

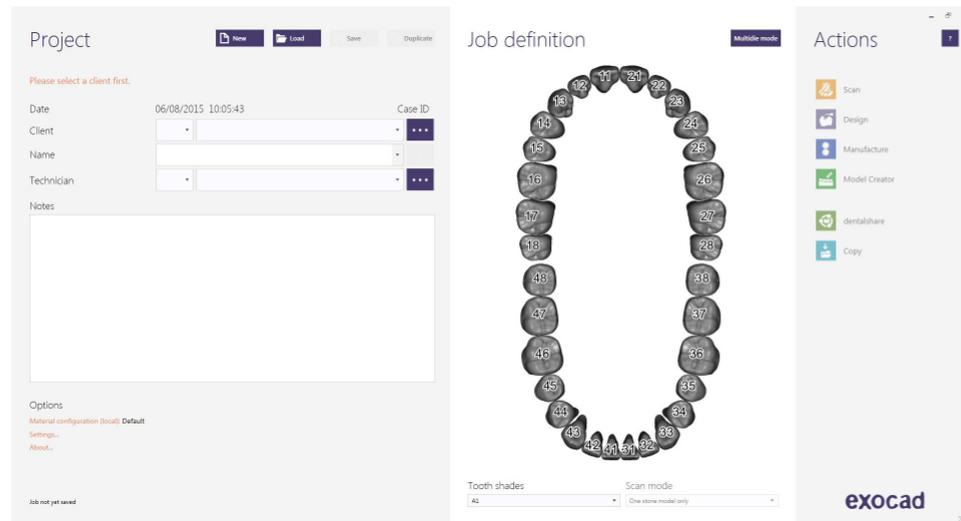
**exocad**

# INSTRUCTIONS OF USE

BIBLIOTECA DYNAMIC ABUTMENT® SOLUTIONS

## INTRODUCTION

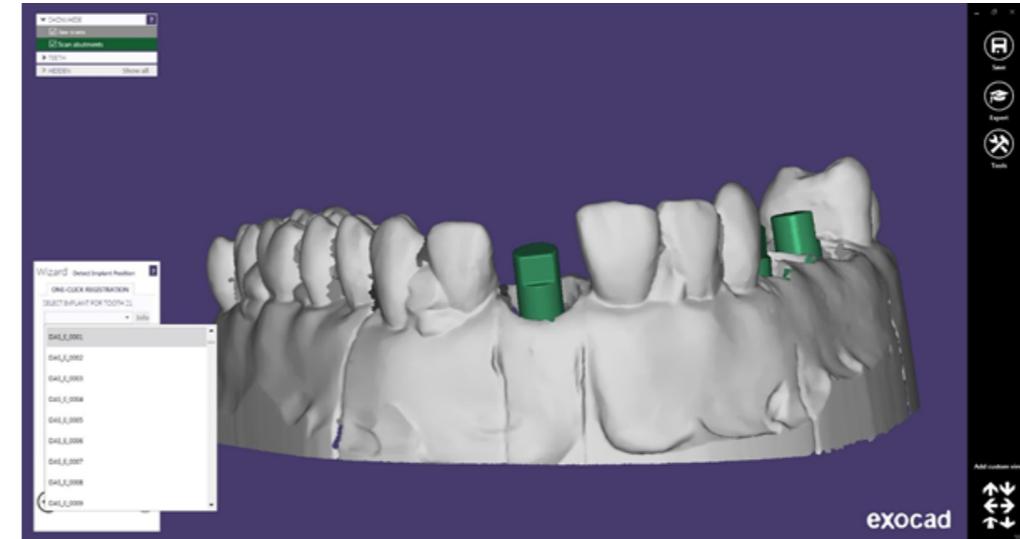
When starting the Exocad Dental DB program, it will appear the following screen that defines the work to do.



In this screen it is defined client, patient, technician, type of work, materials, etc. It is completely defined the work without specifying the brand and implant model. It should be defined that working will be with implant, as the construction will be based in one or more implants depending if the work is single or multiple.

## SELECT DYNAMIC ABUTMENT® SOLUTIONS (DAS) LIBRARY

At the moment to select DAS library, you could choose between different compatibilities that are available (Nobel Biocare, Straumann, Astra, etc.)



