3Shape Ortho System

The power of 3D at the service of your practice

Orthodontics

3shape

3Shape Ortho System™

The power of 3D at the service of your practice

3Shape's Ortho System lets you create your own digital study models in an open format. The advanced 3D software tools allow you to leverage the power of 3D in your treatment planning and assessment process while opening opportunities for the future.

3Shape's Ortho System lets you create accurate 3D models of your study models or impressions* in a few clicks. You can use these 3D models for treatment planning, assessment of treatment results, communication with the patient, the lab and other colleagues, as well as to create customized orthodontics appliances. This significantly reduces model manufacturing, shipment and archiving costs, plus chair time -while giving you immediate and unprecedented insight into your patient's case.

Adopting a system developed by 3Shape, the world leading supplier of Dental CAD/CAM systems, brings you the following significant advantages:

Independence - the open data format (STL) used for 3D representation of your cases guarantees that you own and can use your patient data without limitations. As a provider of 3D technology, 3Shape is a company focused on offering the best possible user experience and flexibility.

Competitivity - the scan speed, quality and the system's overall versatility allow you to customize it to your needs and speed up your processes. Communication with the lab, other orthodontists, and the patient is also highly improved.

Future proof - 50 developers are dedicated to 3Shape's dental solutions and its products are under continuous development. A strong track record of innovation and speedy development based on the input of an extensive user base has enabled 3Shape to become the world leader in the Dental CAD/CAM field within a few years only.

** A software upgrade for direct impression scanning will be available in 2010 to users of the R700 scanner for an additional fee.*

Main Benefits of 3Shape's Ortho System™

The System's two main components, the R700 scanner and the OrthoAnalyzer 3D software package, offer superior results in terms of ease of use, performance and flexibility. Your 3D models can be saved in an open format, which secures availability and compatibility.

Digital patient archiving
Keep your patient records in 3D. They are accessible from anywhere. Interface with your patient management system so the case is created only once.

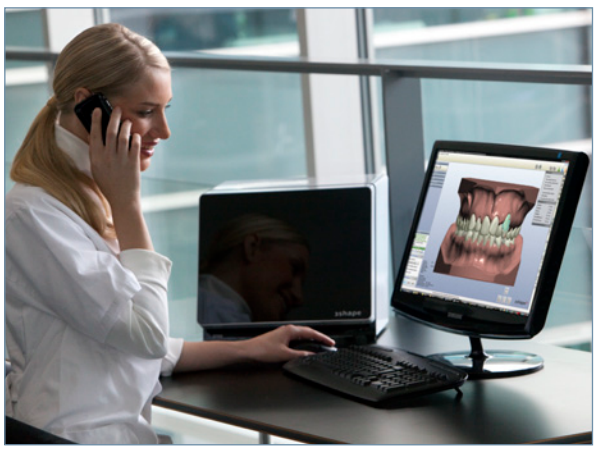
Speedy digital study model creation
5 minutes and 3 mouse clicks are all that is required to scan a patient case from dental casts with the R700. Direct scanning of impressions eliminates the need for physical study models and saves costs, time and storage space.

Diagnostic tools and treatment planning
Choose the treatment plan most adapted to the patient's situation and review treatment alternatives. Visually present treatment alternatives and expected results to the patient.

Full customization and flexibility
We, at 3Shape, recognize that the practice of orthodontics can vary significantly and, therefore, your need to adapt your tools to your preferred practice and methods. Our products let you customize your workflows, analyses and reports.

Communication
Interaction with your patients and your laboratory, as well as with orthodontists colleagues is greatly enhanced with the use of 3D models and Internet-based collaboration tools.

Open format and platform
The use of the standard STL format in the system guarantees that you have full ownership and control of your patient records. The standard format also allows you to export your virtual setups for direct appliance modeling.



R700™ Scanner

The foundation for digital quality in open format

The R700 represents the next generation of scanning technology, and is optimized for the scanning of dental impressions* and plaster casts at the orthodontist's practice. The R700 scanner guarantees superior scan results without compromising ease of use and sets new standards for scan speed and detail level.

Building on the functionality of 3Shape's previous scanners, the R700 represents the culmination of 3Shape's scanning expertise.

