QUINTESSENZ
ZAHNTECHNIK

7/22 | July 2022
Volume 48

DENTAURUM

SPECIAL REPRINT

More than just a touch!

Oral designer Bassam Haddad on ceraMotion OneTouch and what it's all about

QUINTESSENCE PUBLISHING

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When Dentaurum launched the ceraMotion One Touch pastes, many still thought this was simply a hyped-up stain and touch-up kit. But far from it. Meanwhile, there are umpteen similar products and concepts and all show that the components of the system can be used like layering ceramics, albeit in an already mixed state and in much thinner layers. To find out more about the components and their areas of application, we spoke to oral designer and enthusiastic user of the One Touch pastes, Bassam Haddad (Fig. 1), at the LMT Lab Day in Chicago.

„Don‘t be afraid of numerous firings! With the ceraMotion One Touch components, the shade or shape will not change, even after several firings.“

QZ: What would you describe as the key feature of ceraMotion One Touch?

Bassam Haddad: With ceraMotion One Touch, a great many things can be fundamentally changed in our job allowing a host of problems to be solved in our daily work. Among other things, the components of the ceraMotion One Touch system give us a great many options to be able to offer monolithic restorations that are not recognized as such. Be it on the basis of zirconium oxide or lithium disilicate glass ceramics (Fig. 2).

Work finalized with One Touch looks very natural and beautiful. In addition, the components of the system make it very easy to change not only the „color“ but also the shape (Figs. 3 and 4). All this has a positive impact on our work, which now takes less time. The components are easy to process, there are no porosities (Fig. 5) and we can resort to a wide range of shades. In this context, I would like to particularly emphasize that this even covers the shades of the Vita Toothguide 3D Master. To the best of my knowledge, no other competitor offers this tooth shade guide.

In addition, we have always had problems in the past when glazing and finishing lithium disilicate restorations, as it usually took two to three firings before we had achieved an attractive result. With ceraMotion One Touch, we can achieve a beautiful result in just one firing. The third problem area that can be

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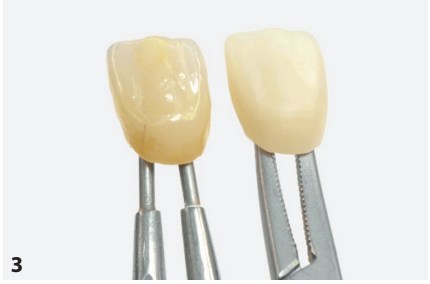

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Fig. 1 opposite Interview at LMT Lab Day 2022 (from the left): Oral Designer and ceraMotion KOL Bassam Haddad, as well as the representatives of the Quintessenz publishing house, Markus Queitsch, Head of Media Sales, and Dan Krammer, Program Planning Dental Prosthetics.

Fig. 2 With the components of the ceraMotion One Touch system, a great many things can be fundamentally changed in everyday dental prosthetics and a host of problems can be solved. The components make it possible to offer monolithic restorations - whether based on zirconium oxide or lithium disilicate glass ceramics - that are not recognized as such. **Figs. 3 and 4** The components of the One Touch system make it very easy to change not only the „color“ but also the shape. The example chosen here for the shape is of course exaggerated, but it illustrates the possibilities. **Fig. 5** The One Touch components are easy to process and homogeneous results are obtained without porosities.

Fig. 6 With the components of the ceraMotion One Touch system, the gingival portion of larger restorations can also be designed very well with a single firing. The system provides five pink pastes for this purpose. **Figs. 7 and 8** The components are very well suited for finishing the system-inherent ceraMotion LiSi lithium disilicate press ceramic. This, in turn, is available in both classic Vita as well as 3D Master shades.

solved with the components of the ceraMotion One Touch system is the design of the gingival portion. With the five pink pastes available, the gingival portion can be modeled and finished in a single firing without having to resort to conventional layering ceramic materials (Fig. 6). And because these pastes are also low-fusing, we never run the risk of unnecessarily stressing the framework material or veneering ceramics that have already been fused on. This is particularly noticeable in the case of large full-mouth restorations.

Furthermore, the components are very well suited for finishing the system-inherent ceraMotion LiSi lithium disilicate press ceramic, which, by the way, is also available in classic Vita as well as in 3-D Master shades (Figs. 7 and 8).

And: No matter how many times I fire, the shade remains stable, even though one firing is actually quite sufficient based on the concept. The reason being that with ceraMotion One Touch, the rule is: what you see before firing is what you get after firing.

QZ: What does one need to be mindful of when using the One Touch components?

