New data exchange feature links CADENT iTero system with Straumann CAD/CAM

At the Chicago Dental Society Midwinter Meeting, one of America’s largest dental exhibitions, Straumann introduced an array of integrated computer-based technologies that have been designed to increase confidence, safety, precision and reliability in implant and restorative dentistry. Under the new umbrella brand of Straumann Digital Solutions, the company now offers state-of-the-art computer-guided surgery, intra-oral scanning and CAD/CAM prosthetics to specialists, general dentists and dental laboratories in various markets around the world.

Straumann is the only leading manufacturer in implant, restorative and regenerative dentistry to offer all these services. The company will also present a number of new products and features that will be launched over the course of the year.

With these new innovations in intra-oral scanning, CAD/CAM and computer guided surgery, a complete Straumann tooth — from implant to final crown — is now available from a single provider. Straumann’s integrated state-of-the-art digital solutions now support implant placement, restoration and esthetic performance.

Gilbert Achermann, president and CEO, commented: “Digitalization will impact all aspects of dentistry as digital workflows supersede labor-intensive manual processes, enhancing interfaces, shortening treatment, reducing potential for error and improving quality assurance. These benefits are expected to translate into lower treatment costs, added convenience and improved comfort for patients. Straumann is committed to bringing the new technologies to customers as part of an integrated array of flexible, reliable solutions that are designed to optimize workflows and enhance patient care.”

A major drawback facing dental professionals wishing to invest in digital applications is that equipment, such as scanners, surgical guides etc., has to be sourced from a variety of manufacturers without standardization, or is part of a closed system offered exclusively by a single provider. Customers, therefore, face being “locked in” or having flexibility without full assurance of connectivity, quality and comprehensive support services.

Straumann Digital Solutions offers the flexibility of open, state-of-the-art systems together with seamless connectivity to one of the world’s leading implant, restoration and regenerative systems, in addition to guaranteed Straumann quality, service and network support.

The company’s expanding portfolio of digital solutions includes three competencies: computer-guided surgery, intra-oral scanning and CAD/CAM prosthetics.

Computer-guided surgery

The combined use of 3-D imaging digital design software to plan and execute precise implant placement is an emerging trend. Using a computed tomographic image of the patient’s jaw, the dental surgeon plans the position, angulation and depth of the implant on a computer using sophisticated planning software. The data are then used to produce a plastic surgical template that fits onto the patient’s teeth or gum. The template incorporates sleeves that guide drills, taps and profilers, designed for optimal implant placement.

Computer-guided surgery is designed to offer the dentist a clear view of the bone condition, the position of nerve and vascular structures, and the final implant location. It simplifies the planning and execution of complex procedures, which can reduce the risk of surgical and prosthetic complications.

Powerful intra-oral scanning

Straumann also announced that its CAD/CAM service is now connected to Cadent’s iTero intra-oral scanning system. Intra-oral scanning enables the dentist to create a 3-D image of the patient’s teeth using a digital scanner inside the mouth. Replacing the slower conventional process of impression-taking in the dental practice and model casting in the laboratory, digital intra-oral scanning is designed to deliver considerable time- and cost-savings — as well as high precision — for both the lab and the dental practice.

In addition to the data sharing-agreement that connects the two companies’ systems, Straumann has exclusive distribution rights for CADENT’s iTero scanning system in Europe and offers European dentists leading intra-oral scanning technology as part of...