DAS library provides different compatibilities, which are classified with the following nomenclature:

DAS= Dynamic Abutment Solutions

E= Extraoral

0001/0002/0003/... = compatibility

Ti-Base\_NR (CH\*/GH\*)= Engaging TiBase

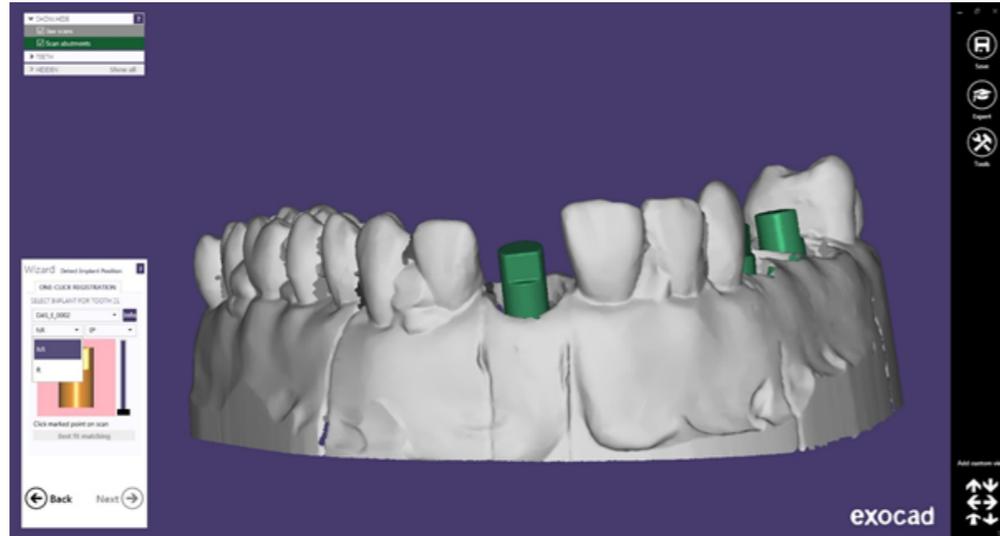
Ti-Base\_R (CH\*/GH\*) = Non-engaging TiBase

\* (CH= Cement Height / GH= Gingival Height)

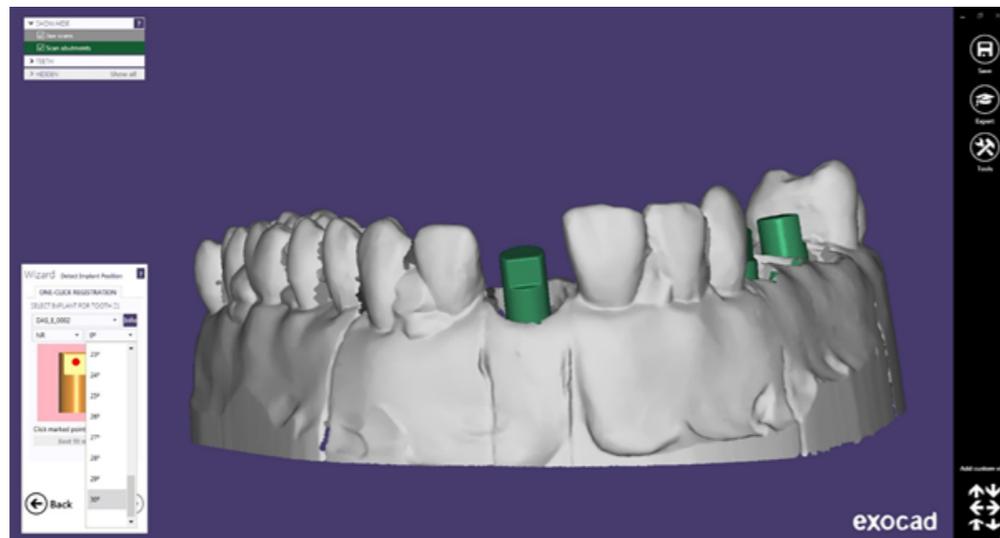
The company has a PDF directory, which links the implant compatibility with a serial number. For instance, the compatibility DAS\_E\_001 corresponds to Biomet 3I Certain Narrow Platform. The same number could correspond to more than one compatibility, for instance DAS\_E\_0024 is compatible with Nobel Biocare Branemark Regular Platform but also compatible with all external hexagon that are compatible with the dimensions of external hexagon of Branemark Regular Platform.

NOTE: the angulation of the chimney it goes always on the opposite side of the scanbody lateral cut. Also it is possible to move horizontally 45° the angled channel to each side from the central axis.

Once choosing the compatibility to work with, decide now if work is non-rotatory or rotatory (NR or R), the gingival height of the Tibase® (GH) and/or cement height (CH) if working with the 3Tibase®.



Once selected if work will be “Non-rotatory” or “Rotatory”, proceed to select the desired angle. It may be selected from 0° to 30°.

