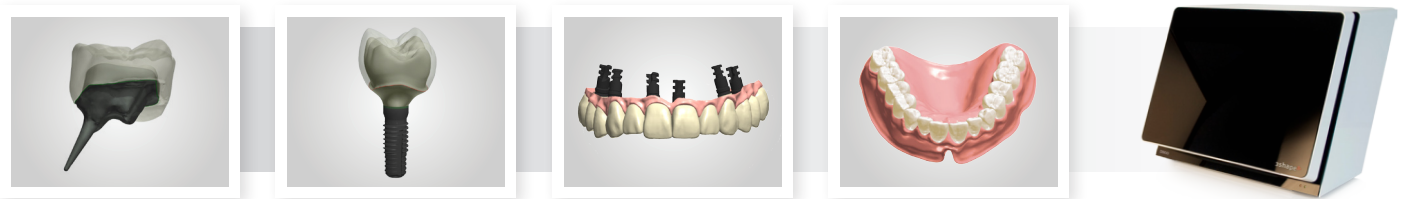


# What's new in Dental System™ 2013



## WHAT'S NEW IN DENTAL SYSTEM™ 2013

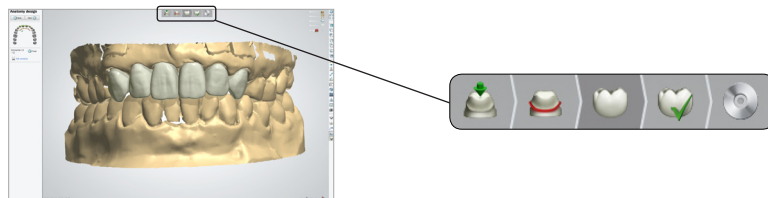
3Shape's Dental System™ 2013 carries forward 3Shape's long standing reputation as the creators of the world's most innovative and sold lab system for Dental CAD/CAM. This latest Dental System™ 2013 version release brings 3Shape users even more powerful features, improved functionalities and new tools to improve your productivity and business opportunities.

3Shape believes that a dynamic and continuously up-to-date system is a natural trait of any CAD/CAM solution for labs and that is why we include unlimited upgrading as an integral part of our LAB care™ package to regularly empower your system with the latest technologies. Now we give you yet another release, to ensure that your system represents a future-secure investment - stays alive for years to come, and grows stronger and more competitive every year.

Each of the new major additions is described below followed by a list of minor improvements implemented in coming updates during this year. Please refer to the online User Manual for detailed descriptions of each feature. We hope you will enjoy exploring the creative power of this new release and trust that it will add true value to your daily business!

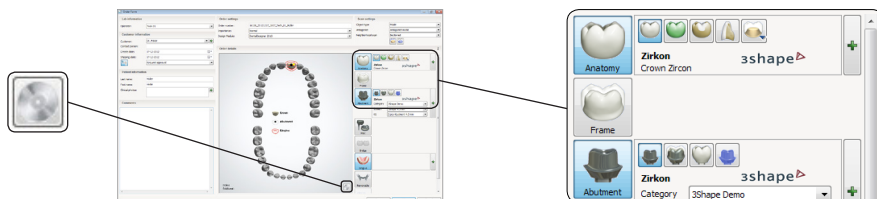
### New Dental System™ user interface

The basic user-interface has been redesigned in Dental System™ 2013 to improve ease of use and simplify the design workflow. The new Full Screen design window maximizes 3D design space while a redesigned workflow progress bar carefully guides the user through each design step. To ensure a high level of consistency, the same icons are now reused in the Order Form, workflow progress bar, visualization sliders, Control Panel etc.

