



DYNAMIC ABUTMENT * SOLUTIONS

MULTI-UNIT DASSYSTEM

Work different, work better



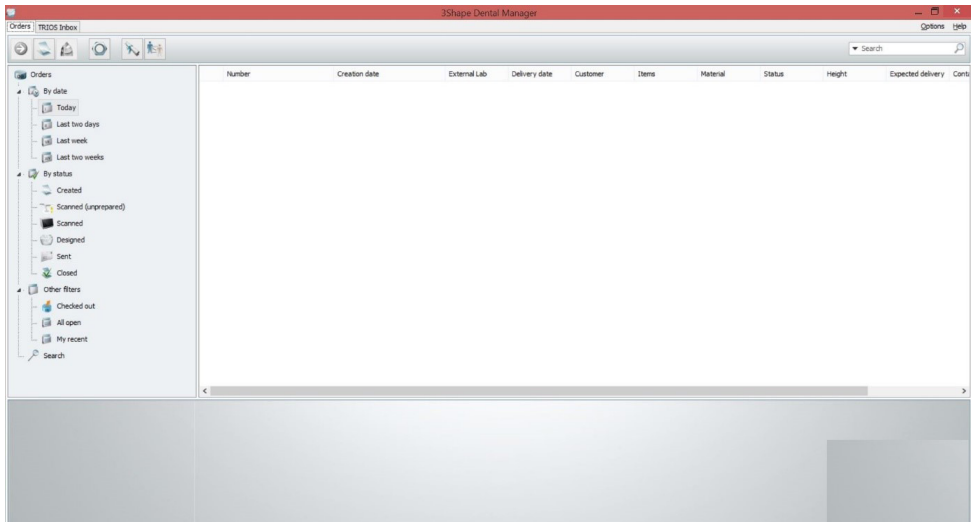
INSTRUCTIONS FOR USE

DYNAMIC ABUTMENT® SOLUTIONS

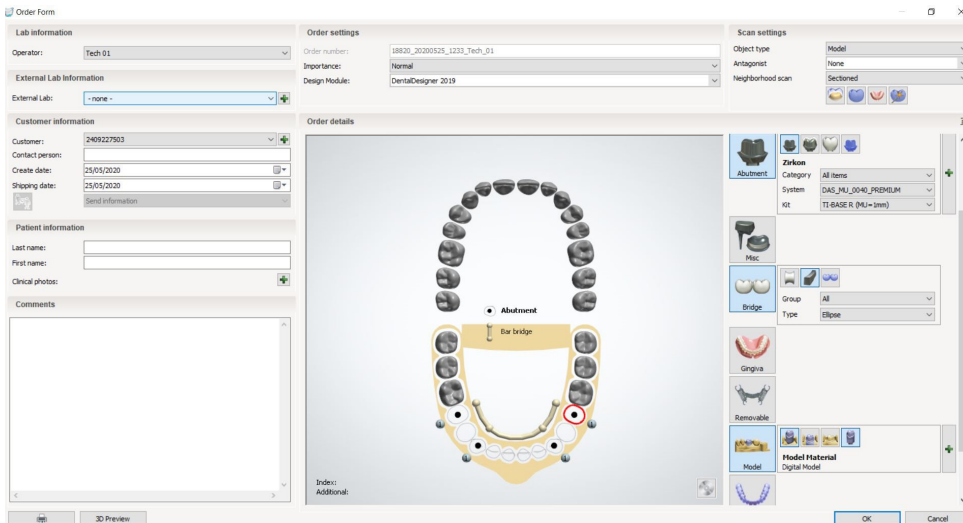
3shape 

INTRODUCTION

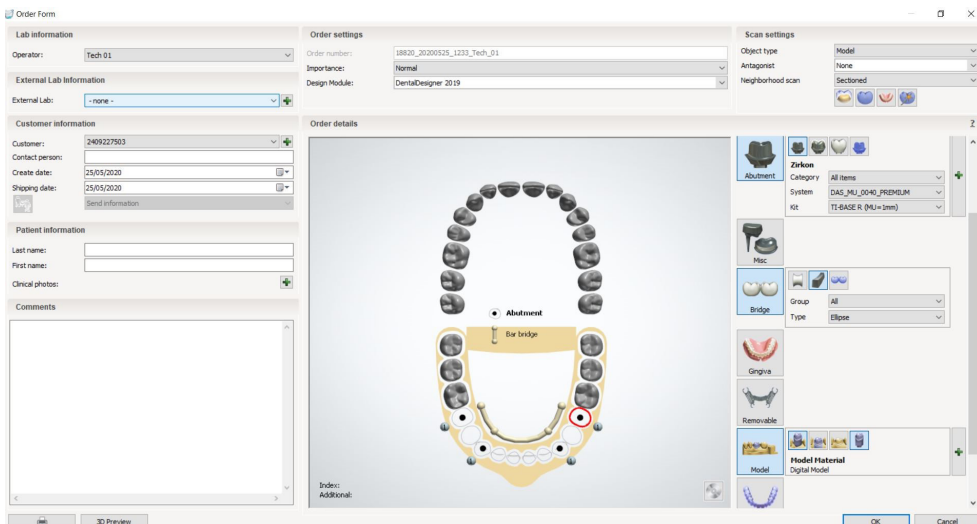
When the 3Shape Dental System program is started, the following screen appears to define the new work order. Select “New” to create a new order.



In the next screen you define the type of work to be done. You will select the dentist, laboratory, patient's name, scanning options, type of work, material, etc.



Then click on the tooth to be worked on, it will be highlighted in red as shown in the following image.



Then select the “Pilar” icon. As you can see in the previous image, under “Category” the name of the library will appear or, otherwise, “All Items”, under “System” it refers to the compatibility of the implant and under “Kit” to the subtype, if working with ti-base, direct to implant or direct to provisional implant.

Select Dynamic Abutment Solutions library (DAS MU)

When selecting the DAS library to work with the Multi-Unit DAS system, you can choose from different Scanbody systems for scanning, which are:

- DAS Scanbody Multi-Unit
 - DAS ScAnalog Multi-Unit (For more information on how to work with a ScAnalog, request specific ScAnalog Instructions for Use).
 - Dynamic Scanbody (8mm, 10mm and 12mm, with I or IG adapter options)
