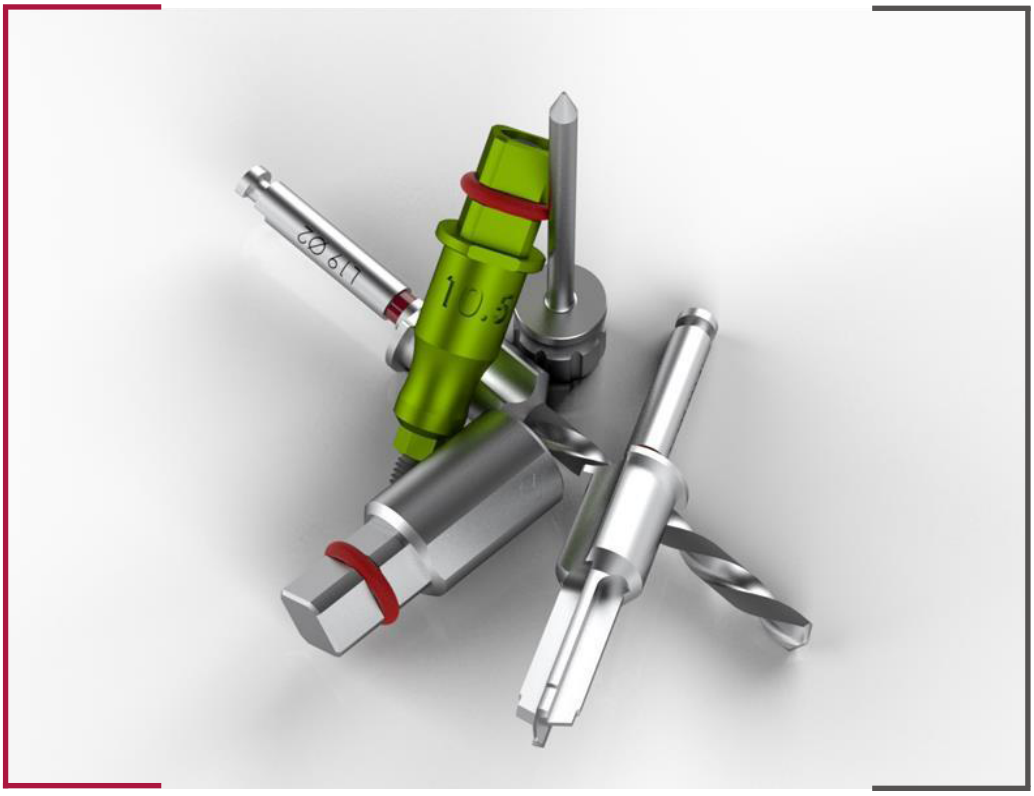
DYNAMIC ABUTMENT SOLUTIONS

GUIDED KIT

DASSURGICAL

3shape

Implant Studio



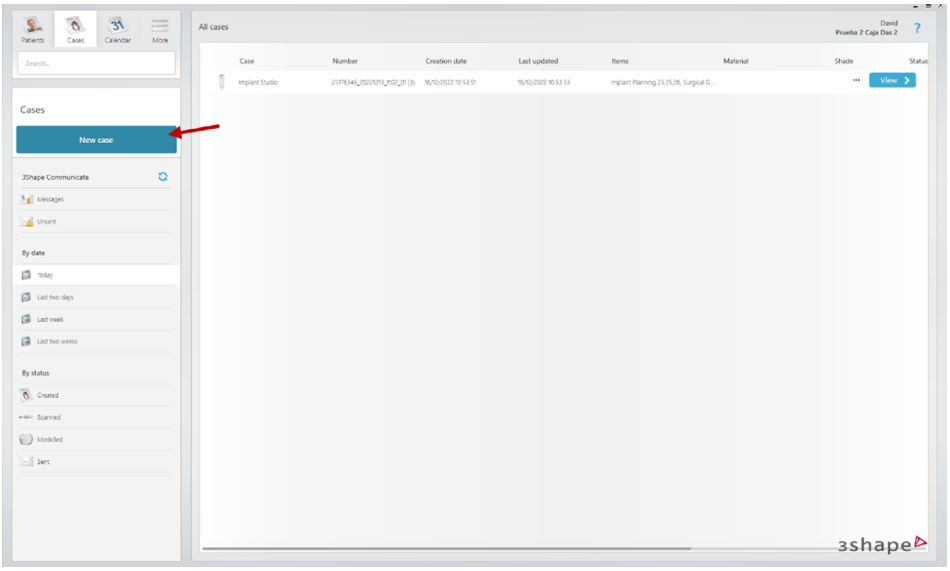
INSTRUCTIONS FOR USE

DYNAMIC ABUTMENT SOLUTIONS LIBRARY

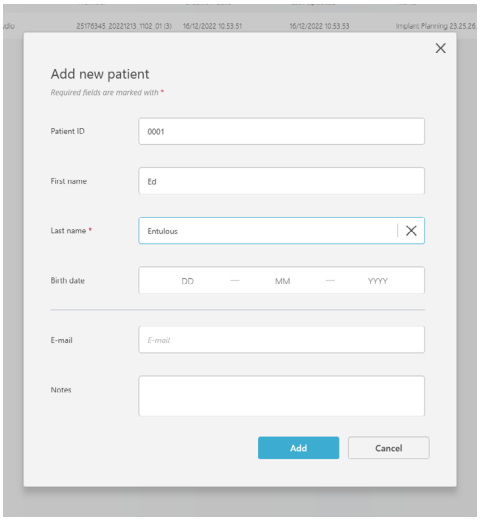
YOUR DIGITAL DENTAL PARTNER

INST_IMP_ST_2023_01_EN

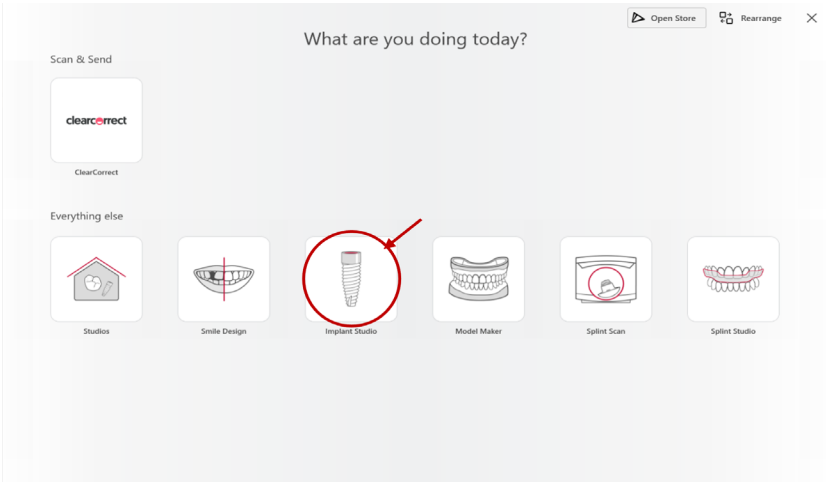
Before starting the planning process, you need to create and define a new case.



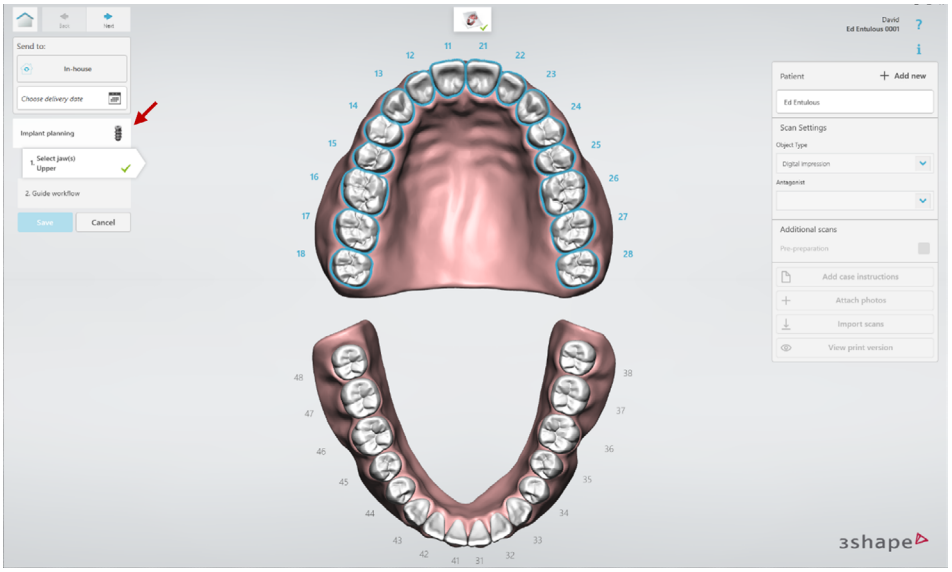
You must either select an existing patient or create a new one.



Next, select the Implant Studio option in the pop-up window shown below.



