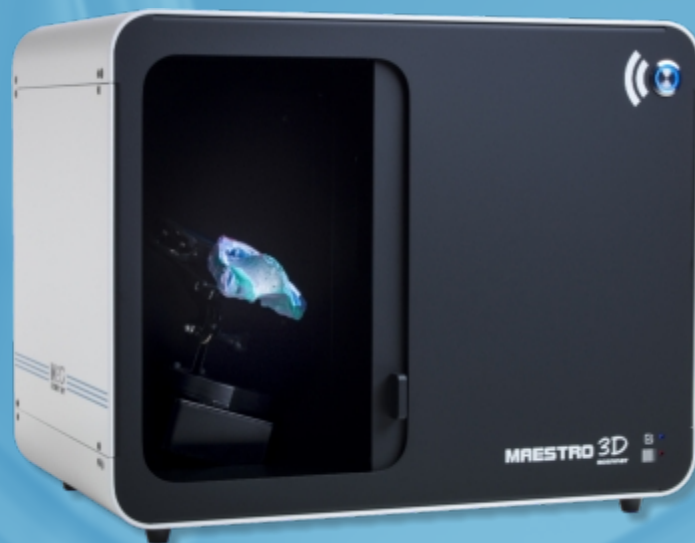
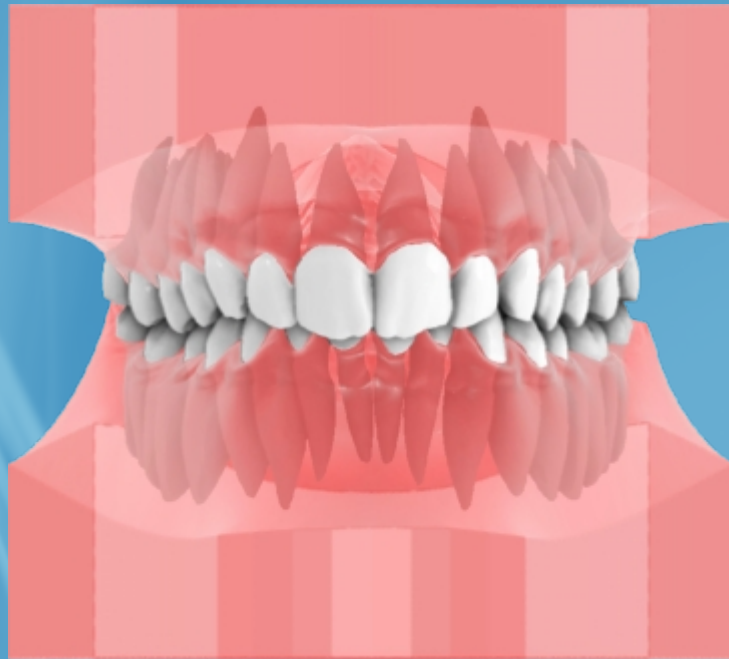


# MAESTRO 3D

Innovative solutions for dental applications

[www.maestro3d.com](http://www.maestro3d.com)



THE POWER TO BE EASY!

# AGE SOLUTIONS SRL

## The Company

AGE Solutions started in 2007 from an idea of two ex researchers of the C.N.R. (National Research Council) of Pisa, Italy, specialized in the elaboration, visualization, comparison and processing of three-dimensional data and creating of three-dimensional acquisition systems. The origins of AGE Solutions are to be found in the common passion of two founder members in the computer graphics and in the technical-scientific background that was matured during the years of permanence inside of the V.C.L. (Visual Computer Lab) of ISTI-C.N.R. of Pisa, Italy.

AGE Solutions is a company that operates in an hi-tech specialized field. It produces the integrated development of hardware and software solutions for the creation, treatment, analysis and the management of three-dimensional data of high quality. These solutions allow to automate and significantly improve many of that industrial processes (inspection, quality control, reverse engineering), otherwise expensive both in terms of time and human resources.

AGE Solutions offers the best quality/price ratio for specific solutions that have found their application in the dental, acoustic, footwear sectors and for personalised solutions, realising hardware and software applications, standalone and/or OEM, which can be integrated in third party preexisting solutions.

## Philosophy

The philosophy of AGE Solutions is to revolutionize the approach with 3D, making it friendly and easy, in order to make the use of these technologies available for the masses and not a privilege for the few. For this reason AGE Solutions company has decided of open their own technology to the market, making their exclusive tools of acquisition and elaboration of three-dimensional data available to all.

AGE Solutions, thanks to a technology result of years of research in 3D and to a development team highly qualified that works with passion and competence, offers hardware and software solutions of quality, flexible and highly innovative, at very competitive prices.

## Contact

AGE Solutions is partner of the CERFITT, Center Search and Formation on the Technological innovation and the Transfer of the Technologies.

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# MDS-500 Dental Scanner

## Technical Specifications

Plug & Play	YES
Texture Color Superimposition	YES
Calibration	YES
Automatic Calibration	YES
Impression scanning	YES
Multi die support	YES
Customizable scanning strategy	YES
Number of cameras	2 x 1.3 or 2 x 5.0 MP with high quality lenses
Projector	1, structured light LED
Object movement	rotary table, tilt table, 2 real axis
Operating voltage	110V or 220V
Scan surface	90mm[W] * 90mm[D] * 60mm[H]
Interface	USB3
Output formats	STL, PLY, open formats
Accuracy	< 8 micron
Resolutions	< 0,05 mm
Scanner dimensions	428mm[W] * 275mm[D] * 332mm[H]
Weight	20 Kg
Operating temperature	5 - 40 degrees Celsius
Approved Regulations	CE, FDA







**2 x 5.0 MEGAPIXEL**

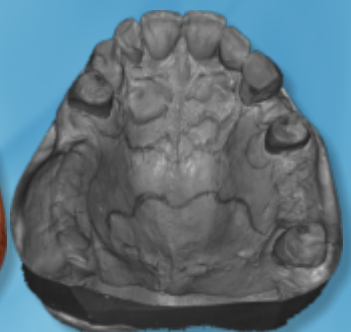
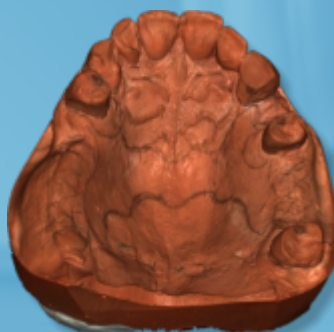
**Plug & Play SS** 

