

What's NEW in 3Shape Dental System 2017



3shape 

CAD/CAM just got better!

With Dental System 2017, we have strengthened reliability and performance, introduced improvements to the core design tools, added new functionality and made scanning more efficient. And there is more. All new major additions are described in this document. Please refer to the online User Manual and training videos for detailed descriptions of each feature. We hope you will enjoy the new release.

3Shape Lab team



“The new features in Dental System 2017 have made it even easier to produce quality work with minimal effort.”

Sevan Palurian, Pacific Dental Lab,
Los Angeles, CA

The new E scanner series – now any lab can be digital

With its new affordable E scanners, 3Shape makes advanced CAD/CAM accessible to labs of all sizes while raising the bar for entry level solutions.

Best value for money

Get advanced scanning features and CAD design workflows at an affordable price

Fast scanning

High scan speeds let you complete more cases in less time

Latest technologies

5 MP cameras, Blue LED and multi-line scanning for optimal detail capture and accuracy



Reliable impression scanning

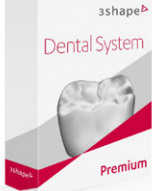
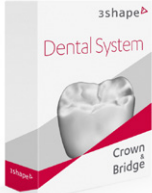
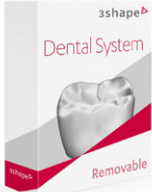
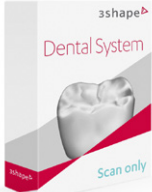
Scan impressions directly without pouring a model, saving time and costs

Auto-start for high productivity

No need to press a button. Starts scanning as soon as you place the model inside

New software packages – CAD points for anything you need

You can now choose between different software packages depending on your needs.

Licenses	Indications	
Premium	Like premium today	
NEW Crown & Bridge	Full Anatomy Crown & Bridges Inlay & Veneers Copings & Frameworks CAD points for all additional designs	
NEW Removable	Full Denture (incl. impression scanning) RPD Trays	
NEW Scan Only	Scanning Only All indications	

Now you are no longer limited by the license you have chosen. You can use CAD points to pay per use for those cases that you rarely make.

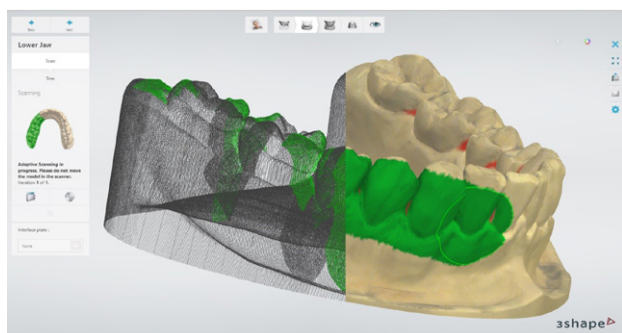
See more details of the versions on pages 16-17

Scanning

Easily add extra scans of models

Extensive "Adaptive scanning" functionality which is now supported not only in impression scanning, but also in models, dies and wax-ups scanning and allows to:

- Append scan points to repaired areas and scan holes thus providing a better quality of the scan
- Extend the boundary of the scanned model



All-in-One scanning further automated

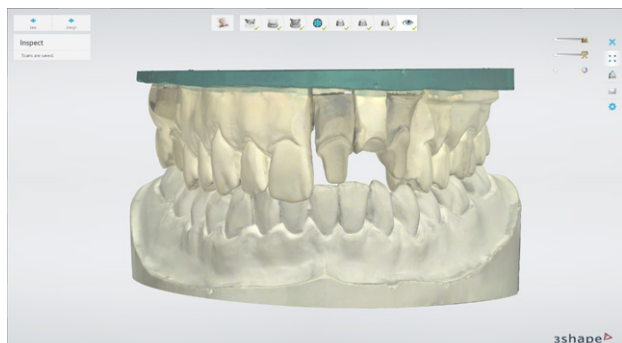
Now you only need to mark dies and select an area to scan on the preparation preview scan. Then you can let the scanner and software handle the rest. This is made possible by:

- The scan area selection will now be automatically transferred to all the arches in the order. This works with all scanners, not just D2000.
- The same area of the antagonist as chosen on the preparation scan will automatically be scanned if you have chosen "Skip optional steps" in scan settings.