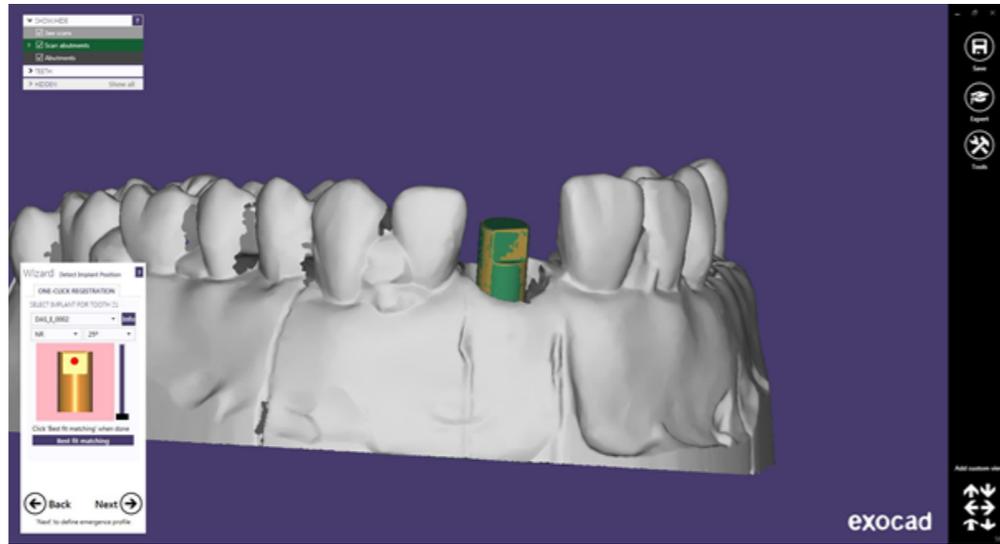


To explain the work to make we will use the central scanbody and we will make a single case.

Once selected the work and angulation of 25° (as example), we will proceed to the place the scanbody in the working area. The angulation in this step is an estimation. The angulation can be changed when designing the structure. It is recommended to choose the most approximately angulation in order to minimize angulation changes in the next steps. This advice is given due to the fact that the angulation section in Exocad when changing the angulation and channel direction, the screw hole design is deformed –making the hole larger than the one designed initially.

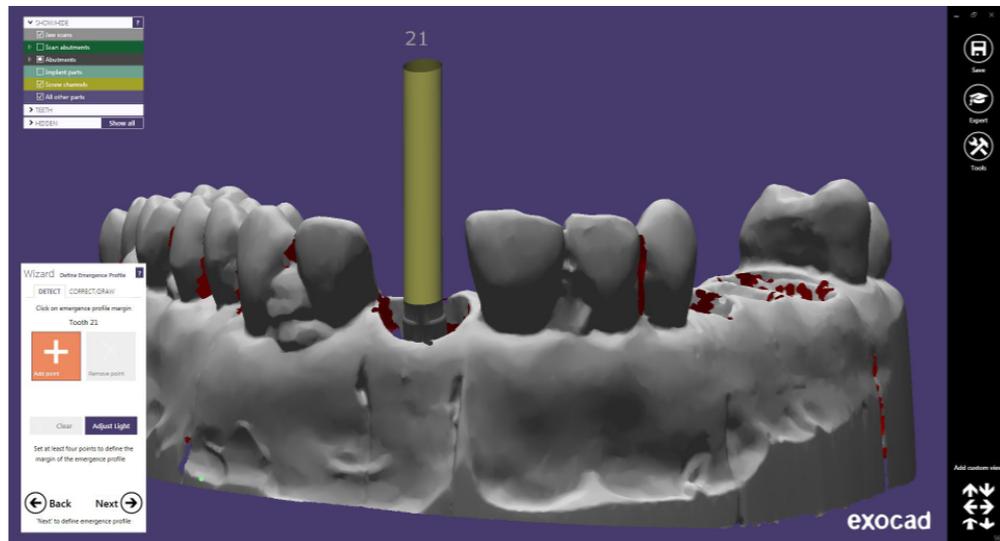


It can be observed that the scanbody is not in a perfect position. Click on “Best fit matching” and position correctly the scanbody.