This revolutionary scanner is optimized for impression scanning, and is capable of scanning full dental gypsum models up to 40% faster and with greater details than 3Shape's previous R640 scanner.

Easy and quick object fixation followed by **a few clicks in the scanning software** makes the scanner easy to use and require a minimal amount of training. The patient's original occlusion is registered using the provided 2-cast fixture and can easily be altered on-screen.

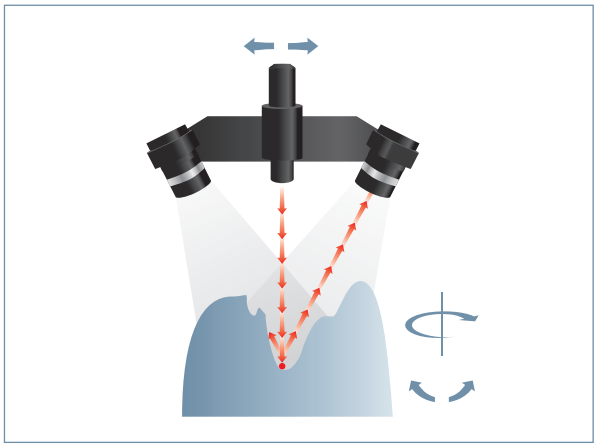
The scanner employs a unique **2-camera and 3-axis motion system**, which results in unrivaled accuracy in object geometry acquisition.

Minimal footprint (comparable to a laptop PC), easy fixation and quick insert of objects, high accuracy, versatility and excellent scan speed are recognized characteristics of the R700.

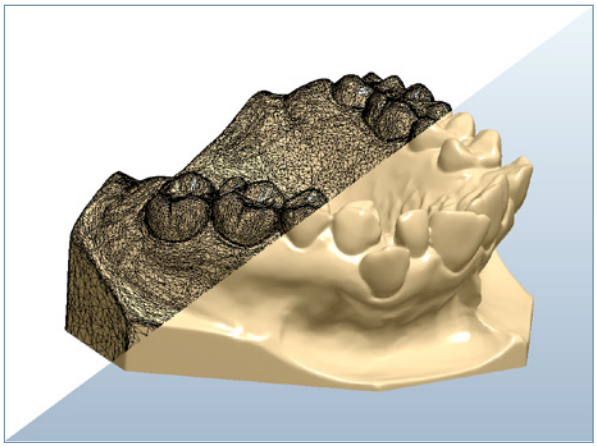
** A software upgrade for direct impression scanning will be available in 2010 to users of the R700 scanner for an additional fee.*

Its 2 cameras' reduced angle enables the R700 to effectively scan dental impressions inside areas where a single camera often will be blinded by the cavity. 2 cameras also improve general coverage, accuracy and scanning speed.

Virtual base creation: the R700 allows you to scan models directly as poured from the impression tray without the need for a base: this one can be created on screen from a 3D base library, which saves processing time and material.



2 Cameras and 3 Axes
The R700 is built with 2 cameras with reduced angles, which is required to effectively scan impressions.



Automatic model creation
The output of the scanner is a highly accurate representation consisting of triangles. These connect the points captured at high resolutions by the cameras and their number is optimized to balance model size and accuracy.

HIGHLIGHTS

• **Scan time (Ready STL)**	Full model: 60 sec (75 sec) Patient case: less than 5 minutes in total
• **Accuracy**	20 microns tested with Mitytoyo® gauges
• **Dual image capture**	2 x cameras, 1 x laser
• **Motion system**	3-axis: rotation, linear motion and tilting
• **Interface**	USB connection to PC and laptop
• **Output formats**	STL (open standard) and DCM
• **Material color**	Material color independent
• **Regulatory conformity**	CE, RoHS, FCC, FDA registered, WEEE, UL
• **Dimensions (W x H x D)**	34 x 29 x 33cm (14" x 11" x 13")
• **Weight**	14 kg
• **Laser**	Class 1 laser product

Adaptive Impression Scanning NEW

Save time and costs by scanning your impressions directly* without the need for a study model - and without compromising chair time!

3Shape is proud to introduce a breakthrough in 3D scanning! Thanks to the unique features of the R700 scanner, full silicone or alginate impressions of the patients can be scanned directly and automatically.