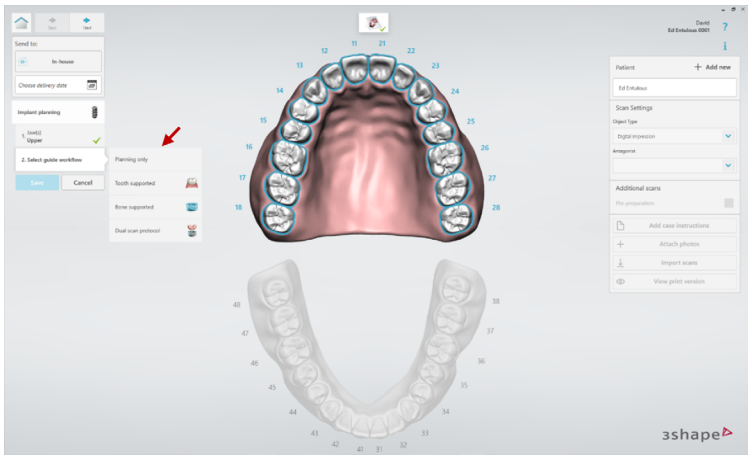
In the case planning window, select the Implant Planning option, and then the jaw you want to work on.



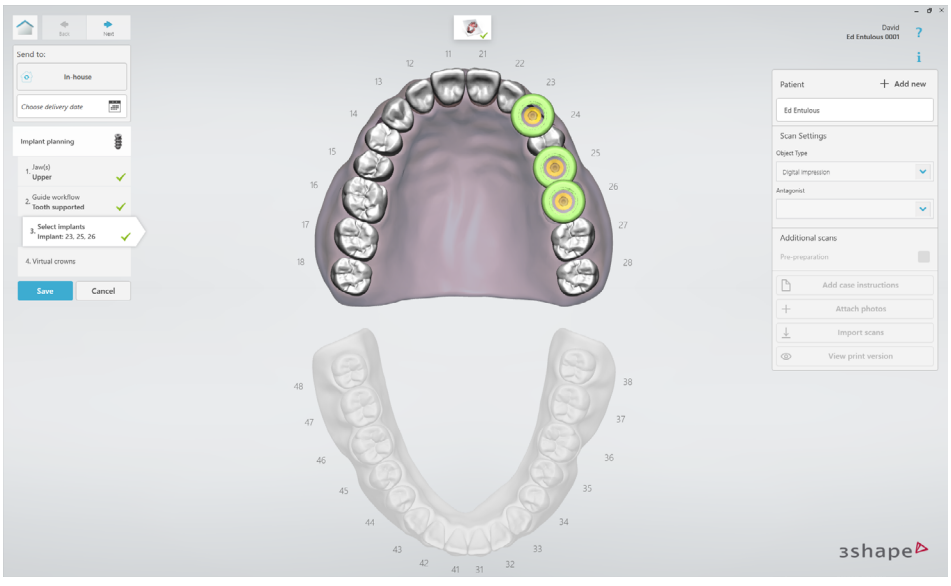
In the next step, select the surgical guide work flow that best meets the needs of the case. The procedure is the same for any of the four available options:

– Planning only
– Tooth supported -> supported on teeth
– Bone supported -> with a bone support
– Dual scan protocol

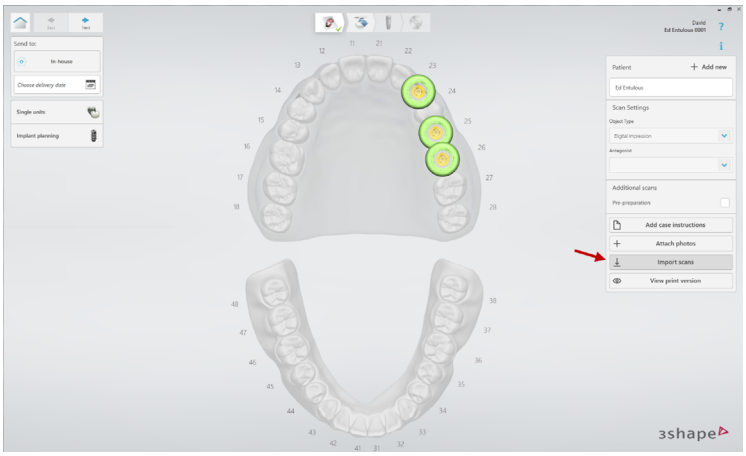
Note: The protocol for a tooth-supported surgical guide has been used for reference in these instructions.



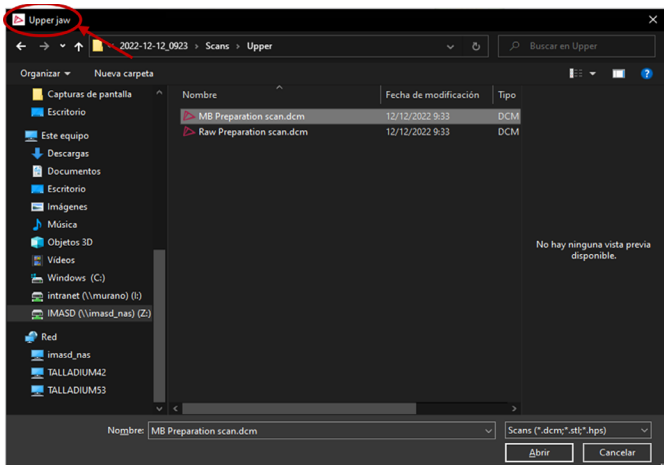
After selecting the work protocol for the surgical guide, you need to define the case and identify the elements to be restored. Click on Save when you are finished.

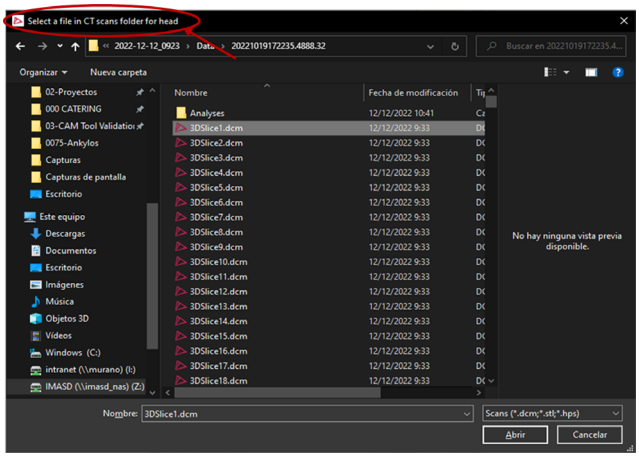


Next, import the scan files by clicking on the button enabled for this purpose in the menu to the right.

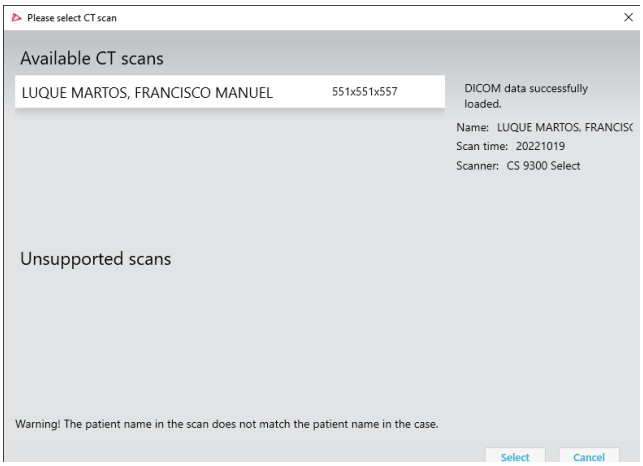


When this option is selected, the software prompts you to import the files. In the upper left-hand corner of the pop-up window, the file to be imported is displayed at all times. It is mandatory to import the upper jaw (or the lower one, depending on the jaw involved in the planning process) and the patient's CBCT (the cone-beam computed tomography systems).

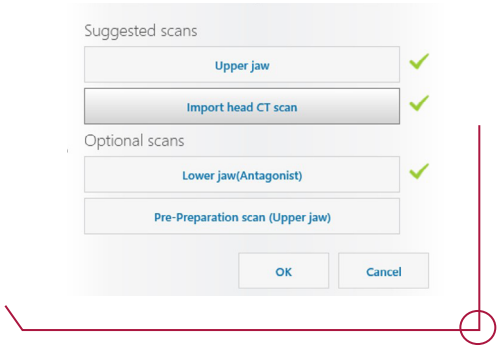




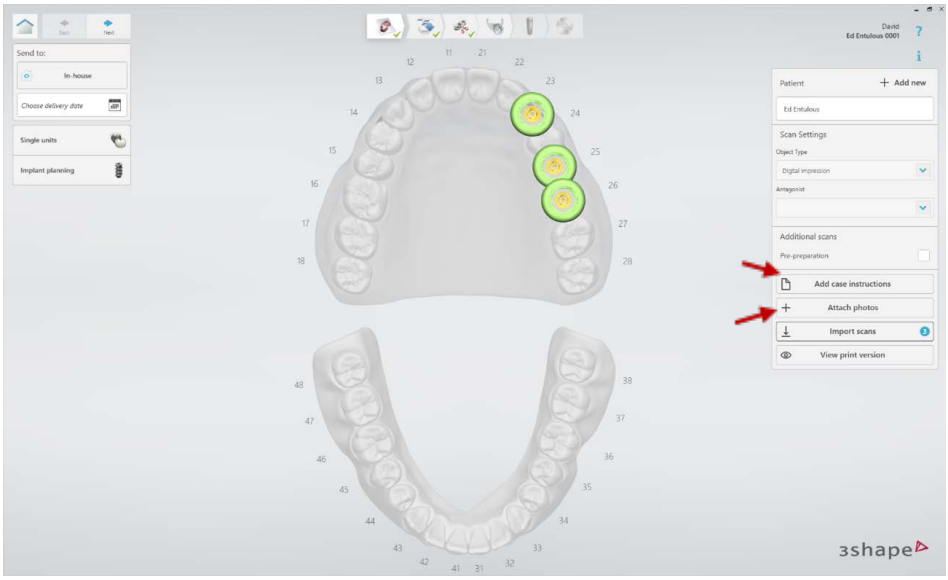
After selecting the CBCT file, click on the Select button to confirm the import (as a CBCT is made up of numerous DCM files, it should be noted that any of the files is valid for the import).