Additional scan improvements

- Pre-rotating a model scan will speed up the annotation point placement up to one click per tooth.
- Improved bite alignment. Dental System will automatically detect the quadrant arch cases and it no longer matters which model is on top when scanning the bite.



Transfer correct positions and reduce manual adjustments

3Shape's enhanced Articulator Transfer Plate solution accurately transfers the position from the physical articulator into the virtual articulator reducing the need for manual adjustments. You also skip the bite scan and save an extra scanning step. Works with any articulator.



Crowns and bridges

Control of your setup in Smile Composer

To increase your control of in Smile Composer, you now have

- Improved initial anatomy placement – the teeth will be symmetrically scaled making a better initial design.
- New “Simple initial placement of smile library” option will place teeth in crown bridges exactly as they are in the corresponding smile library in the Control Panel, without any additional modifications (requires configuration in the Control Panel under Design Options).

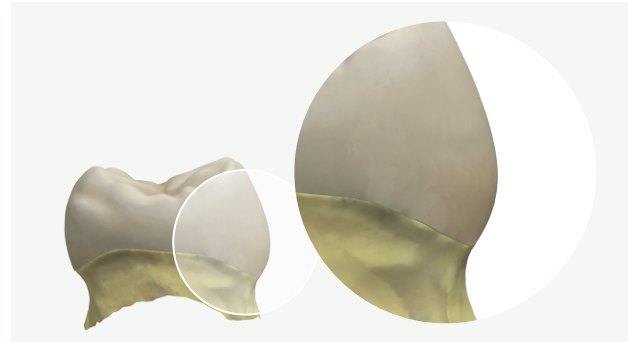


Control over the connection to margin line

If you prefer to make the complete teeth setup before connecting to the margin line and want to keep shapes untouched – the new “Simple connection to margin line” is introduced:

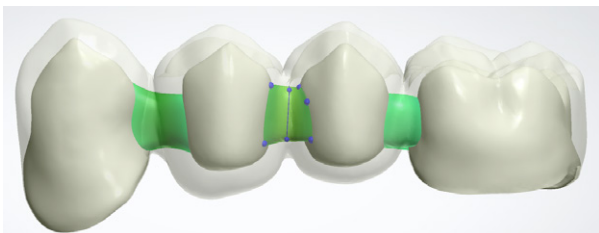
- Enable the new “Simple connection to margin line” option either in the Control Panel or directly in the Smile Composer to connect the crown to the margin line without applying extra smoothing.
- Die Interface model and its collar will now be shown on the Smile Composer step with a corresponding visibility slider.

Simple connection to margin line is especially useful if you have the design option in the Dental System Control Panel “Automatically connect anatomy” set to false.



Increased speed of core algorithms

- The speed of connecting anatomy to the margin line in the Smile Composer™ has been increased
- The speed and stability of making framework connectors has been increased.



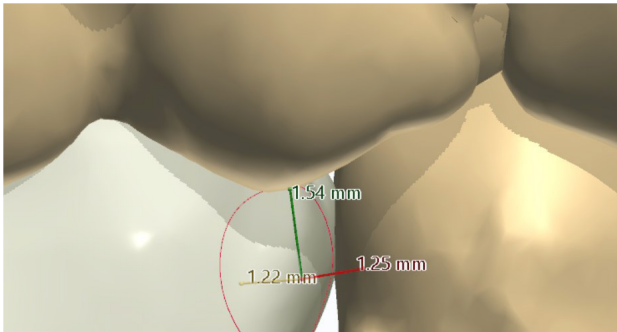
Move directly to any design step

It is now possible to access any step on the workflow bar at any time during the design of frame and anatomy cases. The design software will make default design in any steps that are being skipped by the user.



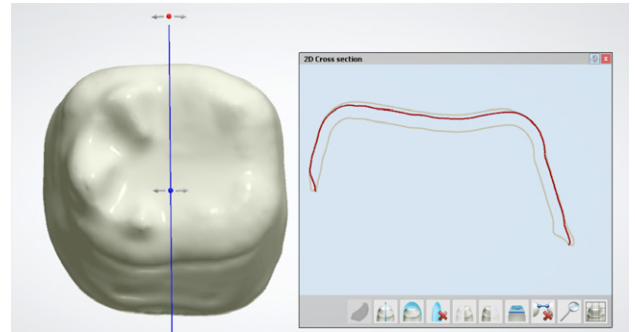
Improved distance measurement

The distance measurement tools have been improved. The calculation become even faster and more accurate. "Distance to adjacent" measurement tool now works only with designed teeth and together with "Distance to preparation" shows all neighbor distances properly.