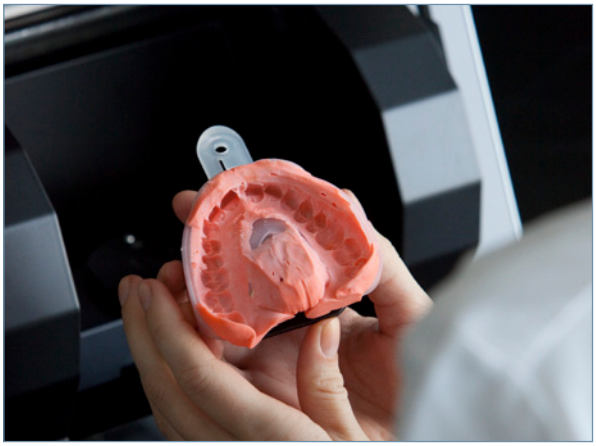
Direct scanning of impressions represents a truly unique opportunity to optimize the archiving and treatment planning process by eliminating the need for a study model. This technology gives you instant insight into the patients' cases, while they are sitting in the chair.

Eliminating the time-consuming, costly and dusty model making process by instantly going from physical impression to a high accuracy digital study model enables a fast return on your investment.

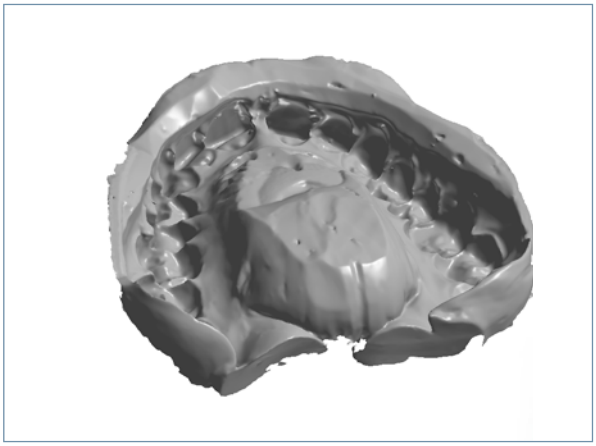
Impression scanning capability is realized through an unparalleled combination of 3Shape's patented adaptive scanning technology and 2 cameras placed at a reduced angle. Adaptive scanning intelligently detects incomplete areas and automatically rescans these areas to obtain full coverage.

The created virtual model – saved as STL – can be sent to digital model making machines for automatic model creation.

Both 3D printing and milling offer attractive opportunities in terms of manufacturing cost, model creation speed and quality.



Direct impression scanning with a R700
Put the impression onto the scanner plate: the 3D model is just one click away.



Adaptive scanning
3Shape's unique and patented adaptive scanning technology ensures that areas originally hidden are captured automatically to get the most accurate 3D representation.

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3Shape OrthoAnalyzer™ 2010

Advanced orthodontics diagnosis & treatment planning tools

3Shape's OrthoAnalyzer is a dedicated software package for the planning and assessment of orthodontic treatments. The tools replicate the usual handling of study models, but also go beyond by opening completely new opportunities. Already recognized for its performance and flexibility, OrthoAnalyzer gives you unprecented tools for treatment planning and assessment with this 2010 version.

Diagnostics tools - Overjet and overbite analyses, dental arch analysis and definition of the ideal arch, which can be used as guide for virtual setups, tooth width, Bolton, Space (Tanaka & Johnston, Moyers). Easy definition of the occlusal plane and modification of the scanned occlusion.

Flexible treatment planning with virtual setups - OrthoAnalyzer is the only software package offering you tools to plan your treatment in an open format. In a few mouse clicks, you can gain unprecedented insight into the potential impact of major treatment decisions, such as a tooth extraction.

Once you have simply defined the tooth's mesial and distal areas, the software automatically identifies the margin line and **segments the teeth:** your case is ready for virtual setup.
You can control all tooth movements with your mouse, the computer keyboard or by entering movement values directly.

All **tooth movements** are summarized to ensure follow-up during the treatment, as well as communication with the lab for appliance manufacturing. Virtual setups can also be exported for direct manufacturing.

