on the product.

The main features include:

- Fast and easy handling thanks to ready-mixed ceramic pastes;
- Designed for the easy finishing of aesthetic, full monolithic ceramic restorations;
- Maximum aesthetics thanks to colour-coordinated pastes with 3D effects; and
- Micro layering and subtle changes in shape and the adding of contact points are possible with 3D effect pastes.

ceraMotion One Touch is a unique product to say the least. It's a Glaze system, it's a stain system and it's a micro layering effect system all in one kit and you can do all 3 functions and more potentially in one firing. The *ceraMotion One Touch* kit consists of sixteen jars and two liquids, a Glaze Paste, 4 base stains - A,B,C,D, five 2D effect pastes and six 3D effect pastes.

After using a suitable abrasive rubber, a fine sandblast and a thorough steam-cleaning, the basic procedure is to apply the glaze paste evenly with the supplied brush all over the restoration. You will be absolutely amazed how well and easily the glaze paste applies to the restoration and actually stays put due to its propriety thixotropic formula. It is also not at all grainy as is the case with some other pastes. Applying the paste glaze does two things: it adds a glaze but also creates a medium to hold the stains and effects perfectly prior to firing.



Figure 3. Milled Lithium Disilicate crown ready for crystallisation. ceraMotion is ideal for zirconia as well.

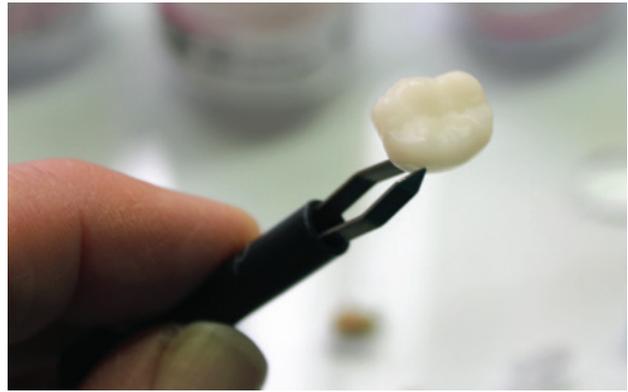


Figure 4. Surface prepared and cleaned.



Figure 5. ceraMotion Paste Glaze and diluting liquid.



Figure 6. Applying the Paste Glaze is very easy - the kit comes with two brushes but you can use your favourite brush as well.



Figure 7. Body Paste - here we are using "A".

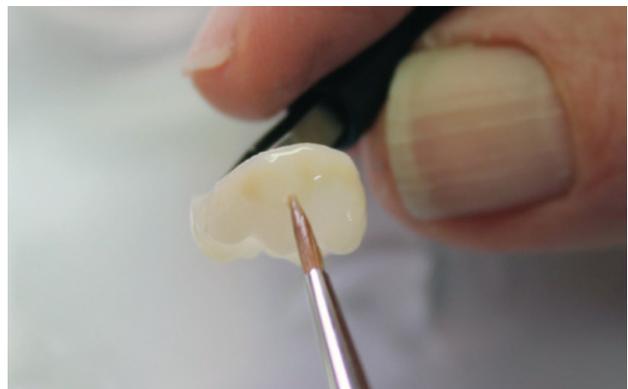


Figure 8. Spread the body paste in the desired regions.



Figure 9. Fissure staining. Here we are using ceraMotion powdered stain, available separately.



Figure 10. Some of the 2D effect pastes.



Figure 11. Brush into the glaze to achieve effects, Blue, Violet, White etc.



Figure 12. Using the White 2D effect paste.

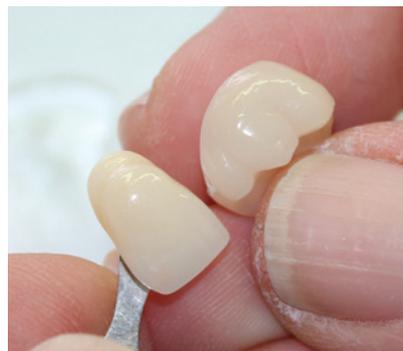


Figure 13. After firing, shade matching.



Figure 14 and 15. Completed restoration.



Figure 16. Zirconia restoration ready for One Touch.



Figure 17. Shade matching after firing.

The next step is to add your body colour stain - lets say an "A" body around the neck and contact areas. You will notice how easily it blends into the glaze paste and stays put without slumping. There are effect stains such as white, blue and violet and these are applied as easily to the base glaze as the base stains.