- Then with the type of Scanbody you must choose the compatibility of the implant (such as Nobel Biocare, Straumann, Astra, Zimmer, etc.).

The DAS libraries have, as mentioned above, different Scanbody options, which are represented by the following nomenclatures:

DAS_MU_XXXX_PREMIUM - Library with Scanbody Multi-Unit

DAS_MU_SA_XXXX_PREMIUM - Library with ScAnalog Multi-Unit

DAS_MU_I/IG_HH_XXXX_PREMIUM - Library with Dynamic Scanbody (only for rotary prosthetic option)

Nomenclature:

DAS = Dynamic Abutment Solutions

MU = Multi-Unit

XXXX = Compatibility (Example 0040)

PREMIUM = It has the prosthetic options of Tibases, Direct to Implant, Direct to Implant Provisional, both Direct to Implant with real connection values for milling. Also the Digital analog option.

SA = ScAnalog

I/IG = Standard Adapter I or Adapter 3mm IG

HH = Scanbody height, can be 8mm, 10mm or 12mm.

The company has a listing (PDF) which marks the compatibility of the implant with a number, such as the compatibility DAS_MU_0001_PREMIUM represents Biomet 3i Certain Narrow Platform.

The same number can have more than one compatibility, e.g. DAS_MU_0024_PREMIUM is compatible with Nobel Biocare Branemark Regular Platform, but will also be compatible with external hexagons that are compatible with the dimensions of the external hexagon of Branemark Regular Platform.

Once the compatibility with which to work has been selected, the type of work to be done is now decided. One of the most important advantages of the system is that it has different working options.

