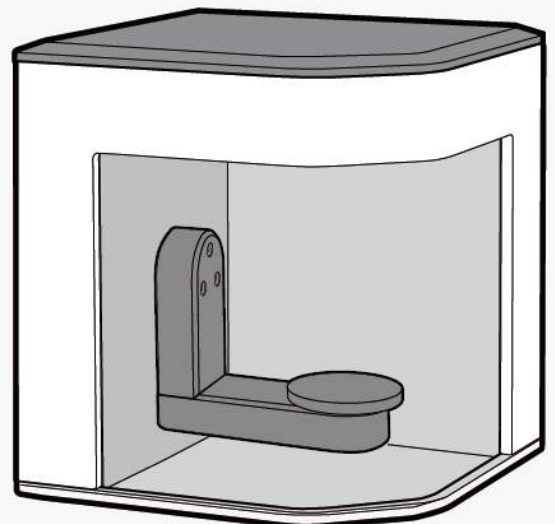


# Identica **T500**

*User Guide*



# Identica T500 User Guide



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# Greetings

Medit specializes in providing scanners and CAD/CAM solutions for dentists and dental technicians. Medit's Identica T500 scanner can be used to quickly and easily generate high-quality 3D data in the open STL and OBJ format, increasing your productivity and efficiency. Medit's scanners are very user-friendly, so anyone in the office can learn how to use them. This manual will help guide you through the installation and operation process.

※ Caution: Please read this manual completely before using Identica T500 Scanner.

Thank you for buying the Identica T500.



# General information

Applications

Workflow

Scanner and Scanning software



# Applications

Identica T500 can be used for the following applications.

- Single coping
- Bridge framework
- Anatomical copings and framework
- Full anatomic crown
- Full anatomical bridge
- Inlay / Onlay / Inlay bridge
- Veneers
- Single waxup / Waxup bridge
- Over-press crowns and bridges
- Post & Core
- Telescope
- Customized abutments
- Implant bars and bridges
- Removable partial design
- Orthodontics
- Virtual articulation
- Full denture

# Workflow

The Identica T500 is designed to provide high-quality scan data for any application, and any sized lab. Identica T500's user-friendly software gives users the ability to finish scans quickly and easily.

Scanning with Identica T500's specialized impression scanning feature makes it possible to save a significant amount of time – up to one day in some cases.

## 1) Create order

Set up the restoration tooth settings in the collab software or CAD software.

## 2) Model or impression scanning

Depending on the settings from the previous step, scan using a stone model. Directly scan an impression to create a restoration.

## 3) CAD work

Convert the design data to NC data using a CAD program.

## 4) CAM work

Convert the design data to NC data using a CAM program.

## 5) Milling

Create a restoration using a milling machine with the NC data.

## 6) Finish

Process the finished restoration.

# Scanner and Scanning software

## 1) Scanner: Identica T500

Identica T500 is designed to scan a wide range of dental models and impressions to quickly provide accurate data. With triple camera scanning technology, accuracy and precision is guaranteed, and with some of the fastest scanning speeds in the world, a full arch can be scanned in only 16 seconds.

Identica T500 maximizes convenience by improving existing workflows with new innovative technologies. In addition, Identica T500's new 3-axis arm makes it easy to scan impressions in one step.

## 2) Scanning Software: colLab 2017

The colLab 2017 consists of colLab for setting teeth, colLab Scan for scanning, and Update Agent for automatic update. colLab Software's user-friendly and intuitive design make scanning easy.

The Identica T500 also features a flexible multi-die function that decreases scan steps while improving the accuracy of matching scan data, saving you time and increasing productivity.





# Before use

Unpacking and Installation

Product information product

Specifications

PC requirements

# Unpacking and Installation

Connect the scanner to the computer, and find the other accessories in the box. There is special packaging to protect the scanner and accessories during transport.

※ Caution: When you receive your scanner, make sure all of the accessories are there, and if any are missing, please contact your dealer.

## Product information

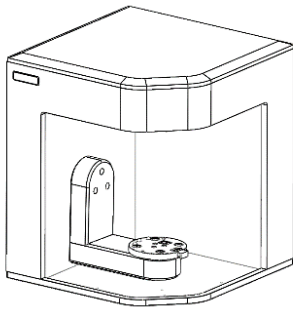
### Basic packing list

1. Identica T500 Scanner
2. Screw jig (2EA)
3. Gum jig
4. Multi-die
5. Half block jig (2EA)
6. Impression jig
7. Calibration panel
8. USB cable
9. Power cable & external adaptor
10. 3-axis arm (impression)
11. Flexible multi-die (8 single dies included)
12. Installation USB (UserGuide PDF included)

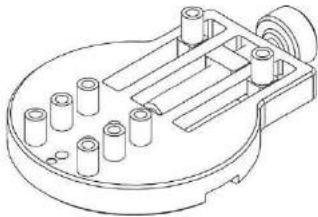
### Optional (separately sold)

13. Articulator plate
14. KAS jig
15. Antagonist jig

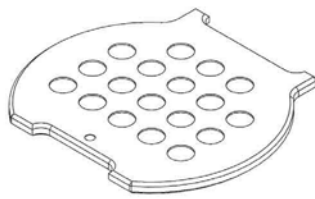
1. Identica T500 Scanner



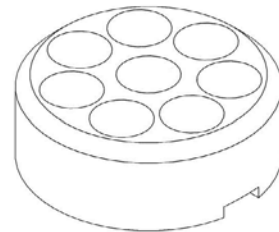
2. Screw jig (2EA)



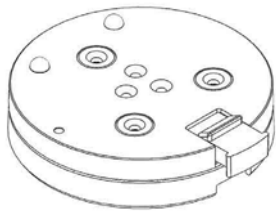
2. Gum jig



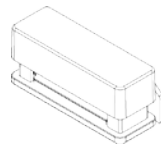
4. Multi-die



5. Half block jig (2EA)



6. Impression jig



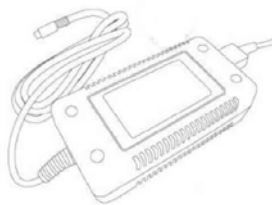
7. Calibration panel



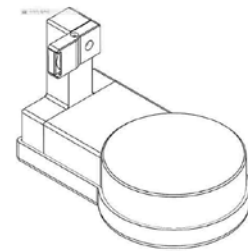
8. USB cable



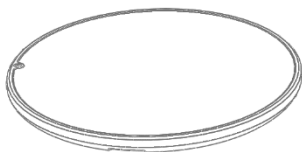
9. Power cable & external adaptor



10. 3-axis arm (impression)



11. Flexible multi-die  
(8 single-dies included)



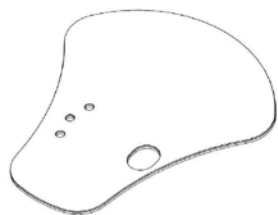
12. Install USB (User Guide PDF)



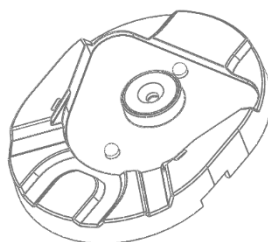


\* Optional (separately sold)

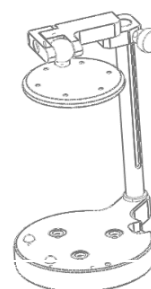
13. Articulator plate



14. KAS jig



15. Antagonist jig



## Product Specifications

Category	Descriptions
Camera resolution	Mono 2.0 (MP)
Point spacing	0.056 mm
Scan region	90mm x 72mm x 60mm
Scan principle	Phase-shifting optical triangulation
Size	290mm x 290mm x 340 mm
Weight	12 kg
Light source	LED, 150 ANSI-lumens
Light color	Blue
Scanning of textures	Color textures
Connection method	USB 3.0 B Type
Power	AC 100-240V, 50-60 Hz

## PC requirements

We suggest that you use the Identica T500 with a PC that exceeds the minimum PC requirements. We cannot guarantee proper operation with a PC that does not meet the minimum PC requirements. You must update your windows for the proper operation of USB 3.0.

### ※ Cautions

- : Identica T500 is designed for USB 3.0 port.
- : Identica T500 must be connected to a USB 3.0 port. Cannot run on Windows 32 bit and Mac OS.
- : Before installing the scan software, check for a Windows update and make sure the mainboard, VGA card, and USB drivers have been updated recently.

#### [ Minimum Requirements ]

CPU	Intel i5 2.6GHz or higher
RAM	8G or higher
Graphic Card	NVIDIA GeForce GT 730 (1GB) or higher/equivalent ATI graphic card
O/S	Windows 8 64 Bit (32 Bit - not available)

#### [ Recommended Requirements ]

CPU	Intel i7-3770 3.4GHz or higher
RAM	16G or higher
Graphic Card	NVIDIA GeForce GTX 1060 (3GB) or higher
O/S	Windows 10 64 Bit (32 Bit - not available)



# Installation

First, install colLab Software on your computer before connecting.