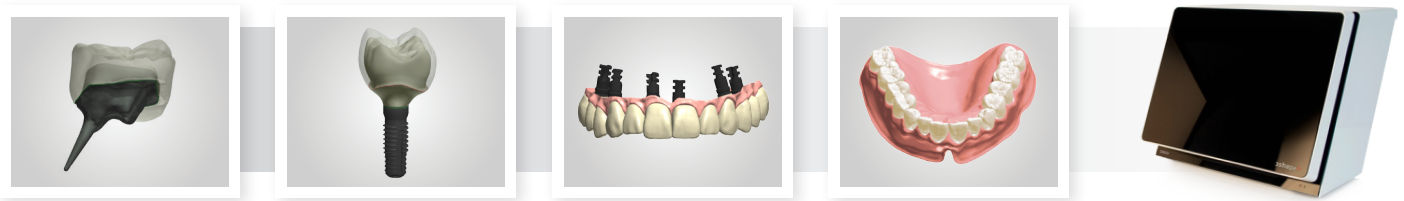


### Improved Order Form

A new collection of Order Form icons makes it easier, faster and more intuitive to create orders. The Order Form has been expanded with a range of new indications, such as Anatomical Abutments, Screw Retained Crowns, Post and Core, and Gingiva design for selected restoration types. Using the new 'Set default' option icon, the user can save his Order Form selections as default for the particular order indication. A new option makes it possible to visualize the brand logo of selected materials directly in the Order Form for easier identification.



# What's new in Dental System™ 2013



## Change Order Form during design

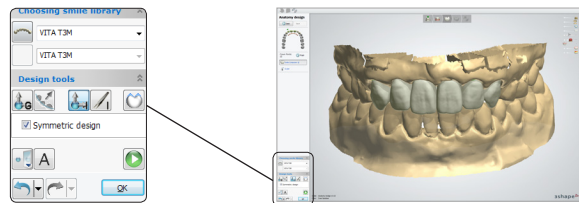
The 2013 release introduces a new option to change the selected Order Form indication during design and reuse the margin line and anatomy design that have already been created. This enables users to easily change the order without the need for redesigning. For example when changing a "Crown" order to an "Anatomical coping" order or when users need to change an implant library in the middle of the design workflow.



## Smile Composer™ - more tools, easier to use, better designs

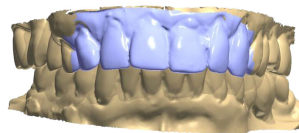
Dental System's™ user-acclaimed Smile Composer™ just keeps getting better. In the 2013 release, Smile Composer™ has been updated with new tools, a new User Interface, new 'Preview images' in the library drop-down menu, and even more anatomy and smile libraries, including Pritidenta® pre-manufactured crowns and PhysioStar®. Transition from margin line to anatomy and the Global Transformation tool - used for moving multiple teeth simultaneously - have been improved significantly.

Upper and Lower designs can now be moved at the same time – and the new rotate and scale functions make it easier than ever to adjust your designs of single teeth - simply click on the new control point above the tooth to switch between the two functions. The toolbox has been expanded with new Short Keys (1-7) for fast changing between different tools and an improved Occlusal attrition tool. (Some features are partly released in Dental System™ 2012).



## Morph the Anatomy to Wax-up or Pre-preparation scans

A new powerful tool allows users to easily morph the anatomy layer to a Wax-up scan or Pre-preparation scan and thereby make the anatomy correspond to the original teeth or to a well-functioning temporary. The functionality is available whenever a Wax-up or Pre-operational scan is present and can be performed using the 'Mirror' icon in the Smile Composer™ step.



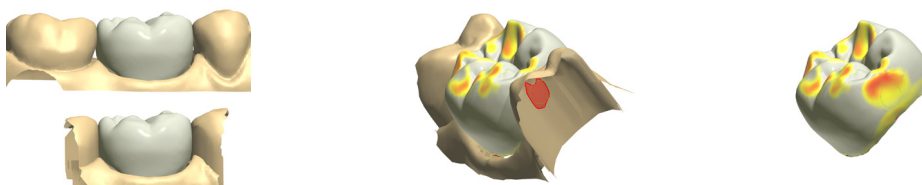
Pre-preparation scan



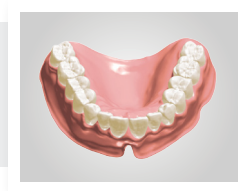
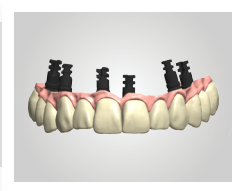
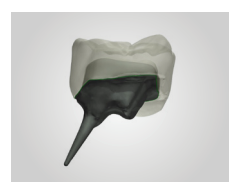
Design after morphing

## Crown Insertion Tool

The 2013 release introduces a unique Crown Insertion Tool that enables users to check for crown undercuts towards the neighboring teeth to ensure smooth insertion of the final crown. A color map instantly visualizes neighboring teeth undercuts and the new Threshold Sculpt tools makes it easier than ever to adjust the crown for smooth insertion and optimal interproximal contact design.