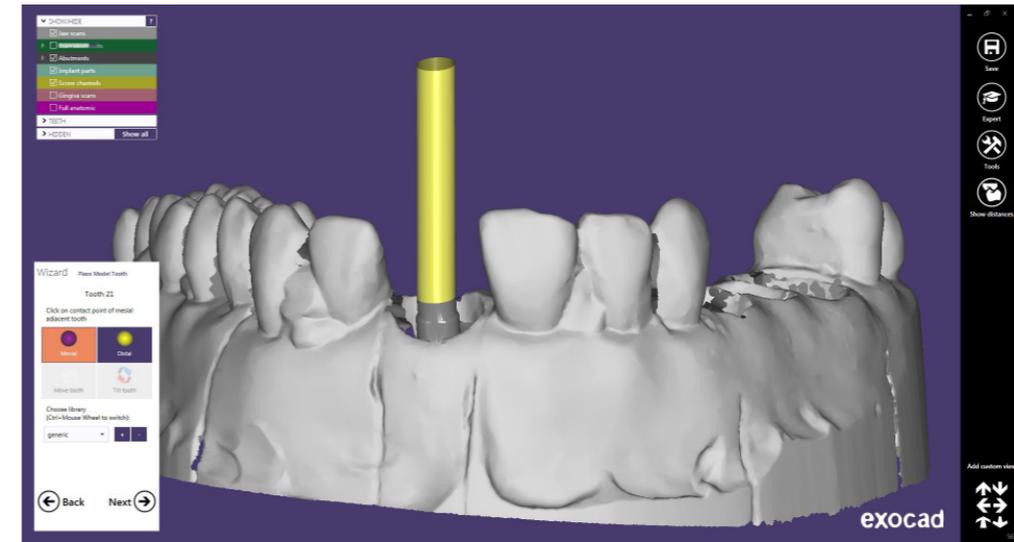


When scanbody is positioned correctly, click on "Next".

In the following screen it is defined the emergency profile. (It is the same for any library)

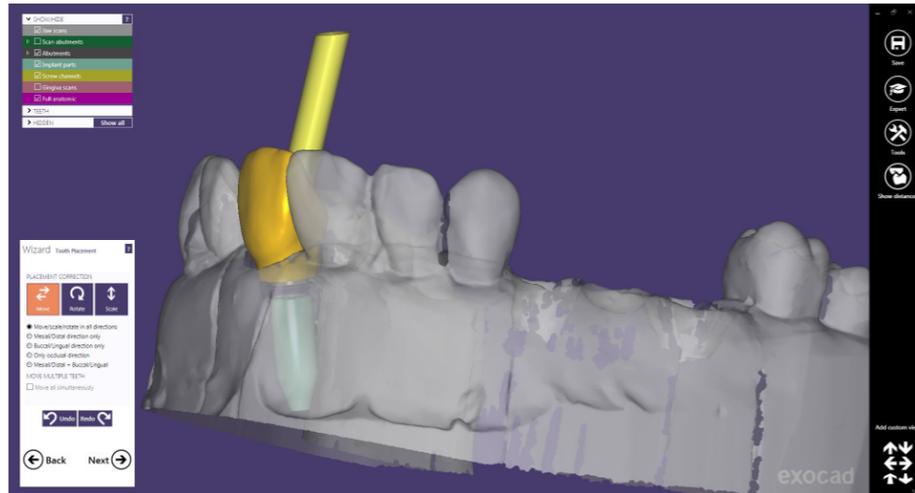


Then defined the position of tooth model. (It is the same for any library)