**Smart Impression Scanning**

**Accuracy less than 8 micron**

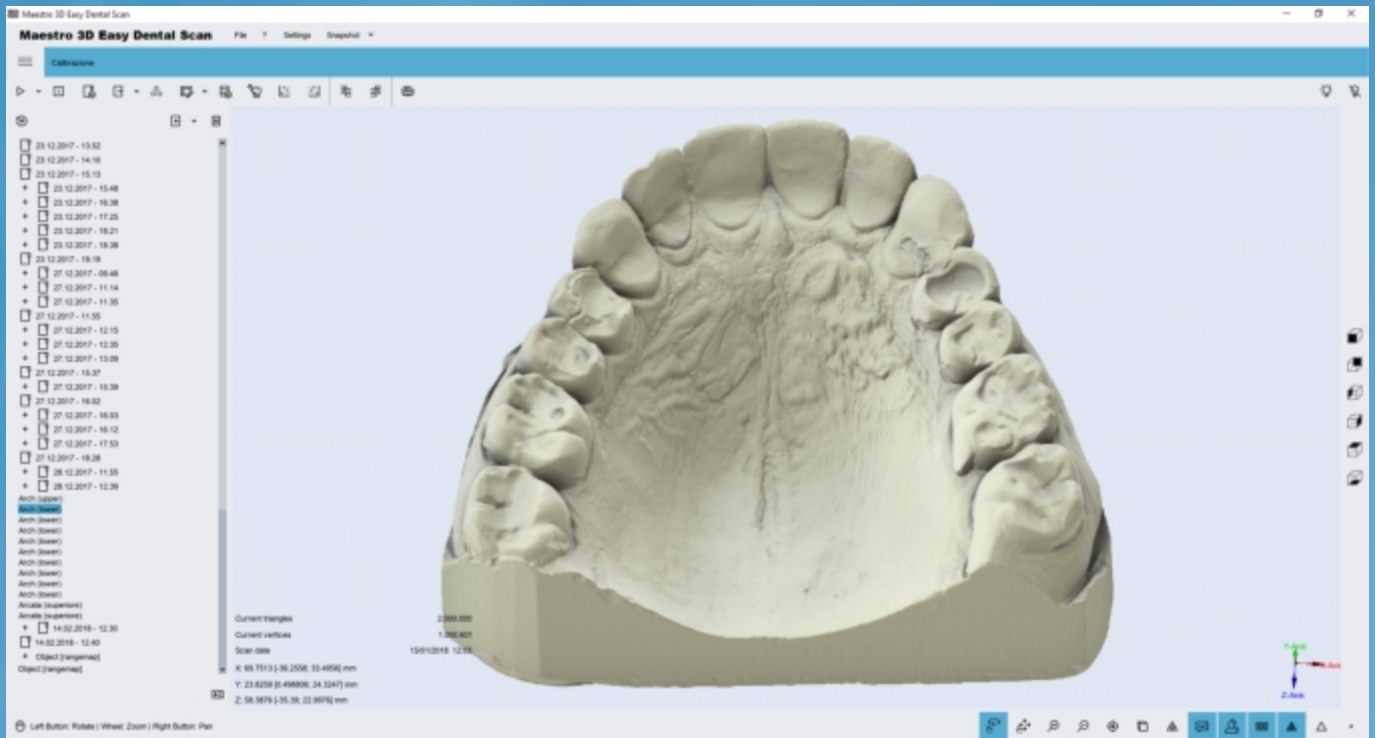
**Texture Superimposition**

**Texture Superimposition module** is useful to obtain models with a RGB color texture or grey scale. For example, it helps create very accurate margin lines as marked on the model.

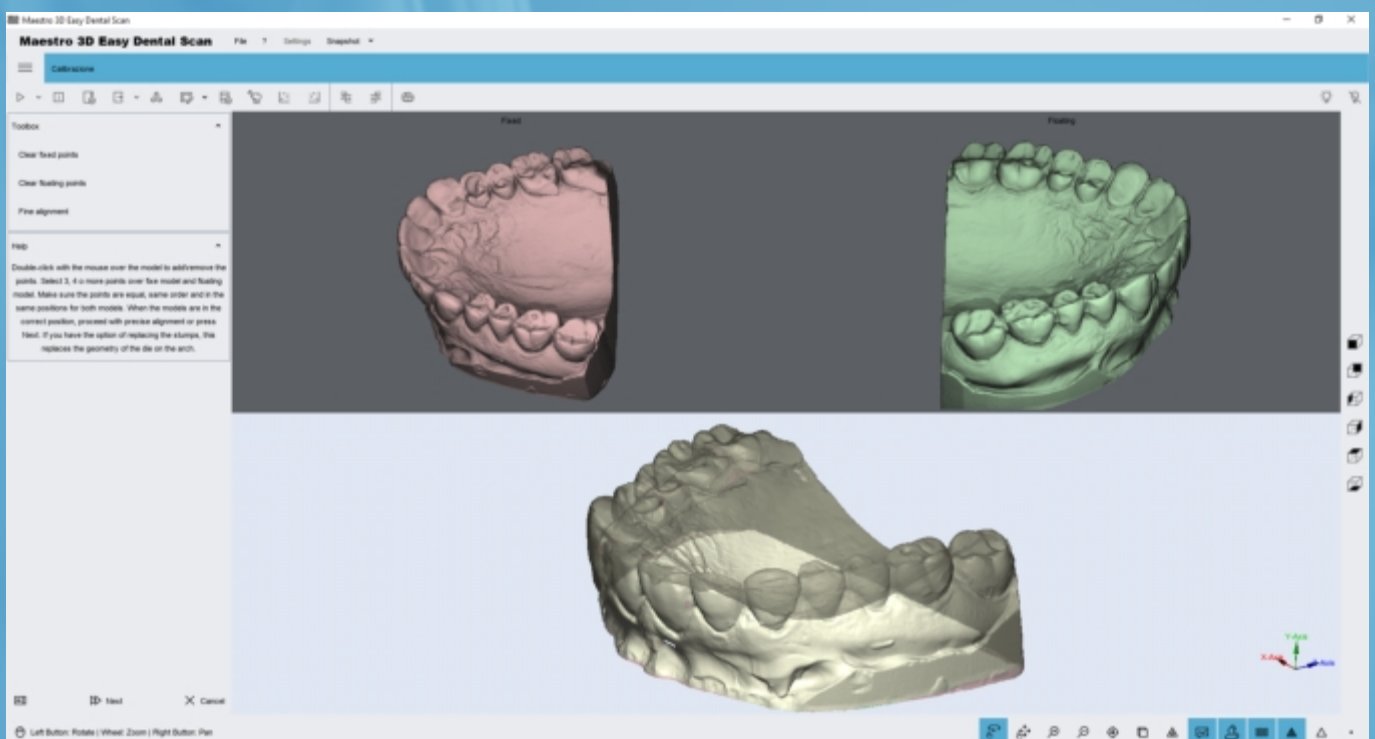




# Easy Dental Scan



- Automatic:** the scan of any models is totally automatic and doesn't need any manual user intervention;
- Stable:** the projected light parameters and the camera parameters are automatically adjusted according to the ambient lighting and material properties and color of the model to scan;
- Parallel:** simultaneous acquisition of more than one model in a single work session;
- Open:** completely open with no restrictions;
- Integrated:** full integrated with Dental Studio and Exocad software.



# Dental Studio



Maestro 3D Dental Studio is a software based on a totally proprietary technology and is a complete tool for the realization of orthodontic, dental restoration and smile creator jobs. The software is modular and is composed from three main macro modules:

## Dental Studio Ortho Studio module



## Dental Studio Dental Restoration module



## Dental Studio Smile Creator module

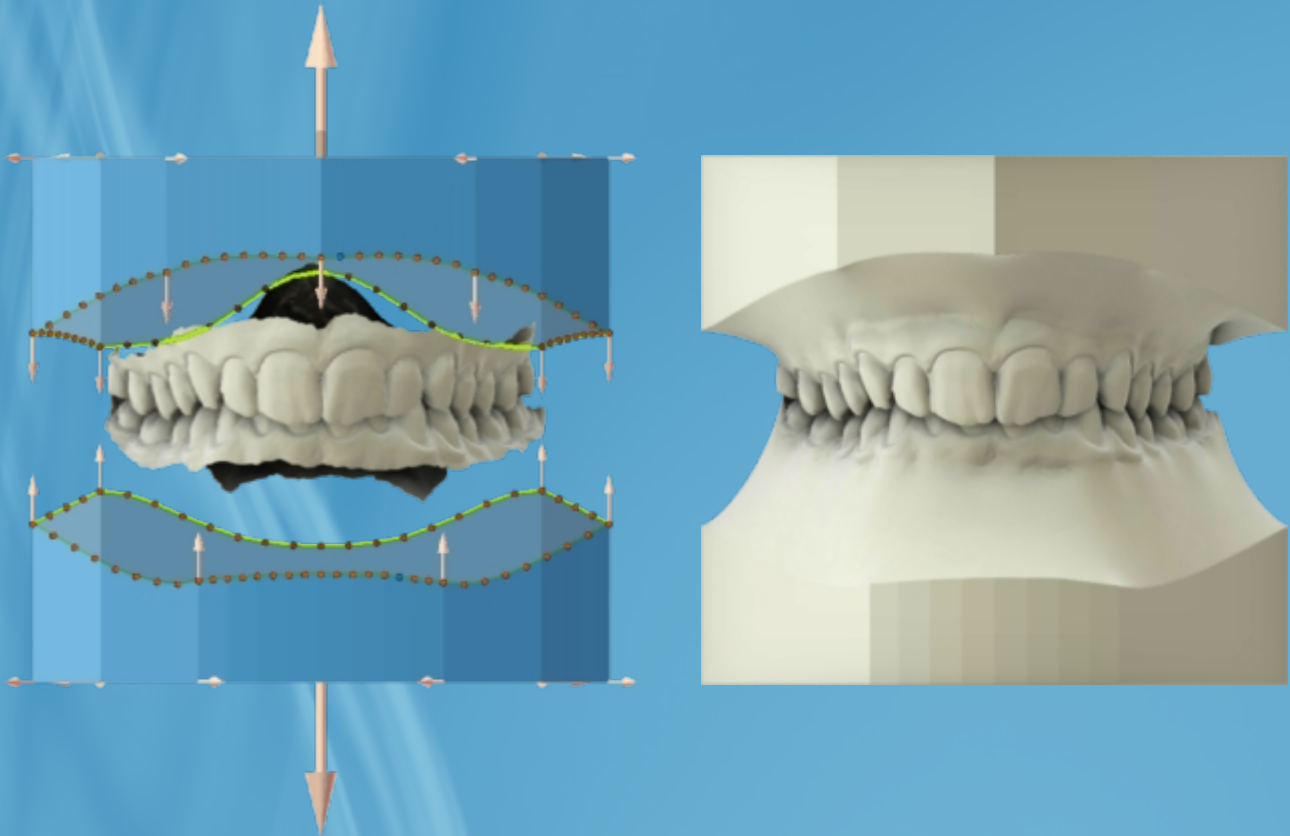


Easy to use both for the laboratories that for the clinicians, used in combination with Maestro 3D dental scanner, is the complete solution that helps the laboratories and the medical studies to enter in the digital era. Thanks to the union of the orthodontic module, the dental restoration module and the smile creator module in a single software, it is possible to exploit these several combined functionalities within an intuitive and integrated workflow.

# Dental Studio - Ortho Studio module

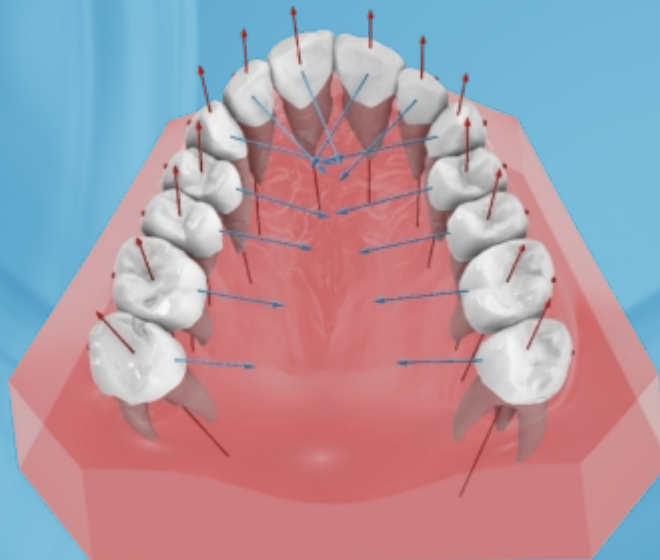
## Orthodontic basic module

The orthodontic basic module allows to manage clinic, doctors, patients and cases through a database. It allows to create virtual bases (ABO, ABO-2013, Ricketts, Parallel, Tweed) and add them to the scanned stone models. It is also possible to perform occlusal inspection analysis, 2D / 3D sections, measurement on teeth and full arches. This module is required in order to use the other modules.

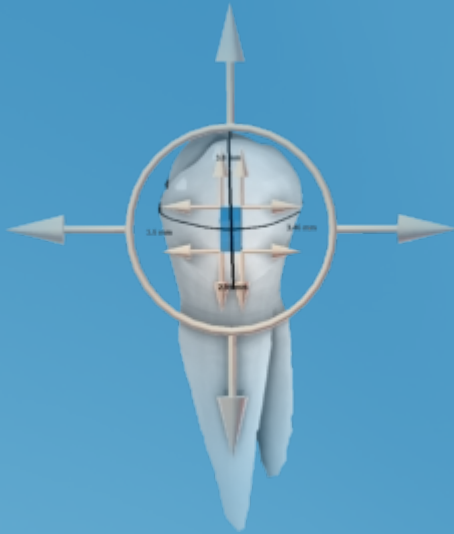


## Virtual Setup module

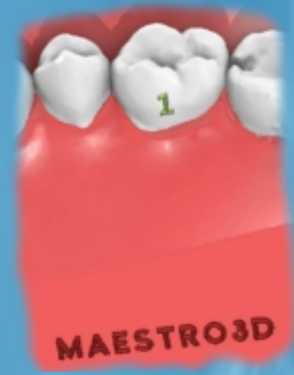
The virtual setup module allows to move the teeth for both the arches, evaluating distances contacts and intersections. It also allows to add and customize attachments / labels (both positive or negative) and to perform teeth extractions and IPR (interproximal reduction).