When the files have been correctly imported, a check mark appears next to them. Click OK when the required files have been imported.

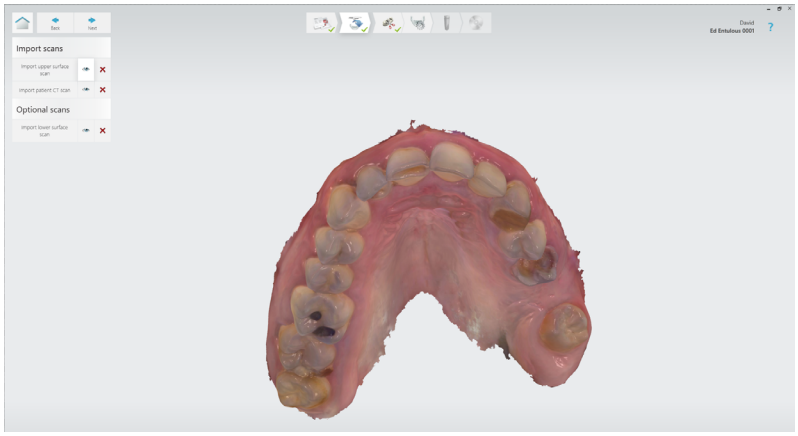


Notes and photos can also be added to the case. To do this, use the buttons that are enabled for this purpose in the menu to the right.

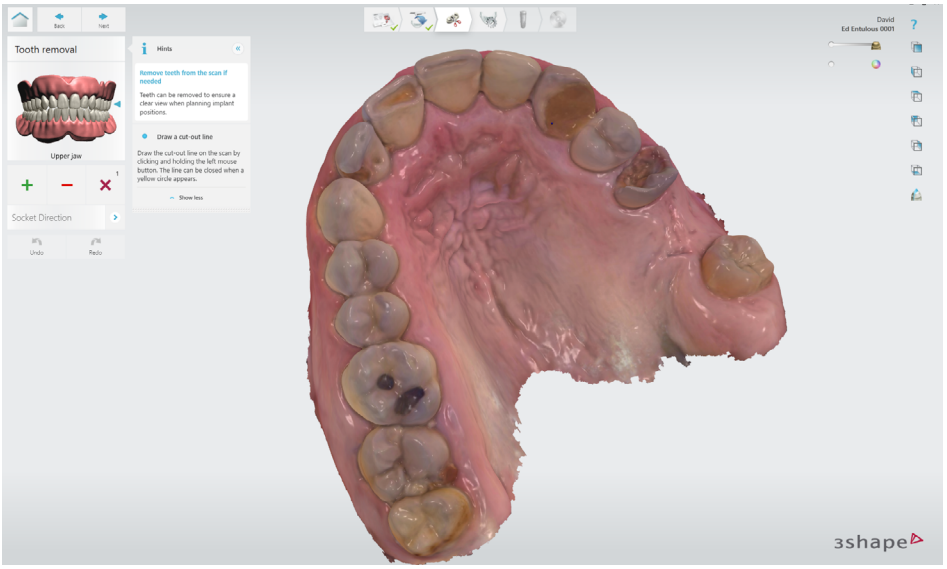


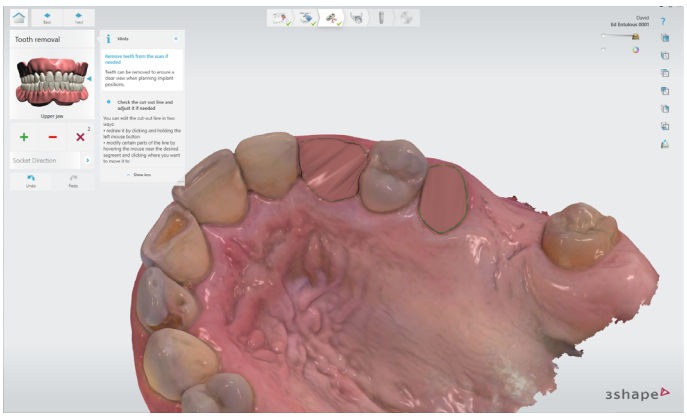
After importing the required files, click on Next.

The import scan files are shown on screen in the next step. If any of the files in this step is incorrect, it can be changed.

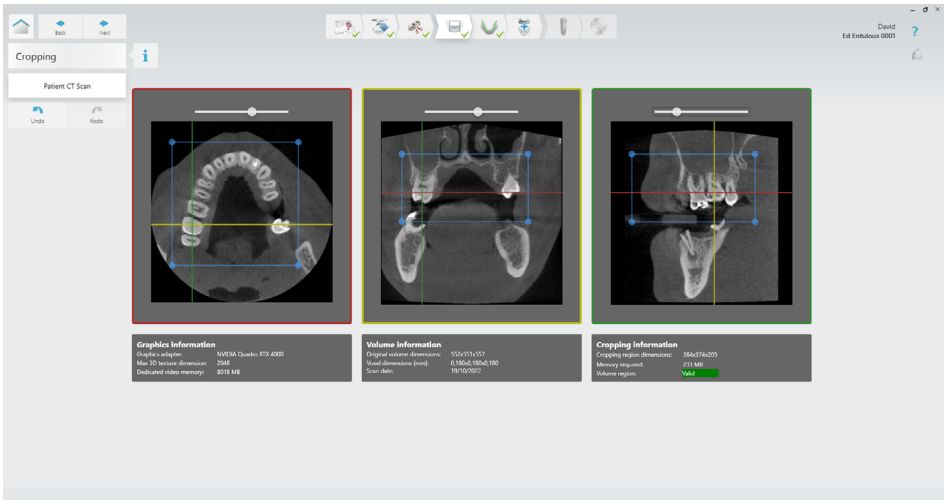


In the tooth removal option, it is possible to remove teeth as required. To do this, you need to draw the dotted outline of the tooth.

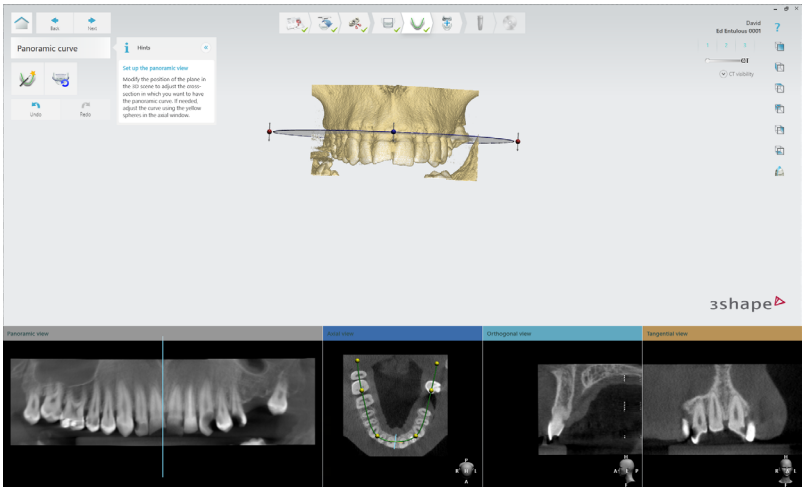




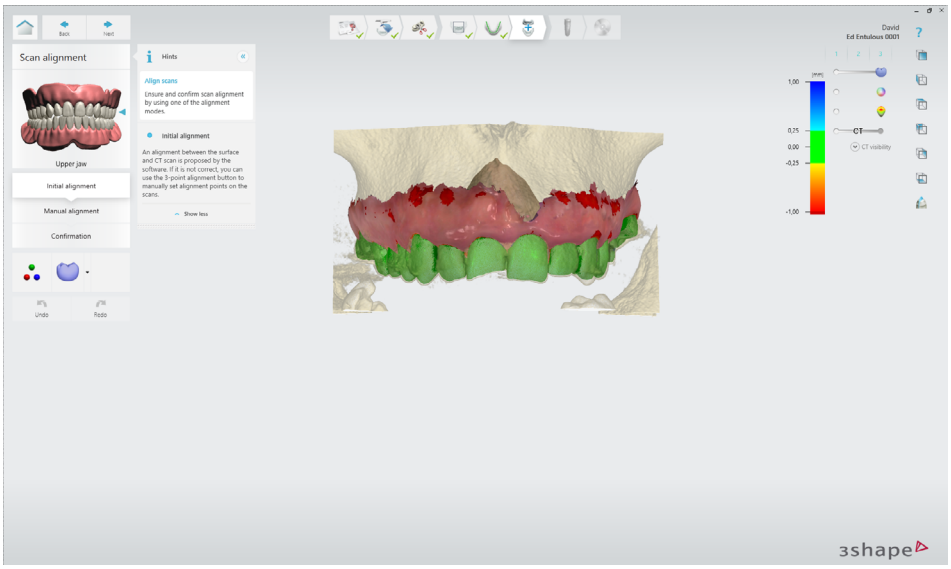
Then crop the CBCT file to help the software create a more precise alignment and remove unnecessary shapes. There are three sliding bars to aid in this selection process. The selection is made by moving the crop handles on the blue square to fit the cut-out area.