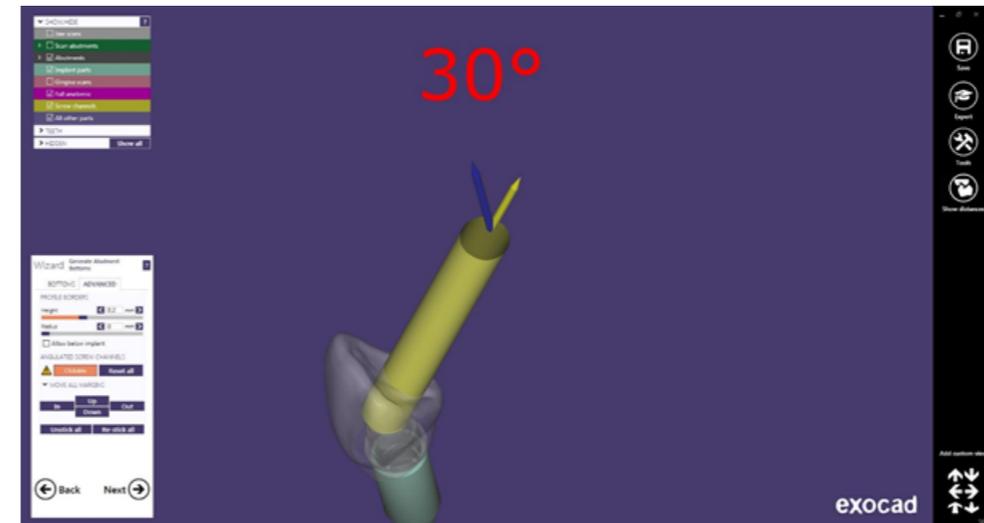


## STRUCTURE DESIGN

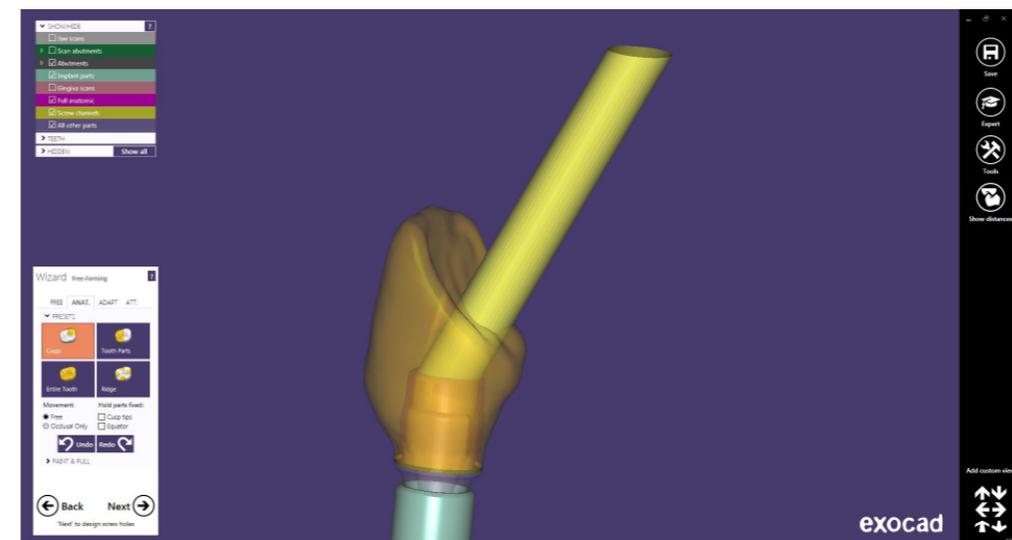
In this step it is defined the position and the structure scale.



Then, on "Create abutment base", on "Advanced", there is an option called "Angulated screw channels" where the angulation and chimney direction can be changed. It is recommended that changes either in angulation and direction are not excessive, as the angulation section of Exocad deforms the chimney, making the hole channel with a larger diameter than the original. For instance, change from 25° to 30° is a good solution, but a change from 5° to 30° would cause a channel deformation and would not remain aesthetic. In addition, pay attention when the channel direction changes due to an excessive change would deform the screw channel.

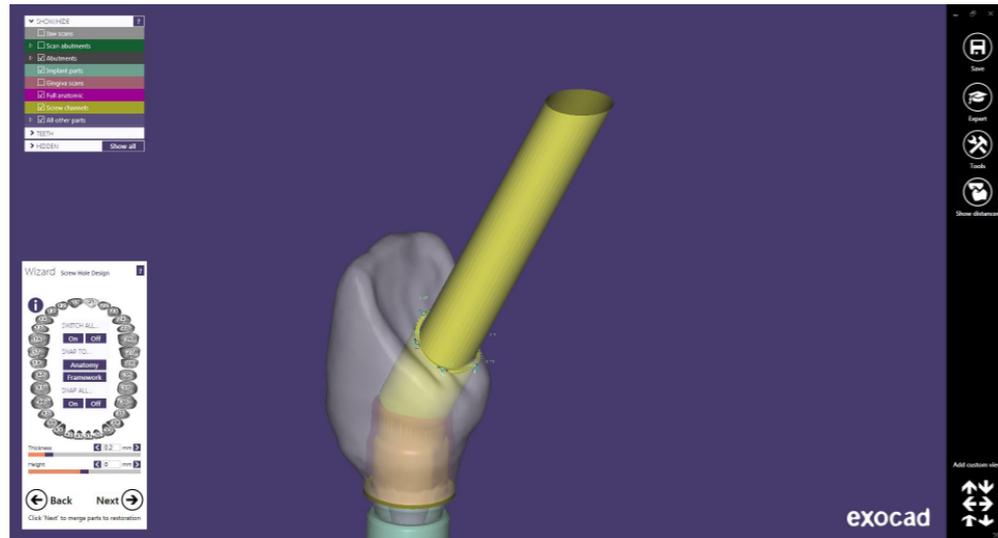


Next it is defined the anatomical design of the structure.