Step 1 : Software installation

Step 2 : Hardware installation

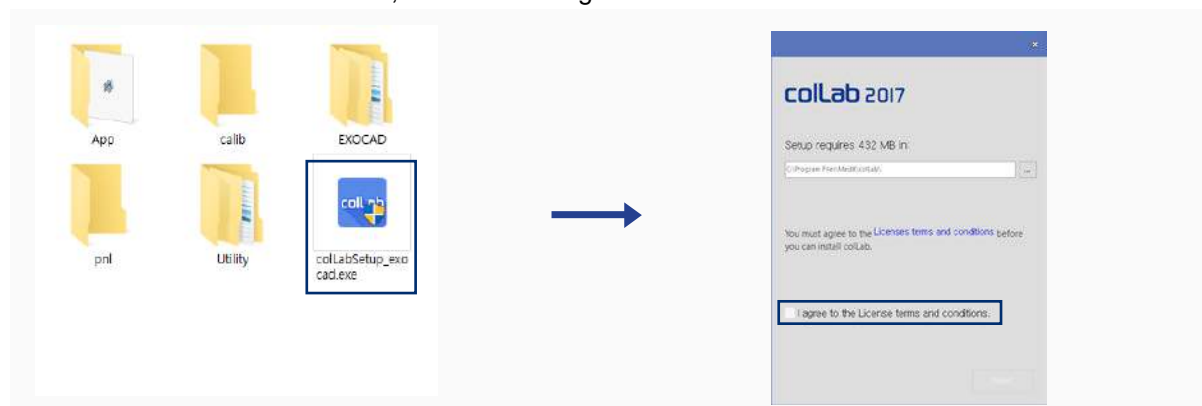
Precautions

# Step 1: Install colLab 2017 S/W

## 1. 1. Install colLab 2017 S/W and EXOCAD together (colLabInstaller\_EXOCAD\_2.0.0.0)

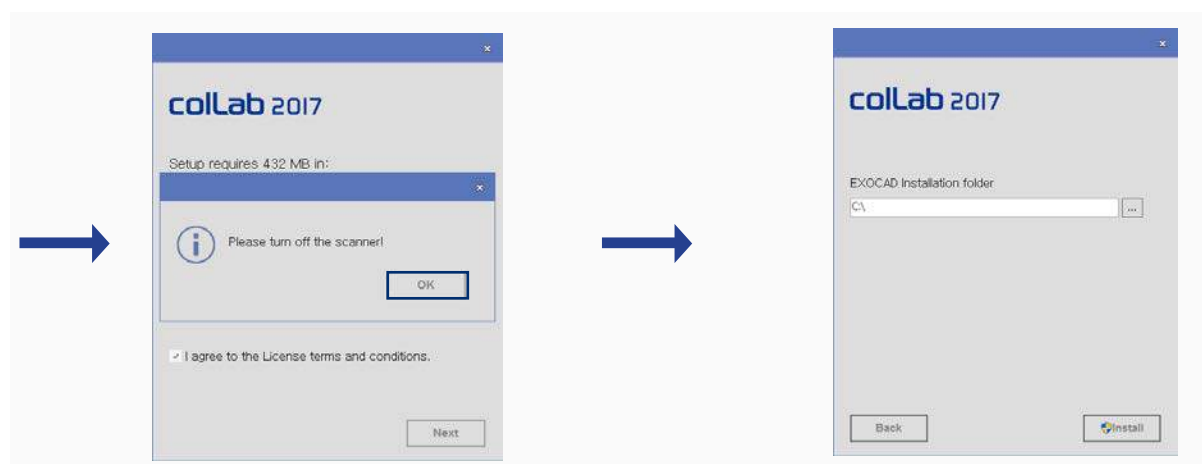
► Please open the installation folder and run 'colLabSetup\_exocad.exe'.

First, set the directory you wish to install the program in (default directory recommended). Then check the license terms and conditions, then select 'I agree...'



► Please turn off the scanner if it is on, then press [OK] to proceed to next stage.

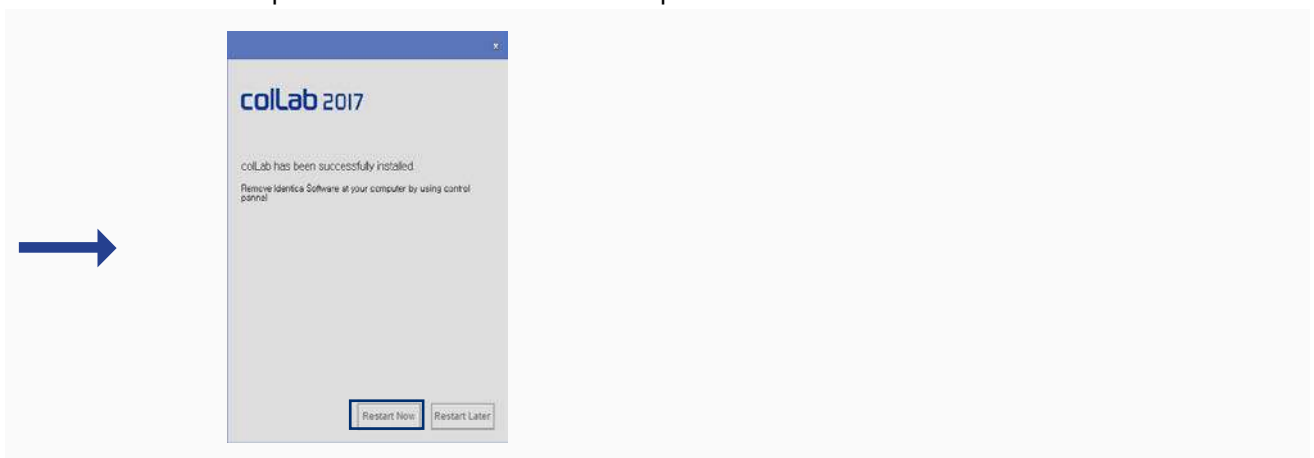
Please set the directory to install EXOCAD.



This will automatically install the colLab 2017 S/W and other necessary S/W. this process may take few minutes depending on the computer.



Please reboot the computer once the installation is complete.



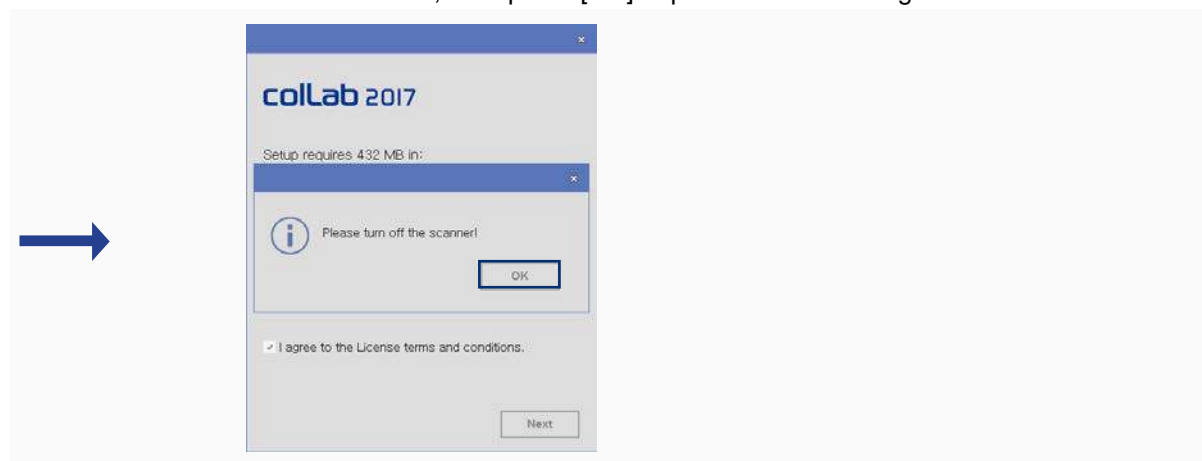
## 1. 2. If only colLab 2017 S/W needs installation or if EXOCAD is already installed (colLabInstaller\_2.0.0.0)

Please open the installation folder and run 'colLabSetup.exe'.

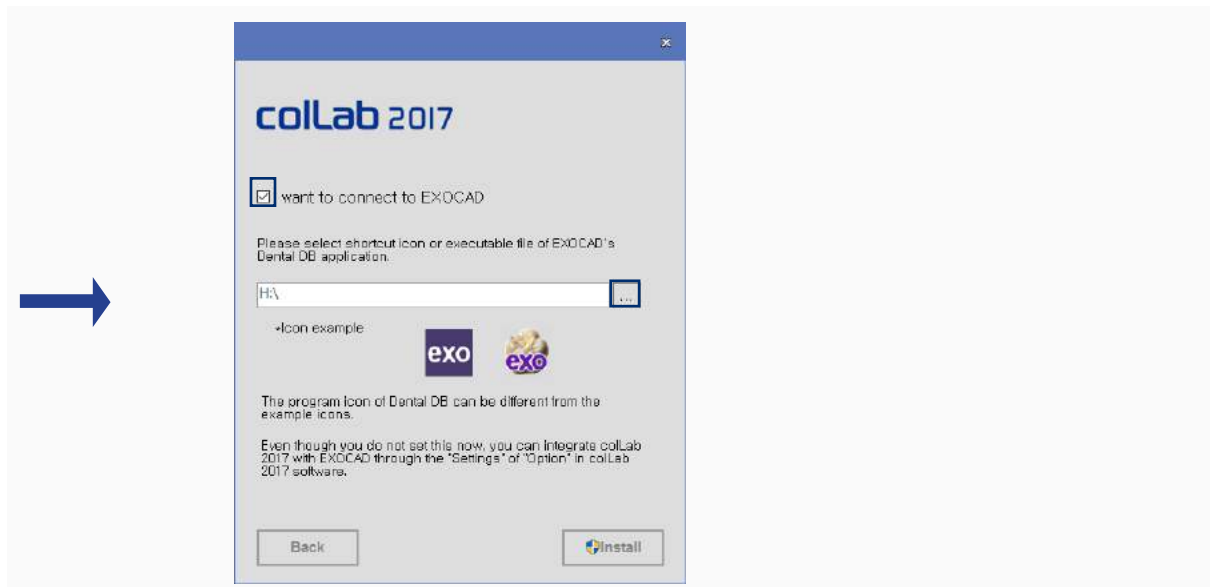
First, set the directory you wish to install the program in (default directory recommended). Then check the license terms and conditions, then select [I agree...] and click next.



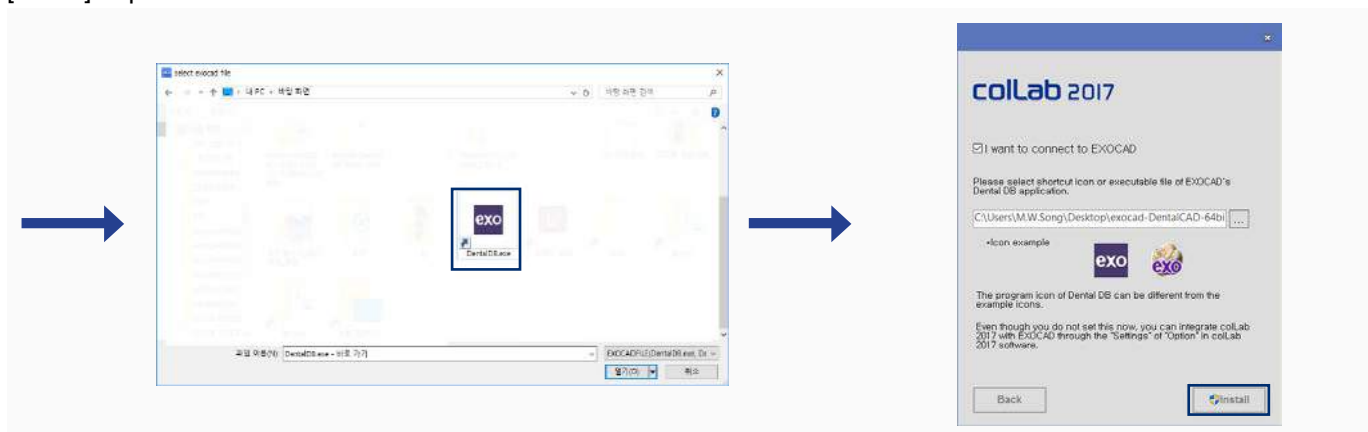
Please turn off the scanner if it is on, then press [OK] to proceed to next stage.