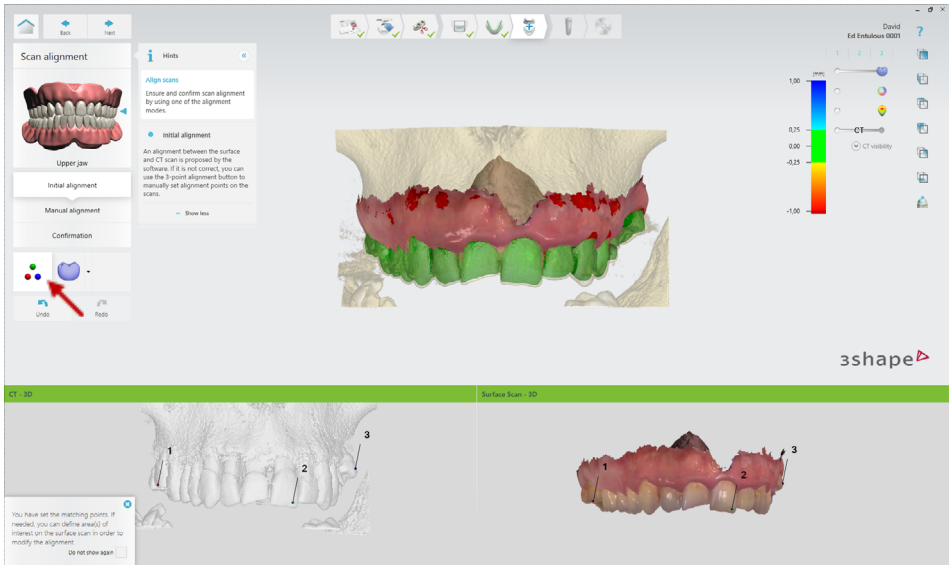
After cropping the CBCT, the panoramic curve must be set up. First, modify the position of the plane with respect to the 3D scene to adjust the cross-section where you want to have the panoramic curve. If needed, the curve can be modified manually in the axial view by using the yellow crop handles.



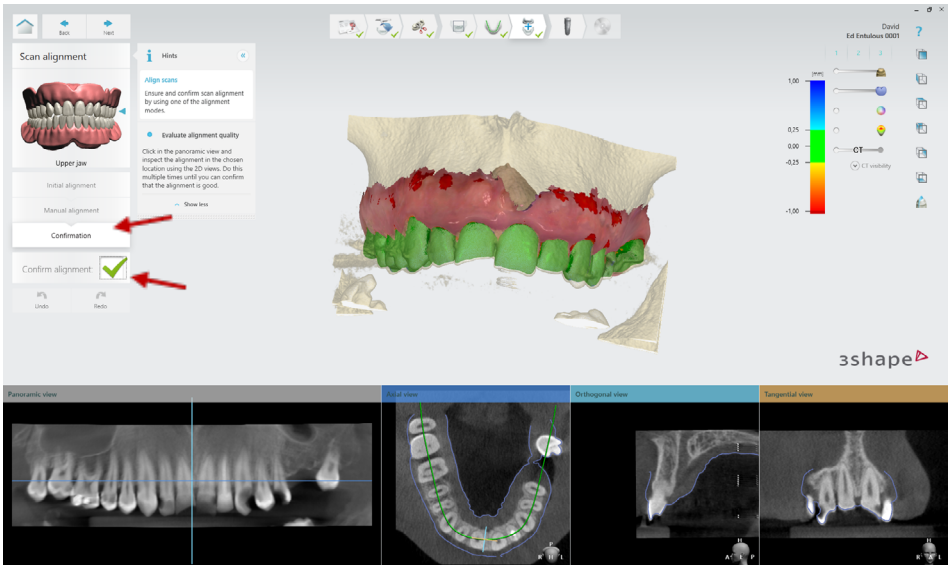
Click on Next to go to the alignment step. At this point, the software proposes an initial alignment between the CBCT and the scan file.



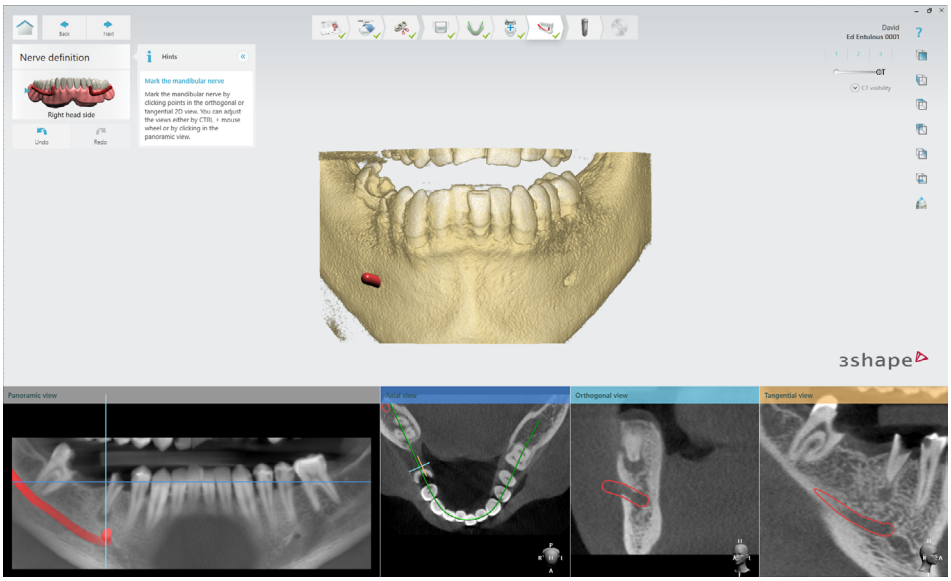
If this initial alignment is not correct, it can be modified by clicking on the 3-point alignment button. It is very important to select areas that are easily identifiable in both 3D objects, to make the three points coincide in both views.



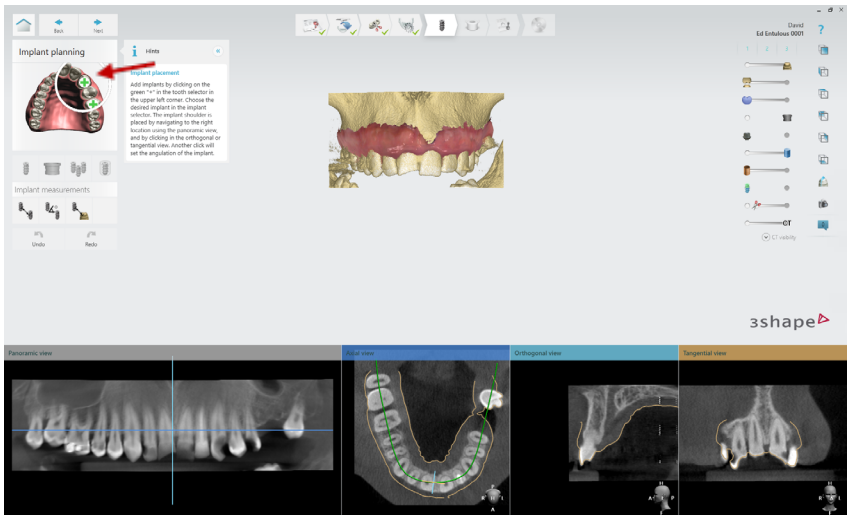
Once a satisfactory result is achieved, go to the next step and check the confirmation box.