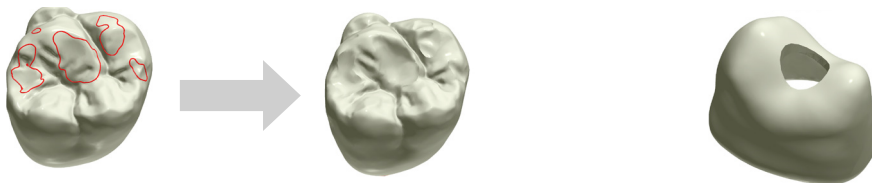


# What's new in Dental System™ 2013



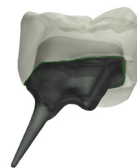
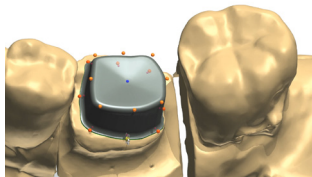
## Updated and improved Sculpt Toolkit

Once again we have added more advanced dental design tools to the Sculpt Toolkit. The new 'Threshold-based' Add and Remove tools enable technicians to control the exact distance of the CAD design to the preparation die, the adjacent teeth, or the antagonist, and the 'Precise Cut to Antagonist' function helps to obtain an even more realistic-looking contact surface. Users also benefit from the new "Cut-to-antagonist" function for CAD design on the antagonist and the updated attachment tool that now includes the option to create holes in any coping or crown design – this is for example a useful feature when designing a coping with a screw hole for placement on top of a stock abutment.



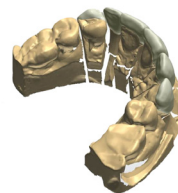
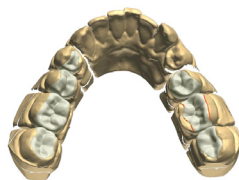
## New Post and Core design software

Dental System™ 2013 includes a completely new Post and Core solution with unique scanning and design workflows. Use the patented and specially designed scan-posts to capture post positions and depth from the model, and save time by designing all layers in a single workflow. By first designing the anatomy layer, technicians can model an optimally shaped Post and Core guided by the form and boundaries of the final crown. The software works with scans from both TRIOS® and 3Shape desktop scanners and can be used for even complicated cases involving parallel core design and multiple posts.



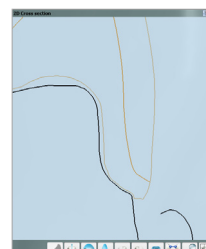
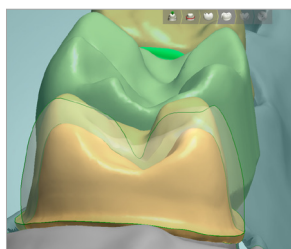
## Improved design of Inlays, Onlays and Veneers

Now technicians can use Dental System's Smile Composer™ to easily place the anatomy in their Inlay, Onlay and Veneer cases. An optimized algorithm automatically shapes and morphs the Inlay and Onlay surfaces to the remaining tooth, thereby ensuring high esthetic results with minimum need for adjustments.

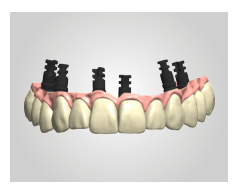
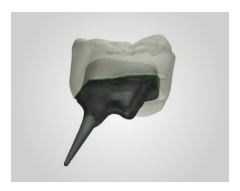


## Multilayer Design for full digital bridges

The Multilayer workflow has been improved with higher stability and a new edge design that enables multilayer bridges to be split in two real layers. In addition, a new algorithm ensures a guaranteed minimum thickness of crown anatomy edges to avoid 'chipping' during manufacturing. When selecting the 'Enforce Shoulder' option during the 'Coping Design' step, the software automatically generates proper shoulders for crown support

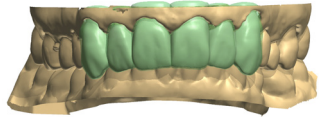


# What's new in Dental System™ 2013



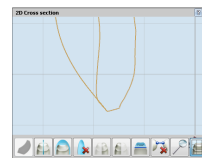
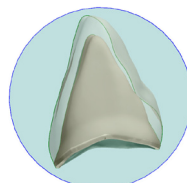
## High-esthetics with pre-manufactured ceramic crowns

Enjoy a complete new approach to fully digital crown manufacturing using pre-manufactured crowns with multiple layers and colors mimicking the real tooth. The final restoration is designed inside the shape of the pre-manufactured teeth, thereby ensuring that the final restoration is always within the boundaries of the pre-manufactured teeth. The pre-manufactured teeth can be visualized in Smile Composer™ as design guidance. Pritidenta® pre-manufactured teeth library is included in Dental System™ 2013.