Attachment



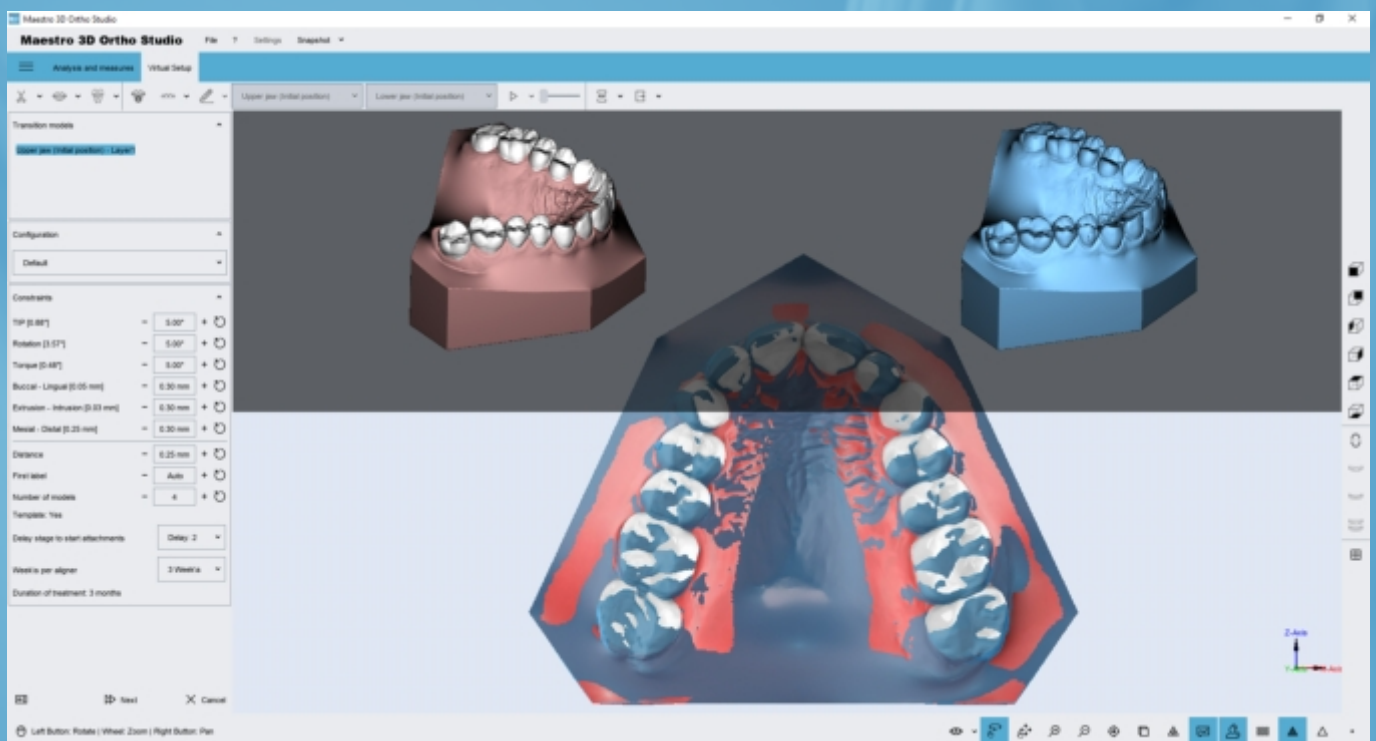
Label



IPR

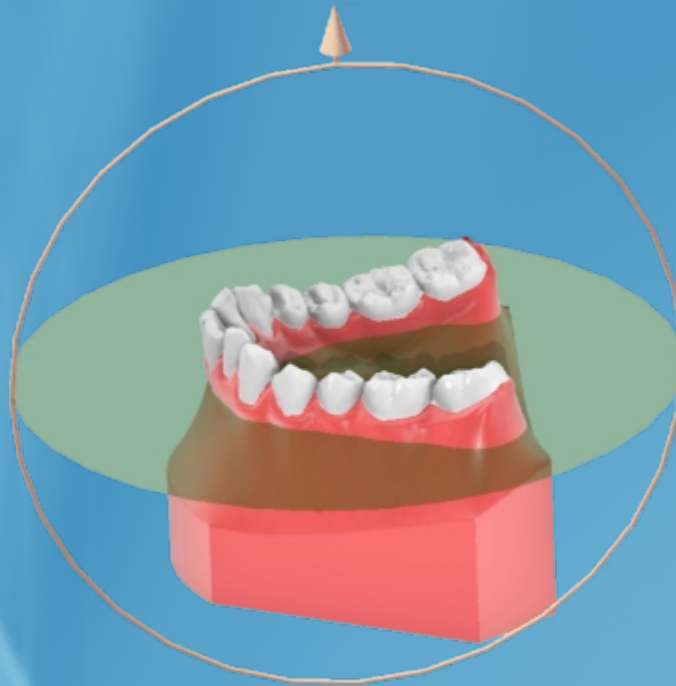
## Models Builder module

The transition models builder module allows to create the set of 3D models needed for the whole orthodontic treatment, ready to be exported in STL / PLY file format and optimized for the 3D printing. The user can decide the number of transition models, the maximum movement along the canonical axes and the maximum expected rotation for each model.



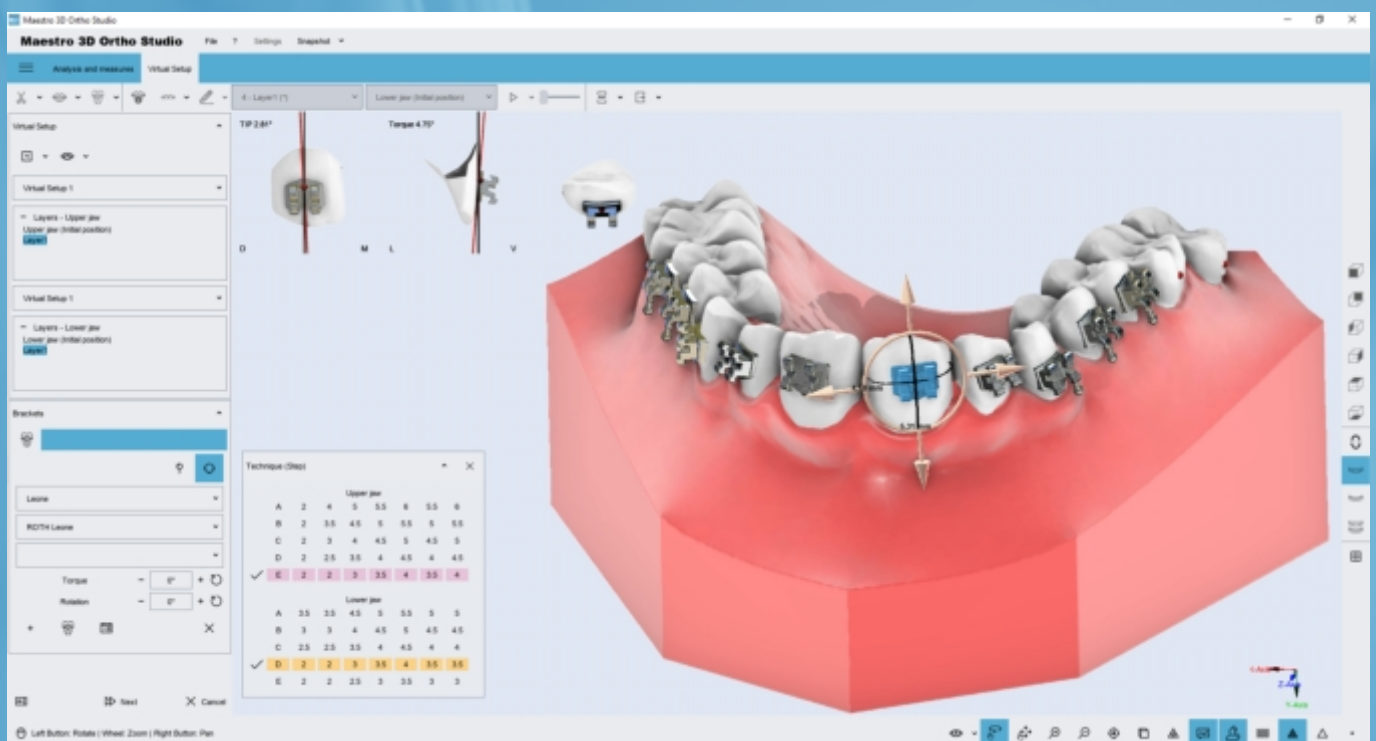
## Cut & Close

Remove excess parts in order to save material and speed up the printing process.



## Brackets Placement module

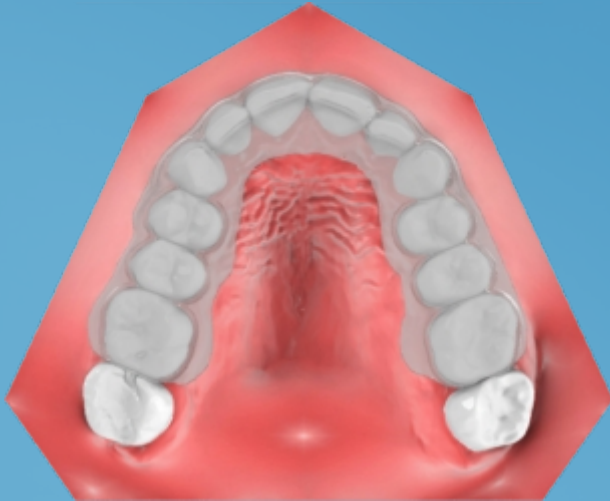
The brackets placement module allows to automatically place the brackets on the teeth. It offers various placement techniques (Step, Roth, Wick Alexander, Dwight Damon, MBT, Andrews) and, in combination with the clear aligner module, allows to construct several types of trays for the transfer of the brackets in the mouth of the patient.



## Clear Aligner module

The clear aligner module allows to design and construct the clear aligners in a virtual way; with this module is possible to draw the aligner shape, set a variable thickness and simulate the thermoforming. It also allows to make the bracket transfer trays for bracket placement (with or without jig) and the guide for etching for attachment placement.

### Clear Aligner

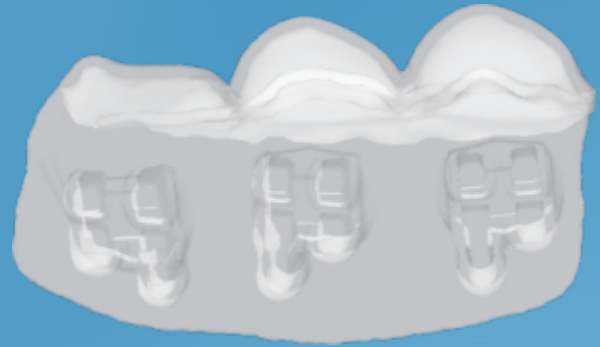


### Etching guide for attachment placement





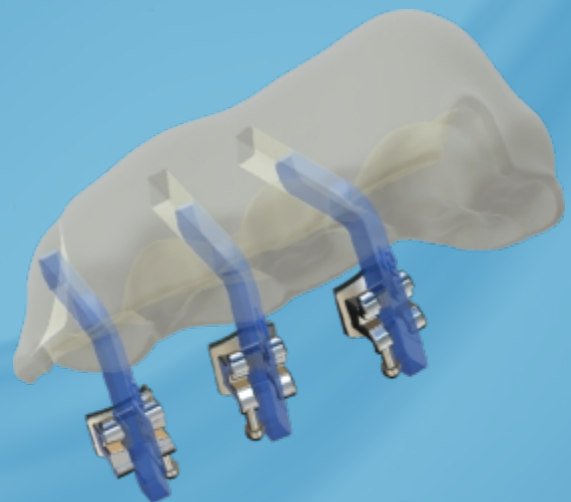
### Bracket transfer trays for bracket placement