Assess treatment efficiency - before/after treatment comparison with color deviation maps and misc. measuring tools.

Full customization of analyses and workflows - we recognize that the needs and habits of our users can vary significantly. 3Shape's tools can adapt to the way you normally work -with more accuracy and consistency. Analyses and workflows can be completely customized using wizards.

Virtual base creation - create fully based study models on screen, from your scans of impressions or models out of the tray.

Archiving & Communication

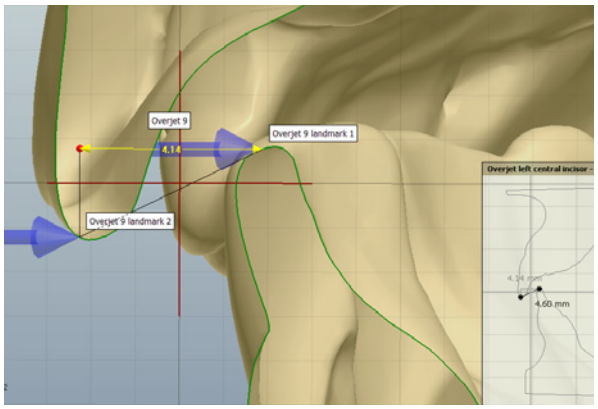
- Easy on-screen communication of treatment plan to patient with animations.
- Reporting full interface to Crystal Reports® and fully customized analysis reports.
- Interface to patient management system using XML protocol.
- Automatic archiving of patient cases and analyses keeps track of the complete patient history.

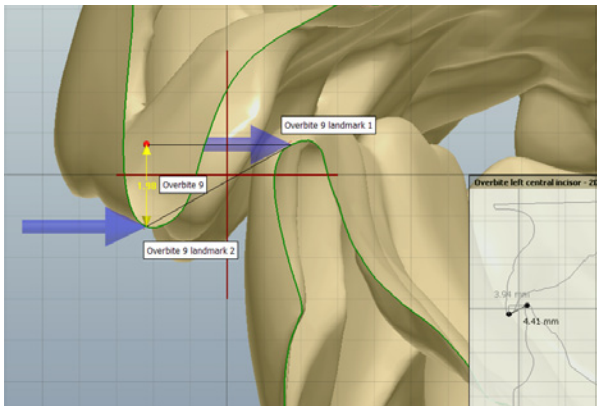
HIGHLIGHTS

- **Virtual setups in a few clicks** - treatment simulation has never been so easy and flexible
- **Virtual base creation** - on the scanned models to save time and maintain consistency
- **Advanced 2D and 3D diagnostics and analysis tools** - 2D and 3D measurements
- **Customization and automation** - Adapt analyses and workflows to your specific needs

OrthoAnalyzer™ 2010

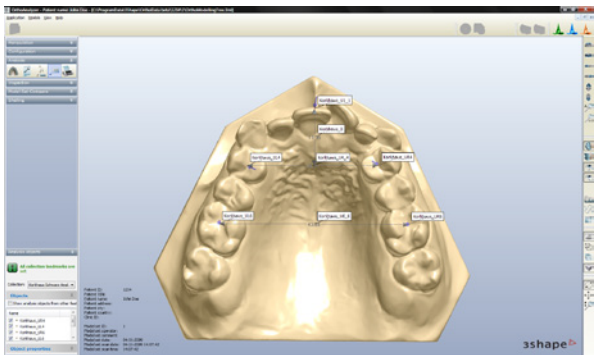
Intuitive diagnostic tools





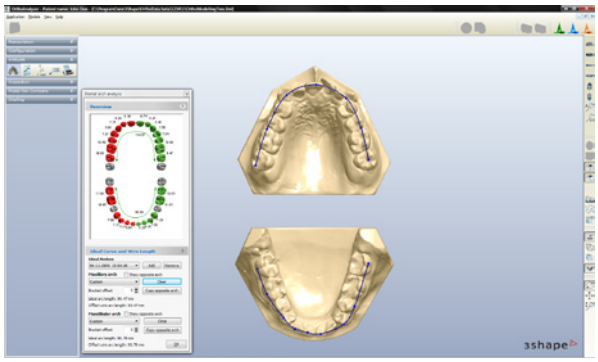
Instant Overjet and Overbite analysis NEW

New tools provide a quick insight into the protrusion and relative eruption of the patient's incisors, as well as precise measurements of these deviations.