## Anatomical copings and frameworks

A new "simple edge" feature enables anatomical copings to obtain the same simple edge design as standard 'inside-out' copings for optimal milling performance. In addition, the 2013 release includes an improved feature to easily create Occlusal Stop on anatomical copings and frameworks to protect the crown from hard contact and ensure integrity of the ceramic material.



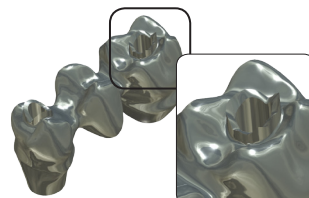
## Upgraded Telescope design including secondary telescopes

The improved software for designing telescopes now allows technicians to design both primary and secondary telescopes simultaneously in a single workflow without rescanning. Separate files can be outputted for all layers for manufacturing. Optimized telescope design tools include visualization of angle between insertion direction and telescope direction and option to define maximum angle difference.

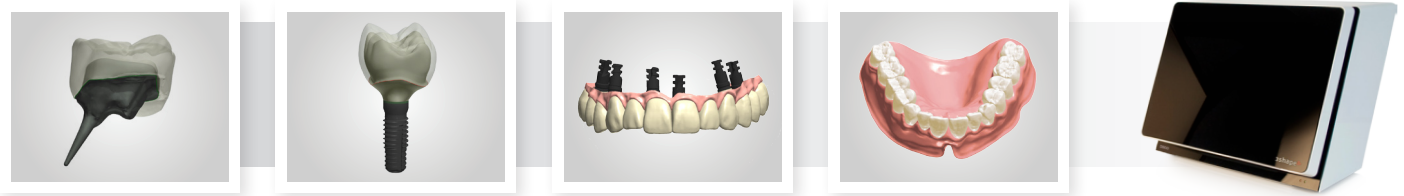


## Screw-retained crowns and Anatomical abutments

With Dental System™ 2013 we introduce a new workflow for designing screw-retained restorations in Abutment Designer™. All types of abutments – Standard customized abutments, screw-retained Crowns and anatomical abutments – are now selected directly in the order form, followed by a new 'Anatomy-First' workflow for efficiency and optimal esthetics. A new design tool allows technicians to snap the abutment emergence profile to the crown anatomy to ensure a highly esthetic continuation of the crown onto the abutment emergence profile. Furthermore, technicians can enjoy updated tools for creating optimal screw-hole protections and limited cut-back on anatomical abutments.



# What's new in Dental System™ 2013



## Abutment Designer™ with expanded toolbox

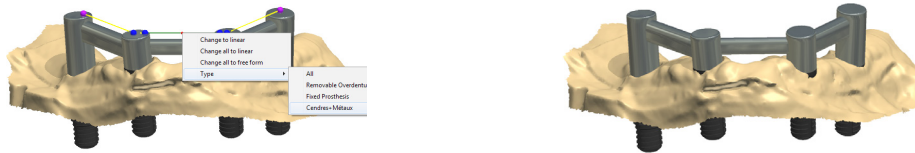
The 2013 version of Abutment Designer™ offers an extensive range of new functionality, improved tools and more settings for faster and better customized abutment design. Now technicians always design the full anatomy first and visualize it directly in the abutment design process to ensure optimal esthetics. A new right-click option makes it possible to add (or remove) horizontal or vertical profiles during robotic abutment design enabling improved and more sophisticated design.

Users can also enjoy the new option to change implant kit during the design – a useful feature in situations where you suddenly need a 1-piece abutment instead of a 2-piece abutment due to clinical circumstances, and the improved possibility to keep design within the regulatory limitation.