Improved minimum thickness enforcement

A new version of the "Enforce minimum thickness" has been made, to ensure minimum thickness more smoothly without creating bumps. The new algorithm, that can be activated in the Control Panel under Design Options. If you e.g. have validation procedures based upon the old algorithm you may choose to use the old algorithm.



Enhanced visualization

For cases with restorations on both jaws, the antagonist visibility slider has been replaced with a new slider with 3 positions:

- Off – antagonist scan and all restorations on it are hidden
- Middle – antagonist scan is visible, all restorations on it are hidden
- On – antagonist scan and all restorations on it are visible.



Improved inlays

Thanks to the new algorithm, you can now easily design highly esthetic inlays and onlays with a minimal need for adjustments. The new margin line tool makes it fast and easy to define the margin.



Better implant bridge design

- “Thickness map” slider has been added to the Finalize step for implant bridges with customized abutments and library pontics.
- “Sculpt on protected surface” option will now successfully work on the Finalize step for implant bridge orders with gingiva.
- Connectors will no longer penetrate the surface of the screw hole in implant bridges with customized abutments and library pontics.



Digitally create pressing and casting trees

Now you can digitally create wax trees and further improve your productivity and control. Easily combine restorations into a single cast tree for casting or pressing.

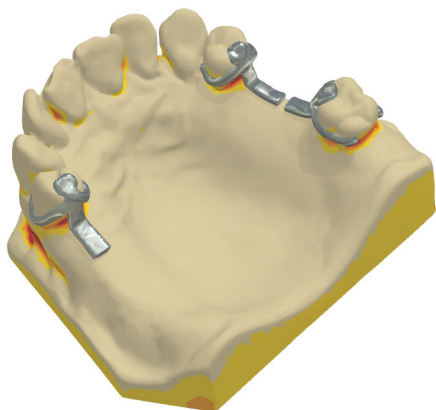
Note: Availability depends on reseller.



Removable Partial Dentures

More freedom in clasps design

The new option to design a suite of clasps for acrylic removable partial denture provides ability to create and manufacture a frame consisting of several parts in one order. The option is controlled at the “Frames” page in Dental System Control Panel.



Manage and share design settings

Now, every aspect of removable partial denture design is controlled by the settings configured in Dental System Control Panel. Easily define and share these design settings with technicians and other labs.



Full Dentures

Scan and design single arch dentures

Scan and design dentures for single arch – including adapting the design to the antagonist.

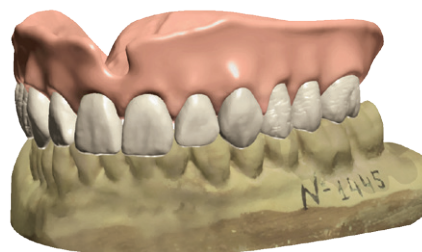
• Scanning

Combine gypsum and impression scans in one workflow. Scan a gypsum model with a wax rim, a functional impression, or a tray made of the existing full denture prosthesis, accompanied by a gypsum antagonist model.

• Designing

Now you can design taking the antagonist into account and easily adapt to the situation of each case, using new tools:

- monitor the premature contacts between the teeth
- fine-tune the occlusion maintaining the pestle-mortar cusp/central fossa relationship
- easily establish contacts between the teeth by using new options on mouse right click.



New tools for designing full dentures

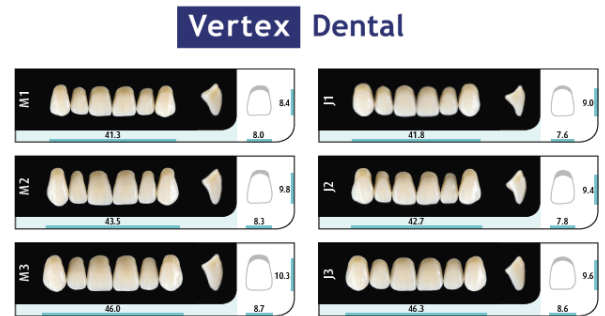
Full Dentures design procedure has been made even easier.