Bassam Haddad: One thing that technicians should be addressing in advance of any patient work is the handling of the 3-D pastes. It is therefore advisable to practice handling the pastes a little to familiarize yourself with the somewhat different way of working. In simplified terms, this is because the ceraMotion One Touch 3-D pastes are glaze pastes that have been mixed with corresponding layering ceramic materials (Fig. 9). In other words, the pastes are premixed with an oily liquid. However, technicians are normally used to mixing their veneering ceramics with water. Therefore, layering with the 3-D pastes is somewhat different than with conventional ceramics. For example, one can extract the water of the conventionally mixed and applied layering ceramic with a fleece or similar to regulate the moisture - this is not possible with the One Touch pastes. In addition, the One Touch pastes must be layered freely, i.e. they should not have any contact with the adjacent teeth made of plaster (as they are mixed with an oily liquid).

Also, the One Touch pastes are simply placed on the object and shaped the way you want them to be later and fired (Fig. 10). However, this leads to another very big advantage for me, because after firing I have to fit the restoration to the model and the machined areas need to be polished. And here it becomes evident that the fused ceraMotion One Touch ceramic does not exhibit any porosities at all. It looks like glazed! All the other materials I have worked with have always displayed microporosities.

Another very important aspect I would like to share with my colleagues is the difference between Diluting Liquid and Refreshing Liquid (Fig. 11). These two

liquids and in particular their use are fundamentally different, so it is essential to pay attention to their correct use.

The Diluting Liquid is used to adjust the consistency of the 2-D paste material, i.e. to make it somewhat „more fluid" if necessary. As the name already implies, it is used to dilute the 2-D pastes.

The 3-D paste material must possess a certain stability in order to be able to apply it exactly as intended by Dentaurum. This is the only way to really exploit the advantages of the material. And should the 3-D material have become a little too dry, then one must resort to the Refreshing Liquid. The Refreshing Liquid ensures that the structure of the 3-D pastes is retained and that they can be applied and modeled nicely.

However, it is also possible to change a 3-D paste material into a 2-D paste material by mixing and diluting it with Diluting Liquid.

QZ: What is the biggest difference between the 2-D and 3-D pastes and when do you use which?

Bassam Haddad: That's easy to explain. The 2-D pastes are ready-to-use shaded glazes. In other words, they are glaze materials and stains in one, making additional glaze material firing unnecessary. Stains from other manufacturers do not contain glazing material, which means that the stains must be applied first and then the glazing material. If necessary, the consistency can be changed with the aforementioned Diluting Liquid.

In contrast, the 3-D paste material is a mixture of glaze and layering ce-

Video with tips on processing

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Fig. 9 One thing that technicians should be addressing in advance of any patient work is the different handling of the 2-D and 3-D pastes. It is therefore advisable to familiarize yourself with the somewhat different way of working. In simplified terms, this is because the ceraMotion One Touch 3-D pastes (on the right in the image) are glaze pastes that have been mixed with corresponding layering ceramic materials. **Figs. 10a and b** The One Touch pastes should be layered freely, as they should not have any contact with the adjacent teeth made of plaster due to their oily consistency. **Fig. 11** Another very important aspect is the difference between the Diluting Liquid (left) and the Refreshing Liquid. The Diluting Liquid is designed to adjust the consistency of the 2-D paste material, the Refreshing Liquid ensures that the structure of the 3-D pastes is retained and that they can be applied and modeled nicely.

ramic material, i.e. the proportion of layering ceramic is higher. Therefore, it is also more stable, has a higher viscosity and is consequently very well suited for changes in shape. The 3-D pastes can therefore be compared to premixed layering ceramics, where the glazing material is already included. Therefore, all you need to do is apply the 3-D paste, shape it, fire the restoration and you're done!

QZ: In your opinion, what distinguishes the components of the ceraMotion family?

Bassam Haddad: From my point of view, the ceraMotion family is distinguished by the fact that you get everything a laboratory needs. It includes everything you can imagine. Starting with the 2-D and 3-D glaze pastes in Vita Classic and 3-D Master as well as five gingival shades, lithium disilicate press ceramics, also in both Vita shade guides, investment material and liquid for the press ceramics, veneering ceramics for all common materials such as ZrO_2 and LiSi, precious metal-free and precious metal-containing alloys as well as titanium and zirconium oxide (Fig. 12).

