High-Temperature Furnace for More Speed

By Dentsply Sirona

For high masticatory forces, zirconium oxide is the material of choice. The new CEREC SpeedFire sintering furnace accelerates processing time. In this way Dr. Michael Skramstad from Minnesota, USA, can provide his patients in a single visit. Zirconium oxide is almost as hard as dental alloys. The biocompatible ceramic has been successfully used in dentistry for over 15 years – first only as a veneering framework material and for the last six years also for full anatomical crowns. This gives me the assurance to now use the material chairside when placing a crown that still has to sit perfectly from now. Besides its high stability and durability, zirconium oxide has two more important advantages: The flexural strength of the material allows me to fabricate restorations with very thin wall thicknesses. This enables me to prepare the tooth in a substance-friendly way. In addition, restorations can be placed more easily. Traditional cement rather than adhesive bonding is used.

CROWN RESTORATION MADE BY CEREC ZIRCONIA

1. After a caries fracture in a tooth restored with amalgam, I proposed a CEREC crown made of full contour zirconia.
2. I drew in the preparation margins on the virtual model with the help of the automatic margin finder.
3. The CEREC software reconstructs the crown automatically with the Biojaw algorithm.
4. In the preview, I checked the position of the crown in the ceramic block. Adjustments could be made at this point if needed.
5. Finally, I placed the finished polished crown made of pre-colored zirconium oxide in the patient’s mouth.

FABRICATION OF ZIRCONIUM OXIDE RESTORATIONS IN JUST UNDER TWO HOURS

1. Digital impressions: The scan with Omnicam is done in the same way as with conventional CEREC restorations (2 min).
2. Milling: Zirconium oxide is milled in enlarged form. This allows for more detailed finishing of the structures (10 min).
3. Sintering: The assistant places the restoration in the CEREC SpeedFire furnace and starts the sintering process with a touch-pad (16 min).
4. Polishing and glazing: The restoration can be individualized between both steps (12 min).

Producing Zirconium Oxide Easily in The Practice

My experiences with CEREC Zirconia have been very positive. Fabricating dental prosthesis from full contour zirconia using CAD/CAM technologies is easy, we familiarized ourselves with the process very quickly. This is not surprising since the process is hardly any different from producing other milled restorations. By means of full anatomical zirconium oxide chairside fabrication with CEREC becomes even more versatile and economical. A great benefit for my practice.

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Mathew Skramstad is a dentist in Orono, Minnesota, USA. He specializes in restorative and cosmetic dentistry as well as implantology.

Dr. Michael Skramstad is a certified trainer for Patterson Dental and lectures internationally on digital dentistry.
Pink & White Aesthetics with BEAUTIFIL II

By SHOFU

BEAUTIFIL II ENAMEL and GINGIVA from Shofu are developed as a complementary line extension of BEAUTIFIL II to easily create life-like direct aesthetic restorations. A special one-push syringe ensures controlled dispensing of the smooth and creamy material that is easy to sculpt into fine details and recreate the surface textures seen in natural teeth & gums.

Integration of nanofillers and newly developed organic/inorganic filler complex into a unique silanol modified resin network imparts BEAUTIFIL II ENAMEL and GINGIVA with exceptional handling characteristics, longer working time, high abrasion/wear resistance, stable shades, effortless and superior polish with sustained polish retention for lasting aesthetics. Shofu’s proprietary 5-PFG fillers offer additional fluoride benefits and anti-plaque effect on the restoration surface.

BEAUTIFIL II ENAMEL is available in 4 naturally translucent and opalescent, Value based shades that facilitate life-like shade reproduction for lasting aesthetics. Shofu's proprietary S-PRG fillers offer additional fluoride benefits and anti-plaque effects.

Integration of nanofillers and newly developed organic/inorganic filler complex into a unique silanol modified resin network imparts BEAUTIFIL II ENAMEL and GINGIVA with exceptional handling characteristics, longer working time, high abrasion/wear resistance, stable shades, effortless and superior polish with sustained polish retention for lasting aesthetics. Shofu’s proprietary 5-PFG fillers offer additional fluoride benefits and anti-plaque effect on the restoration surface.

New Putty super soft consistency - very smooth and easy to mix - PRESIDENT wash materials show perfect flow behavior under pressure - to capture all marginal details precisely

New, fresh colors provide better contrast and more accurate detail readability -

Dentsply Sirona appoints new group Vice President of CAD/CAM Systems

By DTI

BENSHEIM, Germany/SALZBURG, Austria: Dentsply Sirona has announced that Dr Frank Thiel will be succeeding Dr Joachim Pfeiffer as head of the company’s strategic CAD/CAM business unit. Owing to the Dentsply–Sirona merger at the beginning of 2016, Pfeiffer’s tasks as chief technology officer will keep evolving and Thiel, who was previously involved in the development of the CEREC Omnicam 3-D intra-oral scanner, will take over his responsibilities in the development, production and acquisition sections of the CAD/CAM division.