Ti-Base_NR = Titanium Base Non-Rotating

Ti-Base_R = Titanium Base Rotating

Direct_NR = Direct to implant Non-Rotary

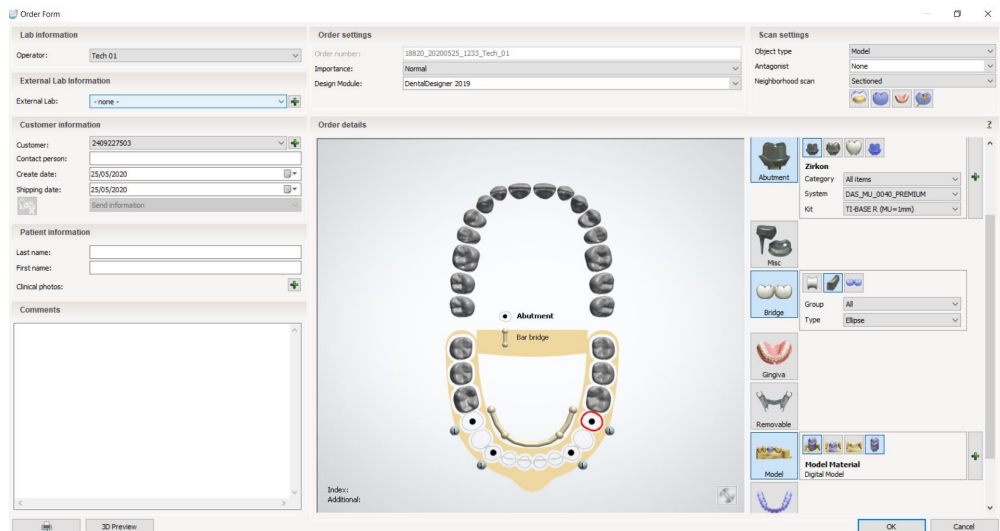
Direct_R = Direct to implant Rotary

Direct_NR_Provisional = Direct to implant for non-rotating temporaries

Direct_R_Provisional = Direct to implant for rotating temporaries

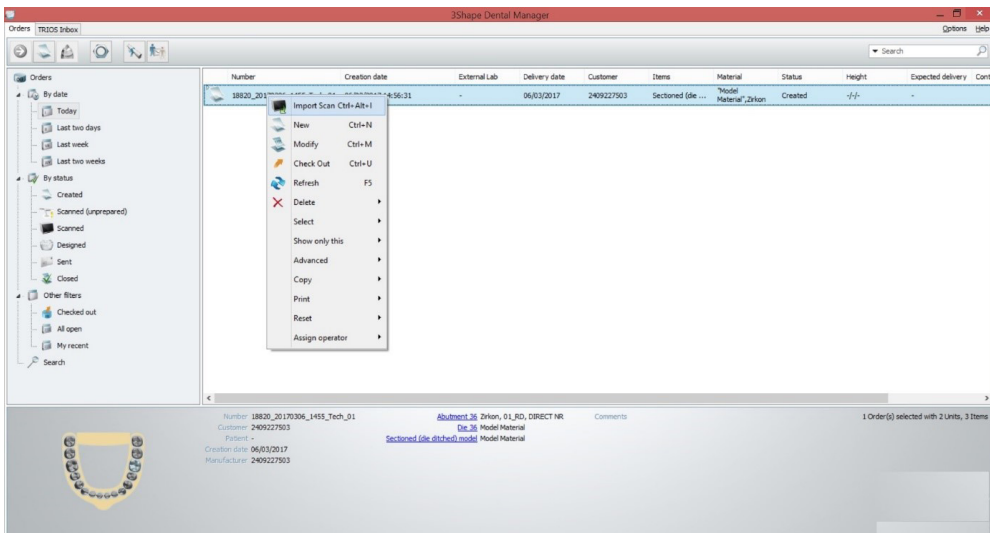
As shown in the previous images, each prosthetic option is accompanied in brackets by the Multi-Unit option with which you want to work, such as MU=1mm which means that it is the Multi-Unit of 1mm in gingival height with which you want to work and design the prosthesis.

As you can see in the following image, the job is defined. There is also the possibility of making the model in 3D, in the option “Object type” you select “Digital Impression” so that later you can design and print the model in 3D. Once the option is selected, select “Model” as shown in the lower right part and define the type of model to be printed.