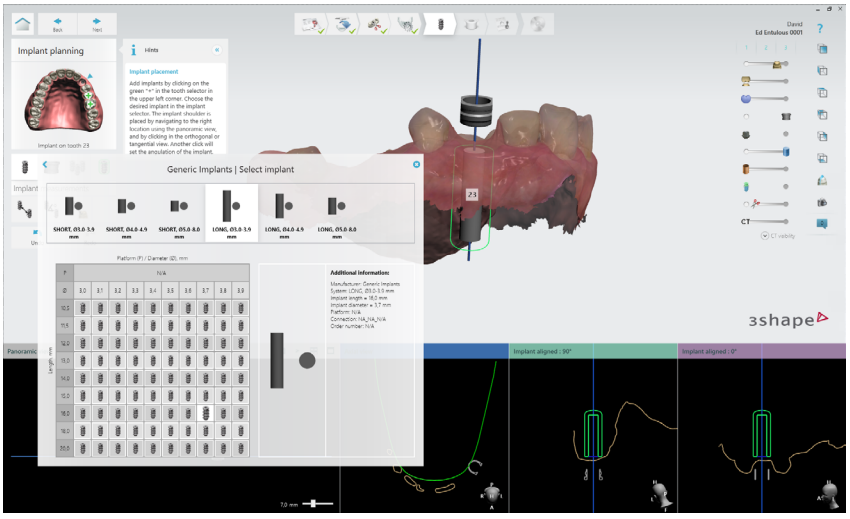
Note: If you are working on the lower jaw, the mandibular nerve must be marked in the next step. Using the panoramic view along with the orthogonal, tangential and 3D views is recommended in order to evaluate the CBCT scan from different angles and to place the nerve correctly.



The next step is the implant planning step. Click on the “+” symbol to add the implants in the previously defined positions.

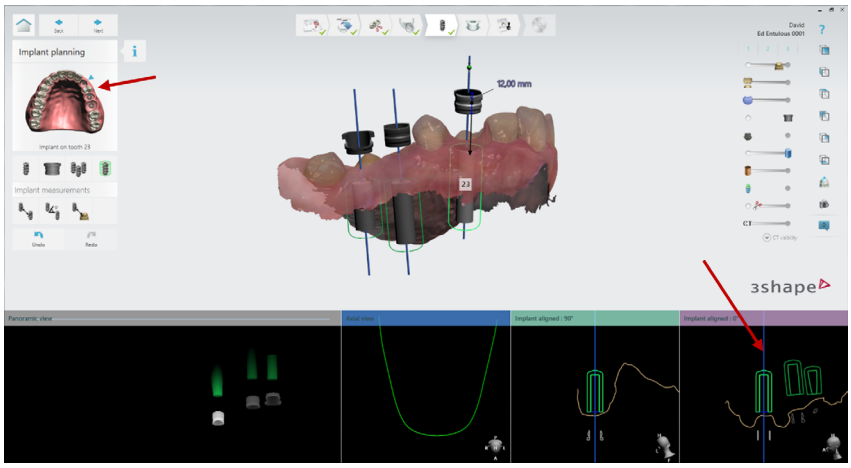


After the selecting the “+” symbol, a list is displayed of all the implant brands available in 3Shape. Next, choose the brand, model, diameter and length of the implant you want to work with. Double click to confirm the selection.

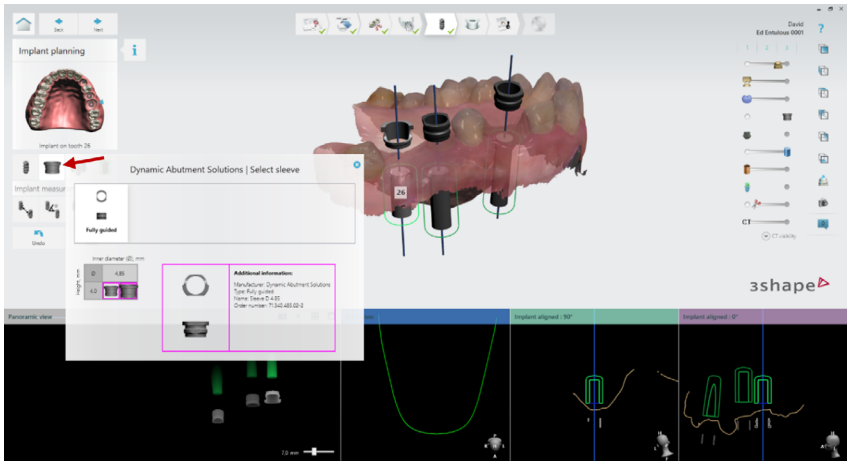


Select the desired implant and position it by using the 2D views to place the implant correctly.

To change from one implant to another, you can select the appropriate tooth number in the work flow tool bar or left-click on the required implant in the 2D views.



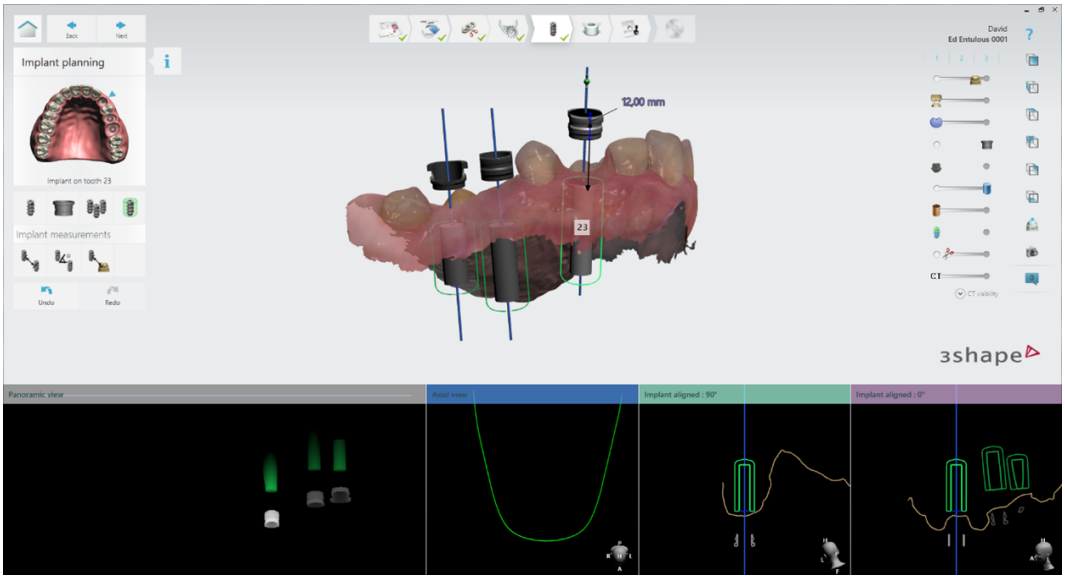
By default, the regular sleeve is displayed. It can be changed by pressing the left left menu button. Two different sleeves are available to choose from according to the needs of the needs of the case, the regular and the regular with cut.



Once the sleeve has been selected, it is necessary to adjust the offset. When the cursor is positioned on the the sleeve, a green sphere is displayed which can be dragged to change the offset value.

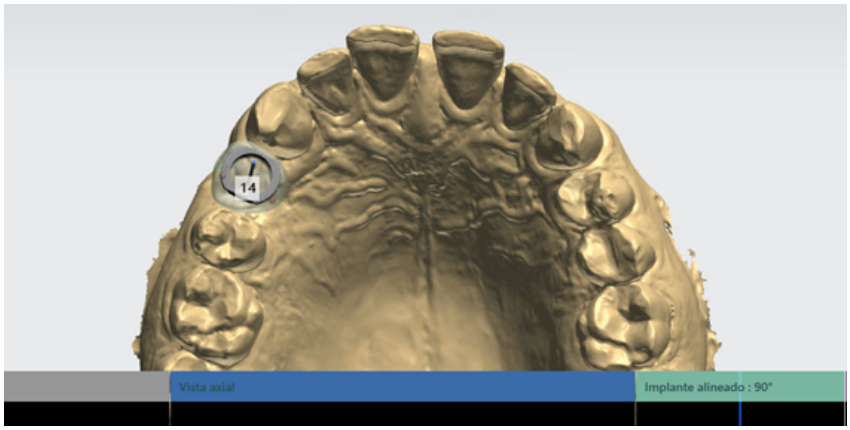
Important: *The sleeves have several different offsets depending on the selected implant. The offset selected will define which drills and which implant mount to choose when performing the surgery, consult the PDF* ***work offsets by compatibility*** *to find out which drill corresponds to each offset.*

If a change of sleeve or implant is made after the offset has been defined, the value of the offset is retained, so it is not necessary to redefine it.