Thiel will be sharing the management position of the division with Roddy Macleod, who will be in charge of product management, marketing and control.

Thiel has been working in the company’s CAD/CAM division for more than 15 years. From 2009 to 2016, he held the position of head of development for optical 3-D measurement technologies, and he oversaw basic development from 2006 to 2009. Thiel began as a development engineer at the then Sirona Dental Systems and took over management of the development projects soon afterwards. Prior to his career at the company, Thiel was involved in basic research in the fields of atomic, molecular and electronic physics, as well as photonics.
By E.M.S.

DIVONNE LES-BAINS, France: More than 30 years ago, EMS developed AIR-FLOW® and PIEZON® NO PAIN and since then continuously improved these technologies. In July 2016, it is time to launch the next game changer: EMS presented the Guided Biofilm Therapy (GBT). The GBT revolutionizes what Axelsson and Lindhe started more than 40 years ago and will set a new standard in dental maintenance and oral hygiene. International guest speakers from Universities, Dental Offices and the Swiss Dental Academy were invited to a two-day conference in Divonne Les Bains. The summit provided a stage where dental professionals could discuss biofilm management, the main causes of biofilm and the clinically effective ways to remove it.

The Game Changer

“I believe that education and awareness is key to making game changers out of our colleagues.” (Jolene Fenn, prophylaxis professional and trainer at the Swiss Dental Academy, “proud to be a game changer”. Indeed, dental maintenance and oral hygiene has never been as important as it is today. The participants feel like pioneers who experience a high standard homogenous solution for every patient. And it seems that a new gold standard has been created in the field of prophylaxis, coming straight out of Switzerland.

The presented ‘Game Changer’ was developed in close cooperation with universities, dentists, dental hygienists and EMS specialists. Therefore, it is no surprise that Nina Von De Pinder, Dental Hygienist, “is proud to be a game changer”. In deed, dental maintenance and oral hygiene has never been as important as it is today. The participants feel like pioneers who experience a high standard homogenous solution for every patient. And it seems that a new gold standard has been created in the field of prophylaxis, coming straight out of Switzerland.

GBT – no conflict of ethics and profitability

“I prefer to earn money with the health of my patients! Than the diseases of my patients!” (Dr. Dong Xiao Xiao, Peri-implantitis and peri-implant mucositis). (Dr. Dong Xiao Xiao, Periodontist)

The GBT, which is a detailed clinical protocol, ensures a high standard in dental maintenance and facilitates complete removal of biofilm sub-and supra-gingivally. The GBT aims to bring a fast and comfortable treatment to any patient profile with the use of the high technology powder PLUS based on Erythritol, the AIR-FLOW® and the PIEZON® NO PAIN technologies. Be it children, sensitive patients, recall or pre-surgery prophylaxis, the GBT offers a complete solution. The GBT, this new, simple and predictable approach to professional dental maintenance, begins with the use of a disclosing agent. It guides the dental professional to see the biofilm normally not visible to the naked eye and to demonstrate biofilm presence to the patient. This procedure is followed by removal of biofilm and stains from the hard and soft tissues sub- and supra-gingivally by using AIR-FLOW® with the very fine Erythritol powder PLUS. After this procedure, calculus and concrements are easy to detect and can be removed using PIEZON® NO PAIN and the PS instrument. Scaling is only needed if there are hard deposits. Therefore, GBT provides a minimal invasive therapy. Afterwards, the GBT is completed with a quality control and the recall management.

Nevertheless, the presentation of the detailed GBT protocol was only one of the highlights of the conference. The guest speakers like Prof Magda Mersi, Dr. Klaus-Dieter Bastendorf, Eva Müller, Karen Davis and Brigitte Schönreich, board member of the European Dental Hygienist Federation, offered a course on pathogenic biofilm, the history of biofilm removal and the challenges of clinical cases. With a total of 18 speakers a variety of topics was treated, including hand piece technique and literature analysis. The attendants were professors, dentists, dental hygienists and dental assistants, actively involved in dental prophylaxis either at the clinics or in dental universities. The aim of the congress on Guided Biofilm Therapy was essentially to build a common understanding of the need to introduce the approach towards prophylaxis – based on knowledge, experience and supported by clinical evidence. Every presenter shared his personal opinion on best practices which were differentiated and country specific.