The 3D effect pastes are very useful for micro layering and adding effects to the restorations. By joining slightly larger ceramic particles with a thixotropic paste, it is possible to shape the incisal area and the occlusal surface area and to add contact points precisely. The 3D pastes have a firing stability which guarantees that the desired morphology is maintained. The translucency and the opalescence of the ready-made 3D incisal masses create an in-depth effect which appears authentic. The ceraMotion One Touch pastes fluorescence are matched to that of the fluorescence of natural teeth.

One Touch Liquids

CeraMotion consists of two liquids: One Touch Diluting Liquid and Refreshing Liquid. The Diluting Liquid and the Refreshing Liquid are compatible with all ceraMotion One Touch pastes, however, their behaviour during processing ceraMotion varies. Diluting Liquid can be used to reduce the paste's viscosity (Zr Paste Glaze, 2D and 3D). The 2D pastes can then be applied in a thinner layer giving a glazed effect. The Diluting Liquid is preferably used only for 2D pastes and also for diluting Zr Paste Glaze to apply very thin layers.

Stir the pastes using a glass instrument before using any of the liquids.

Using too much Diluting Liquid may impair the stability of the pastes following application. Mix the diluting liquid on the mixing plate only and not in the pot.



Figure 18. Finished restoration.



Figure 19. One of the 3D effect pastes, great for micro layering and adding contacts.



Figure 20. Dilute 3D effects only with Refreshing Liquid as this will not interfere with thixotropic properties.

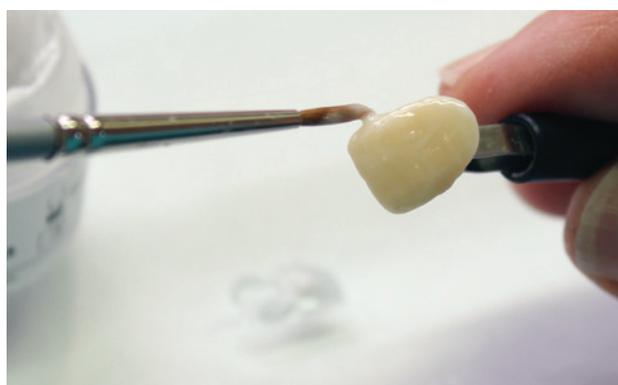


Figure 21. Adding contact area with 3D effect paste.

The Refreshing Liquid is the correct solution for the 3D pastes since it does not affect the pastes' modelling qualities. If the 3D paste is too dry, add Refreshing Liquid. The Refreshing Liquid can be used to alter the viscosity of the 3D pastes without changing their thixotropic behaviour. Always close the bottle of Refreshing Liquid after use.

Handling tips

The ceraMotion Stains Universal / colours in powder form can be used in addition to ceraMotion One Touch and these are available separately. Mix these either as usual with the ceraMotion stain liquid or with the Diluting Liquid. If you choose to use the ceraMotion Universal Stains in powder form to characterise the restoration, you can mix this into the Zr Paste Glaze and this will give you an individual 2D paste. Then use the Diluting Liquid if necessary.

If you wish to create a jar of a custom stain, you can use your choice of the ceraMotion powdered stains and add them to a jar of paste glaze. The 3D pastes can be used for the cut-back technique for micro layering.

Firing

Use 730°C as per instructions for most of the firing cycles for ceraMotion One Touch. To reduce the glaze level, turn the firing temperature down to 715°C. To increase the glaze level,

turn the firing temperature up to 750°C max. You can also influence the level of glazing individually by polishing the restoration.

Dentaurum is a long-standing family owned company that produces high quality products and most of us will know their alloys, investments and orthodontic products. Their ceramic products are well known in Europe and are now gaining popularity in Australia. ceraMotion is a new product that will definitely put them on the map here for ceramics.

About the author

Terence Whitty is a well known dental technology key opinion leader and lectures nationally and internationally on a variety of dental technology and material science subjects. He is the founder and owner of Fabdent, a busy dental laboratory in Sydney specialising in high tech dental supply and manufacturing. Using the latest advances in intra and extra oral scanning, CAD/CAM including milling, grinding and 3D printing technologies, most specialties are covered including orthodontics, fixed and removable prosthetics, computer implant planning and guidance, TMD, oral maxillofacial, sleep and paediatrics. His articles appear in various international journals. Terence can be contacted on 1300-878-336 or see www.fabdent.com.au

For more info, contact Dentaurum Australia on 1300-880-782 or in New Zealand, call 0800-336-828. info@dentaurum.com.au