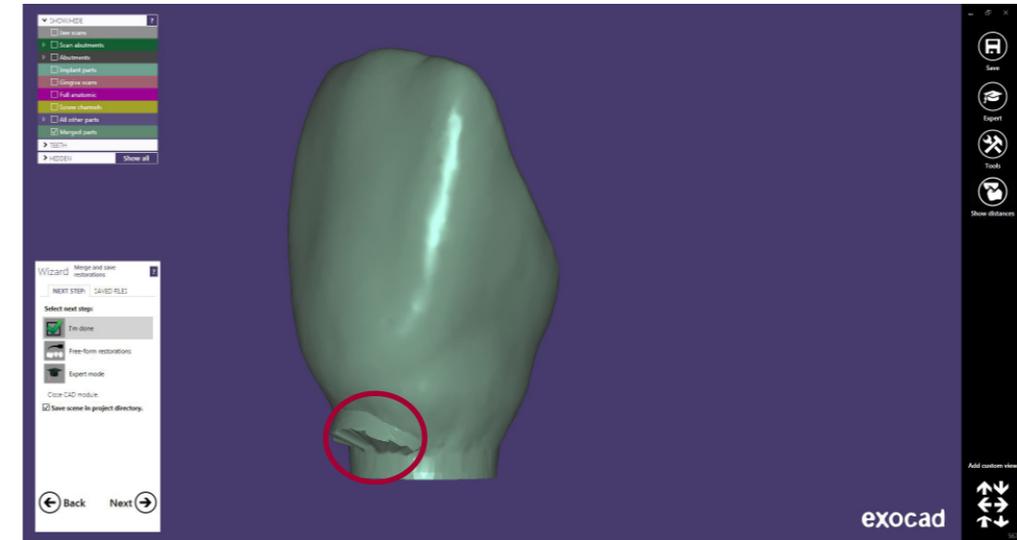
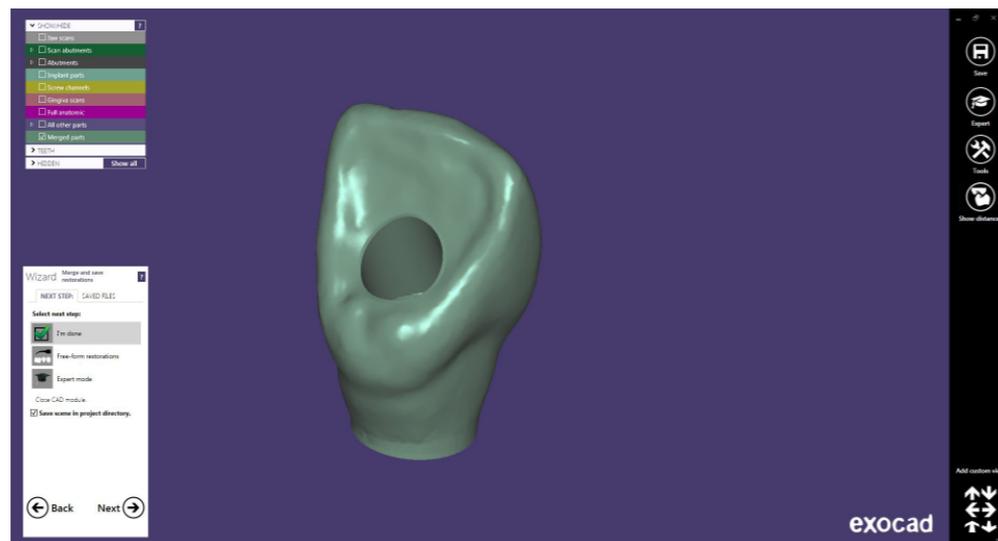


## SCREW HOLE DESIGN

In the screw hole design section, it is possible to modify height and thickness (it is the same for any library).



Once screw hole design is finished, click on "Next" and the following design is obtained