- Raise the bite with Articulator and remove teeth directly in Full Dentures Smile Composer.
- Control the position of the boundary of the denture base using the new "Show local cross-section" function.



Wider range of Denture Libraries

3Shape brought in more denture libraries, giving technicians open options to use teeth from the preferred manufacturers. Quint™ library from VertexDental has now become available allowed for local manufacturing. More libraries will soon follow



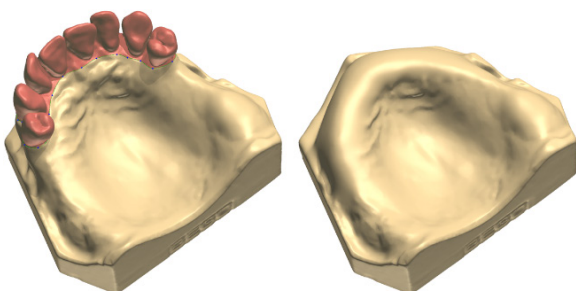
Intuitive workflow for Full Denture Try-ins

Prepare your try-in and examine it in the oral cavity, rescan modified try-in to capture adjustments and update the design for a better denture. Quick and detailed try-in scanning scenarios are available.



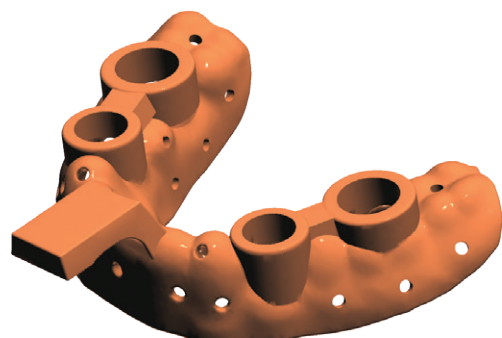
Design Immediate Dentures

Design Immediate Dentures using the new "Tooth Extraction" tool that allows to remove the teeth from the model directly in Dental Designer. Remove artifacts and do planar cuts of the preparation scans with time-proven Sculpt toolkit avoiding grinding gypsum models.



Customized Impression Trays for implant cases

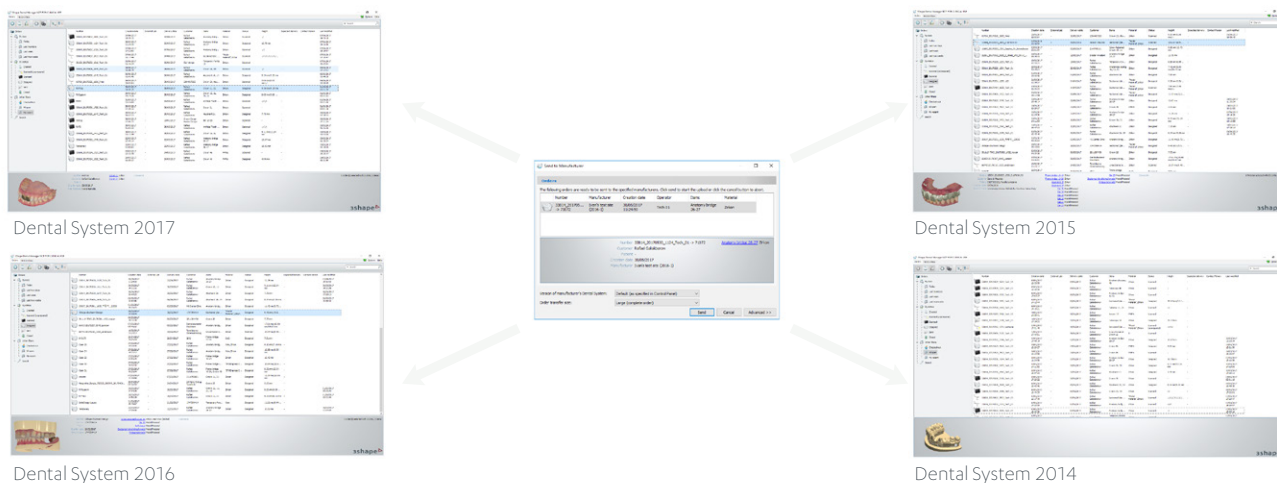
Easily prepare open trays for implant cases making use of new attachments in order to create holes for implant transfer posts.



