Initial[™] LiSi Press Contest: and the winners are...

From the 17th of September 2018 till the 1st of February 2019, GC Europe organised Initial[™] LiSi Press Facebook contest. To be able to win one of the beautiful prizes, dentists were encouraged to upload their Initial LiSi Press case in the "GC Initial World" Facebook group with the hashtag #InitialLiSiPressContest. An international jury, led by MDT Michael Brüsch and Bill Marais, chose the winning cases that are shown below.





Stephan van der Made (The Netherlands)

started his career as a goldsmith and gemstone cutter. He made a career switch to dental technology and graduated n 1996 as an all-round dental technician with the focus on crown and bridge works. In 2007, he founded Kwalident Dental Studio B.V., a laboratory specialised in ceramics, full rehabilitations and complex dental treatments. In 2018, he ounded the course centre 'CUSP' to host international courses for dentist and dental technicians.



Marco Gresnigt (The Netherlands)

graduated Summa Cum Laude in 2005 at the university of Groningen, the Netherlands. In January 2012, he obtained his PhD on clinical and laboratory evaluation of laminate veneers. Besides working at the university, he works as a dentist in a centre for special care. Marco lectures at the Center for Dentistry and Oral Hygiene, where he is the current head of restorative dentistry and teaches master students in a specialised program on aesthetics and prosthetic dentistry. He works together with national and international researchers on studies and has published several articles on minimally invasive and adhesive dentistry in high-impact-factor dental journals. He obtained several international awards. Marco is a member of the international Bio-Emulation group.

This is a case of a young patient diagnosed with Amelogenesis Imperfecta. The patient was treated before with direct resin composite restorations in the anterior region to decrease the sensitivity of her teeth and to change the unattractive aspect of the affected enamel. The patient was unhappy with her teeth and felt social discomfort, therefore she asked for restorations with a brighter appearance.



Fig. 1: Initial situation at intake



Fig. 2: Intra-oral situation, it is clearly visible that some composites were made to improve the aesthetic appearance.



Fig. 3: Right side of the patient



Fig. 4: Left side of the patient



Fig. 5: Upper anterior jaw of the patient



Fig. 6: The surface aspect of the Amelogenesis Imperfecta is clearly visible



Fig. 7: Lower jaw

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Fig. 8: After creating a digital smile design, the facial midline and inter-pupillary line were transferred to the model



Fig. 9: Full wax-up in MO with only 1mm increase in the vertical dimension of occlusion (VDO)



Fig. 10: End-to-end relation hindered the creation of a good interdigitation.



Fig. 11: Cast of the preparations.



Fig. 12: Minimal invasive preparations, only removing the imperfect enamel.



Fig. 13: Preparation guides were used to determine the final thickness of the crowns



Fig. 14: Preparation guides to show the amount of space between wax-up and preparation



Fig. 15: Full contour wax-up of the crowns



Fig. 16: Labial reduction in wax



Fig. 17: Last occlusion check in wax



Fig. 20: Sprues attached to the sprue base



Fig. 18: Sprueing the wax model



Fig. 21: Ready for investing



Fig. 19: Sprueing the wax model



Fig. 22: Investment

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Fig. 23: After pressing and cooling down



Fig. 24: Press results after divesting with glass beads.



Fig. 25: GC Initial LiSi Press MT BO



Fig. 26: Using a silicone guide to reduce the incisal part



Fig. 27: Incisal reduction



Fig. 28: Internal staining



Fig. 29: Powdering for wash fire



Fig. 30: Wash fire



Fig. 31: After the 1st bake an internal staining was done.



Fig. 32: After 2nd bake, surface finishing.



Figs. 34 – 35: Silver powder to check the surface microstructure.



Fig. 33: Drafting compass was used to create symmetry in shape.



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Figs. 36 - 38. After glaze firing and polishing by hand.



Fig. 39: Posterior crowns are full contour lithium disilicate and finished with staining technique and glaze.





Fig. 40: 10 minimal prep veneers and crowns ready for placement.



Fig. 41: Extra-oral view, 1 month after placement



Fig. 42: Intra-oral view, 1 month after placement



Fig. 45: Ceramics with a natural appearance.



Fig. 43: A much brighter yet still looking natural compared to the mandibular teeth (next phase).



Fig. 44: A very natural fluorescence in comparison to the little remaining enamel on the lower teeth.

Good photographic documentation, interdisciplinary communication and proper treatment planning is giving a predictable and satisfying end result. The use of DSD in combination with silicon guides is very helpful. I am very pleased with the Initial LiSi Press system. It facilitates creating very nice fluorescent dentine and the beautiful opalescent ceramics make it more easy to create a natural translucency without making the end result look greyish.

2nd WINNER



Santiago García Zurdo (Spain)

was born in Madrid (Spain) in 1974. He completed his studies as dental technician in Opesa (Madrid) in 1992. With more than 20 years of experience in different laboratories, he opened his own dental laboratory in Madrid in 2012, focusing his work on dental aesthetics. He obtained the certificate of the Osaka Ceramic Training Center (Osaka, Japan) under the orders of Shigeo Kataoka in 2012. Santiago has been working in Germany (Bellmann-Hannker Dentallabor) in 2014. In 2016, he started implementing the eLAB protocol of Sascha Hein and became an eLAB instructor in 2018. He currently practices in a specialised private practice in Madrid (Spain).

It is always very easy to obtain predictable results and very satisfactory from the aesthetic point of view when we use GC Initial LiSi. When veneering lithium disilicate frameworks, the guidelines of the respective manufacturer must be respected. By means of a simple standardised build up technique, lifelike aesthetics can be reproduced.



Fig. 1: Pressed lithium disilicate structures (Medium translucency- MT A1).



Fig. 2: Dentine layering with internal effects (GC Initial LiSi) (Dentin A1, TM-05, EO-15, TO Opal, EOP-2, IN-44, IN-45, CT-23, E-58, E59, EO-15, EOP Booster).



Fig. 3: Result after first bake.



Fig. 4: Enamel layering (A1+TN, EOP-2, EO-15, E-58-E59).



Fig. 5: Enamel correction (EOP Booster-E59).



Fig. 6: Shape and texture.



Fig. 7: Final result.

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3rdwinner



Haluk Demir Taşdemir

graduated from Ilgaz Health College in 2008. In 2010, he graduated from Hacettepe University, Department of Dental Prosthesis Technology. He currently runs his dental laboratory in Istanbul, providing services in the fields of aesthetic and implant dentistry.

An Initial Lisi Press crown was made to replace a single central incisor in our patient.



Fig. 1: Initial situation



Fig. 4: MO Initial LiSi Press crowns with screw retention were made and characterised using a polychromatic layering technique. It was glued on the titanium base with G-CEM LinkForce (Shade: Opaque)



Fig. 2: With the help of shade guides and photographs, the shade was determined



Fig. 5: The result was beautiful with intense colour, high value and natural translucency



Fig. 3: A detailed colour analysis map was created



Fig. 6: End result

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