If auto-link to EXOCAD is desired, please select [I want to connect to the EXOCAD], and click [...] button.



When the 'select file' window pops up, please select [Dental DB] icon in the EXOCAD, and click [Install] to proceed.

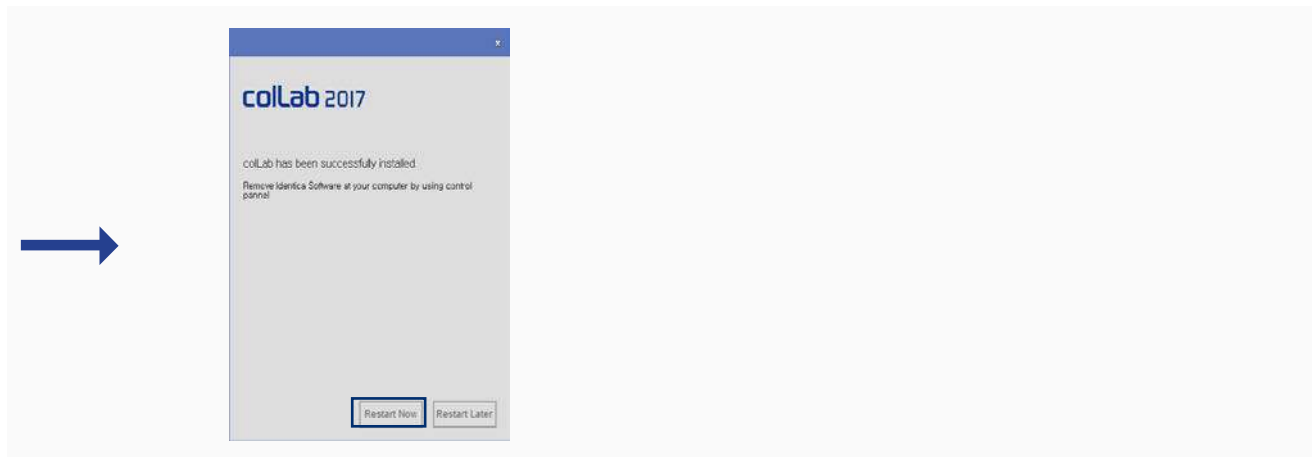


This will automatically install the colLab 2017 SW and other necessary SW. this process may take few minutes depending on the computer.



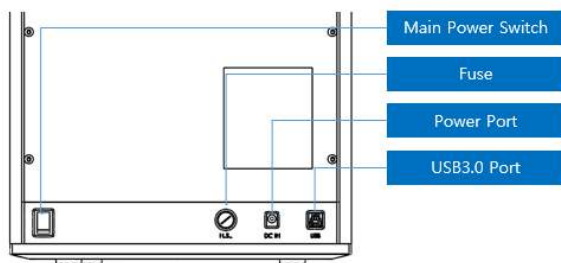


Please reboot the computer once the installation is complete.



# Step 2: Hardware installation

## 1. Product connection



► After installing the software, restart the computer and install the hardware.

※ Caution : Securely connect the cables to the PC.

(Identica T500 requires a USB cable and power cord.)

: Identica T500 requires only a USB 3.0 connection.

### 1. Connect the power cable



### 2. Connect the USB cable to the blue USB 3.0 port on your computer.



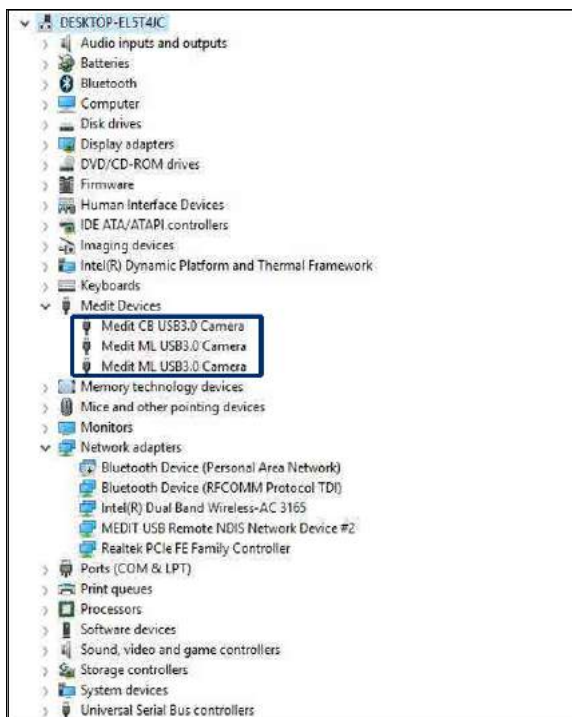
### 3. Turn on Identica T500 by Turning on the power switch on the back of the scanner.



- ▶ Confirm hardware installation.
  - ✔ Open the device manager in computer.
- ▶ Check MEDIT USB Remote NDIS Network Device.



- ▶ Check the camera
  - ✔ Check to see if 3 cameras are registered.



# Precautions

## General precautions

- ✔ Only qualified persons should use this machine.

## Installation precautions

- ✔ Install the machine in a place unexposed to water, high air pressure, high temperature, high humidity, dust, salt, ions, and other environmental factors.
- ✔ Take care to protect your scanner from external hazards (e.g. sloped surface, vibrating surface, etc.)
- ✔ Do not install the machine in a chemical storage area, or any place where there are gas emissions.
- ✔ Install the machine in a well-ventilated place.
- ✔ Take special care regarding power frequency, voltage, and allowable current (or power consumption).

## Precautions before using this machine

- ✔ Make sure that every component is correctly connected and fixed.
- ✔ Make sure that the machine is correctly recognized in your computer's Device Manager.
- ✔ Do not move your machine by applying force to its scanning arm.

## Precautions when using this machine

- ✔ Do not shock or vibrate the machine during use.
- ✔ Do not turn off the power while using Identica T500.
- ✔ Do not block the vent while the machine is in use.
- ✔ If there is smoke or a strange smell, immediately turn off the power switch, disconnect the power cord, and contact the manufacturer.
- ✔ Remove the power cord from the machine if not in use for an extended time.
- ✔ All repairs should be done by the manufacturer or a Medit approved repair center. Users should not disassemble or assemble their scanner. Doing so will void the warranty.
- ✔ Do not modify this machine for any reason. Unapproved modifications will result in a voided warranty.

## Maintenance

- ✔ If the machine has not been used for a while, check for proper installation and calibration.
- ✔ Check to make sure that the scan data is correct.
- ✔ Periodically clean the machine with a dry cloth and make sure to not let water or moisture inside the machine.
- ✔ Do not clean this machine with corrosive detergent or antiseptic solution.
- ✔ Always turn off the power when checking the inside of the machine.
- ✔ Do not use a spray can or spray any material near the scanner.
- ✔ Do not touch the mirror inside the scanner.

## Instructions for Storage

- ✔ Lightly wipe the surface with a dry cloth, taking care to not let water, other liquids, or other foreign materials contaminate the machine.
- ✔ Keep the machine in a safe place so that it will not be damaged.

## Environmental conditions for use

Temperature range: 18 °C ~ 28 °C

Relative humidity: 20% ~ 75%

## Environmental conditions for transport and storage

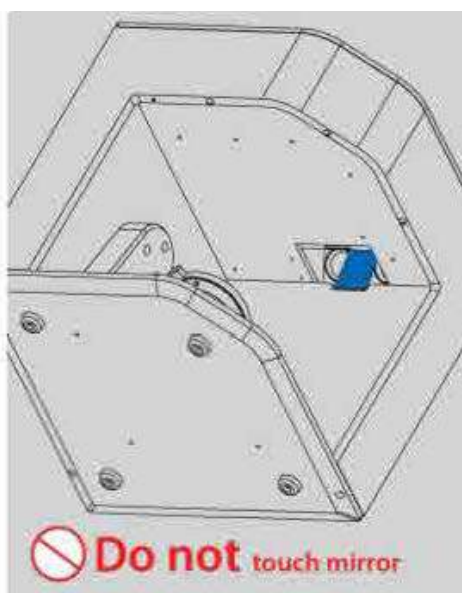
Temperature range: -5 °C ~ 45 °C

Relative humidity: 20% ~ 80%

## Operation Condition: Indoor use only

Altitude: 0 to 6,562 ft. (2,000 meter) above sea level

Overvoltage category 1 and Pollution Degree 2



## Précautions d'utilisations

Cet appareil ne doit être utilisé que par un personnel compétent et expérimenté.

Précautions à prendre lors de l'installation de l'appareil.

- ❖ L'installation doit s'effectuer dans un endroit sec.
- ❖ Installer l'appareil dans un endroit aéré ayant une humidité et une température stable, sans poussière et à l'abri du sel et des ions.
- ❖ Les vibrations, chocs, inclinaisons etc., peuvent agir sur la sécurité de l'appareil.
- ❖ Ne pas l'installer dans un local où se trouve des produits chimiques ou des produits émettant du gaz.
- ❖ Ne pas placer dans un endroit mal aéré.
- ❖ Attention aux fréquences et à la tension électrique, ainsi qu'au courant admis (consommation électrique).

Précautions à prendre avant l'utilisation.

- ❖ Vérifier les branchements et les fixations.
- ❖ Ne pas forcer les axes de rotation et d'élévation.

Précautions à prendre lors de l'utilisation.

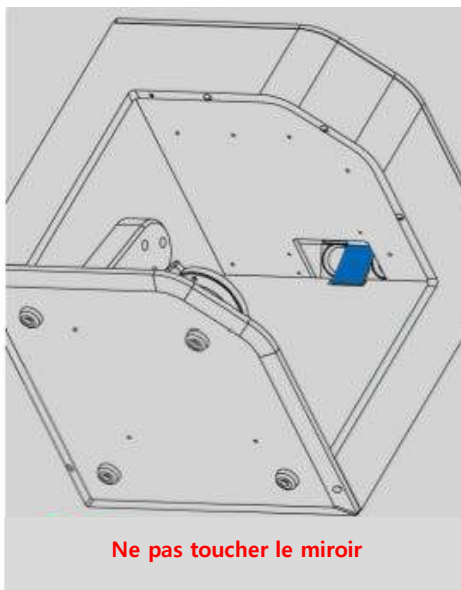
- ❖ Protéger l'appareil des chocs et de vibrations lorsqu'il est en marche.
- ❖ Ne pas éteindre l'appareil lorsqu'il est en marche.
- ❖ Ne pas obstruer la sortie d'aération lorsque l'appareil est en marche.
- ❖ En cas de détection de fumée ou d'odeur anormale, éteindre immédiatement l'appareil puis le débrancher avant de contacter le fabricant.
- ❖ En cas d'absence humaine ou de non utilisation à long terme de l'appareil, veuillez le débrancher.