What I find absolutely remarkable in the system is that ceraMotion Zr is a veneering ceramic which has been matched to two framework materials: lithium disilicate and zirconium oxide. To my knowledge, only few manufacturers offer this. And again, the ceraMotion Zr veneering ceramic can be combined with the One Touch kits. As a dental technician, this offers me considerable leeway, especially for larger, combined cases - but also for monolithic zirconium oxide posterior crowns and reduced lithium disilicate anterior crowns - as I can use both the layering ceramic as well as the One Touch pastes for this purpose. This way, it is possible to respond perfectly to differences in available space and to create dental restorations that harmonize very well with each other despite the different framework materials and layer thicknesses (Fig. 13). Now there's a system concept and a real product family for you!

Another very big advantage I see is that Dentaurum offers two types of glazes for One Touch: Paste Glaze transpa and Paste Glaze bright (Fig. 14). This is a unique selling point in my opinion. Paste Glaze bright was developed to avoid undesirable photo-optical properties (such as a somewhat darker appearance with very bright colors due to light dispersion). If one wishes to fabricate very bright or bleach crowns from lithium disilicate, the use of Bright Glaze is recommended, as it does not dim the brightness value, but even boosts it somewhat.

QZ: Do you have any special tips for your colleagues you would like to share with regard to the processing and application of the One Touch pastes?

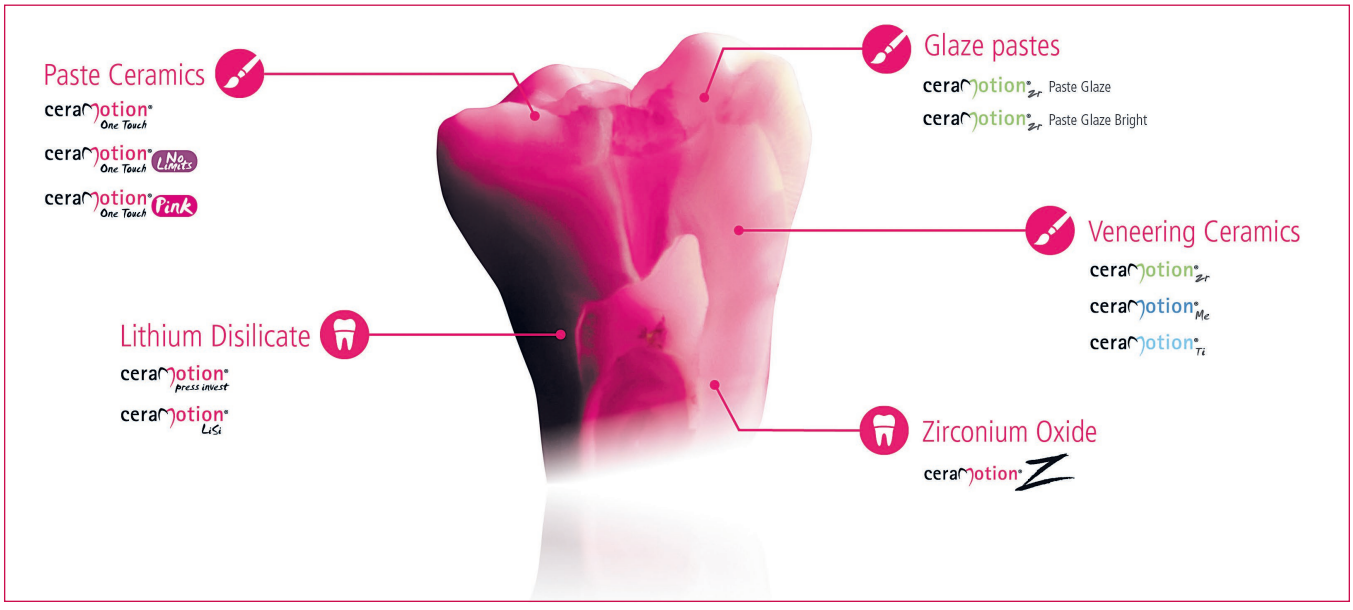

Fig. 12 The ceraMotion product family is distinguished by the fact that you get everything a laboratory needs. Starting with 2-D and 3-D glaze pastes, lithium disilicate press ceramics, zirconium oxides, as well as veneering ceramics for all common materials such as ZrO2 and LiSi, precious metal-free and precious metal-containing alloys, as well as titanium and zirconium oxide.

Bassam Haddad: Would love to. Here's my first tip: Users should embrace the fact that ceraMotion One Touch Paste Glaze cannot be compared with conventional glaze materials. The reason being that these are usually mixed from powder and a special fluid before glazing. In the case of veneering ceramics, this is usually a very thin-bodied glaze which is mixed, applied and fired. The ceraMotion One Touch Paste Glaze, however, is mixed ready for use and is slightly more viscous. When one applies this glaze, it appears milky-white in color, which many find confusing at first. However, after firing, it is crystal clear. So please don't get flustered.

