3Shape releases CAD solution for post and core restorations

3Shape, the provider of 3-D scanners and CAD/CAM software solutions for the dental industry, has launched its CAD solution for post and core restorations, which includes dedicated post and core intra-oral scanning with 3Shape TRIOS and unique CAD design workflows in Dental System 2013. 3Shape's Post and Core solution utilises special scanning capabilities, 3Shape Scan Posts, and sophisticated software tools for reliable capture, and optimally shaped and functional post and core designs. The solution saves time by allowing laboratory technicians to design all layers in a single digital workflow.

3Shape patented Scan Posts for use in clinics and laboratories

3Shape has developed special Scan Posts (patent pending) to facilitate the accurate capture of a post and core's position and depth. Scan Posts are approved for both intra-oral use in the clinic and for model scanning in the laboratory. Scan Posts are autoclavable, and come in various shapes and sizes to support drill systems from major suppliers.

Flexible input: uses scans from TRIOS and from dental laboratory scanners

3Shape's Post and Core solution can be used with 3Shape TRIOS digital impressions and 3-D scans of gypsum models. Dentists with 3Shape TRIOS can kick-start post and core cases in the clinic by capturing and sending highly reliable images to the laboratory for direct designing. A special dual-scan workflow using 3Shape Scan Posts ensures accurate capture of the true depth and position of the root canal. If gypsum models are the input source, laboratory technicians simply insert Scan Posts in the model before scanning.

Sophisticated design tools

In the laboratory, technicians align the captured Scan Posts and allow the software to calculate positions and depths automatically. By first designing the anatomy layer and applying dedicated post and core modelling tools, technicians can create optimally shaped and functional post and core designs that are matched to the clinical case and ready for manufacture through wax print and cast, milling, or laser sintering.

Frédéric Rapp, director of the Crown Ceram dental laboratory in France, said: “In combination with TRIOS, 3Shape’s Post and Core design software gives us a fast and easy way to model optimally shaped and robust post and core restorations. The full digital workflow makes it very easy to design parallel post and cores, or work with cases involving multiple posts.”

All types of post and core cases

Laboratories can design post and core cases for standard crowns, single-piece retained crowns, and anatomical single-piece retained crowns that are cut back for veneering.

3Shape’s Post and Core design solution is fully functional in Dental System 2013 and with 3Shape TRIOS. 3Shape Scan Posts are available to both dental clinics and laboratories through 3Shape distributors. Please contact your local 3Shape representative for details and purchase information.