### Bracket transfer trays for bracket placement (with windows)

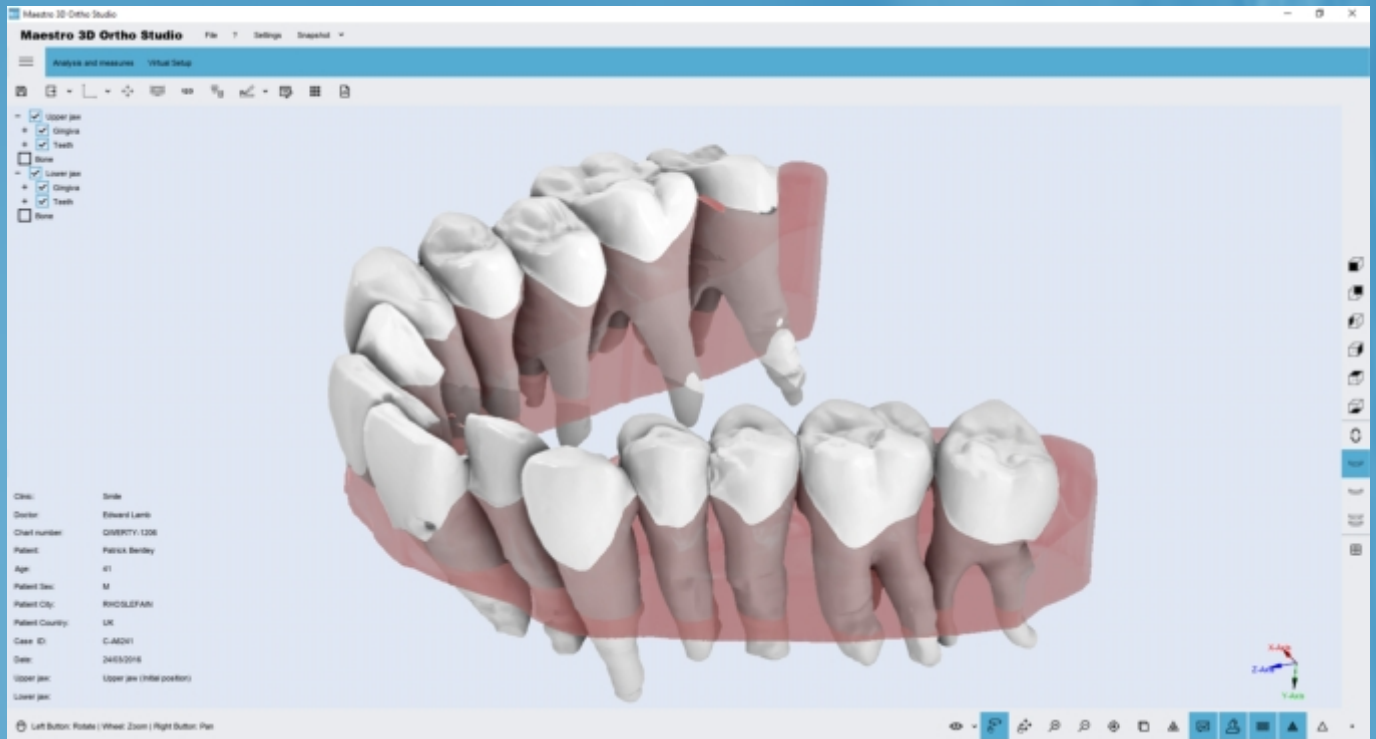


### Bracket transfer trays for bracket placement (with JIG)

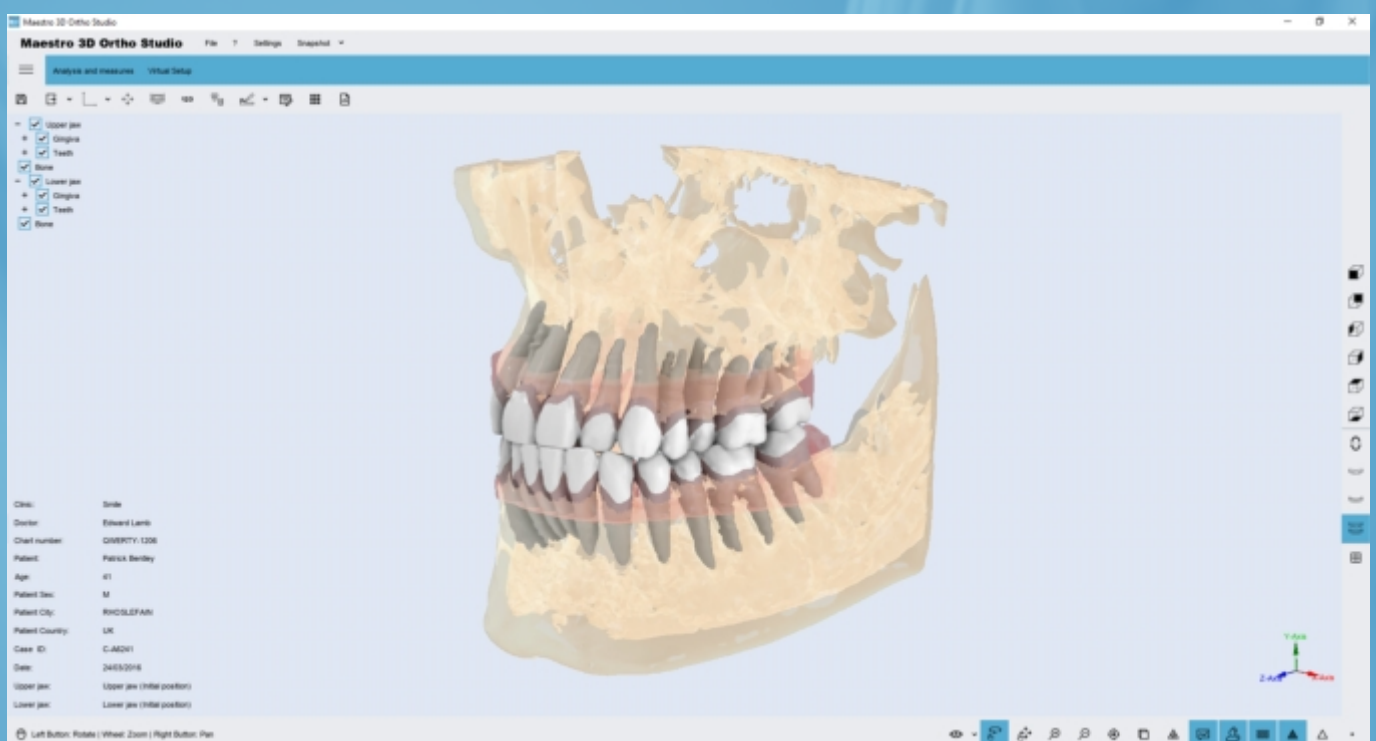


## Combine the real roots coming from CBCT devices

Use the real roots, when available, is really important in order to exactly determine the axes of the teeth and to know the exact position of the roots. The software allows to combine the scanned crowns with the real roots, obtaining a very accurate and detailed final 3D Model, very useful in the successive steps. The picture below shows an example of scanned crowns merged with roots coming from a CBCT scan. The merging process is fast, easy and totally automatic.



## Bones of the maxilla, mandible and the 3D model of the patient's face



## PDF3D module

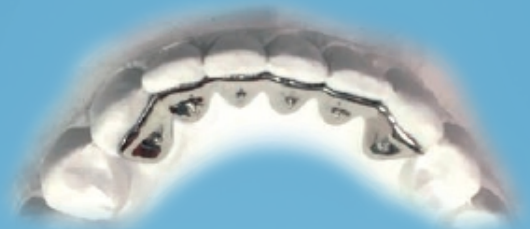
It allows to embed inside to the PDF report the 3D models of the case, containing the movement overview and the details of the performed virtual setup. A very powerful and effective way to share the performed work with the doctor.