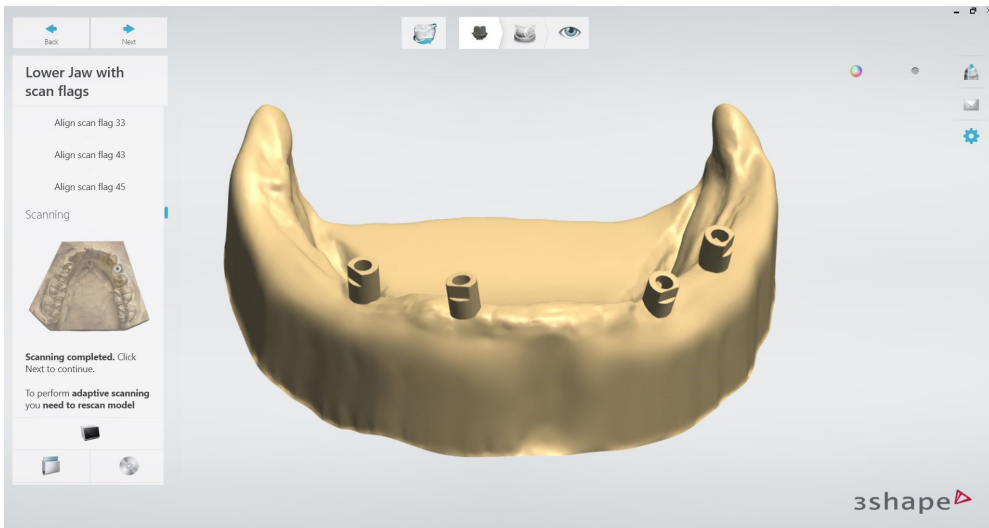


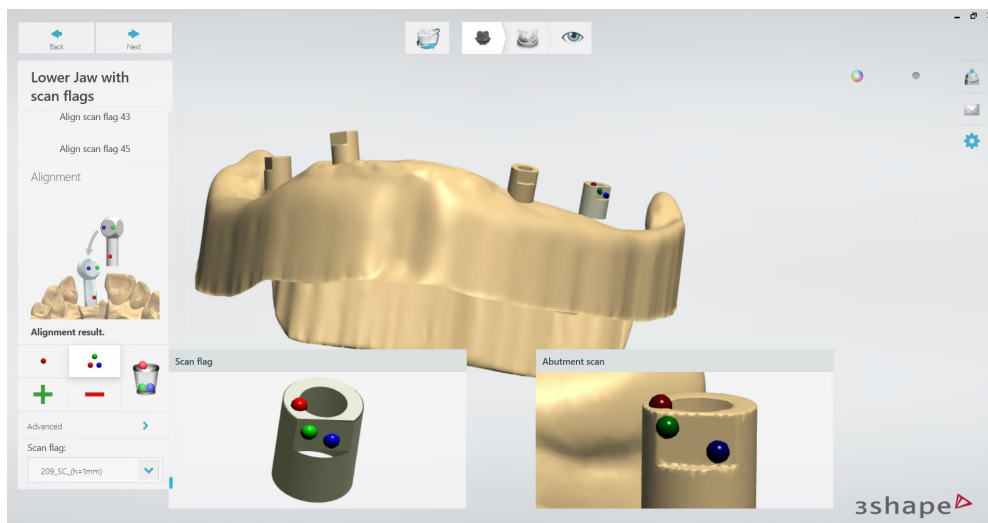
Select “Ok” to create the job.

You then return to the main screen, where the job appears, as well as the description of its main features.



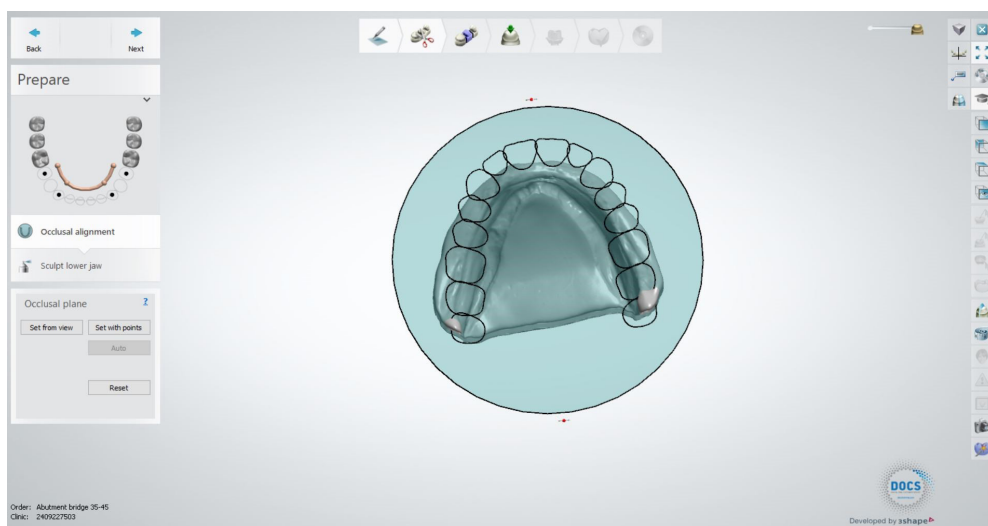
By right-clicking on the mouse button we will choose the “Next” option to scan the model and perform the alignment of the scanning abutments. In case the model is already scanned and the abutments are aligned, choose “Import Scan”.