En cas de détection de problème, la tâche de l'utilisateur se limite à vérifier l'état de l'appareil. Demander la réparation auprès du vendeur au lieu de démonter/remonter librement.

Ne pas transformer/modifier l'appareil

Entretien/vérification

- ❖ A.7.1. Lors de l'utilisation de l'appareil suivant une longue période de repos, vérifier l'état de l'installation et du calibrage de l'écran.
- ❖ Vérifier si les données scannées sont normales.
- ❖ Essuyer l'appareil à intervalle régulière avec un torchon propre pour empêcher l'eau de pénétrer dans la partie intérieure.
- ❖ Ne pas nettoyer l'appareil avec du détergent ou une solution désinfectante.
- ❖ L'appareil doit impérativement être éteint lors de l'inspection de la partie inférieure.
  - Ne pas vaporiser vers l'intérieur du scanner.
  - Ne pas toucher le miroir situé à l'intérieur du scanner.



## Do Not

### Conditions d'entretien

Essuyer légèrement la surface de l'appareil avec un torchon sec, avec précautions pour le protéger du contact avec des substances étrangères tels que l'eau ou autres types de liquide.

Après utilisation, conserver l'appareil dans un endroit sûr pour éviter tout dégât causé par l'insouciance.

#### Conditions de l'environnement d'utilisation.

Température ambiante : 10°C ~ 35°C

Taux d'humidité : 20% ~ 75%

#### Conditions de l'environnement pour le transport/stockage

Température ambiante : -5°C ~ 45°C

Taux d'humidité : 20% ~ 80%

#### Condition de fonctionnement: Utilisation intérieure uniquement

Altitude: 2,000 Mètres au-dessus du niveau de la mer

conditions de surtension de catégorie I et Degré de pollution de catégorie II

# Using Identica T500

How to use colLab Software

How to use colLab Scan software

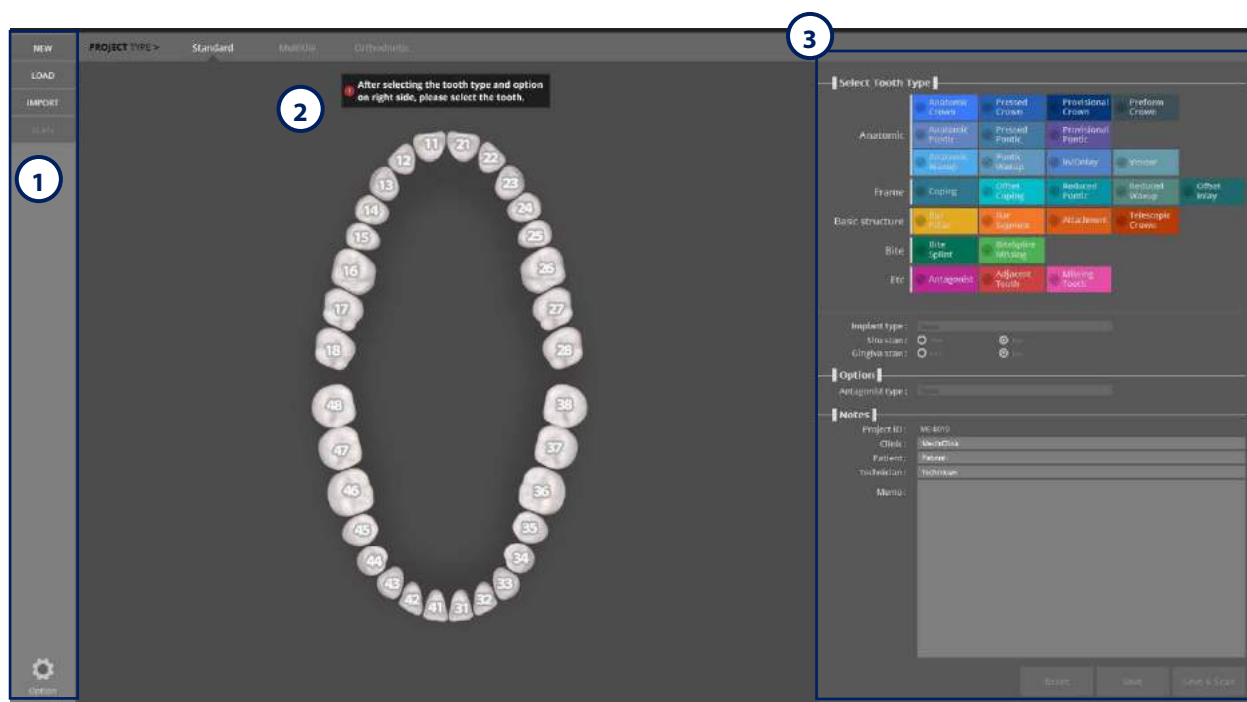


# How to use colLab Software

## colLab Software GUI (Graphic User Interface) Configuration

### Standard screen configuration

The colLab interface will appear as in the screenshot below.



### i Button Description

#### 1 Menu

- New project: create a new job.
- Load: load an existing file.
- Import: import a [.dentalproject] file.

#### 2 Project Type

- Standard: use when not using multi-die.
- Multi-die: select when scanning with multi-die.
- Orthodontics: use when scanning the orthodontics model.

Tooth number: use when setting up the teeth. Tooth numbers can be converted in option-setup.

#### 3 Job setup

##### ► Select Tooth type ►► Anatomic

- Anatomic Crown: Full abutment crowns; complete replacement of tooth shape.
- Pressed Crown: Prostheses made up of two parts. Dental prosthesis consisting of a set for the second operation and operations of the 1st frame, which serves as the cut-back core to reproduce the occlusal surface of the prosthesis by making a Wax / PMMA casting.
- Provisional Crown: Used to prepare a temporary tooth from the outer surface of the inner tooth.
- Preform Crown: Setup using a particular semi-finished block to reduce processing time.
- Anatomic Pontic: Setup a full contour pontic. By default, the link for the bridge is created if pontics are connected to the adjacent restoration.
- Pressed Pontic: Setup a pontic that has the same function as a Pressed Crown.
- Provisional Pontic: Setup a pontic for a provisional crown (unlike a provisional crown of which the inner side tooth is prepped)

Anatomic Waxup: Setup for making an abutment and copied restoration made from a scanned waxup restoration (for making replicated restoration).

Pontic Waxup: Setup for making a replicated restoration from a scanned waxup restoration on the pontic part (for making replicated restoration).

Inlay/Onlay: Setup for making inlay or onlay over a preparation tooth.

Veneer: Setup for making a veneer or laminate over an abutment.

► Select Tooth type ► ► Frame

Coping: Cutback to create space for a ceramic from a restoration.

Offset Coping: Make a fixed thickness cap restoration over the abutment.

Reduced Pontic: Cutback to create space for ceramic from a restoration of a pontic.

Reduced Waxup: Scan and replicate a preparation tooth and contour waxup restoration, and cutback, or shrink, the part for a ceramic restoration.

Offset Inlay: Setup for an inlay restoration with fixed thickness over the preparation tooth for inlay. (Usually, complete the job using ceramic material.)

► Select Tooth type ► ► Basic structure

Bar Pillar: The portion of a bar that connects to the implant.

Bar Segment: The portion of a bar that provides connection between the pillars.

Attachment: Setup the preparation teeth for making the attachment.

Telescopic Crown: Setup for making the inner coping for the telescopic crown

► Select Tooth type ► ► Bite splint

Bite Splint: Used for night-guards, mouth guards, and orthodontic appliances.

Bite Splint Missing: Setup a missing tooth from a bite splint.

► Select Tooth type ► ► Etc.

Antagonist: Define the teeth in the opposing jaw to be used in the restoration.

Adjacent Tooth: Select the tooth beside the tooth to be scanned.

Missing tooth: Select a tooth that is missing and will not be restored.

► Select Tooth type ► ► Implant type

None: when a preparation tooth is not an implant restoration.

Custom Abutment: When using a scanbody to create an implant custom abutment.

Custom Abutment Manual Positioning: When scanning a titanium link or interface without using a scanbody and designing an abutment above it

Screw Retained: Setup for making a fixed restoration using a screw retained above the implant external type abutment.

Screw Retained Manual Positioning: When making a SCRP crown.

► Select Tooth type ► ► Situ Scan

Situ scan: Setup when you have a situ scan or study model to create a restoration.

► Select Tooth type ► ► Gingiva Scan

Gingiva: Select when you scan a gingiva separately.

► Option ► ► Articulator type

None: Choose when you do not select the antagonist in the arch.

Etc.: Select when scanning an antagonist, or scanning an upper/lower jaw using another jig instead of an articulator plate.

ARTEX: Select when scanning an antagonist using an artex articulator and its plate.

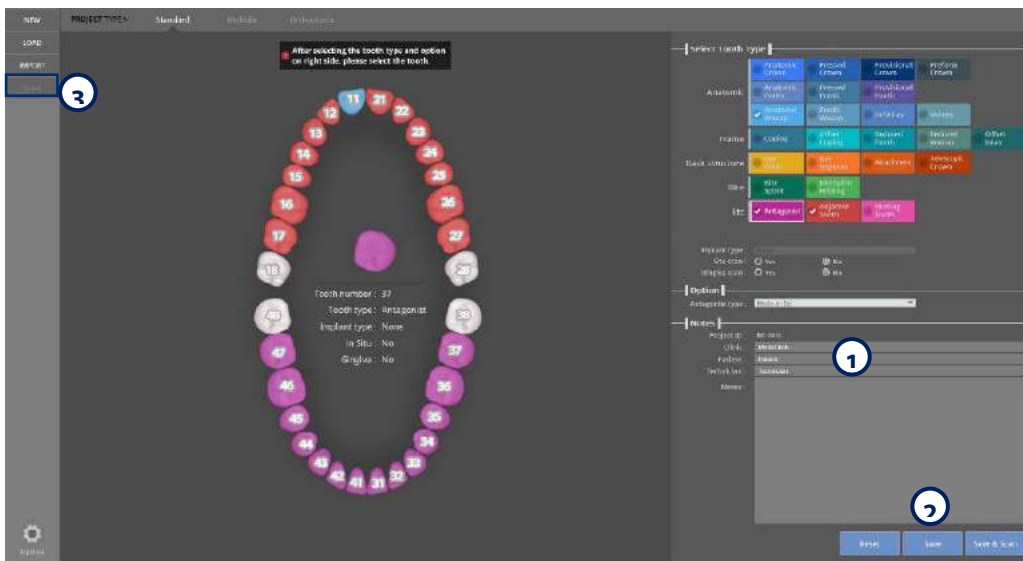
KAVO: Select when scanning an antagonist using a Kavo articulator and its plate.