## New features coming for Ortho Studio

### Appliance Creator module (coming soon)

#### Retainers



#### Guide for the insertion of skeletal anchorage system in the palate



#### Expander





## Bite module (coming soon)

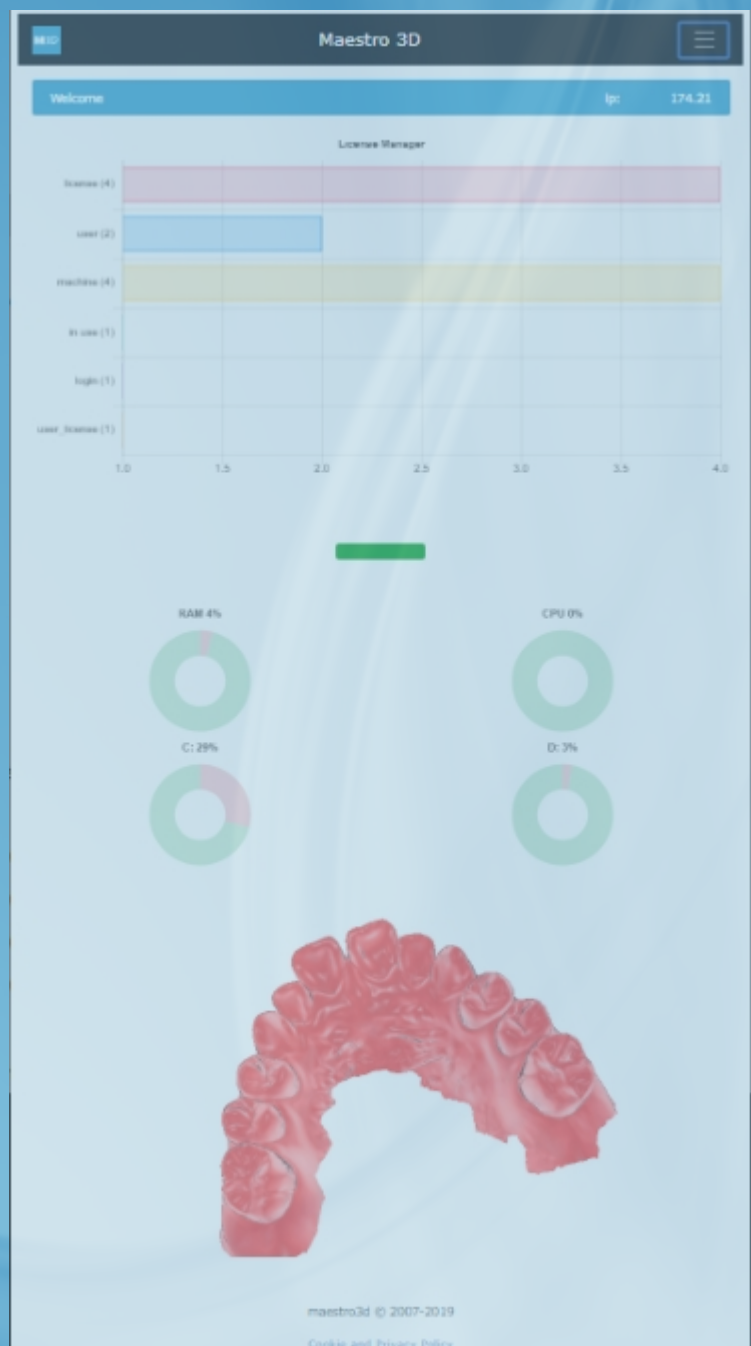


- automatic nighthguard creation based on few simple parameters;
- easy to use tools to detect/remove undercuts and to edit the surface;
- automatic contact point detection/intersection removal with the antagonist.

New Business model  
PayPerUse (coming soon)



Online 3D Viewer  
(PC, smartphone, tablet)  
(coming soon)



# Maestro 3D Cloud

Share your work cases with your customers and colleagues. Allow your customers to accept the job case or suggest changes.



The login interface features the M3D logo at the top, followed by a green 'Welcome' banner. Below this is the text 'Please sign in'. The form contains two input fields: 'Email address' and 'Password', each with a small icon of a document with a checkmark. A blue 'Sign in' button is positioned below the fields. At the bottom, there is a copyright notice 'maestro3d © 2007-2019' and a link for 'Cookie and Privacy Policy'.



Welcome

Please sign in

Email address 

Password 

Sign in

maestro3d © 2007-2019

[Cookie and Privacy Policy](#)

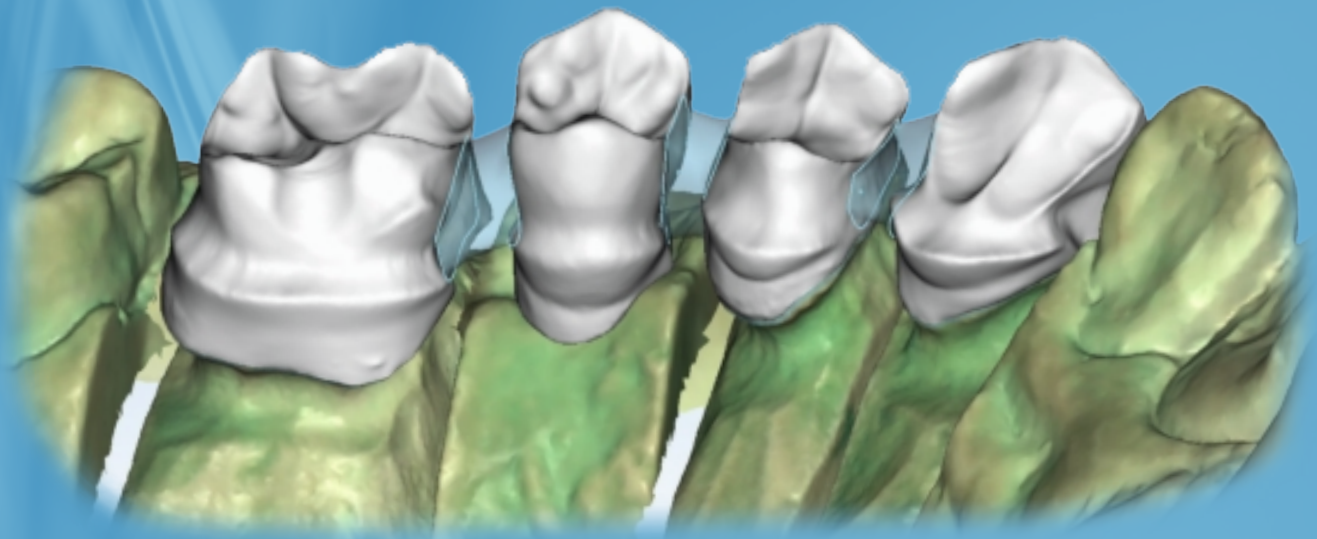


# Dental Studio - Dental Restoration module

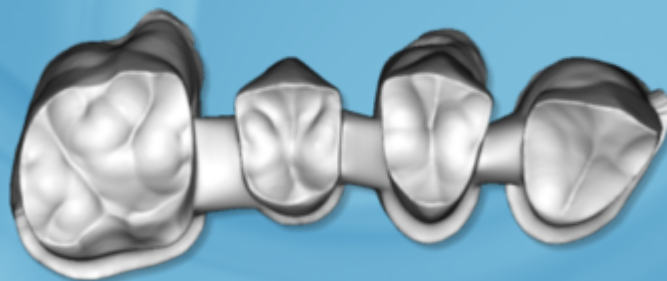
## Dental Restoration basic module

The Dental Restoration is a robust and reliable software package that with minimal training costs helps maximize the productivity of the study or laboratory. It is a CAD tool, reliable and accurate, both when it comes to small operations that when it comes to complex cases.

- automatic margin line detection and easy editing of margin line;
- automatic undercut detection and removal;
- automatic anatomy placement;
- anatomy reduction;
- advanced connectors design and editing.



<b>Fast:</b>	just a few minutes to perform all the creation of their work operations;
<b>Easy to use:</b>	thanks to the wizard mode, it is very easy to perform any operation;
<b>Open:</b>	both inbound and outbound, the software accepts and generates open standard file, making the user free to turn to those who prefer to produce;
<b>Royalty free:</b>	no compulsory fee or annual licenses.