Dental Manager and Control Panel

Send to manufacturer no matter their version

You can now upgrade to the latest version, even though some of your manufacturers that you send cases to have not yet done so. You can send orders for manufacturing from the new Dental System version 2017 to older versions, i.e. DS-2016 and DS-2015. This can be achieved by selecting a required version of Dental System on the "Manufacturers" page in the Control Panel or, alternatively, setting the version directly in the "Send to Manufacturer" dialog in Dental Manager.



Eco-system improved with even more implant libraries

Even more implant libraries are now also supported and can be downloaded:



A number of the implant libraries have been update and can be downloaded as part of upgrading to Dental System 2017.



Attachment libraries

In addition to our existing attachment libraries, we are now making CEKA & PRECI-LINE attachments digital library available for you. This library contains all the CEKA & PRECI-LINE attachment components that can be milled. Please click on www.ckpl.eu to see instructions on how to download and install the digital library. For further information, please contact info@ckpl.eu



CEKA
ATTACHMENTS
PRECI-LINE

3Shape Communicate

Receive cases from entire world

Receiving TRIOS cases is no longer restricted to be made in the same geographical region -you can now receive TRIOS cases from dentists anywhere in the world.

Improved control and stability



Improved stability of receiving 3Shape Communicate cases, minimizing the risk of cases not being received.

New options on the 3Shape Communicate page in the Control Panel for updates intervals, manual synchronization and cut-off date.

New 3Shape Communicate Website

3Shape communicate is now accessible via a new website that features

- Improved performance and usability
- Exchange custom PDF files with your customers
- Easier to find users to connect with and manage existing connections

Add Connection			
	Alek's Dental Clinic Muncksgade 4.2 Copenhagen, 2300 Russian Federation	Type Clinic Email letterbox@ukr.net Phone Number 31414863	● Active
	JR Test Clinic Rindens Kanal 7, 3 sal København K, 1060 Denmark	Type Clinic Email jr@nic@3shape.com Phone Number 10203040	● Active

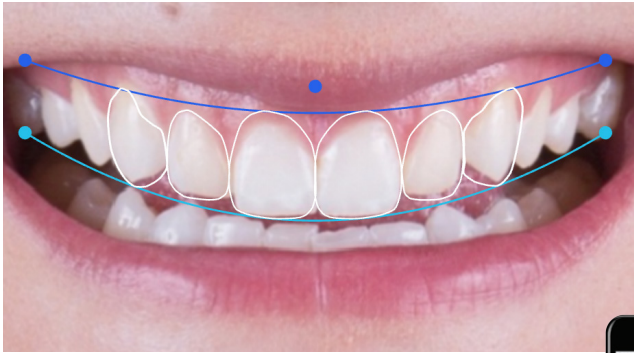


3Shape Smile Design – Offer the perfect smile

The ability to create highly esthetic smile designs is a highly attractive and profitable area for labs. 3Shape provides a new powerful solution for fast and easy creation of smile designs in 2D, and the ability to accurately match 2D photos with 3D designs. Enable patients to try out their new smile before final treatment by creating a mockup model and matrix based on the design. Available August 2017.

Create fast treatment planning and link to 3D design

COMING Provide the dentist and patient with a photo simulation



Luiza Silveira & Nelson Silva, UFMG Brazil

Exchange via
3Shape Communicate

Smile Design is developed based on the DSD principles

Accurate implant planning scanning made easy with 3Shape Scan Bodies

Get your high-accuracy titanium scan bodies directly from 3Shape. Available for all major implant systems, 3Shape scan bodies feature a unique ID code that automatically identifies the implant system and connection. Compatible with intraoral and lab scanners. Please ask your library provide for libraries supporting 3Shape Scan Bodies.



Stabilization and Solved Issues:

Scanning

- Combination of the antagonist and neighborhood scans no longer results in black texture on the final step.

