

DIGITAL DENTISTRY CALLS THE CHANGE OF CERAMICS AND CERAMIC PROCESSES

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Today's dentistry is moving into the digital landscape. First to embrace a digital workflow is the dental technicians while dentists still to a large extent maintains the old working procedures that they know well and has become entrenched in.

Since the start of the new digital impression-taking era which started around 2009 with the introduction of the 3M Lava COS, a slow transformation is gaining momentum and it look as if this and next year will have broad impact on the clinicians. From being merely a way to replace impressions now the total digital work flow enters the industry. This means a whole new way of thinking and a new way to produce prosthetic work where a reproducible constant quality can be achieved in many ways but with some parts still require modification. The reproducibility of a crown is now very high, where the cement thickness can be determined as well as the ability to achieve very good occlusion and articulation.

However, what is still needed in the CAD / CAM-produced work is that one still need a model to finalize the crown by putting manually a porcelain layer on the ceramic copings. An obvious development of better ceramic materials that can satisfy simultaneously the mechanical, bio- and esthetic demands of the prostheses and the corresponding technologies for making them that would fit for the clinic digital work flow is out the expertise of the dentists, which calls the contribution from you, the experts in the ceramic community.