SAM: Select when scanning an antagonist using a Sam articulator and its plate.  
Plate: Select when using an articulator plate with a large articulator.

► Notes

Project ID: Enter the project ID.  
Clinic: Enter clinic information.  
Patient: Enter patient information.  
Technician: Enter information about the technician working on this job.  
Memo: Enter special notes about this job

**i** Project Registration and Execution  
Enter the project information

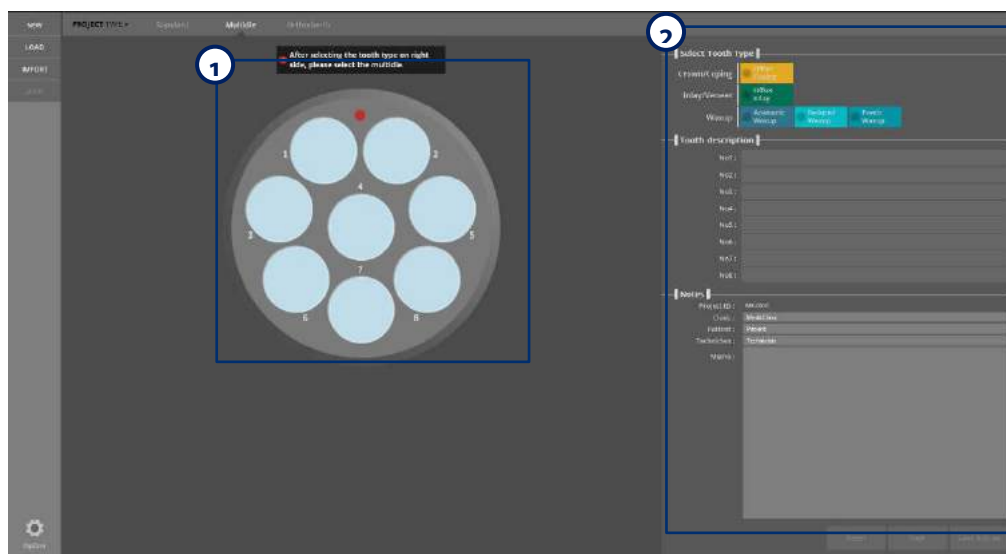


Enter the information in order as seen below:

1. Select the type of prosthesis.
  - ▶ The selected prosthesis is displayed in a different color depending on the type.
    - Refer to [Setting the teeth] (prosthesis type) for more information.
2. When working with an antagonist, select the antagonist in the arch.
  - ▶ If scanning an antagonist, you must select at least one tooth on the other side of the arch as an [Antagonist.]
3. Select whether there is a bridge or not with the connector between selected restorations.
  - ▶ By default the bridge is created to adjacent restorations with the pontic.
    - Taupe: There is a bridge.
    - Gray: There is no bridge. (If you need a bridge, click connection points)
    - If there are no connectors: In case the selected restoration does not have a bridge.
4. Save and scan
  - Leave a note about dentists/patients/workers in the notes **1** section
  - Complete the work information, and click [Save] **2**. All the work and information will be added to the database and a folder will be created. All the work and related information will be saved into a folder.
  - Once the work is saved, the [Scan] button will be activated. You can start scanning if click [Scan] **3**. The activation of the icon and its function can be different depending on the work type.

## Multi-die configuration screen

If you click on the multi-die button, you will see the following:



**i** Description or buttons

**1** Configure multi-die set up

To proceed with the scan, select the desired position of the teeth from 1-8, Setup the selected restoration.

**2** Job setup configuration

▶ Tooth type ▶▶ Crown/Coping

Offset Coping : Setup a simple coping with a fixed thickness over the preparation.

▶ Tooth type ▶▶ Inlay / Veneer

Offset Inlay: Setup for a simple inlay with a fixed thickness over the inlay preparation.

▶ Tooth type ▶▶ Waxup

Anatomic waxup: Scan the full anatomic waxup to create the framework for the prep teeth.

Reduced waxup: Scan the full anatomic waxup, and cut it back to create the framework. Selective reduction (marking parts that stay unreduced) is also possible.

Pontic waxup: Scan the full anatomic waxup to create the framework for the pontic base.

▶ Notes

Project ID: Enter the project ID.

Clinic: Enter clinic information.

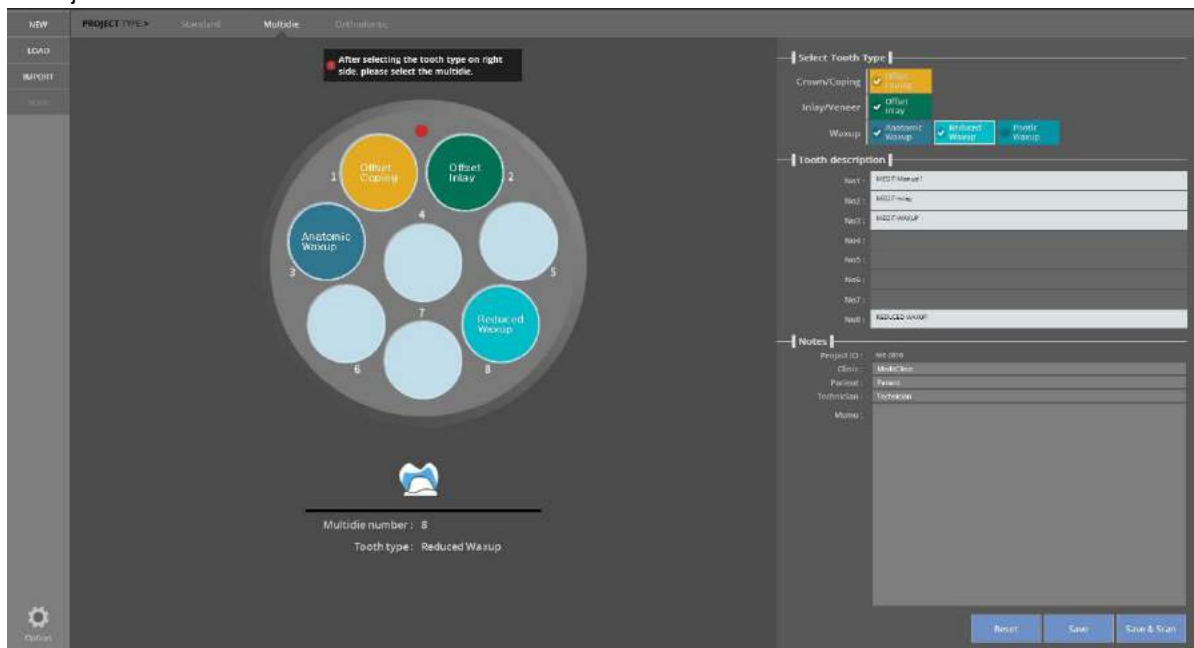
Patient: Enter patient information.

Technician: Enter technician information.

Memo: Enter any special notes.

**i** Register job and run the scan

Enter job information

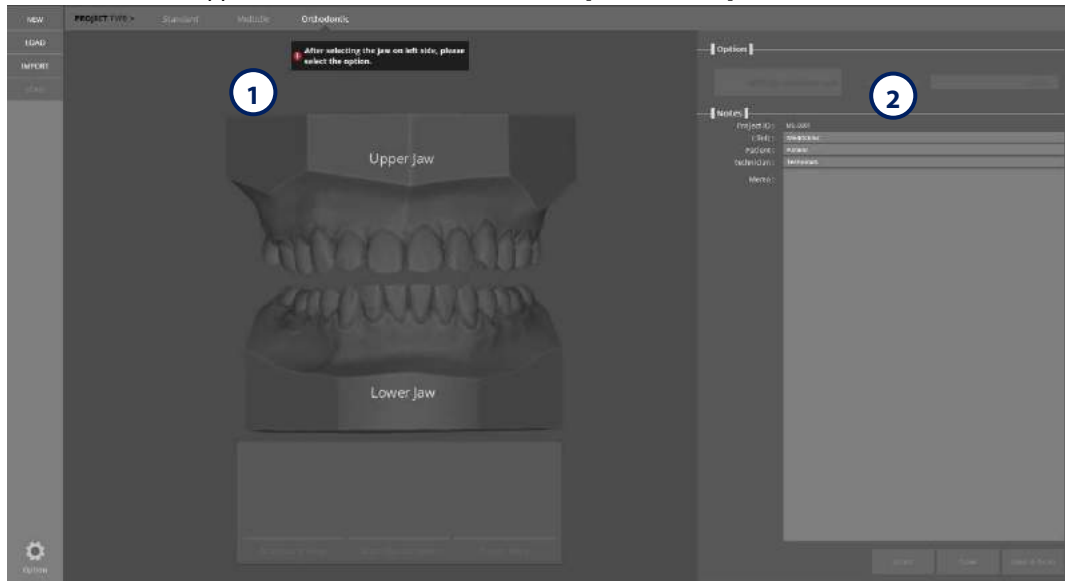



Enter the job information in the order below:


1. Select the type and location of the prosthesis in the multi-die.  
The selected prosthesis is displayed in a different color.  
Refer to the [Job Setup] for the detailed information.
2. Enter descriptions for the positions of the abutments in the multi-die.
3. Enter necessary information for the dental clinic, patient, and job.
4. Save and scan.
  - After inputting the information, click [Save & Scan].
  - The stored job information is added to the database and a task folder is created. This folder contains all of the data associated with the job.
  - You can start the automatic scanning after saving the project. Icons and their corresponding functions can vary depending on the type of operation.

## Orthodontics screen configuration


The interface will appear as in the screenshot below if [Orthodontics] is clicked.



 Button description

 Jaw selection

Select the upper or lower jaw to be scanned


 Job setup

Option: Occlusion scan

Once the upper and lower jaws are selected together, the [occlusion scan] option will be activated.

If occlusion is not needed for orthodontics, deactivate that option.

If occlusion is needed, select this option and choose the type of articulator from the right.

 Refer to general setting for articulator types above.

### ► Project Information Project

ID: type Project ID.

Clinic: Type the clinic information.

Patient: Type the patient information.