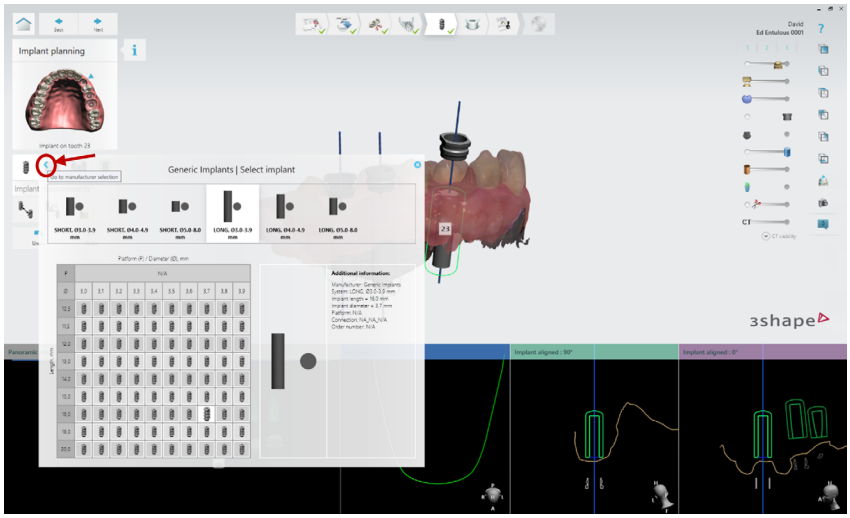


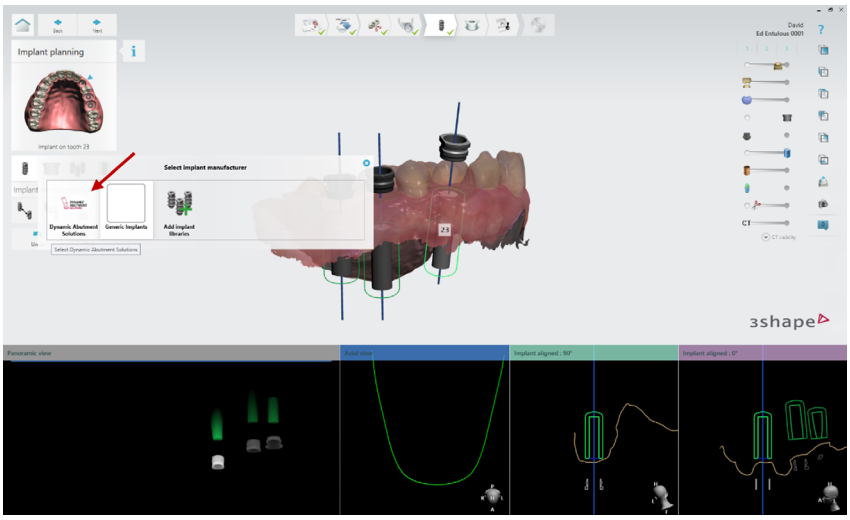
Note: The default offset in Implant Studio is always 9mm. Bear in mind that there will be implant brands that will not have this offset, so it is very important when planning the guided surgery to consult the PDF ***work offsets by compatibility.***

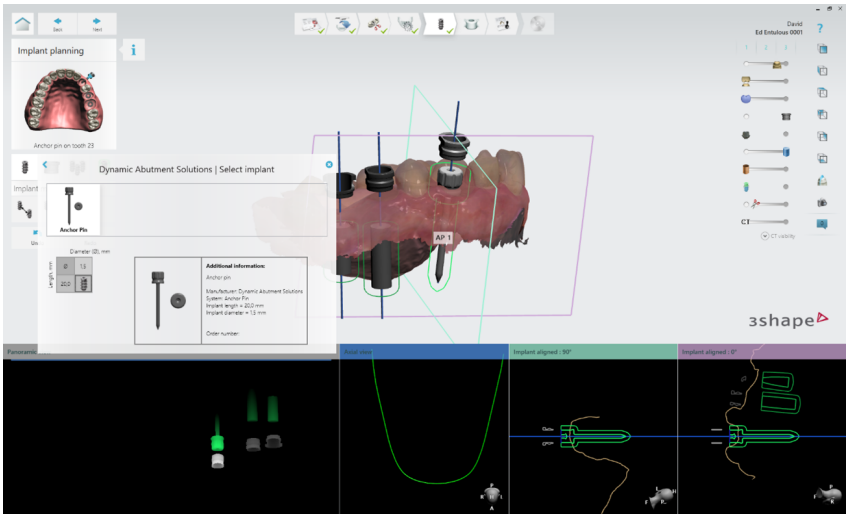
Place the sleeve in such a way that it can be seen from the upper part, in this way you will be able to see the red controllers that will allow you to change the rotation of the sleeve when you pass the mouse over it. Note that the implant will be will rotate together with the sleeve.

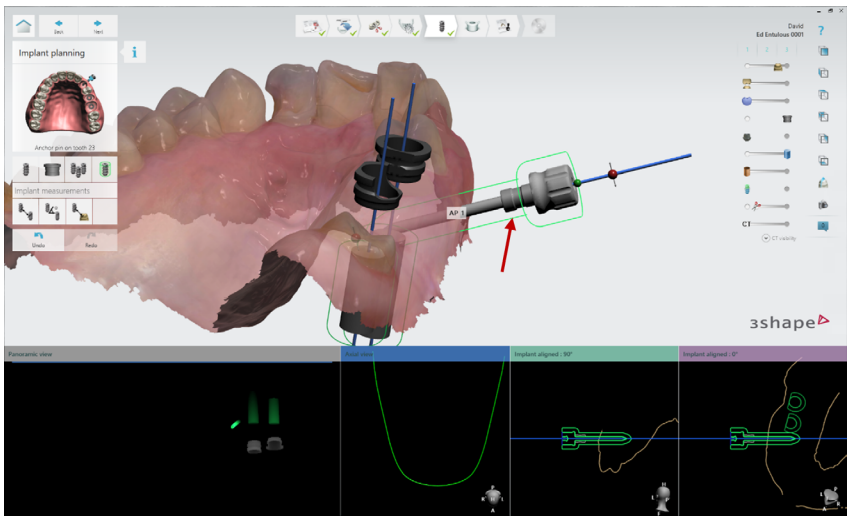


If the case requires it, fixation pins can be added in the same way as an implant is positioned. From the implant window, go back to the manufacturer selection and select Dynamic Abutment Solutions. Once selected, locate the anchor pin option and position the pin with the pin option and position the pin to the desired depth.



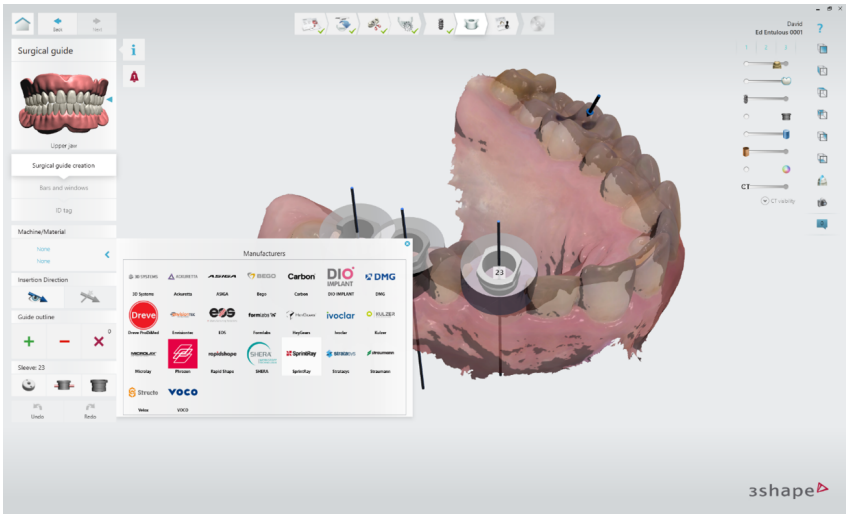




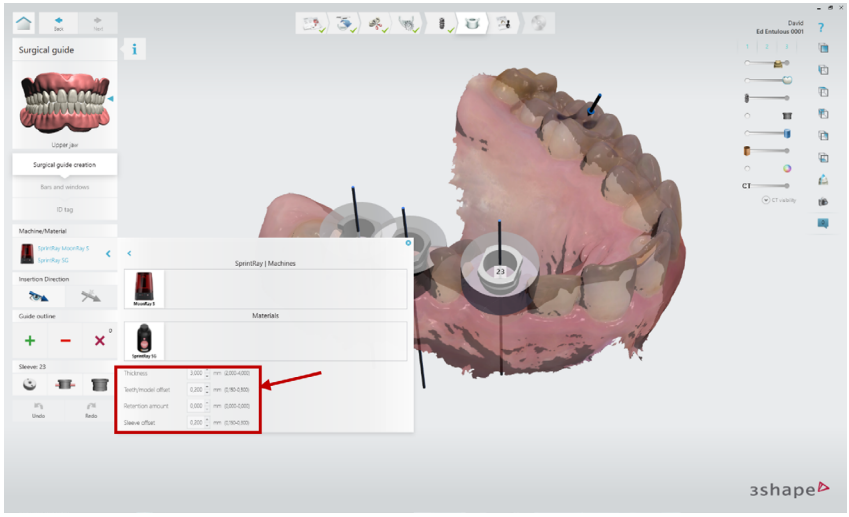


When the implant planning process is complete, the surgical guide must be created next.