Fully customized analyses NEW

The tools are customizable and any analysis can be set up in the system using the analysis kit. Example: Schwartz-Korkhaus analysis

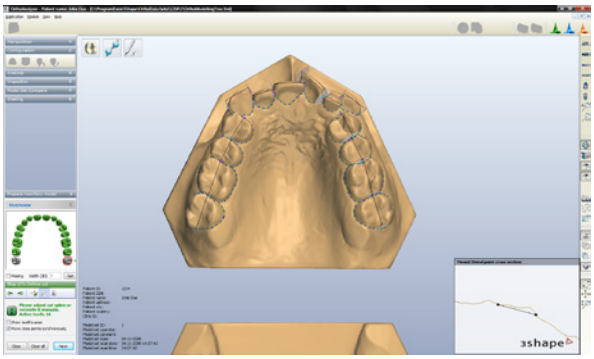


Dental Arch analysis

Use the predefined arch shapes or define your own ideal arch for the current case. Arches can be applied as guide for the virtual setups.

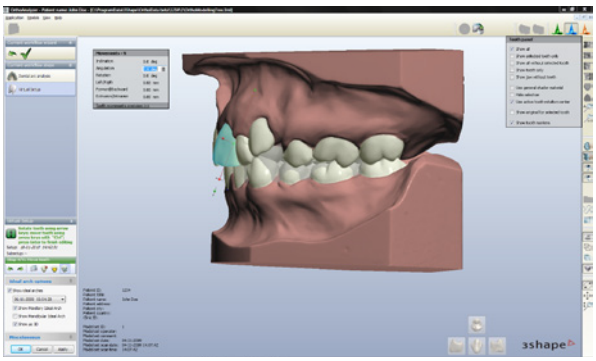
OrthoAnalyzer™ 2010

Treatment planning and virtual setups



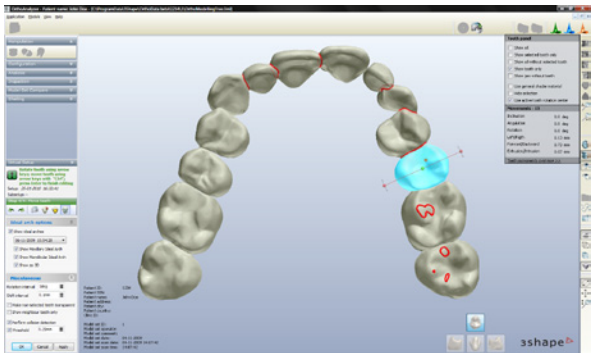
Automatic tooth segmentation NEW

Simply define the tooth's mesial and distal planes. The software automatically identifies each tooth's margin line and segments the teeth in a few seconds. The suggested segmentation and tooth axis can be manually adapted at any time.



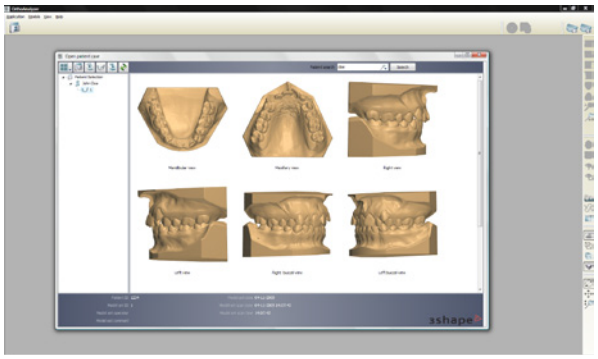
Virtual setups NEW

Simulate alternative treatment scenarios and assess the impact of major decisions, such as tooth extractions, in real time. All tooth movements are summarized to ensure a consistent treatment plan, as well as to ease communication with the orthodontic laboratory. The setup steps can be exported individually as 3D models for appliance manufacturing.



