

# Workshop highlights clinical CAD-CAM – Chairside Dentistry

## CLAUSS System from XYZ Dental

By David Petrikas

Dentists were given a glimpse of the ‘future’ of clinical CAD-CAM available to them now at a special CAD-CAM chairside systems workshop for dentists, hosted by XYZ Dental at the Align™ Technology training centre in St Leonards, Sydney.

The CPD information evening included sessions on the clinical CAD-CAM workflow and applications that are currently available. The night started with the latest developments of the iTero™ intraoral scanner range, reviewing the exocad™ chairside CAD design software, through to the CAM process – integrating a Roland DGShape milling machine and Asiga 3D printers designed specifically for dental applications.

The group of about 30 (mostly general dental practitioners) heard from prosthodontist and lecturer, Dr Tom Giblin, who discussed his analogue to digital journey and then they heard from key CAD-CAM suppliers who together demonstrated the Clinical chairside CAD-CAM system known as CLAUSS.

The attendees heard how the CLAUSS system can support chairside workflow automation, linking artificial intelligence (AI) and cloud-based design services to produce seamless high-end prosthetics – in-house.

In house options are thanks to the development of increasingly affordable technologies to perform accurate and rapid in-chair 3D scans to generate the level of accurate and detailed data required to produce high-end dental prostheses and appliances.



The group heard that the advent of digital workflows offers far greater control of the process of manufacturing crowns and other prosthetics, together with higher accuracy and faster turnaround than traditional analog approaches.

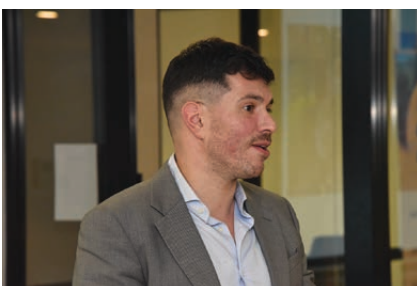
Dr Giblin began the night showcasing his journey to digital workflows and said, “his investment in improved technologies paid off in the long run, in terms of improved efficiency, accuracy and predictability”.

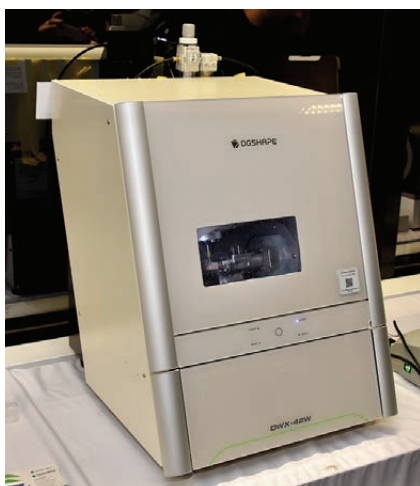
“There’s nothing worse than having to get a patient back into the chair because something has gone wrong with an impression (such as errors in waxing and trimming). A lot of things need to go right for a casting to fit and a lot of things can go wrong.”

He said dentists should consider the cost/benefit ratio of upgrading to a digital workflow. “Think ‘workflow’. There’s less opportunity for errors and less steps. While some inaccuracies are possible with a digital scan, you have more control and can correct any problems before they go into manufacturing.”

The evening was also supported by pioneering equipment companies, Roland DG Shape and Asiga who together produce specialised CAD-CAM dental design software, high-quality milling machine options and 3D printers suitable for a number of clinical applications.

Craig Davidson, Business Development Manager of Roland DGShape shared the amazing background and foundation of





the organisation, from music through to printing machines and how their grassroots have paved the way, providing insights from the milling machines and the number of workflows, technology, and choices that are now available.

CAM opportunities didn't stop there on the night, it was then Asiga 3D printers turn to impress, the 3D resin printer was demonstrated at the workshop by founder and managing director Justin Elsey.

Mr Elsey said, "digital printing was a way of serving patients better in a timelier way by adopting a digital workflow, starting with a 3D scanner to get the data to a design software quicker." Mr Elsey educated the attendees on what he saw as the "killer apps" for clinical CAD-CAM dentistry, that being - temporaries in crown and bridge, removable prosthetics i.e.- splints and the third killer app - Clear Aligners.

Explaining the ABCs of this breakthrough new CLAUSS system was Sam Thalassinis, Managing Director of XYZ Dental. His business XYZ Dental supplies not only Clinical CAD-CAM equipment, but also laboratory products and continues to assist and support his clients with scalability of these workflows through his Axios milling centre.

He has a truly unique perspective, or as he puts it: "We use what we sell, and we sell what we use." He said, "the CLAUSS system has revolutionised the dental laboratory industry and had the advantage of being a truly open, integrated, and scalable system in the dental market".

The overarching CLAUSS 'system' brings together all the software and hardware needed to build an integrated end-to-end digital workflow, enabling users to design and/or produce high-quality dental restorations and appliances at their pace.

A highlight of the evening was the practical hands-on session by all the presenters and the scalable options/choices available to them; showcasing



how the iTero intraoral scanner directly integrates into exocad CAD design software and then further integrates into a Roland DGShape milling machine and/or Asiga 3D printer, creating an ease of use and dot to dot clinical process.

On the night the DGShape milling machine was put through its paces, producing a dental crown during the session using a design generated by the exocad CAD-CAM software, based on the digital image acquired by the iTero 5D Plus series intraoral scanner, while the Asiga printer manufactured a splint directly off the live scan.

Mr Sam Thalassinis further said that the ability to be able to share/educate the key attributes from each of the experts and companies about their respective workflows and technologies and to then be able to showcase the results in real time was very beneficial to all professionals and support teams in attendance.

The on-the-spot demonstrations showed attendees that there was 'no smoke and mirrors', proving what was possible with the CLAUSS system, based on real insights from pioneers in the development of the technology and users such as Dr Giblin. The combination of information and education through to seeing and believing - all in one night was very powerful!" he said.

The CLAUSS system starts with the iTero intraoral scanner which acquires highly detailed and accurate intraoral scans. These scans are used by exocad CAD software which controls the precise milling achieved with a Roland DGShape milling machine or Asiga printer whilst creating a system that is integrated, open and scalable to the end user. ♦

**For more information and future CAD-CAM workshops, if you're ready to take the next step in transforming your consultation process, streamlining your practice, and making the most of your investment, the team at XYZ dental is here to help.**

**Reach out to the team at XYZ Dental on 03 8538 5100 or alternatively, check out the website -xyzdental.com.au - or request a demo.**

This article was written by *Australasian Dental Magazine* in partnership with Invisalign Australia Pty Limited ("Invisalign"). iTero® is an intra-oral scanner used to record images of teeth and oral tissue. Always follow the directions for use. Dr Thomas Giblin is an independent Australian registered orthodontist who was paid a fee by Invisalign for his involvement in this workshop. His opinions, however, are his own.

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