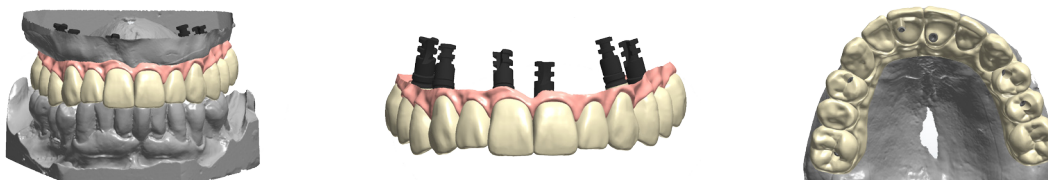
## Improved Implant Bars

It is now possible to combine different bar types in the same Bar design. With a new right-click option the user can select specific bar profile types for each segment of the bar. A new option has been added in the Dental System™ Control Panel allowing the technician to increase number of triangles (add extra points) and thereby improve the smoothness and finish of the manufactured bar.

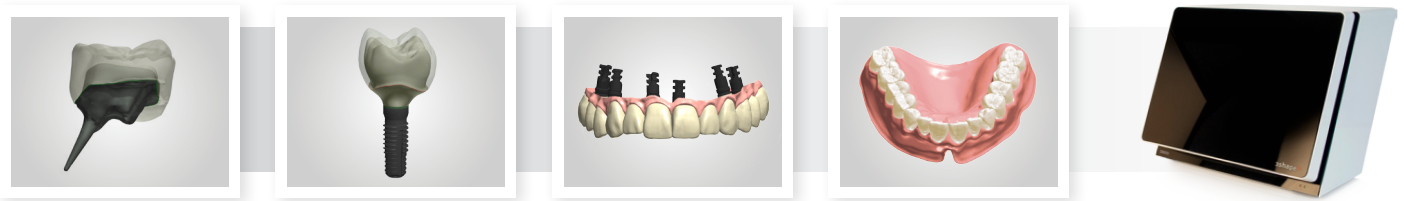


## Advanced implant bridges with gingiva ("Prettau style")

The 2013 release also offers a brand-new workflow to virtually design advanced bridges - complete with gingiva, teeth, and implant interfaces. Use Smile Composer™ to design the anatomy and draw a single boundary curve to obtain an automatic proposal for the gingiva. Optionally, cut back selected areas of the teeth to prepare space for hand veneering and acrylic layer. Use the design as the temporary or final bridge. The design can be milled directly in Zirconia, titanium, PMMA, or other materials.

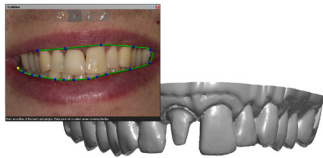


# What's new in Dental System™ 2013

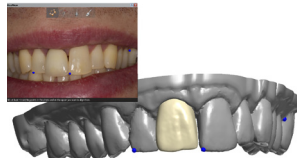


## RealView™ engine including 2D Image Overlay

Get a near photo-realistic visualization of the patient-case that includes not only the newly designed teeth, but also the scanned existing teeth and the gingiva. When combining the RealView engine with 2D image overlays of the patients, labs can offer dentists a "What-You-See-Is-What-You-Get" communication tool and enhance client-relations. Easily align 2D patient images with the CAD design and zoom in and out. Only partly released, final version will be available end of Q1, 2013.



*Cut out original teeth in 2D image*



*Align 3D model and 2D Image*

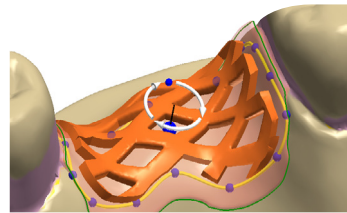
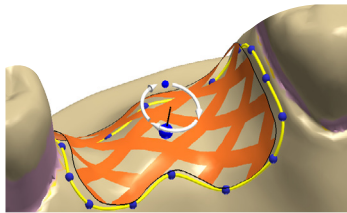


*View 3D design and 2D image together*

## Updated Removable Partial Denture workflow

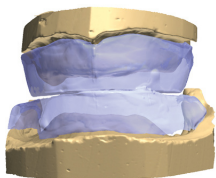
The Removable Partial Denture design toolbox has been updated with a new Retention Grid tool to easily pan and rotate the retention grid patterns for optimal placement. In addition, the retention grid library has been expanded with a new 'Rhombus' grid pattern. Among the new tools you also find the option to control the resin gap width, thereby allowing technicians to design Removable Partials with a self-cleaning effect. New algorithms improves RPD fit through enhanced precision of the 3D surface, and the Curve (spline) validation functionality checks curves and highlights problematic sections to be adjusted during design.