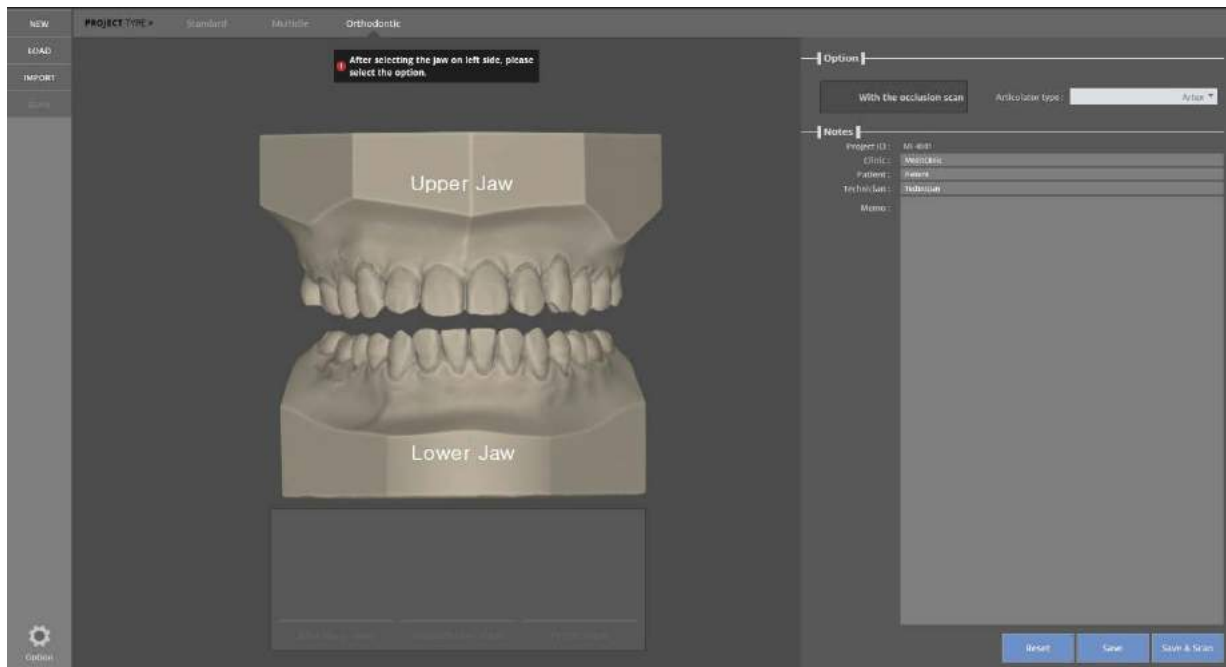
Dental Technician: Type the information of the technician working on this job.

Memo: Enter special notes about this job.

## Setup job and run

Enter job information

Type the job information as indicated below.



1. Select the jaw to scan.
2. If both are selected, choose whether to perform the occlusal scan.
3. Leave a note about the clinic / patients / workers in the notes section.
4. Save and scan

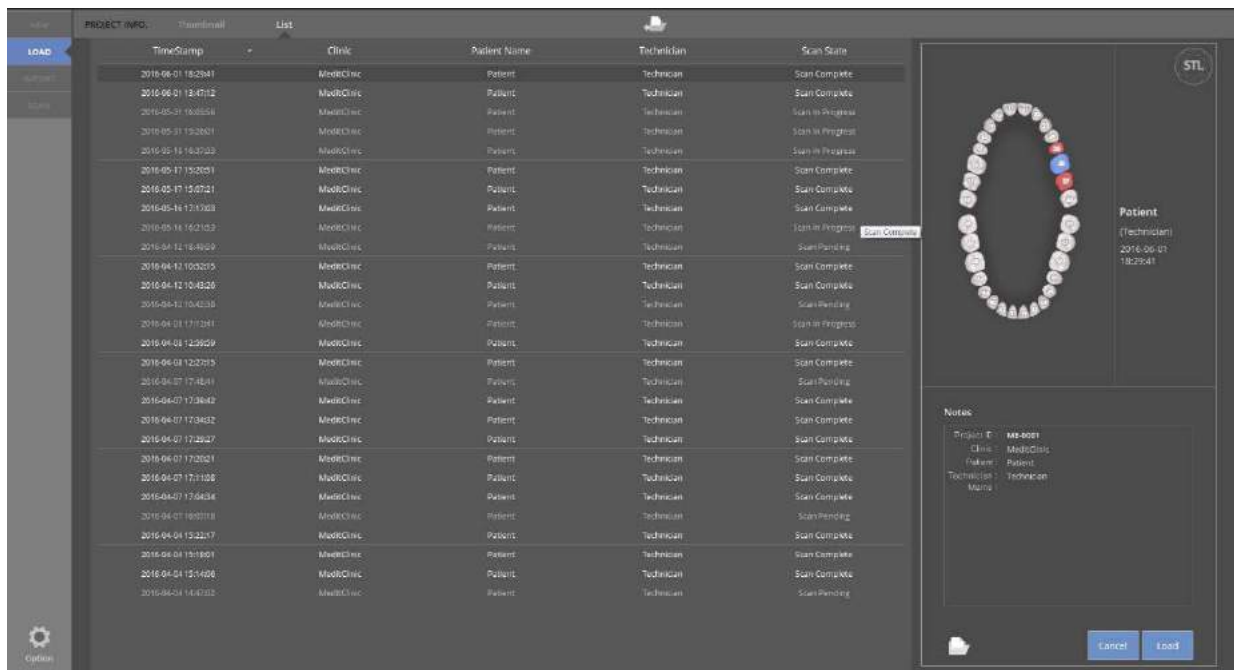
Complete the work information, and click [Save & Scan]. All the saved work information will be added to the data base and a folder will be created.


All the work and related information will be saved in a folder. Once the work is saved, auto scanning will be available. The activation of the icon and its function can be different depending on the work type.



 Configure [LOAD] screen

If you click the [LOAD] button you will see the screen below.

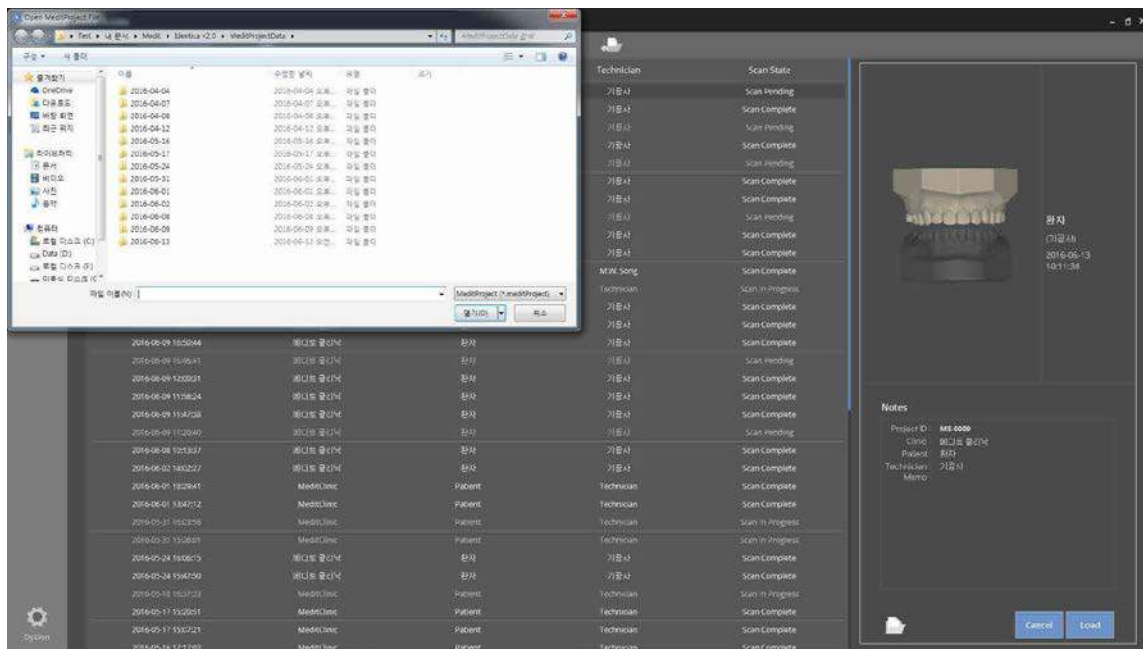


 Button descriptions

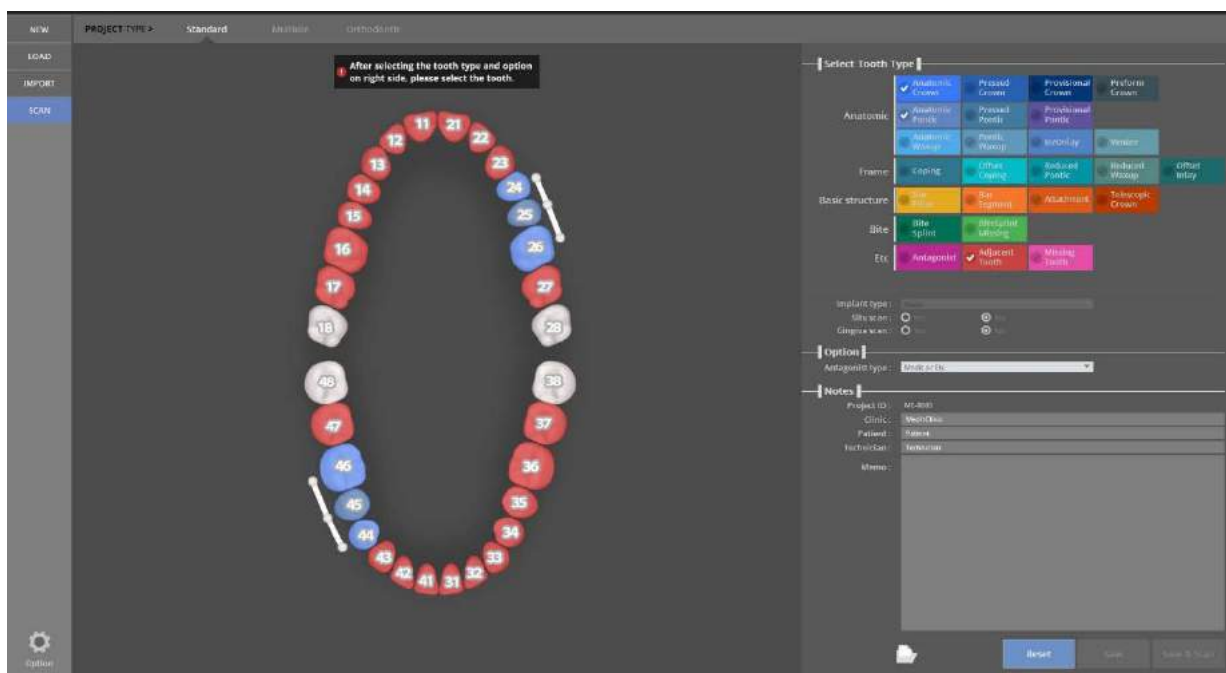
1. Thumbnail: Show the list of jobs as thumbnails.
2. List: Show the list of jobs as a list.
3. File Load: Directly load the [.Medita Project] file.
4. Open Folder: Open the folder in new window.
5. Load: Load the selected file.
6. Cancel: Cancel the current job and return to the previous job.