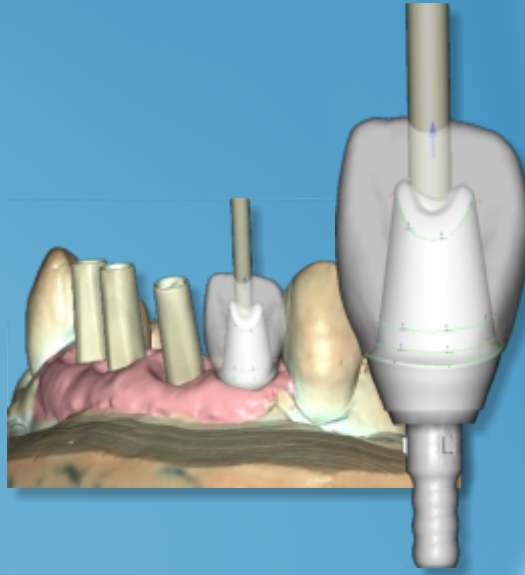




# New features coming to Dental Restoration

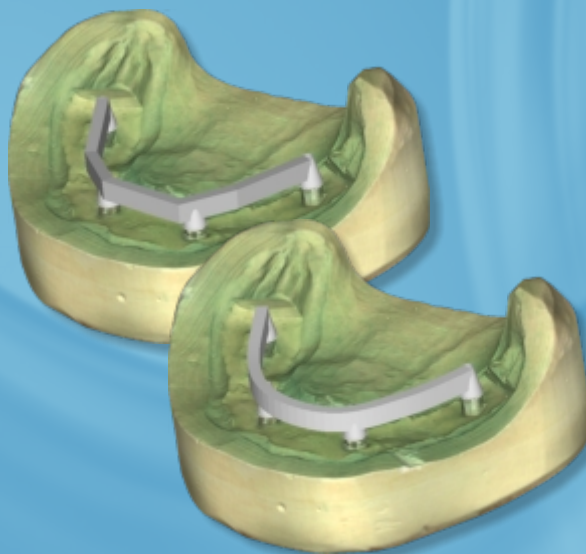
## Custom Abutment module (coming soon)

- automatic emergency profile detection;
- easy to use tools for making screw retained, with titanium base and one-part abutments;
- customizable screw channel direction;
- simultaneous custom abutment and screw retained bridge construction.



## Bar module (coming soon)

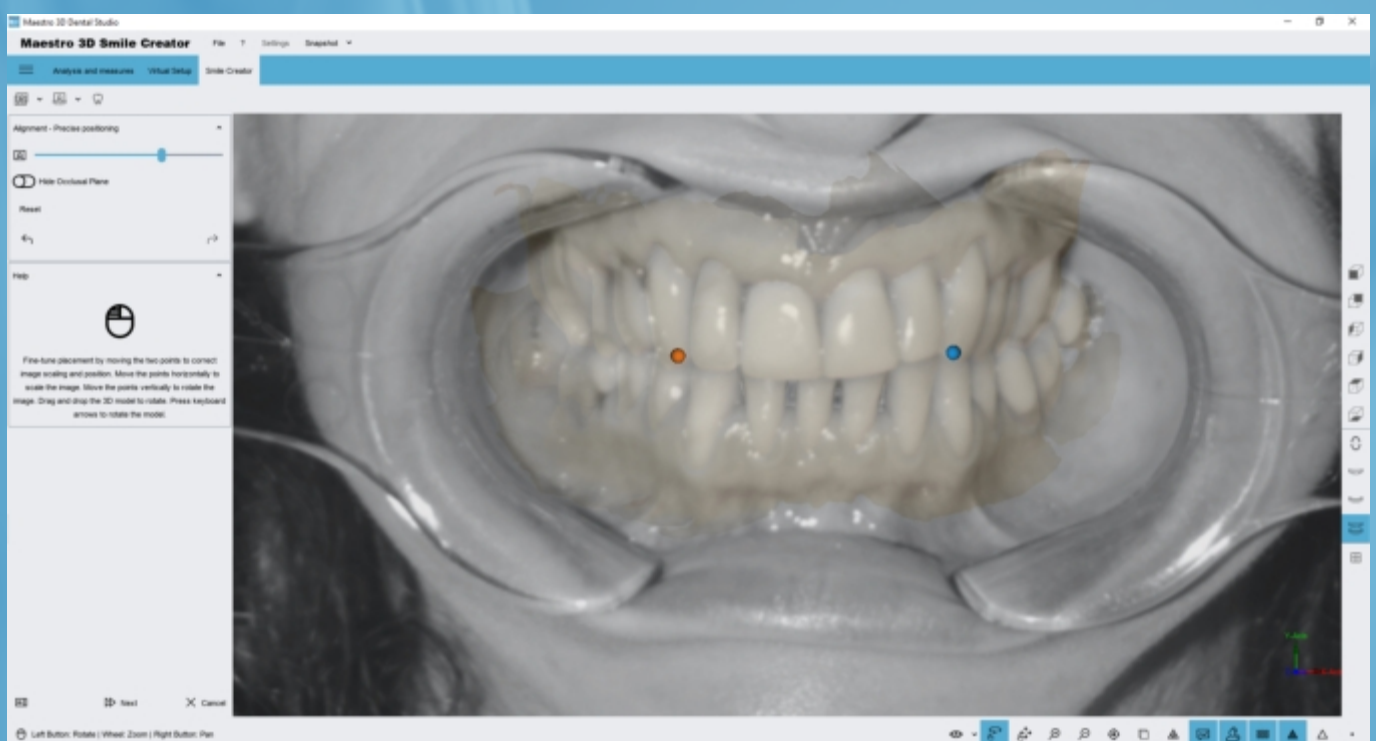
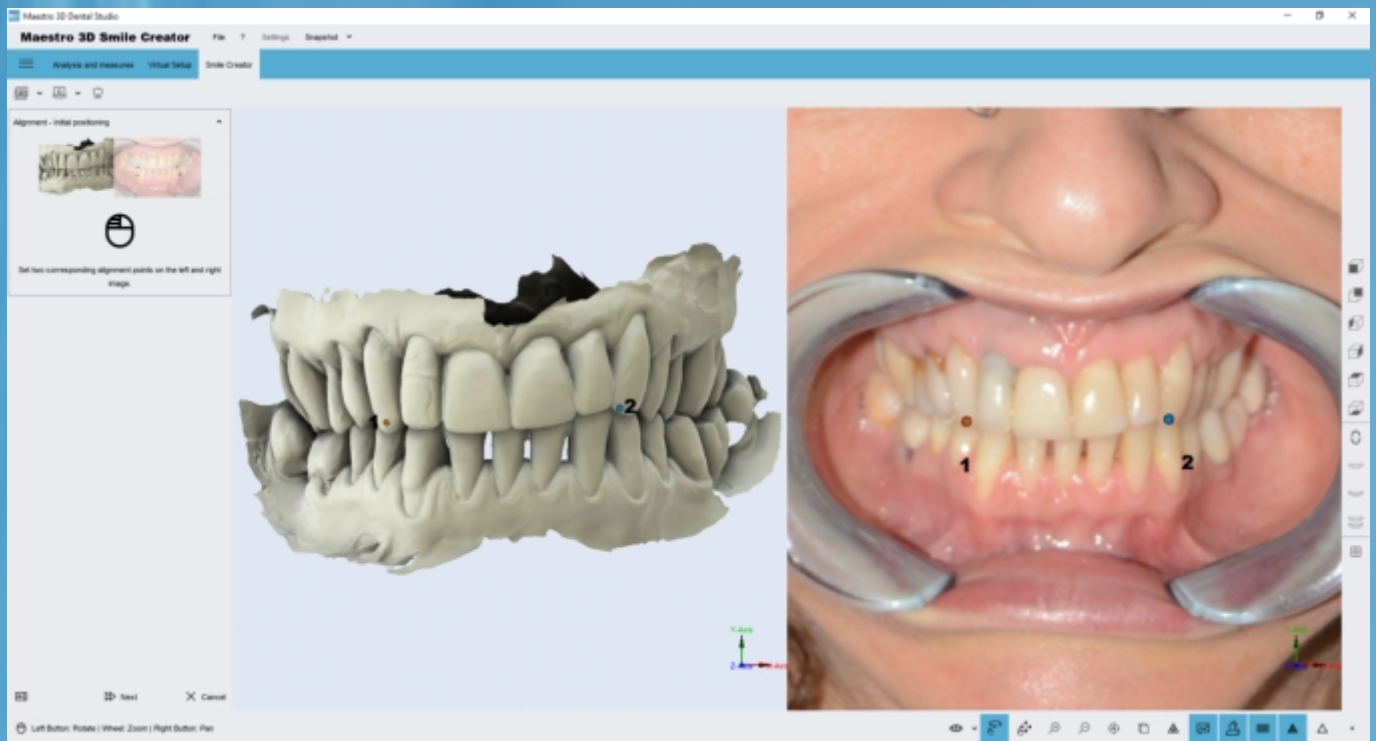
- easy to use tools for making standard bar and advanced custom bar shapes;
- custom attachments or retentions.