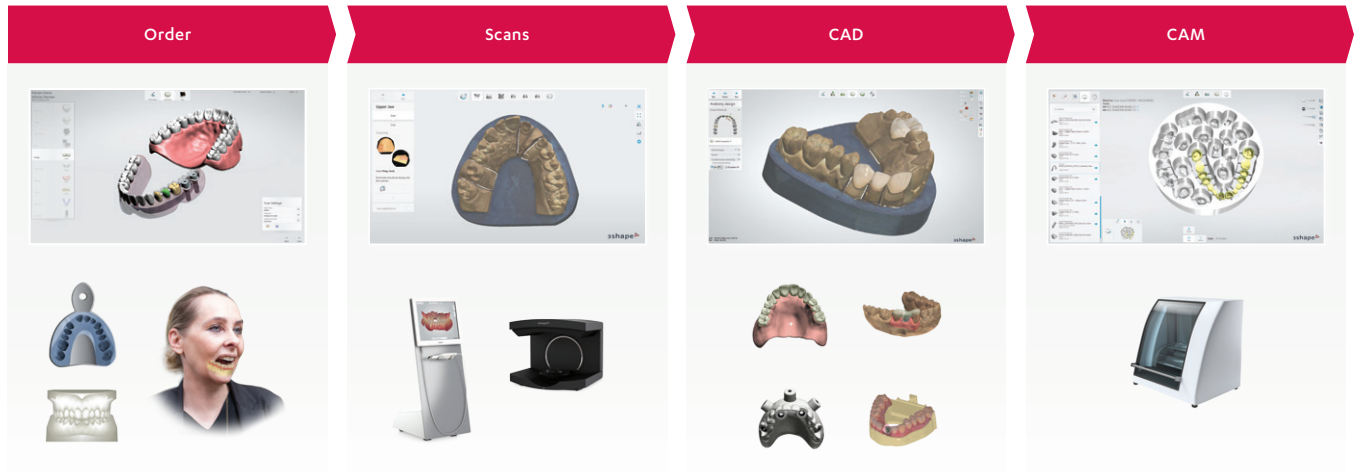
Design

- Minimum manufacturing values such as wall thickness and offsets, including the lingual band parameters, will now be correctly validated during the design.
- It will be possible from now on to use a remote database with non-default settings during the Dental System installation.
- "Cut to neighbors" tool in Smile Composer™ has been improved to be faster and more precise.
- Orders sent via FTP with the order size set to "Small" will no longer contain the "AuxScanDir" folder.
- Links to the STL files in the 3ox file in the Visualization output will now be correct.
- An empty library will not be automatically created each time a new library is added on the "Anatomy and Pontic libraries" page in the Control Panel.
- It is now possible to change the influence radius when using the 'fast edit spline' option in the primary telescope crown design.
- "Hole" attachments will now be correctly applied in Wax-up orders.
- Access Violation appearing on Sculpt step if the "Desired distance to preparation scan" was selected in the Wax Knife tool for single copings orders with the "Neighborhood scan" set to "None" in the Order Form has been fixed.
- Material shaders are now correctly visualized in orders with temporaries.
- Irrelevant "Collision lines" map will no longer be visible on Sculpt step for Full Denture and RPD orders.
- Scans and anatomy will no longer be turned upside down in Dental Designer if the order was scanned with "Scan dies in arch (if supported)" option.
- Wrong occlusion for gypsum cases is now fixed. The occlusion in Dental Designer is correct and the same as in the preview.
- It is now possible to change the implant platform during the design of anatomical abutments without an Access Violation.
- "Contact and smoothing" parameters on the Smile Composer step are now correctly taken from the values defined in the Control Panel

COMING One system, one interface, one workflow

With LabCare you will also in the future get the benefits of the new features and functionality that we are already now working on. Look out for Lab Studio! It's a new lab software platform to ensure continued high performance, solid reliability, as well as future expansion with new integrated technologies.

Watch preview here <https://www.youtube.com/watch?v=vt3vo4lMOcg>



3Shape LabCare makes sure that you always stay ahead and productive

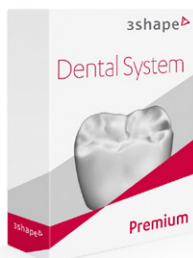
3Shape's LabCare package gives your dental lab valuable services and the option to protect your investment with an attractive warranty and scanner replacement agreement.