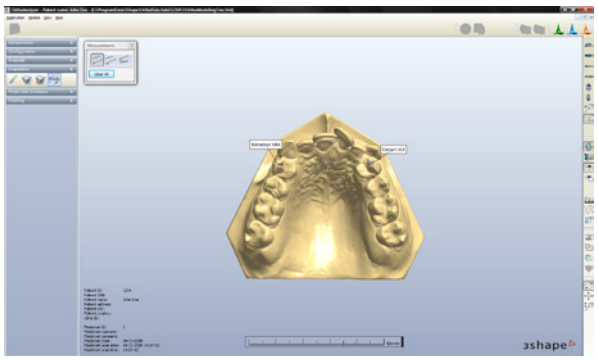
Detailed treatment plan NEW

Major decisions and all tooth movements are summarized in a table format to be used efficiently for further reference. Tooth movements can be defined using the mouse or the keyboard arrows, or parametrically by entering fixed values. Different display options are available to ensure an efficient setup process. The software also performs collision control on the teeth in real time (illustration).



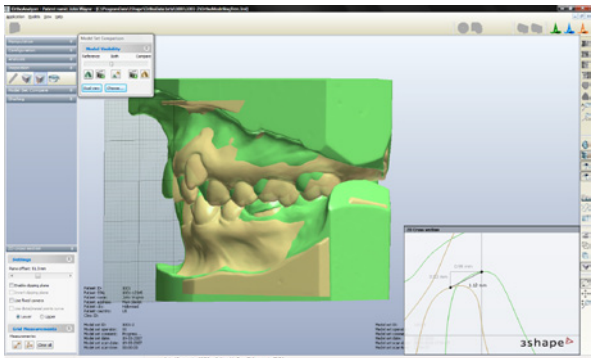
Easy archiving

Easy retrieval of patients cases and preview of 3D models. All analyses and setups can be saved with the models to keep track of the complete case history. Interface to your patient management system via XML protocol, including leading systems such as Dolphin Imaging® and Orthotrac®.



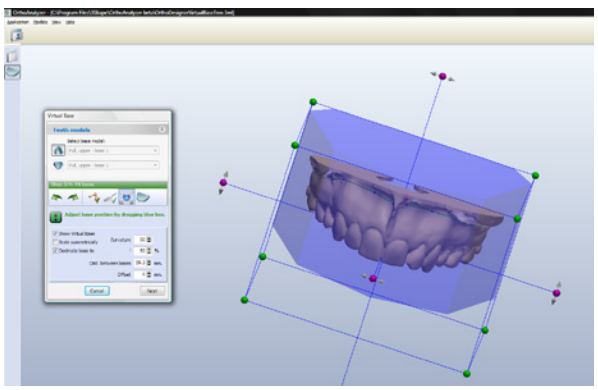
Communication and display options NEW

Easy display of treatment plan for communication with the patient. Streamline communication with the laboratory through annotations on the models. 1:1 scaling of the cases on screen allows for a visual assessment of the cases. Automatic case previews replicate manual handling of the study models.