In the image above you can see at the bottom right the selected scanbody with the height of the Multi-Unit that is being scanned. In this case, as the example with the MU has a gingival height of 1mm, $h=1\text{ mm}$ is selected, which means the gingival height of the MU.

Once the alignment of the scanbodies is completed, the occlusal alignment is performed as shown in the following image.



An image of the scan file is shown at the bottom left of the screen once it has been selected. Select "Next" to start the design.

Use the mouse to mark the area of the attachment to be worked on.



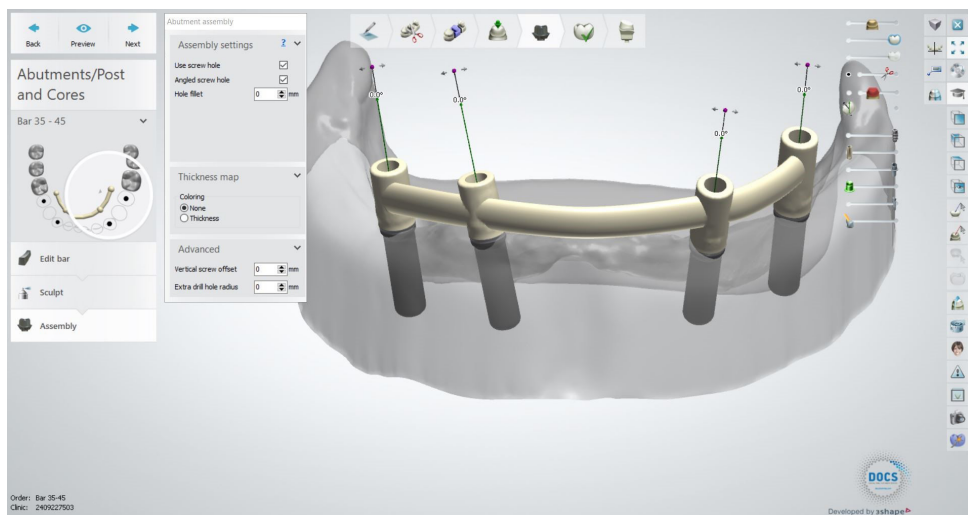
The insertion axis is defined.



The following are the parameters of the attachment and its design.

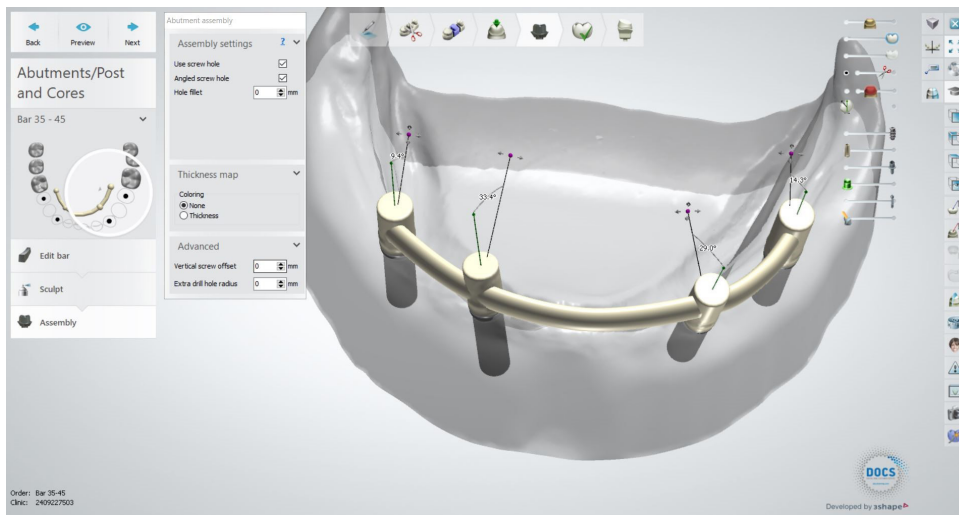


The last step is to design the angled channel. To do this, check the “Angle Screw Hole” box.



As you can see in the picture above, the channel is automatically positioned at 0° .

By dragging the mouse along the channel axis from the purple mark, you define the desired angle for the channel.