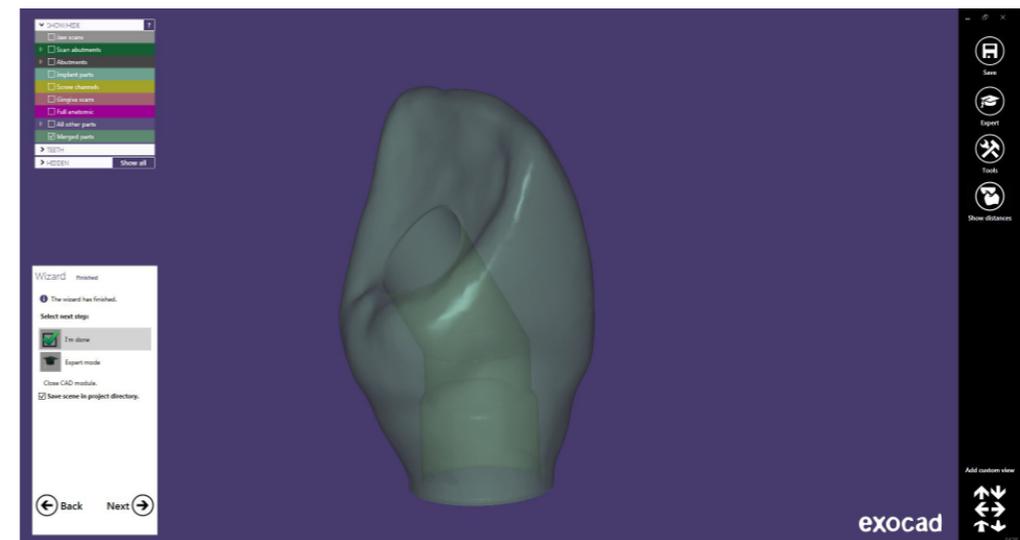
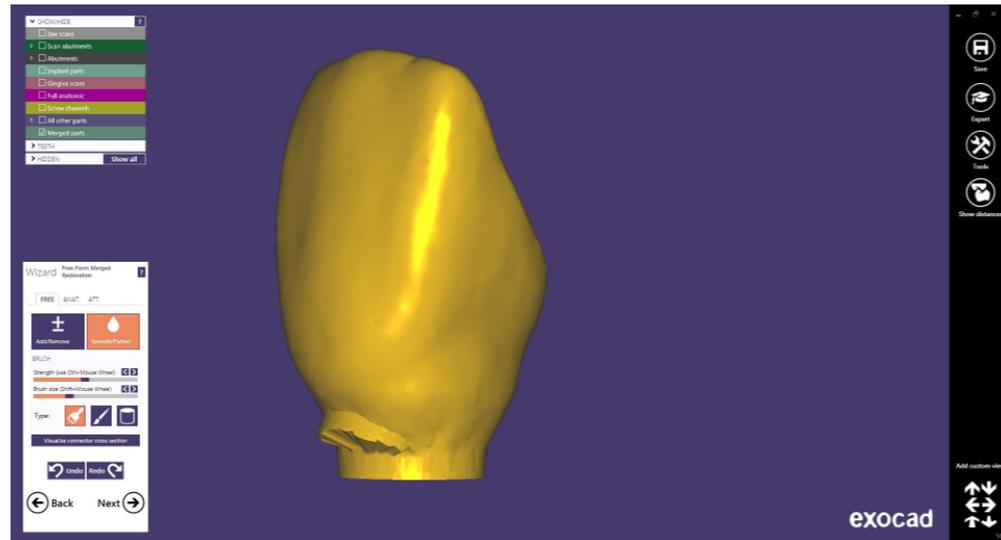


As it is observed in the previous image, in some cases a straight channel is generated (red area) that stands out from the structure. This happens because work is made with angled chimneys, but it is of easy to fix.

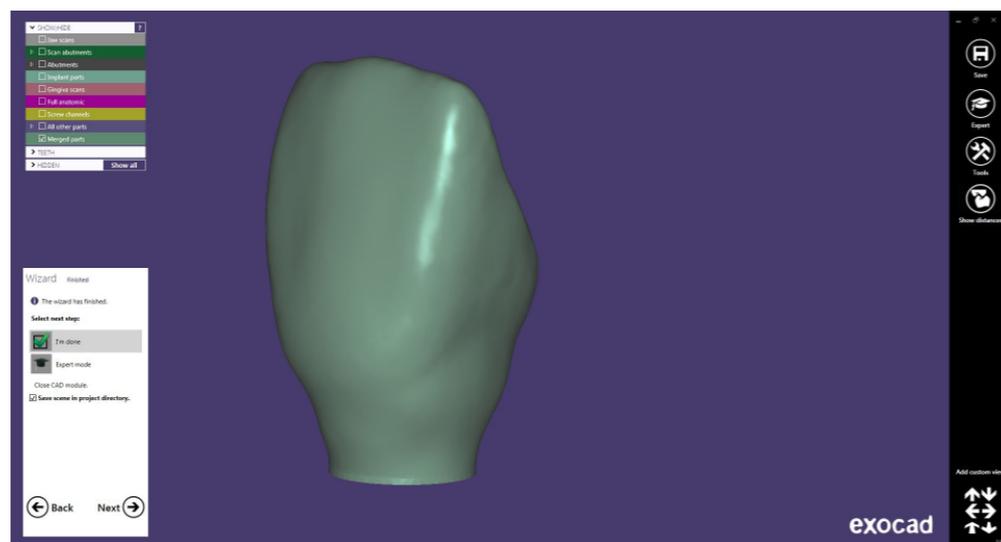
The structure is finished when clicking on "Finish" then click with right bottom over the structure and choose the option "Freeform merged reconstruction".