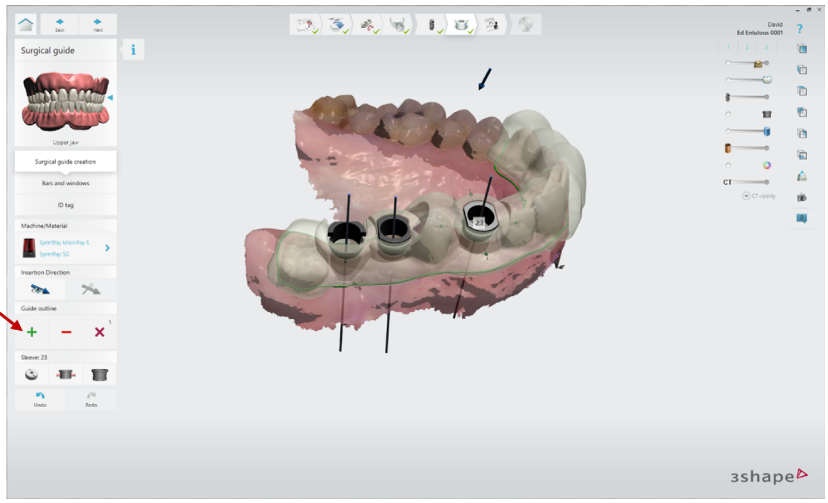
The first step is to select the machine and material from the manufacturer list.



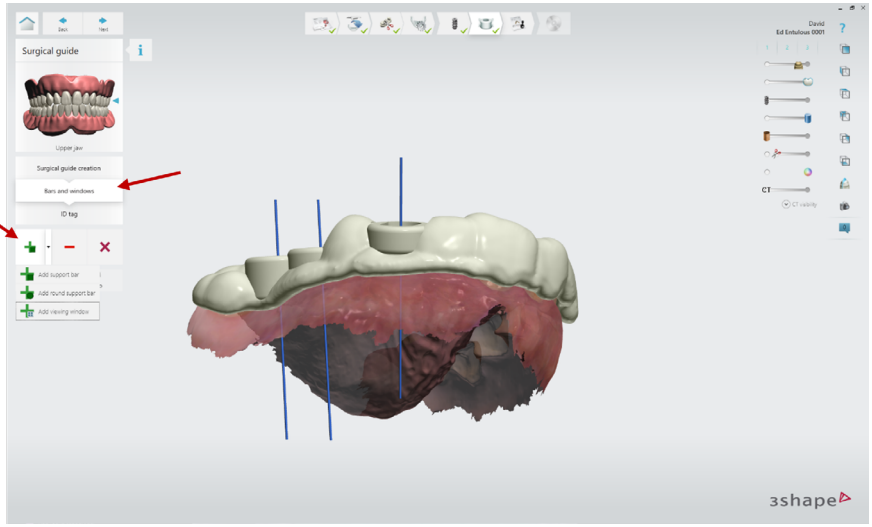
Note: After selecting the material, several parameters are shown that can be modified (guide thickness, teeth offset, retention amount, offset from sleeve to guide). By modifying these parameters, a better fit is achieved between the guide and the other components.



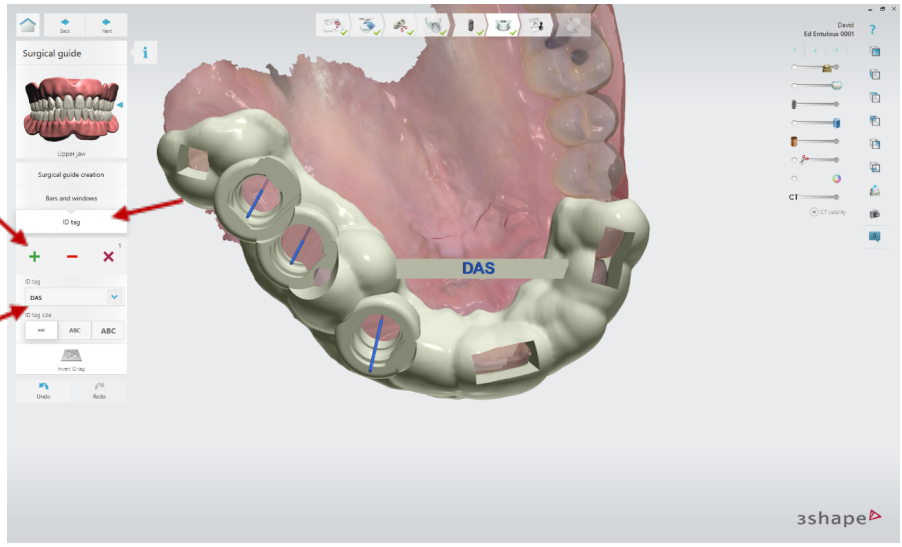
Next, click on the “+” button to start drawing the guide outline. Once the outline is completed, Implant Studio will automatically generate the surgical guide.



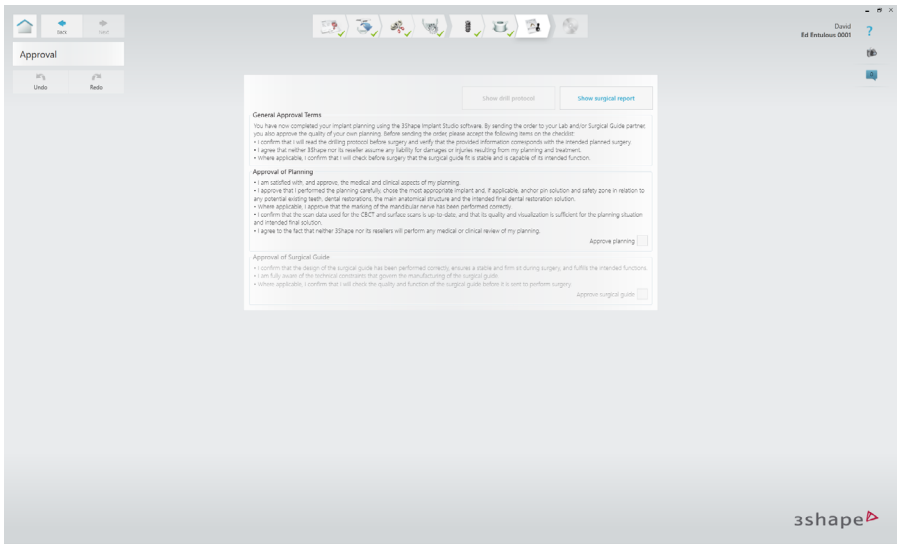
To add support bars or windows for viewing the guide, click on the bars and windows button. When you click on the “+” a drop-down list shown to help you create these two options.

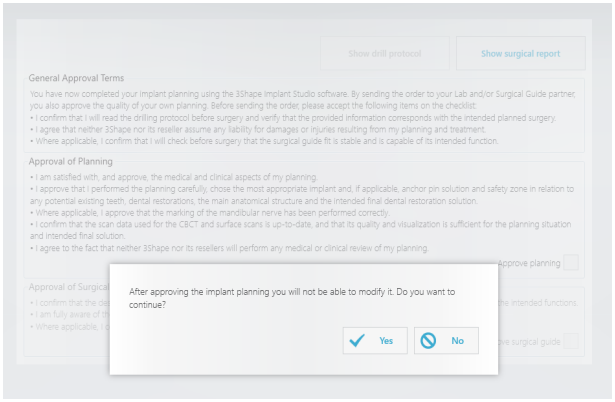


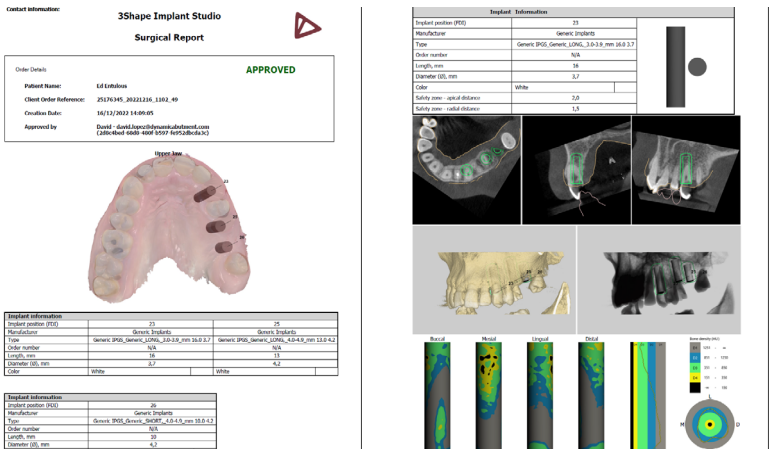
Implant Studio allows you to add text to the surgical guides. Click on the ID tag button to access the text editor submenu. Press the “+” button and enter the text in the field enabled for this purpose. After writing the text, click on the part of the guide where you want to insert it.

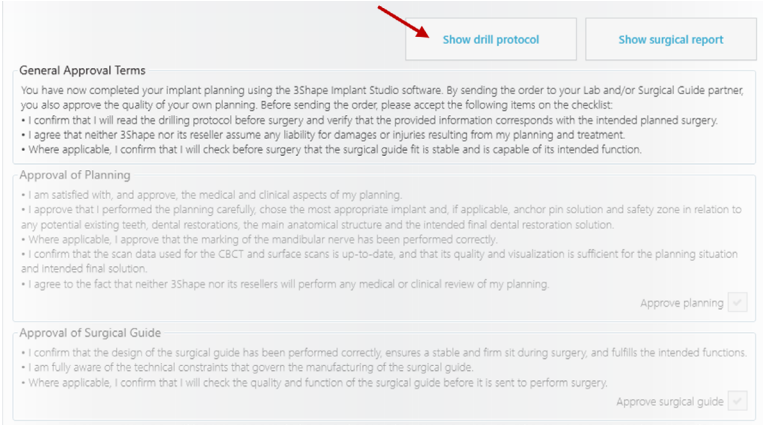


When the surgical guide design is completed, move on to the next step. At this point, your approval of both the planning and the guide is required. Once the planning has been approved, you can access the surgical report containing all the information about the positioned implants.