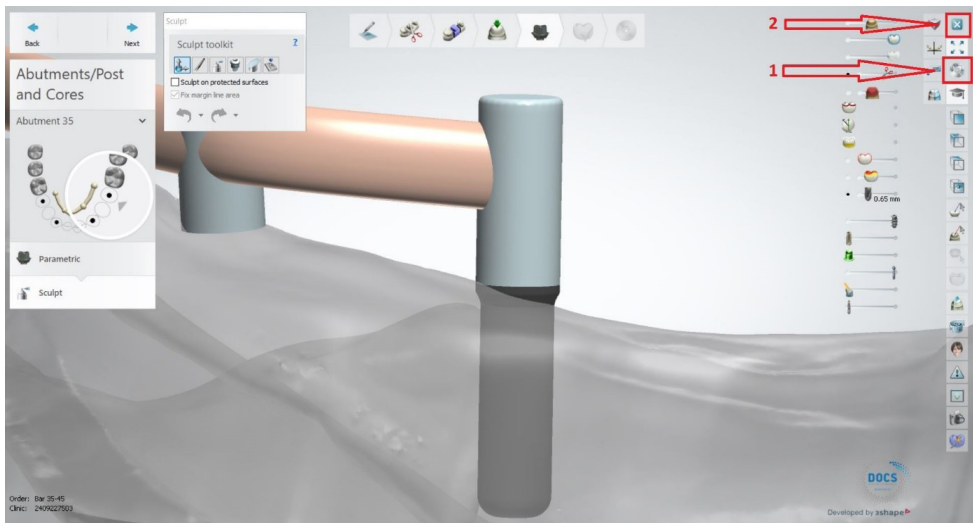


A very important point is being able to switch from Multi-Unit without having to rescan the model or call the patient back for a Multi-Unit gingival height change scan.

When the prosthesis is being designed and the customer observes that it may be necessary to change the gingival height of one or more Multi-units, the prosthetist can communicate with the clinician and show him/her the design and possible change of the Multi-unit. With the Dynamic Abutment Solutions work system and the Multi-Unit library, it is possible to change the Multi-Unit in the virtual design and to design and mill the prosthesis without rescanning. This way the clinician only has to change the Multi-Unit(s) that are changed in the design on the patient and will have the work solved without the need for multiple scans or multiple designs

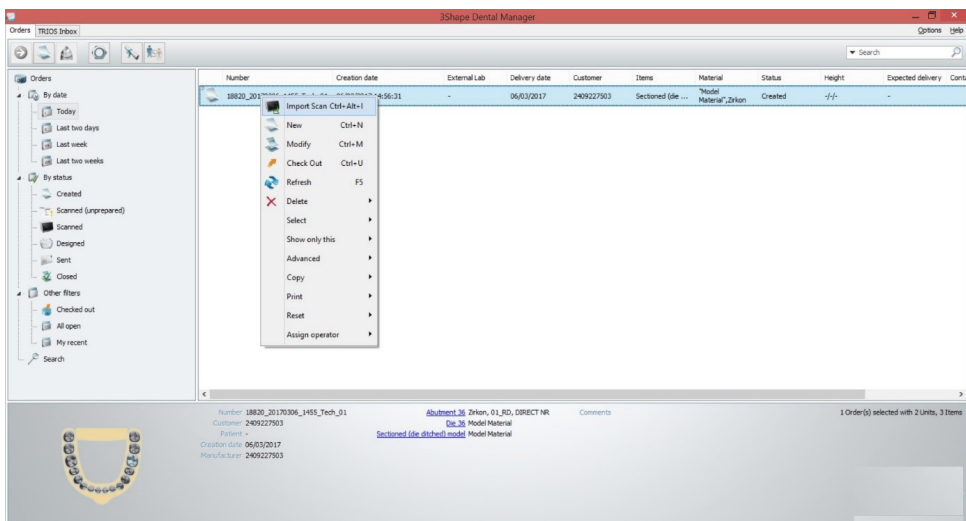
Below is an explanation of how the options are activated and how they work.

The following image shows a standard design in 3Shape.