On the "Freeform merged restoration" menu, click on "Smooth/Flatten".



The deficient area is revised till obtaining the desired aesthetic and achieving the final result.



## ANNEX: CAPTIVE LIBRARY INSTRUCTIONS FOR USE

### Introduction

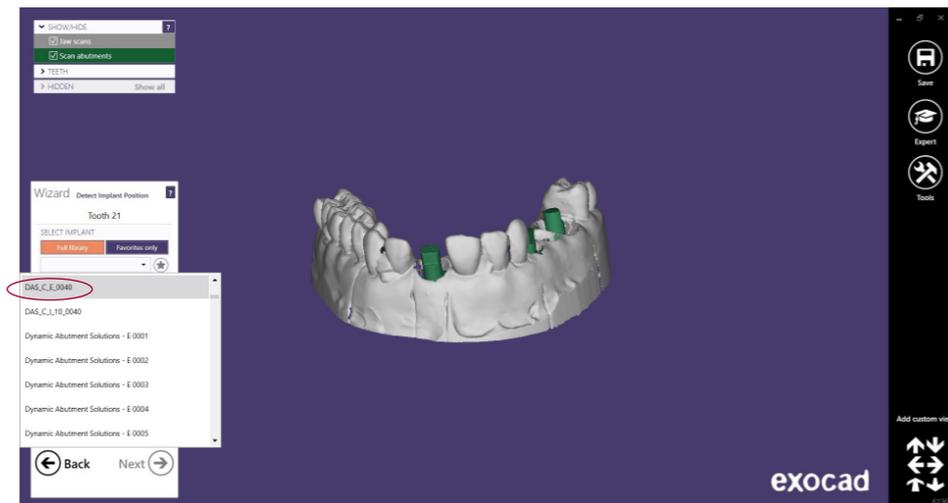
Working with captive screw, the Dynamic Abutment Solutions library is designated:

DAS\_C\_E\_XXXX working with Tibase scanbody

Where C means captive, E is Tibase scanbody and XXXX the compatibility code.

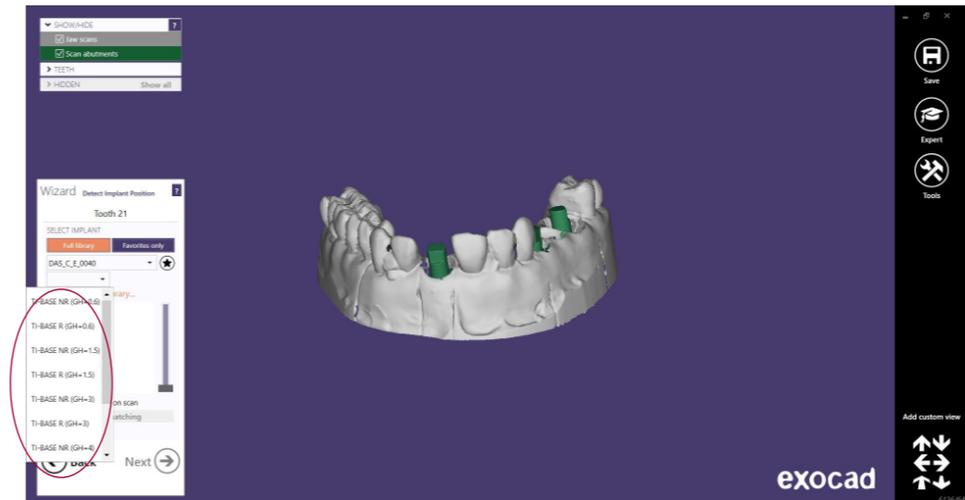
Note: when working with captive screw, it is necessary to place first the screw on the Tibase and after cement the structure, obtaining approximately a screw channel of 2mm which allows to remain the captive screw.

Working with this library, the process to start the software is the same. Choose the option to work with the captive screw, selecting the library according previous indications. See the library name on following picture.



After selecting the connection to work, select the type of work. One of main advantages of this system is there are different Ti-bases with different gingival heights, either engaging or non-engaging.

Ti-Base\_NR (GH\*) = Engaging TiBase  
 Ti-Base\_R (GH\*) = Non-engaging TiBase  
 \*(GH= Gingival Height)



After selecting the type of work, select if the work is with straight (0°) channel or angulated channel up to 25° to 30°.