(Some features are partly released in Dental System™ 2012)

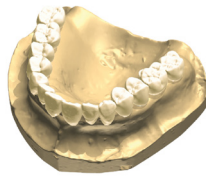


## Ground-breaking Digital Denture Design

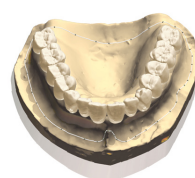
The completely new Denture Design™ software brings digital precision and efficiency to a traditionally technique demanding process. Scan the wax rim, upper and lower gypsum model to obtain correct case setup. By combining the flexibility of 3Shape's Smile Composer™ with the unique Gingiva Creation Tool, technicians can model highly esthetic and functional dentures while significantly shortening the design step. Place the teeth with Smile Composer™ and quickly adjust all teeth simultaneously. Draw the outer boundary of the denture and the system automatically designs the gingiva shaped to fit the teeth. All sculpt and edit tools can be easily be applied to add anatomical details to the gingiva with your own artistic touch.



*Establish occlusion*



*Place teeth with Smile Composer™*

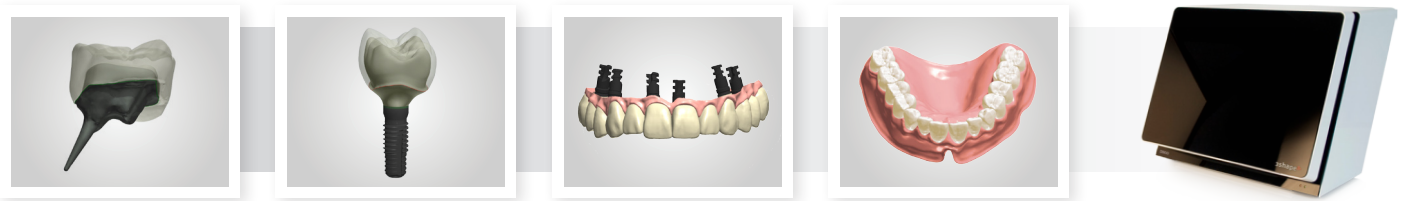


*Design Gingiva with a few clicks*



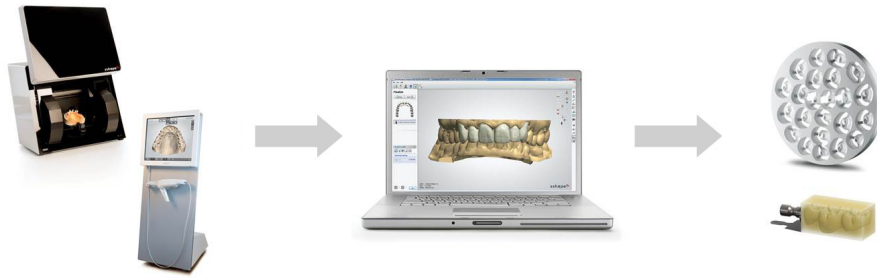
*Final denture*

# What's new in Dental System™ 2013



## Improved Model Free Crown Workflow

Dental System™ 2013 includes an improved workflow for Model Free Crown production based on impression scans, TRIOS® scans, and 3rd party digital impressions. As the 'scan segmentation' step is now fully integrated in the CAD design software, the workflow has fewer steps and is faster and more intuitive to use.



## Connect to any TRIOS® with the TRIOS® Inbox

The new TRIOS® Inbox added to Dental Manager™ enables labs to receive scans from TRIOS® Digital Impression Systems worldwide when lab and dentist are connected through 3Shape Communicate™. Incoming cases are accepted or rejected with a single click and a notification is immediately send back to the dentist's TRIOS® system. TRIOS® orders are quickly identified in Dental Manager™ with the new "TRIOS® Scan" icon added to the Dental Manager™.