	3Shape LabCare The comprehensive service package that keeps you ahead and constantly productive
Software upgrades New software releases with latest developments including libraries, workflows, tools, patches.	✓
Support Authorized experts help you in your local language and time-zone	✓
Training & events Comprehensive user events and trainings by leading dental technicians and 3Shape experts	✓
Special discounts Save money on our trade-in/trade-up program and on subscription for additional seats	Up to 25%
NEW Warranty & Scanner Replacement service (add on)	With 3Shape LabCare
Scanner repair and scanner replacement to avoid downtime	Up to 5 years

Appendix: Dental System versions

Dental System Software configurations

CAD Indications	Dental System™ Premium	Dental System™ Crown & Bridge	Dental System™ Removable
Copings and bridge frameworks	✓	✓	Upgrade to Premium
Anatomical copings and bridge framework	✓	✓	Upgrade to Premium
Full anatomical crowns and bridges	✓	✓	Upgrade to Premium
Gingiva on all indications	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Single wax up / Wax up bridge	✓	✓	Upgrade to Premium
Inlay / Onlay / Inlay bridge / Veneers	✓	✓	Upgrade to Premium
Tabletops and Non-prepared Veneers	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Multi-layer crowns and bridges	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Digital temporaries	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Virtual diagnostic wax-ups	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Post & core	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Telescopes	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Customized abutments and screw-retained crowns	Add-on / CAD Points	Add-on / CAD Points	Add-on / CAD Points
Implant bars and bridges	Add-on / CAD Points	Add-on / CAD Points	Add-on / CAD Points
Full dentures	Add-on / CAD Points	Add-on / CAD Points	✓
Removable partial dentures	Add-on / CAD Points	Add-on / CAD Points	✓
Customized impression trays	✓	CAD Points / Upgrade to Premium	✓
Model Builder™	Add-on / CAD Points	Add-on / CAD Points	Upgrade to Premium
Positioning Guides	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Splints, night guards and protectors	✓	CAD Points / Upgrade to Premium	Upgrade to Premium
Orthodontics / Orthodontic appliances	Add-on	Add-on	Add-on
Implant Planning and Surgical Guides	Add-on	Add-on	Add-on



Advanced Tools

Smile Composer™ including Sculpt Toolkit	✓	✓	✓
Mirroring teeth	✓	✓	✓
Simultaneous modeling on upper & lower	✓	✓	✓
Dynamic virtual articulation	✓	✓	✓
Attachments	✓	✓	✓
RealView™ Engine with 2D Design guidelines	✓	Upgrade to Premium	✓
Align and re-use design	✓	✓	Not available
CAD block placement	✓	✓	✓
3Shape Communicate™ (2 GB storage included)	✓	✓	✓
TRIOS Inbox and Shade Measurement	✓	✓	✓
Basic / Expert mode	✓	✓	✓
Advanced design validation tools	✓	✓	✓
Manufacturing Inbox™	50 connections	50 connections	50 connections
Full manufacturing equipment compatibility	✓	✓	✓
3Shape LabCare™ included in subscription	✓	✓	✓

✓	Included in the specific Dental System™ Software version.
Add-on / CAD Points	You can either use CAD points for each case or purchase of add-on module (sold separately).
Upgrade to Premium	Requires upgrade to Dental System™ Premium edition (sold separately).
CAD Points / Upgrade to Premium	You can either use CAD points for each case or upgrade to Dental System™ Premium edition (sold separately).
Not available	Not available for this scanner model / software version.

CAD Indications	CAD Points
Copings and bridge frameworks	4 per case
Anatomical copings and bridge framework	4 per case
Gingiva on all indications	4 per case
Single wax up / Wax up bridge	4 per case
Tabletops and Non-prepared Veneers	4 per unit
Multi-layer crowns and bridges	4 per case
Digital temporaries	4 per unit
Virtual diagnostic wax-ups	4 per unit
Post & core	4 per unit
Telescopes	4 per unit
Customized abutments and screw-retained crowns	9 per implant
Implant bars and bridges	9 per implant
Full dentures	15 per case
Removable partial dentures	15 per case
Customized impression trays	4 per case
Model Builder™, TRIOS case	6 per case
Model Builder™, 3rd party case	12 per case
Positioning Guides	4 per case
Splints, night guards and protectors	15 per case