### Configure the [IMPORT] screen

If you click the [IMPORT] button, the screen below will appear.

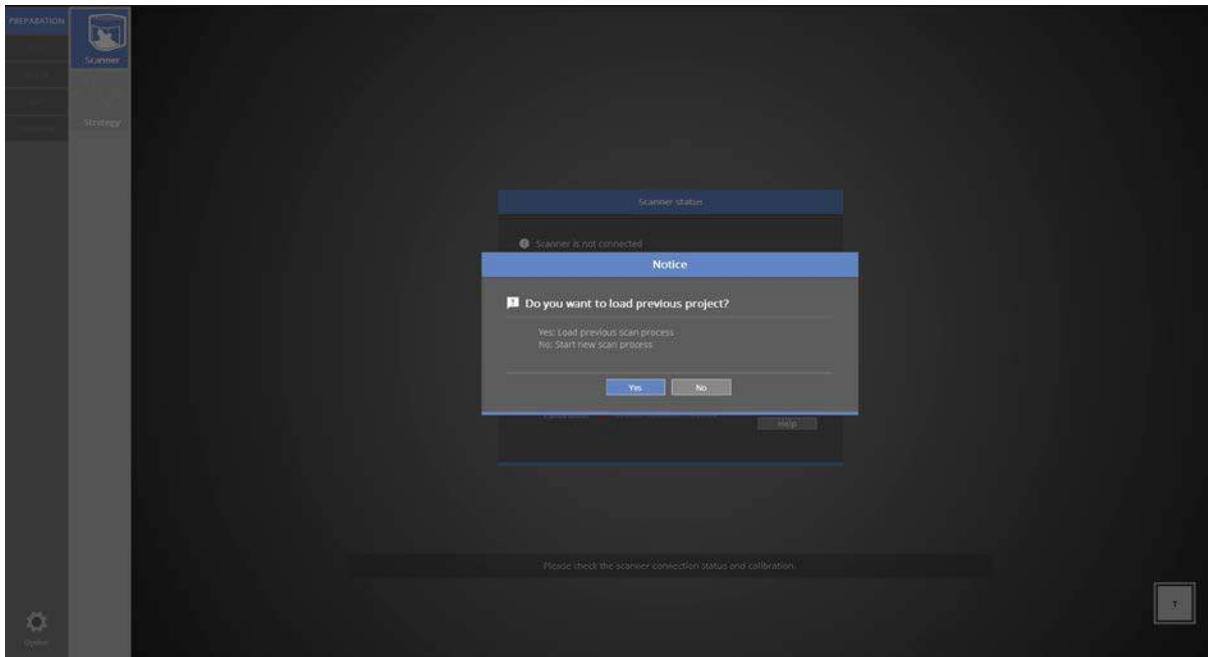


Select the [.dentalProject] file.



Change the settings as needed, and click [Save & Scan].

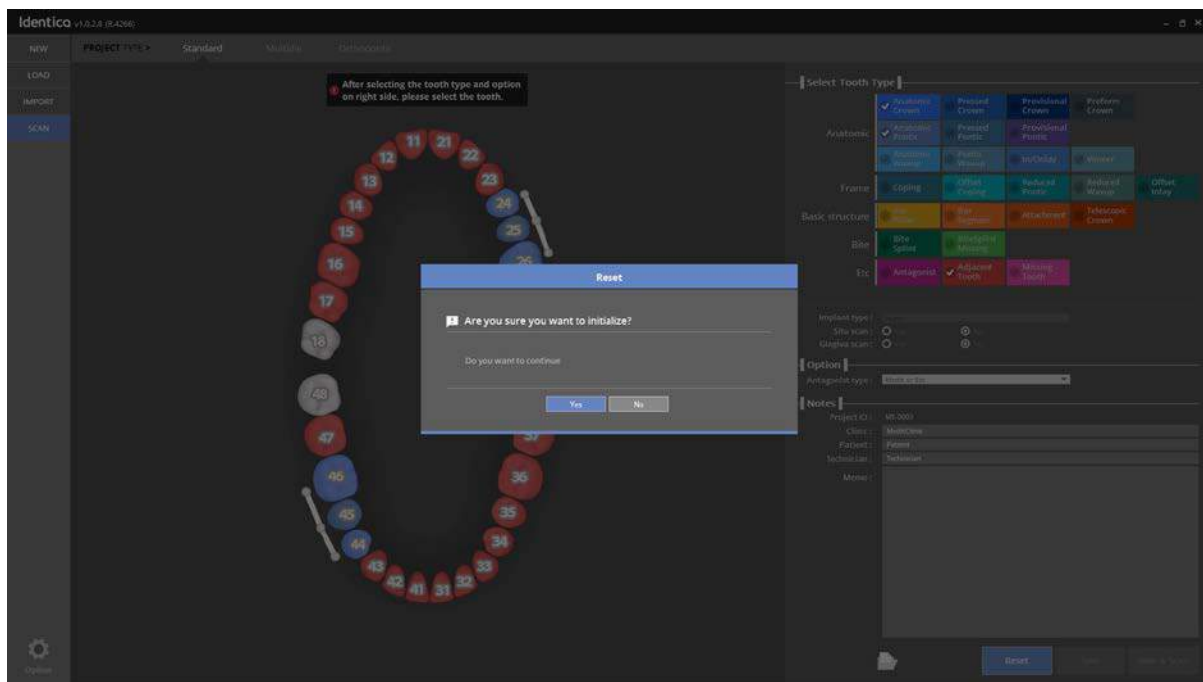
If there is no change, click [SCAN] to proceed to the next step.



The work case has been successfully imported.



If you want to return to the original screen, click [Reset].

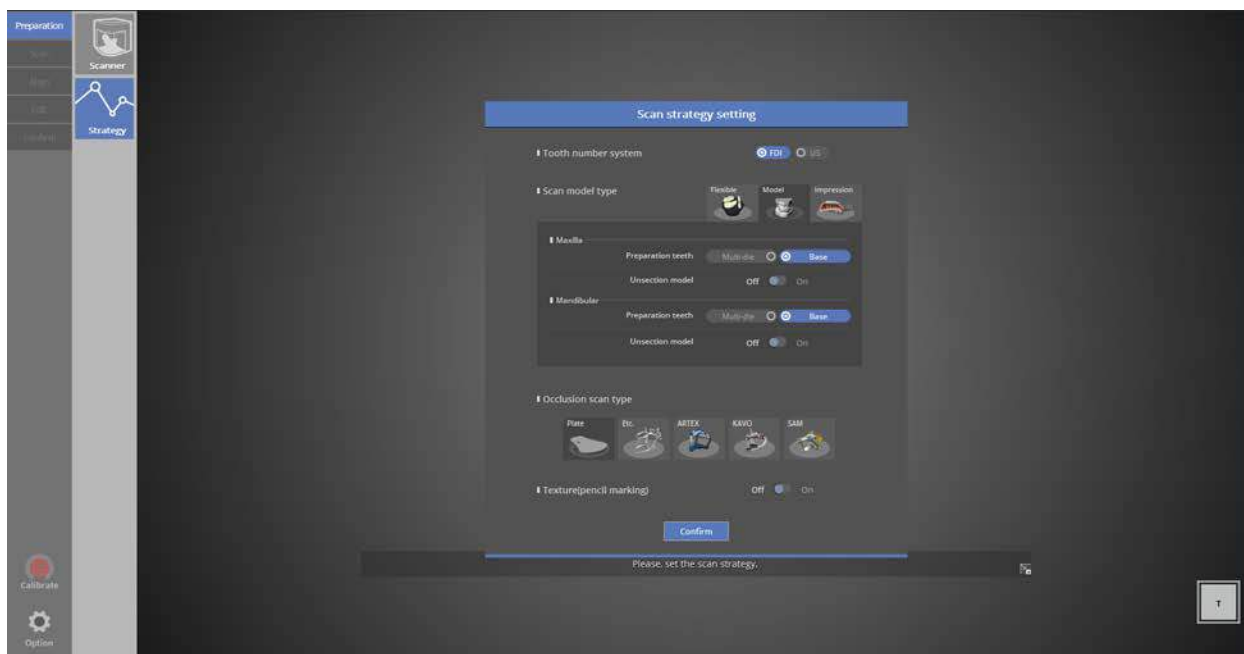


If you click [Yes], you will be taken back to the original screen. If you click [No], you will return back to your workflow.

### Configure [Scan] screen

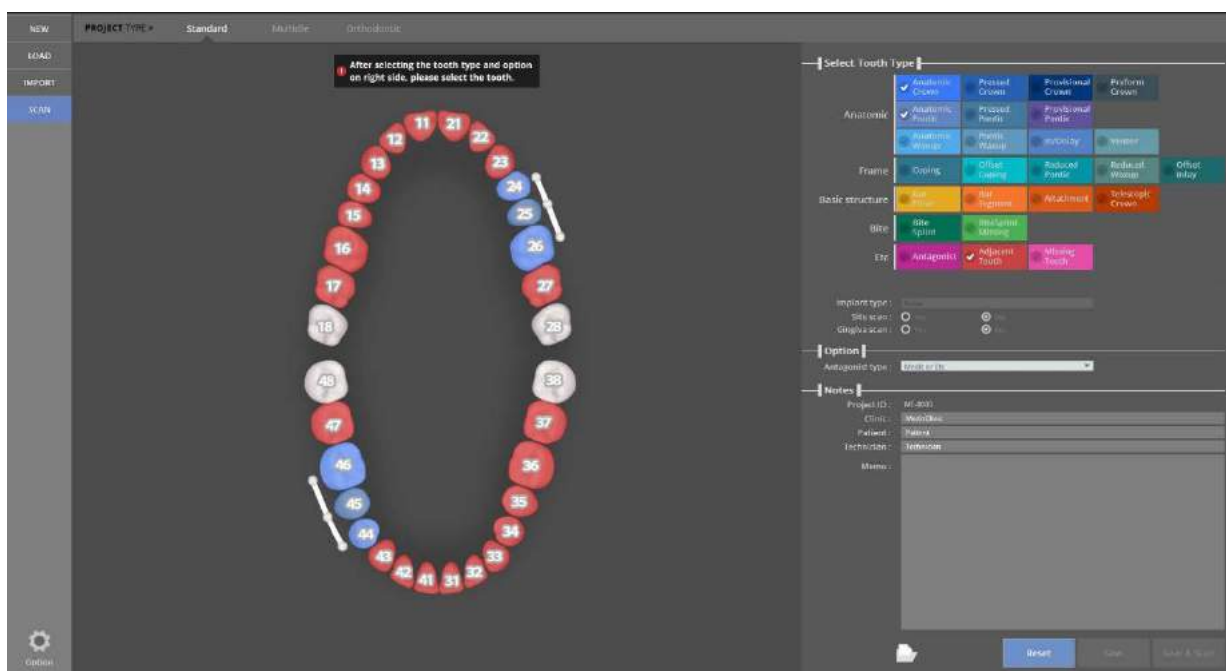
If you click the [SCAN] button, you will see the screen below.