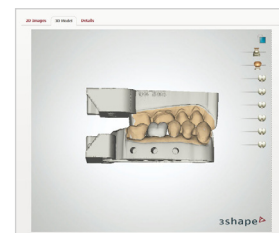


## Improved 3Shape Communicate™

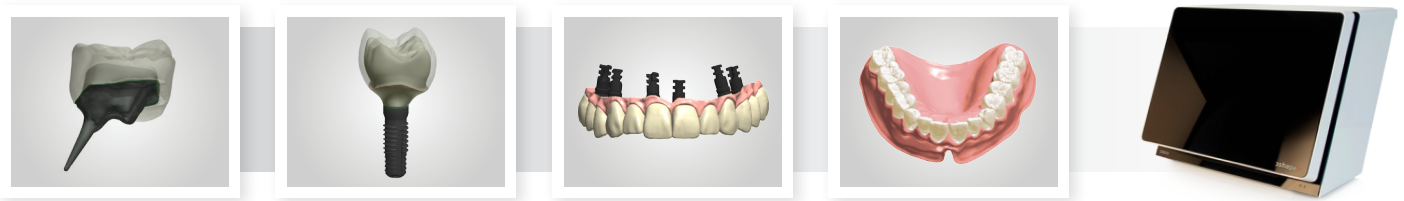
3Shape Communicate™ offers labs and dentists an advanced communication tool that lets them share case information and 3D designs on-line. Through Communicate™, labs can provide better services, enhance both dentist and patient satisfaction, and cement business relationships with their dentist-clients. With the improved version Labs and Dentists can easily connect – "facebook style". New optimized communication protocol allows faster transfer of 3D data and an improved 3D viewer enables improved 3D experience. A new Communicate™ column in Dental Manager™ keeps you updated with 'Communicate Status' for each order and informs you when new messages or approvals are received from the dentist.

Number	Creation date	3Shape Communicate
65073_20121218_1002_Tech_01	18/12/2012 10:03:50	
65073_20121218_1022_Tech_01	18/12/2012 10:22:50	
65073_20121218_1145_Tech_01	18/12/2012 11:45:47	Waiting for approval

Dental Pro Clinic	Order No.	Delivery Date
Material: Zircon Type: Abutment Z1	65073_20121218_1145_Tech_01	18-Dec-2012
Patient No.: Status: Designed Scan		
Order Case		
Reilly, Chris	65073_20121218_1145_Tech_01	18-Dec-2012
McKee, Keith...	65073_20121218_1145_Tech_01	18-Dec-2012
Jensen, Matt	65073_20121218_1145_Tech_01	18-Dec-2012
	65073_20121218_1145_Tech_01	18-Dec-2012



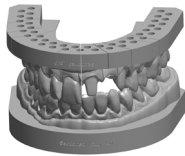
# What's new in Dental System™ 2013



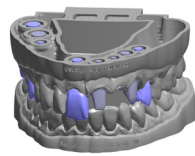
## New Digital Model types for Crown and Bridge

Technicians can now design three different types of digital lab models for crown and bridge cases. Choose between Sectioned (dies ditched) models, Sectioned (Cut) models, and Unsectioned models with the option to produce dies separately. More than one model type can be selected in the same order. Furthermore, Model Builder™ now supports the option to cut digital model with final crown design to ensure the restoration does not collide with the gingiva area of the model. Model Builder™ now includes a new articulator interface for design of digital models to be used with 3Shape's own articulator.

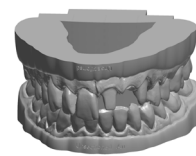
(Some features are partly released in Dental System™ 2012)



*Sectioned (Cut)*



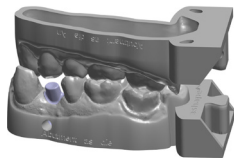
*Sectioned (dies ditched)*



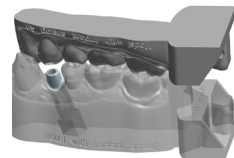
*Unsectioned*

## Advanced Digital Implant models

The new Model Builder™ enables users to choose between two different types of digital implant models depending on indication type and personal preferences. You can either design your Implant Model with interfaces for integrated implant analogs, or you can design the model with the abutment inserted as a die (i.e. no need for implant analogs). Following the design of the customized abutment the software automatically adjusts the digital model to fit the actual abutment design.