Try it and you like it

“GBT meeting made me realize that AIR-FLOW® can be used not only in periodontal maintenance but also for active treatment – periodontitis, peri-implantitis and peri-implant mucositis.” (Dr. Dong Xiao Xiao, Periodontist)

The GBT is safer, more comfortable and more efficient than conventional methods. Thus, it is definitely time to change the game!
Klaus Dieter Bastendorf, Dental Specialist in Prevention

It has long been proven that oral biofilms causes caries, gingivitis, peri-implantitis, peri-odontitis – the main causes of tooth- and implant-loss. Helping patients to keep their natural teeth is one of the highest ethical values for a dentist and the GBT makes this possible. As the dentist is not only a medical scientist, but also an entrepreneur, the profitability of a treatment is an important aspect. With the GBT, the dentist can delegate this service to a dental hygienist and therefore generate further revenue and profit. Additionally, the GBT opens the opportunity to run a successful recall operation in a dental cabinet. Emphasizing on patient motivation and individual oral hygiene education, the GBT strengthens the relationship between the dental professional and his patients by increasing patient satisfaction and personal well-being. Following the GBT protocol, patients are not only enthusiastic for a dental prophylaxis but it also serves them as an incentive to keep their oral hygiene at the optimal level even at home. Thus, the GBT provides a sustainable and long-lasting improvement of health and attractiveness. As the GBT offers a maximal patient comfort, it subsequently increases the patient recall.

Oral health: Why annoy when you can enjoy

“With Guided Biofilm Therapy, no more patients complain, only smiles” (Prof Magda Mensi, University of Brescia)

The GBT congress emphasized the importance of high-quality dental maintenance. The effective removal of biofilm is paramount to long-term oral health. Thus, it’s definitely time to provide the neglected fields of dentistry – dental maintenance and prevention – the reputation they deserve. Indeed, the awareness of dental care and oral hygiene has never been as high as it is today. And that is why the GBT protocol is so vital. Conventional dental prophylaxis with hand instruments, rubber cups and abrasive pastes – the so-called ”gold standard” – is not up to date anymore but is still used by over 80% of dental professionals. These methods induce recession when used in a sulcus, create scratches on exposed dentine or cementum, remove natural enamel structure and obviously, this treatment is not comfortable for the patient at all. Jasmina Karisik, dentist, has only one answer to this: “Guided Biofilm Therapy – finally to replace the traditional way of thinking that endodontics is the savior.”

Perio for a better life

“GBT and its focus on general health aspects reducing massively the overall oral bacterial load – thus reducing health risk” (Klethis Manolakis, Prosthodontist)

Compared to conventional methods, the GBT is more comfortable, safer and makes professional dental maintenance feel more like a wellness treatment instead of an unpleasant medical examination. The AIR-FLOW® Powder PLUS has a grain size of only 1µm, therefore it feels very comfortable even if applied sub-gingivally! The presentations convinced the attending dental professionals: “GBT meeting encouraged me to use PLUS powder for all my periodontal and implant maintenance patients”, states Jolene Pinder, Dental Hygienist. And with PIEZON® NO PAIN – composed of PIEZON® NO PAIN Module, Original PIEZON® handpiece and Original SWISS INSTRUMENTS PS – the removal of calculus and concrescences is comfortable and safe. And the long-term benefits are remarkable as well. By avoiding over-instrumentation you preserve the natural tooth structure, the implant surface and prevent root sensitivity. For the clinician, the approach of GBT reduces treatment time and hand fatigue with minimal use of ultrasonic. The safe and comfortable treatment is easy to adapt and decreases recolonization by biofilm due to antibacterial properties of Erythritol. Given the resulting advantages, it is not surprising that the prevailing mood at this congress was dominated by an atmosphere of striving, positive spirit and overall optimism, confidence and trust in the future. It’s time to shape the future of dental prophylaxis – it’s time to change the game adopting the GBT protocol in dental maintenance.

SDA – Swiss Dental Academy

“SDA in China encourages the trainees to share the ‘real’ knowledge to help the clinicians and patients through evidence based dentistry” (Dr. Dong, Xiaoxi, Periodontist)

The GBT is based on the state of the art technologies AIR-FLOW® and PIEZON®. They are easy to handle and guarantee a high level of safety. Therefore, the GBT is easy to adapt for dental professionals. To learn more about the GBT and all the benefits it provides, we highly recommend the Swiss Dental Academy.

Experienced dental hygienists present clinical evidence for the GBT, offer pragmatic tips for the daily business and in the hands-on part of the course, the participants have the opportunity to experience the superiority of AIR-FLOW® and PIEZON® one-by-one. One thing we can certainly take from SDA and the congress on Guided Biofilm Therapy is the GBT, or in other words: ‘Get a much Better and more sustainable Treatment’.

For further information visit us on www.byebiofilm.com and https://int.sda.swisstdentalacademy.com/

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