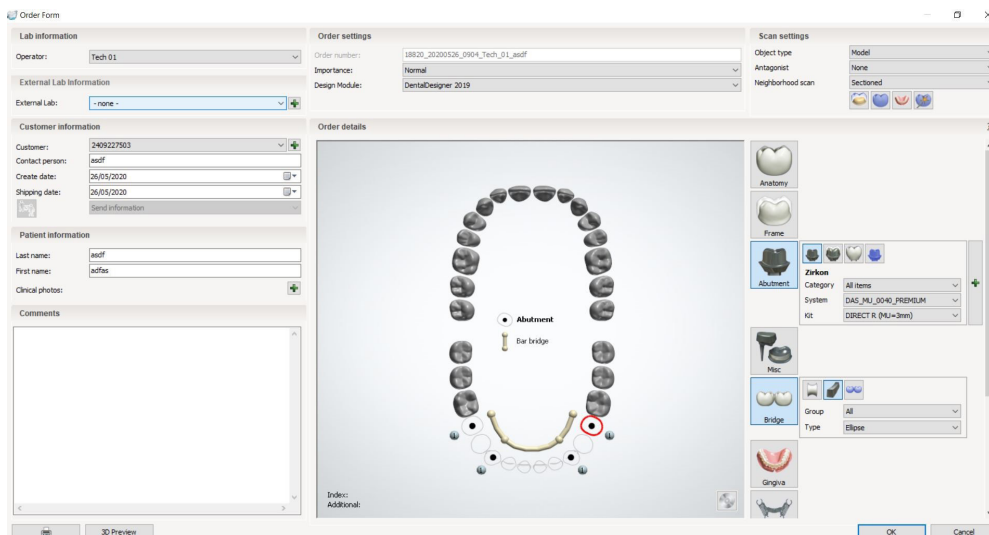


To change the Multi-Unit, save the job (arrow 1) and then close the job (arrow 2).

The following screen will appear and right click on the case and click on “Modify”

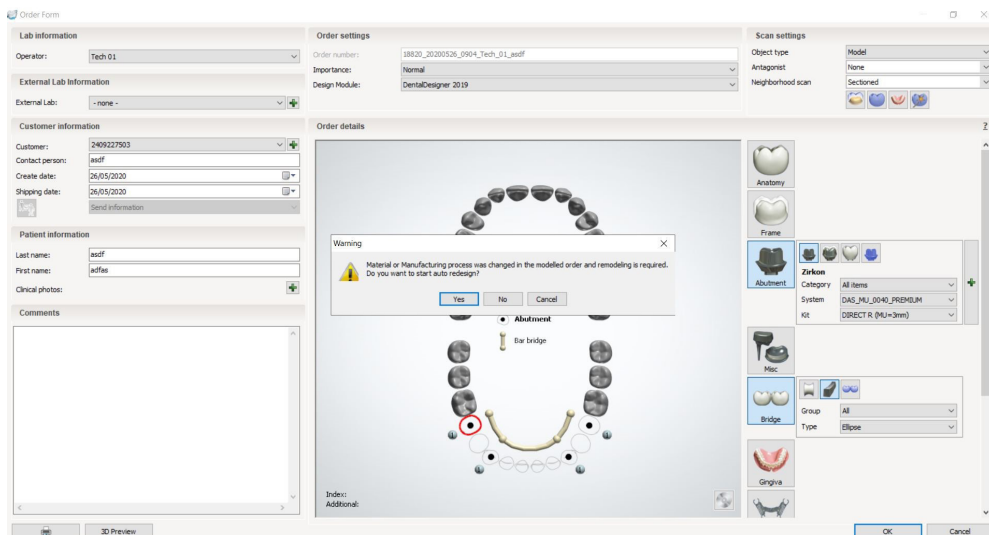


The following screen will appear where you can change the MU.

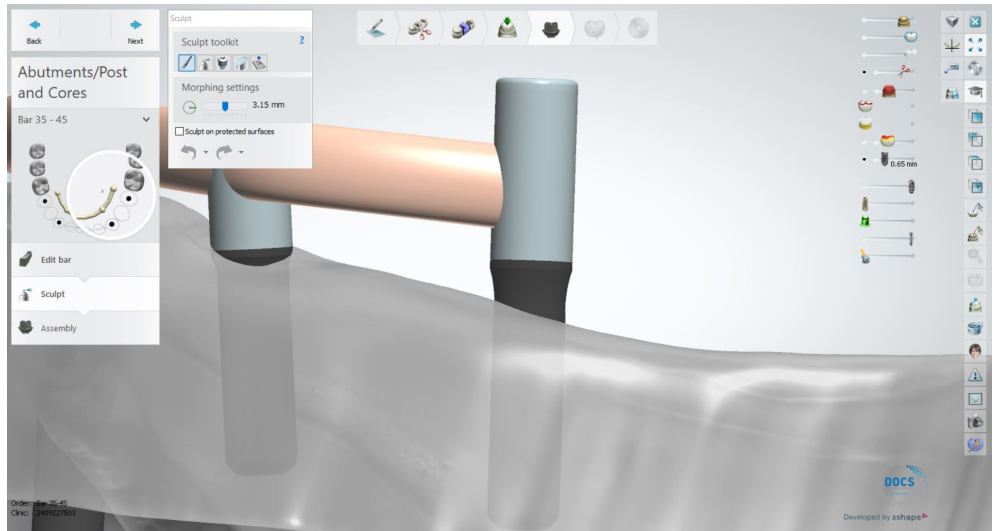


As explained in the first order, the selected MU was 1mm, as you can see in the “KIT” option you can change this MU, in this case you can see that it is changed by the 3mm. Make the change on the MU(s) you want to change and click OK.