*Implant Model with Abutment as a die*

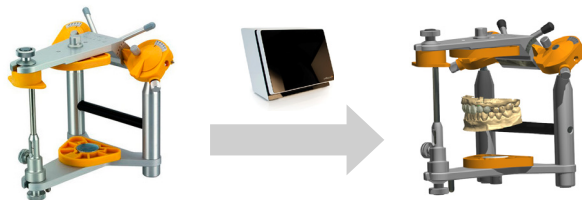


*Implant Model with implant analogs*

## Transfer exact position to virtual articulator

Transfer the exact jaw position from the physical articulator into the Dynamic Virtual Articulator. Use the specially designed 3Shape Transfer Plates, together with your 3Shape scanner, to capture the exact 3D position and bring it into the software.

(Some features are partly released in Dental System™ 2012)



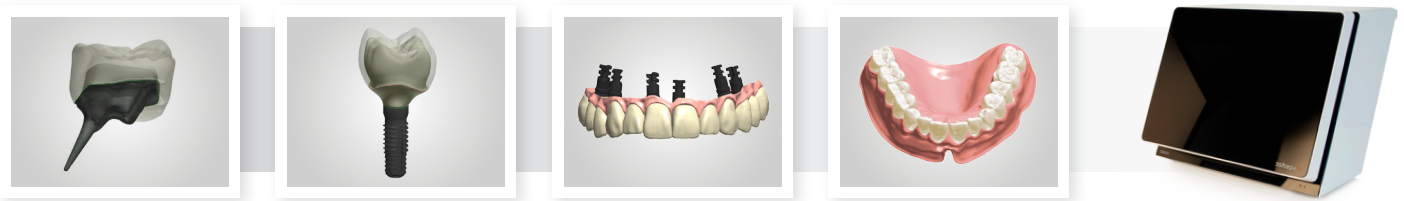
## Create your own Dental Manager™ buttons

Dental Manager™ now allows you to create your own customized buttons and associate them with pre-defined actions. Labs can use their customized buttons for launching CAM software, for launching Track 'n Trace systems, for 3rd party integration or other actions of your own choice.



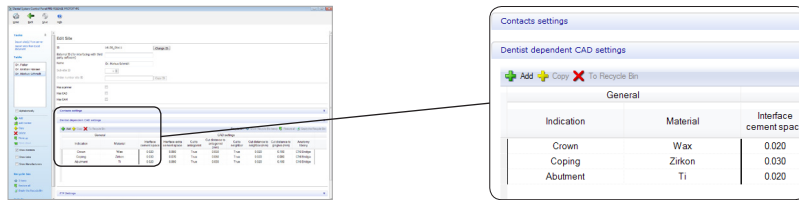


# What's new in Dental System™ 2013



## Dentist dependent CAD settings

A new option makes it possible to create specific Dental System™ design settings for each of the labs' dentists. When a specific dentist is selected in the Order Form, the predefined dentist parameters are automatically used for the order. Design settings can be defined for each indication and for each material, e.g. cement gap and extra cement gap settings for a zirconia coping. The design parameter settings are found under 'Dentist Settings' in the Control Panel.



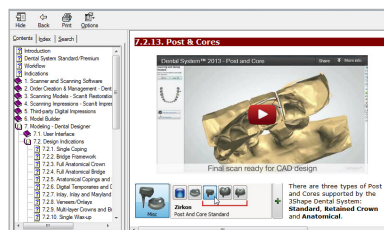
## New solution for the smaller lab

To supplement the two existing Dental System™ packages - Standard and Premium – 3Shape introduces a new subscription called 'Dental System™ Full Contour'. The indications and tools in the 'Full Contour' package are optimized for dental labs that focus on full-contour modeling like full contour crowns.



## Updated Online Help System with embedded training videos

Dental System™ 2013 comes with integrated Online Help in 12 languages. Users get instant access to detailed instructions directly from the software and are automatically sent to the relevant section in the manual. Embedded Training Videos can now be started directly from the relevant chapters in the Online Help manual, carefully guiding users through the different workflows and design tools. The Download Center in Dental Manager™ gives access to all the Online Help manuals in all 12 languages, training videos and other training tools.



## Auto-testing for increased software stability

With the release of Dental System™ 2013, 3Shape also introduce a new initiative to ensure high software stability. Everyday 200 cases sampled across indications, materials and countries are automatically tested in Dental System™ using 3Shape's new Auto-Test server setup. The manufacturing output – both STL files and text files - are compared against validated references and this ensures that most issues are identified and corrected on a daily basis before release of any software patches.