Show drill protocol
Show surgical report
General Approval Terms
You have now completed your implant planning using the 3Shape Implant Studio software. By sending the order to your Lab and/or Surgical Guide partner, you also approve the quality of your own planning. Before sending the order, please accept the following items on the checklist:
• I confirm that I will read the drilling protocol before surgery and verify that the provided information corresponds with the intended planned surgery.
• I agree that neither 3Shape nor its reseller assume any liability for damages or injuries resulting from my planning and treatment.
• Where applicable, I confirm that I will check before surgery that the surgical guide fit is stable and is capable of its intended function.
Approval of Planning
• I am satisfied with, and approve, the medical and clinical aspects of my planning.
• I approve that I performed the planning carefully, chose the most appropriate implant and, if applicable, anchor pin solution and safety zone in relation to any potential existing teeth, dental restorations, the main anatomical structure and the intended final dental restoration solution.
• Where applicable, I approve that the marking of the mandibular nerve has been performed correctly.
• I confirm that the scan data used for the CBCT and surface scans is up-to-date, and that its quality and visualization is sufficient for the planning situation and intended final solution.
• I agree to the fact that neither 3Shape nor its resellers will perform any medical or clinical review of my planning.
Approve planning
Approval of Surgical Guide
After approving the implant planning you will not be able to modify it. Do you want to continue?
Yes
No


Contact information:
3Shape Implant Studio
Surgical Report
Order Details
APPROVED
Patient Name: Ed Emulous
Client Order Reference: 25176345_20221216_1102_49
Creation Date: 16/12/2022 14:09:05
Approved by
Upper Jaw
Implant information
Implant position (FDI) 23 25
Manufacturer Generic Implants Generic Implants
Type Generic IPGS_Generic_LONG_3.0-3.9_mm 16.0 3.7 Generic IPGS_Generic_LONG_ 4.0-4.9_mm 13.0 4.2
Order number N/A N/A
Length, mm 16 13
Diameter (Ø), mm 3,7 4,2
Color White White
Implant information
Implant position (FDI) 26
Manufacturer Generic Implants
Type Generic IPGS_Generic_SHORT_ 4.0-4.9_mm 10.0 4.2
Order number N/A
Length, mm 10
Diameter (Ø), mm 4,2
Implant - Information
Implant position (FDI) 23
Manufacturer Generic Implants
Type Generic IPGS_Generic_LONG_ 3.0-3.9_mm 16.0 3.7
Order number N/A
Length, mm 16
Diameter (Ø), mm 3,7
Color White
Safety zone - apical distance 7,0
Safety zone - radial distance 1,5
Buccal
Mesial
Lingual
Distal


Show drill protocol
Show surgical report
General Approval Terms
You have now completed your implant planning using the 3Shape Implant Studio software. By sending the order to your Lab and/or Surgical Guide partner, you also approve the quality of your own planning. Before sending the order, please accept the following items on the checklist:
• I confirm that I will read the drilling protocol before surgery and verify that the provided information corresponds with the intended planned surgery.
• I agree that neither 3Shape nor its reseller assume any liability for damages or injuries resulting from my planning and treatment.
• Where applicable, I confirm that I will check before surgery that the surgical guide fit is stable and is capable of its intended function.
Approval of Planning
• I am satisfied with, and approve, the medical and clinical aspects of my planning.
• I approve that I performed the planning carefully, chose the most appropriate implant and, if applicable, anchor pin solution and safety zone in relation to any potential existing teeth, dental restorations, the main anatomical structure and the intended final dental restoration solution.
• Where applicable, I approve that the marking of the mandibular nerve has been performed correctly.
• I confirm that the scan data used for the CBCT and surface scans is up-to-date, and that its quality and visualization is sufficient for the planning situation and intended final solution.
• I agree to the fact that neither 3Shape nor its resellers will perform any medical or clinical review of my planning.
Approve planning
Approval of Surgical Guide
• I confirm that the design of the surgical guide has been performed correctly, ensures a stable and firm sit during surgery, and fulfills the intended functions.
• I am fully aware of the technical constraints that govern the manufacturing of the surgical guide.
• Where applicable, I confirm that I will check the quality and function of the surgical guide before it is sent to perform surgery.
Approve surgical guide

After approving the surgical guide, you can access the drill protocol, which contains the minimum drill length. **Please check the PDF file "Offset Options DAS Surgical Guide" to determine which drill length corresponds to each offset, according to the implant length.**

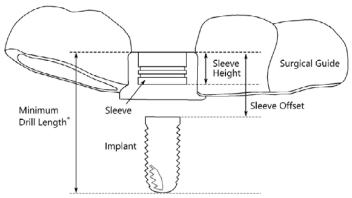
Contact information:

3Shape Implant Studio

Drilling Protocol

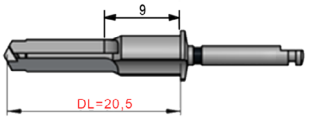
Order Details

Patient Name:	**Ed Entulous**
Client Order Reference:	**25176345_20221216_1102_49**
Creation Date:	**16/12/2022 14:03:00**
Created by:	**David - david.lopez@dynamicabutment.com (2d8c4bed-68d8-480f-b597-fe952dbcda3c)**



Implant information	
Implant position (FDI)	26
Manufacturer	Generic Implants
Type	Generic IPGS_Generic_SHORT_4.0-4.9_mm 10.0 4.2
Order number	N/A
Length, mm	10
Diameter (Ø), mm	4,2
Color	White
Sleeve information	
Name	Dynamic Abutment Solutions Sleeve D 4.85
Type	Fully guided
Order number	71.340.485.02-2
Offset, mm	10,5
Color	Purple
Drill information	
Minimum drill length	20,5

L final drill = DL - 9

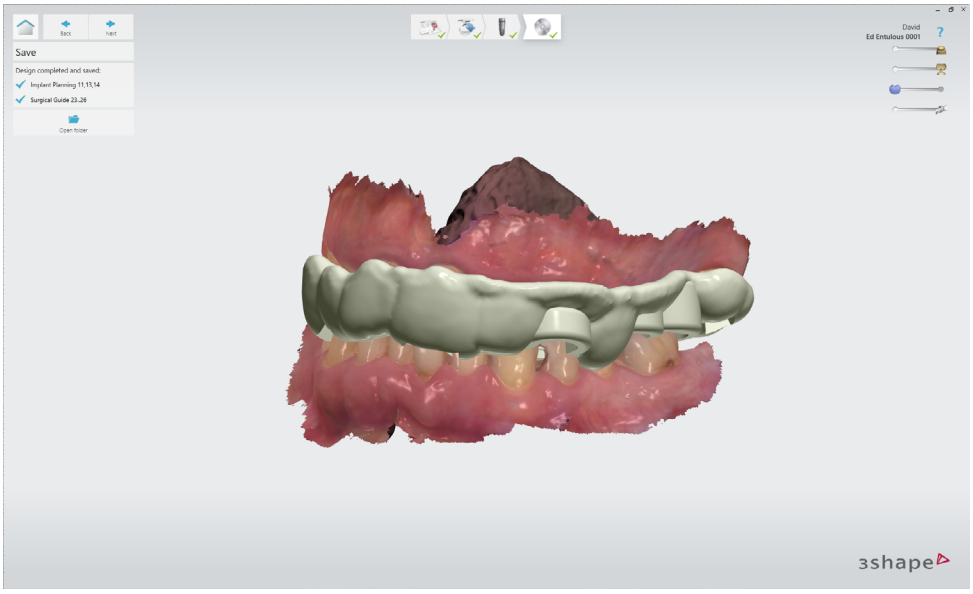


(E.g : L final drill = 20,5 - 9 = 11,5
Final drill: L11,5)

Always check the result with the PDF work offsets by compatibility.

After giving your approval, go to the last step, where the case will be saved. The following files will be generated automatically:

- Drill protocol PDF
- Surgical report PDF
- Surgical guide STL
- DCM of the jaw used in the case (containing the implant position)
- Case 3OX file



Nombre	Fecha de modificación	Tipo	Tamaño
25176345_20221216_1102_49.3ox	16/12/2022 14:57	Archivo 3OX	17 KB
Drilling protocol.pdf	16/12/2022 14:57	Documento Adob...	273 KB
Surgical report.pdf	16/12/2022 14:57	Documento Adob...	2.191 KB
SurgicalGuideUNN-11-13-14.stl	16/12/2022 14:57	STL File	7.391 KB
UpperJawScanWithImplantInfo.dcm	16/12/2022 14:57	DCM 3D Model File	3.655 KB