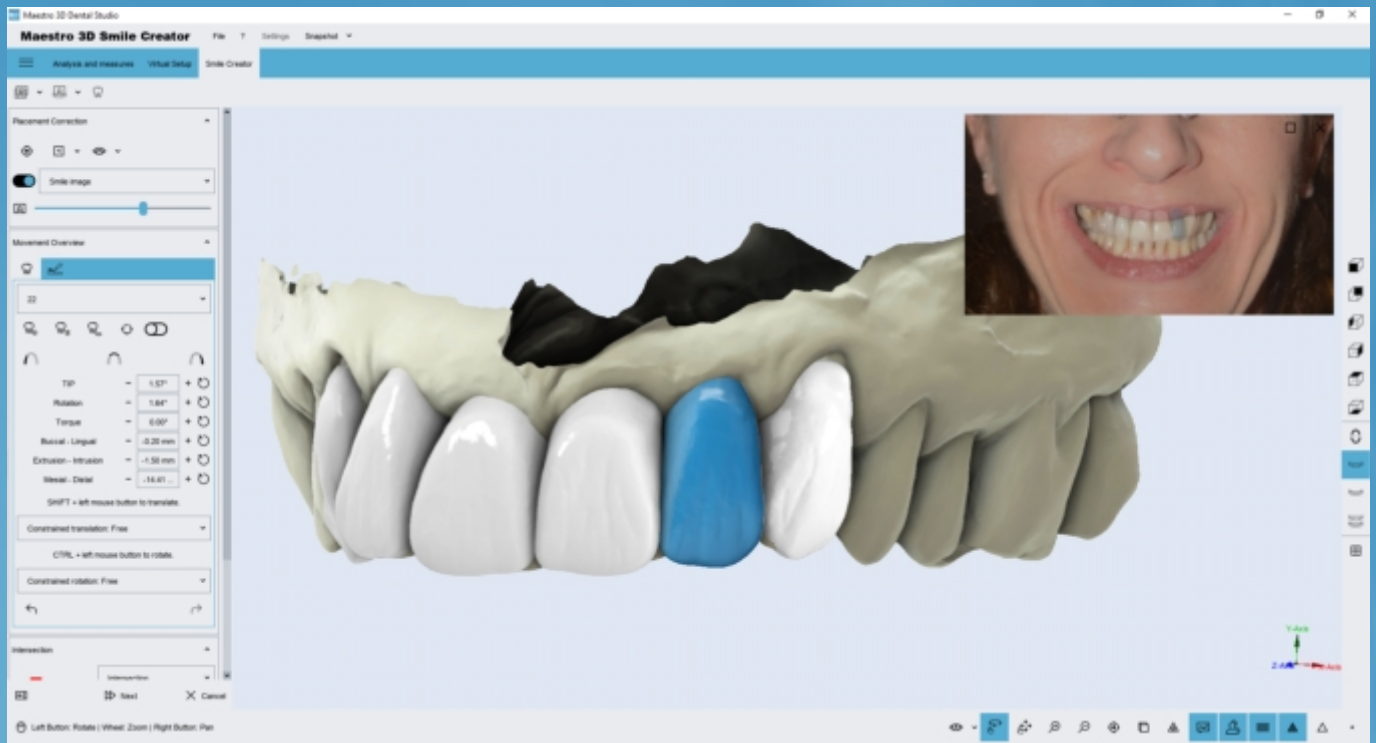


# Dental Studio - Smile Creator module

The Smile Creator module is an innovative technique of dental aesthetics able to give you a preview of your 3D smile. Thanks to the Smile Creator module, dental specialists can perform highly esthetic tooth restorations, offering the patient the desired smile.

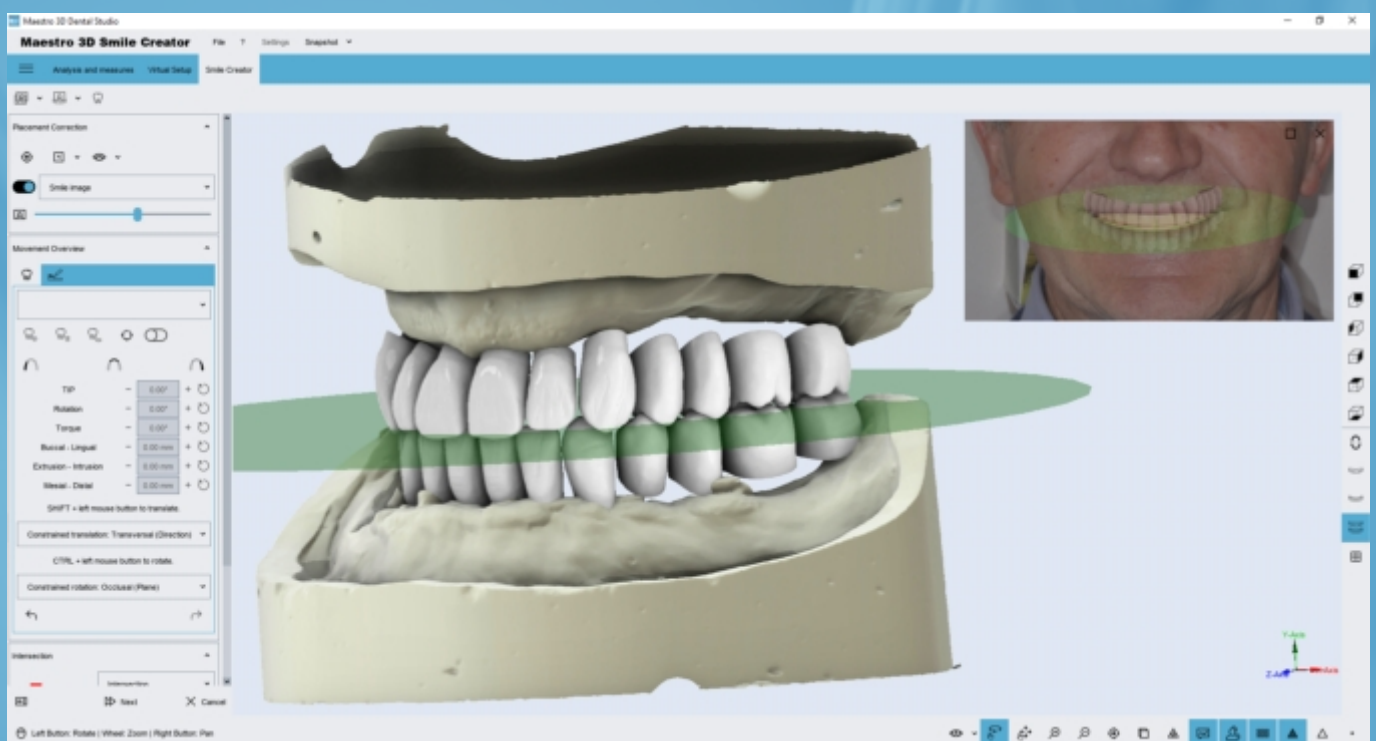
## Mockup module





## 3D Denture Guide module

This module allows you to easily create a printable positioning guide to mount commercial teeth in the patient's dental impression. Taking in input the 2D images of the patient, the 3D impressions of the edentulous part and of the waxwall, it allow to perform the various 2D and 3D alignments and then go to place the commercial teeth through a library, to align the patient's 2D images and 3D impressions of the arches and waxwalls, using the assembly and brand of the teeth you want to use. The aim is to create a printable guide that helps the user to place the commercial teeth on the 3D impression of the patient's mouth, in order to replicate the positioning obtained in the software.





# MAESTRO 3D

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