Then the following warning will appear and click on “YES” to make the changes.



The software will automatically return to the design when you click “YES” and the changes made will be displayed.

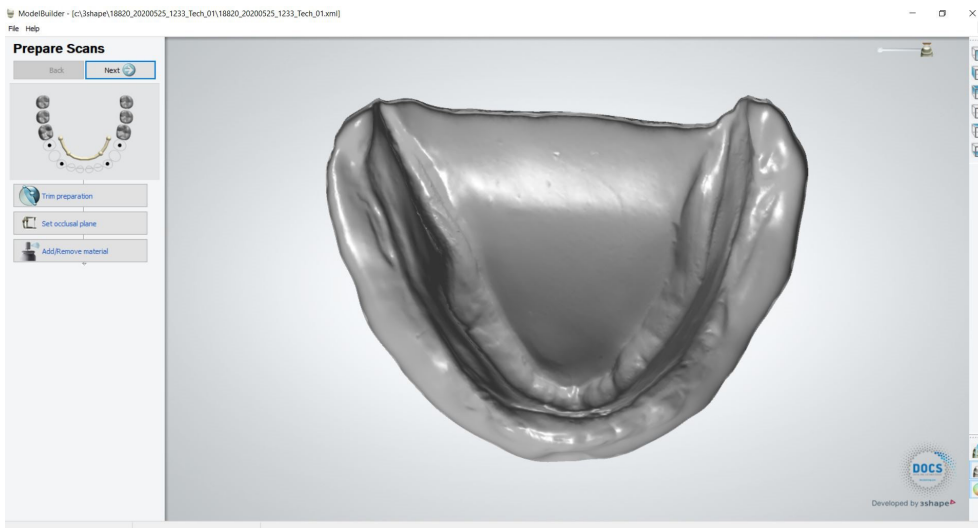


As you can see in the image above, the MU now in the design is the 3mm. The design is finished in case any changes are needed and the work is completed.

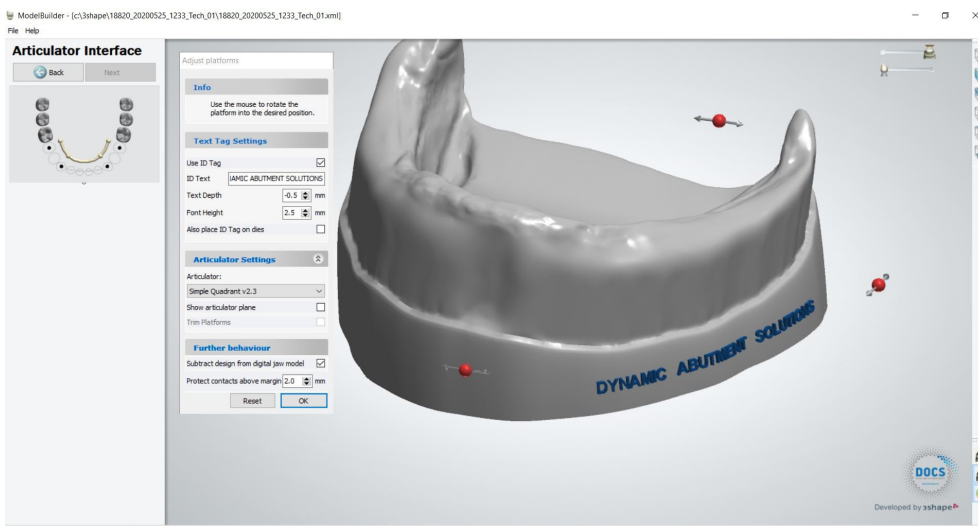
Once the work is completed, the model can be designed for subsequent 3D printing.

Digital analog

Once the work has been completed, the dental model can be designed for subsequent 3D printing. In the following image you can see the first step for the design of the model to be printed in 3D.



You can then change parameters in the design and articulator.



At last, the final design is obtained with the hole for the subsequent placement of the digital analog.