My second tip relates to the 3-D paste material. In case one wants to„dilute" this somewhat, please never add the Diluting Liquid directly into the jar. Otherwise, the entire paste is diluted. So please put the desired quantity on a mixing plate and do not add the Diluting Liquid directly there either, but place it drop by drop next to the 3-D paste, mix it, and thus carefully proceed towards the desired consistency. Because if one adds too much liquid too quickly, one loses the beautiful properties of the material and it simply can't be applied as precisely. And then that is not the fault of the 3-D paste material. And should the 3-D paste have lost some of its consistency, then one should proceed towards the original viscosity by adding Refreshing Liquid drop by drop.

My third tip is: Don't be afraid of numerous firings! With the ceraMotion One Touch components, the shade or shape will not change, even after several firings. Even if one has chipping at the incisal edge, this can easily be repaired with One Touch. Because the true life of the dental technician is not only governed by beautiful crowns, but frequently by repairs and solving problems. This is the„real life" that I also try to reflect in my courses.

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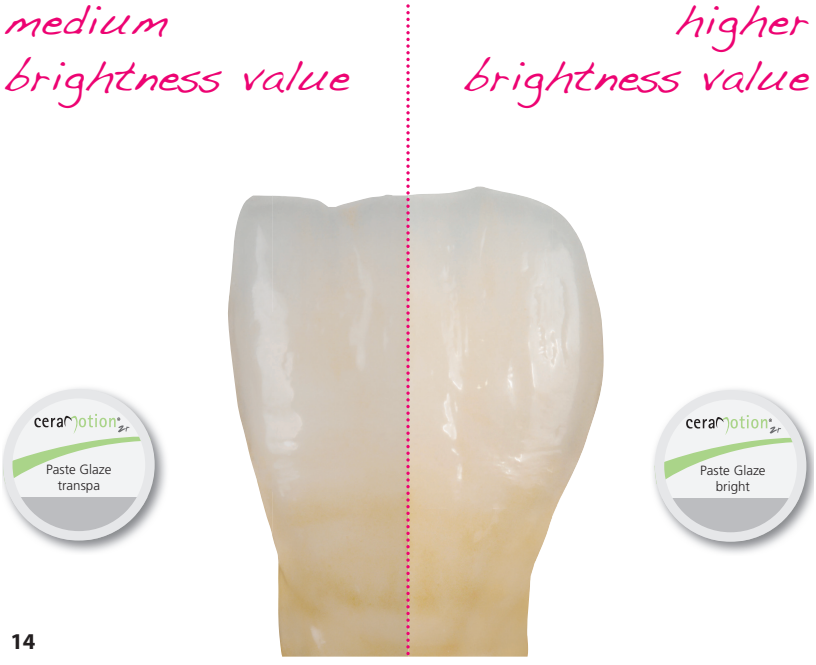

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Fig. 13 With the components of the ceraMotion system it is possible to respond perfectly to differences in available space and to create dental restorations that harmonize very well with each other despite the different framework materials and layer thicknesses. **Fig. 14** Dentaurum offers two types of glazes for One Touch: Paste Glaze transpa and Paste Glaze bright. Paste Glaze bright can be used to avoid „shadowing" with very bright shades - it boosts the brightness value. Paste Glaze transpa, on the other hand, is a neutral, transparent glaze paste.

Another very important tip concerns the ceramic furnaces of many colleagues. These are generally calibrated at 920 °C – a temperature that is based on metal ceramics. However, as the ceraMotion components are almost all fired at 750 °C, the furnaces are often not set exactly to this temperature. For this reason, calibration should also be performed for this temperature. To this end, it is sufficient to layer a small square of Transpa-Neutral material and fire it at 750 °C. If this square

is white and not transparent afterwards, the temperature of the furnace is too low. And if it leaves the furnace transparent but with rounded corners, then the temperature is too high. Hence, the furnace must be calibrated accordingly.

And then there's something else: Anyone using firing trays and supports for ceraMotion firings that are also used for PFM crowns whose alloy contains silver will encounter greenish and yellowish contamination on their restorations. The reason being that silver from the alloy deposits on the firing tray and subsequently on the restoration during ceraMotion firing. So please don't replace the firing chamber or the furnace right away ... it's often just the firing tray or due to the pins. Normally, this silver contamination disappears with further firings around 950 °C, or one performs furnace cleaning - including the pins and firing trays.

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