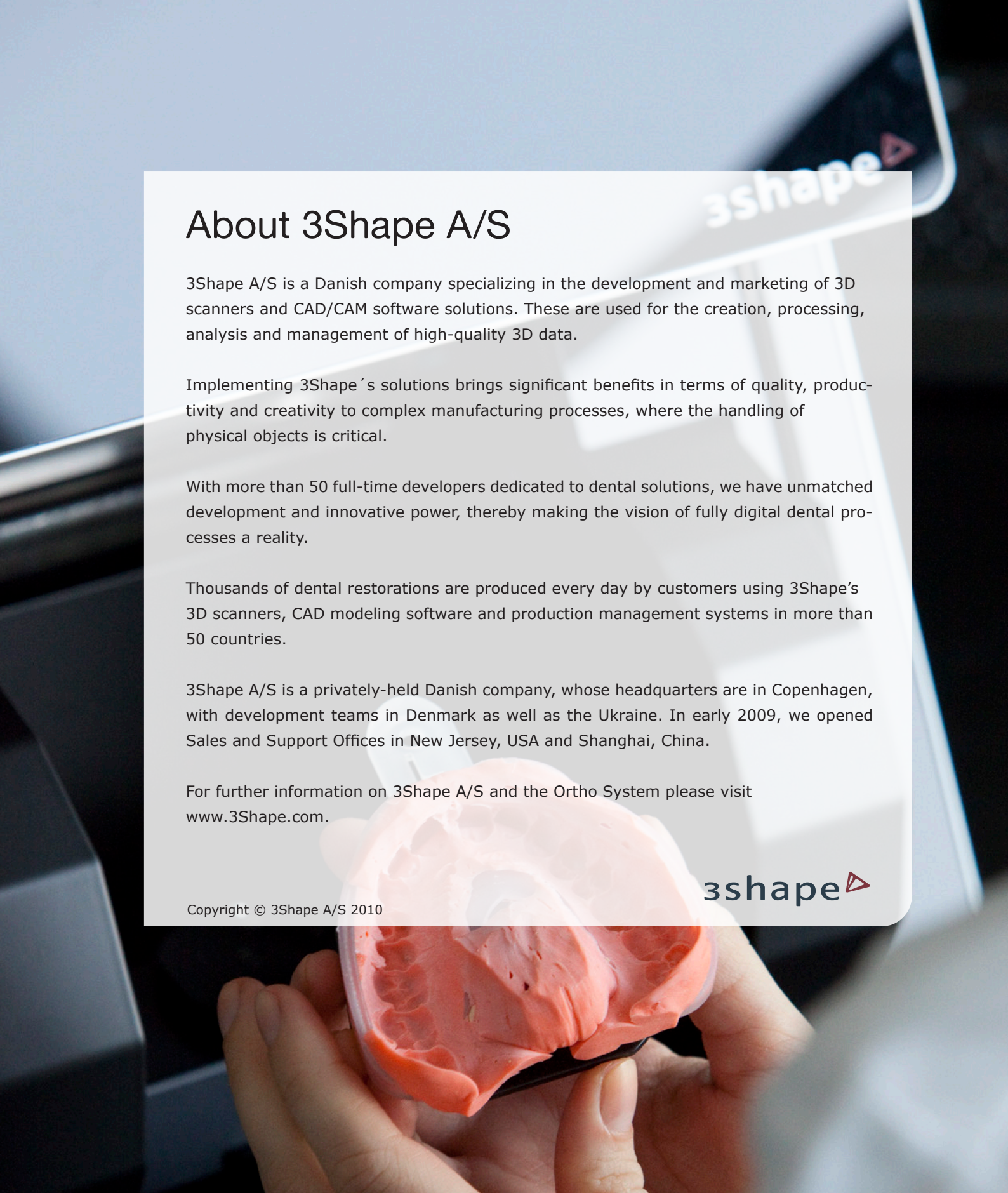
Model Compare

The advanced tools of OrthoAnalyzer allow you to easily compare the cases before and after treatment. A number of tools help you align the models accurately and take measurements to assess deviations. Animations of the case can also be shown.



Virtual base creation

Any base can easily be fitted to the 3D models scanned from a plaster model or an impression. This ensures a consistent look of your digital models and saves time and material in the study model making process.



About 3Shape A/S

3Shape A/S is a Danish company specializing in the development and marketing of 3D scanners and CAD/CAM software solutions. These are used for the creation, processing, analysis and management of high-quality 3D data.

Implementing 3Shape´s solutions brings significant benefits in terms of quality, productivity and creativity to complex manufacturing processes, where the handling of physical objects is critical.

With more than 50 full-time developers dedicated to dental solutions, we have unmatched development and innovative power, thereby making the vision of fully digital dental processes a reality.

Thousands of dental restorations are produced every day by customers using 3Shape's 3D scanners, CAD modeling software and production management systems in more than 50 countries.

3Shape A/S is a privately-held Danish company, whose headquarters are in Copenhagen, with development teams in Denmark as well as the Ukraine. In early 2009, we opened Sales and Support Offices in New Jersey, USA and Shanghai, China.

For further information on 3Shape A/S and the Ortho System please visit www.3Shape.com.

3Shape A/S
Holmens Kanal 7
DK-1060 Copenhagen K
Phone: +45 70 27 26 20

3Shape, Inc.
571 Central Ave., Suite 109
New Providence, New Jersey 07974
Phone: +1 908 219 4641

3Shape, Asia
Room 1205, No.738 Shangcheng Road
200120 Shanghai
Phone: +86 138 183 389 60