Refer to the [SCAN] for the further information.



### Configure the [Option] screen

If you click the [Option] button the screen below button settings will appear.



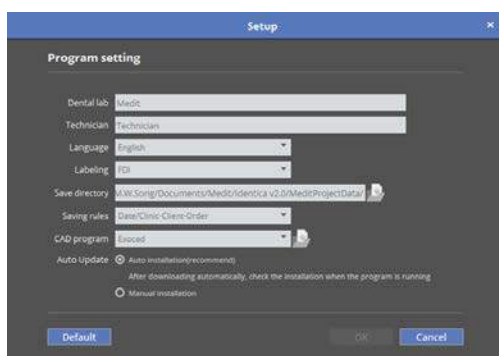
### Button Settings Option

**Update Agent:** After checking if the software is up to date, run the update program. (Log-in required)

**Trouble-shooting:** Should you have problems with the colLab Software, go here for help.

**Settings:** You can change the original settings of colLab software program.

**About:** Current information about the colLab Software.



### ► Option ► ► Setup

**Dental Lab:** Register the name of the dental lab using this program.

**Technician:** Type the name of the dental technician.

**Language:** Choose your language.

**Labeling:** Choose FDI or ADA tooth numbering system.

**Save directory:** Choose where to save your files. (Set the path by opening the folder.)

**CAD program:** When you want to connect to Exocad, select the Dental DB and use it

Storage rules:

- (1) Date / Clinic-Client-Order: The date is created as the parent folder, and the data is managed by creating a working folder named 'Clinic-Client-Order'
- (2) Date-Clinic-Client-Order: Collects and stores data in one folder without creating a parent folder of the date. The folder name is managed in the form of 'Date-Clinic-Client-Order'.

CAD program: It is used to select Dental DB file and to link with EXOCAD.

Auto update:

- (1) Automatic installation: Automatically download the update version to your computer without clicking the update icon. When the download is completed, it asks whether the update is in progress and proceeds to update.
- (2) Manual installation: If the update version exists, the update button appears and clicking it starts the download and proceeds to the installation.

# colLab Scan guide

colLab Scan software will start if you click the scan button after setting on the colLab.

## Precautions before use

Check before use

✓ Is the scanner connected properly?

✓ Make sure the projector has booted.

Make sure the power is on and that the Medit logo appears from the projector.



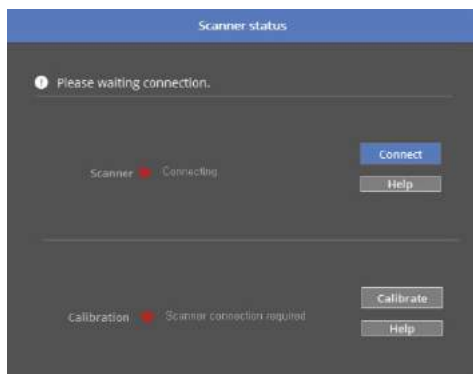
When booting has finished, the Medit logo will turn on a blue light.



✓ After installation, check the scanner connection.

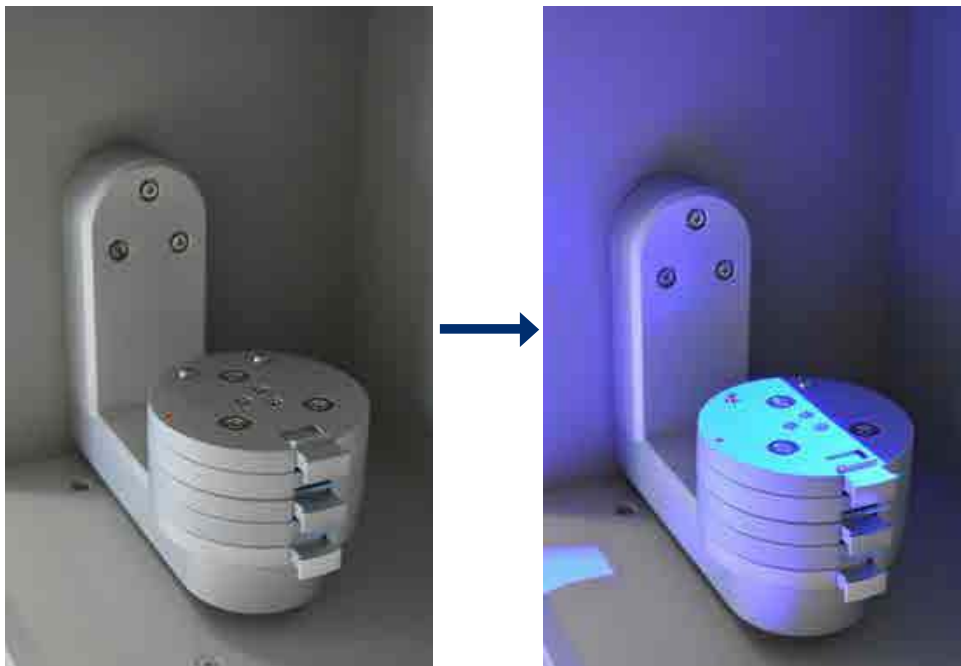
✓ Initial screen page when running the program

The following message appears during the first connection when running the program.



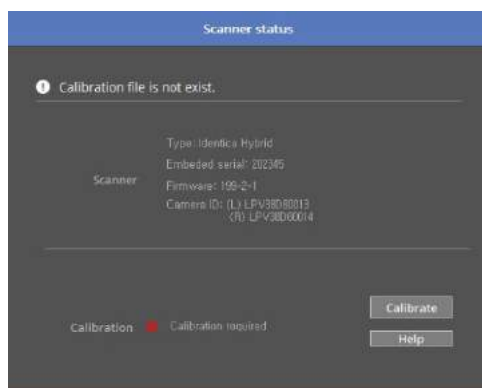
- ✔ The first time you connect your scanner, it will take around 30 seconds to boot.

After the first installation, it will take around 3-5 seconds. Also, during the scanner connection process, the projector will momentarily blink, and then the connection will be completed.



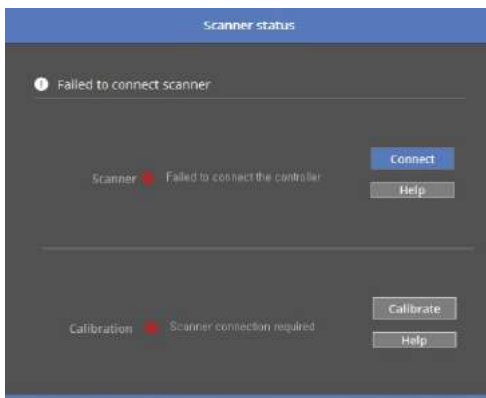
- ✔ If the scanner is not properly connected, a message will appear. Check the status of the equipment according to the message.

- ✔ The image below shows a successfully connected scanner.





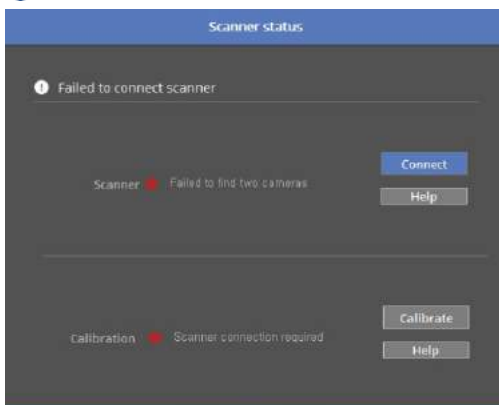
- ✔ If your computer cannot find the connected scanner, you will see the message below.



Computer cannot detect connected device.

- ✔ Check the scanner update version
- ✔ Check the scanner power
- ✔ Check USB cable

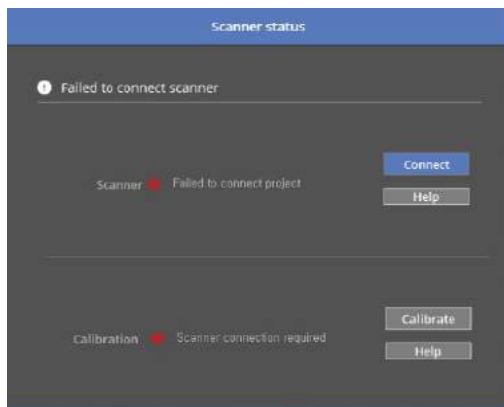
- ✔ If the cameras are not recognized, you will see the message below.



Camera not connected properly.

- ✔ Check USB cable

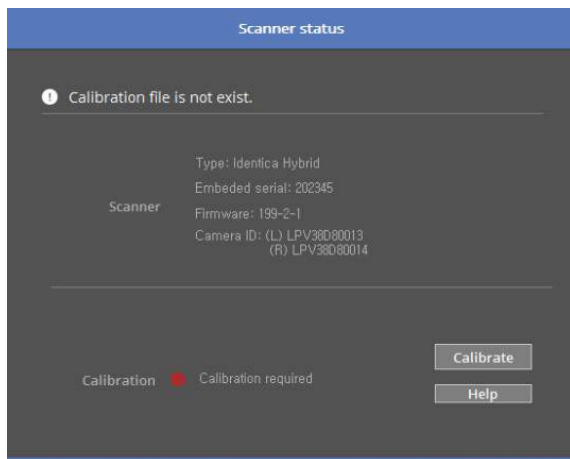
- ✓ If the projector and computer cannot connect, the following message will appear.



Projector is not connected properly.

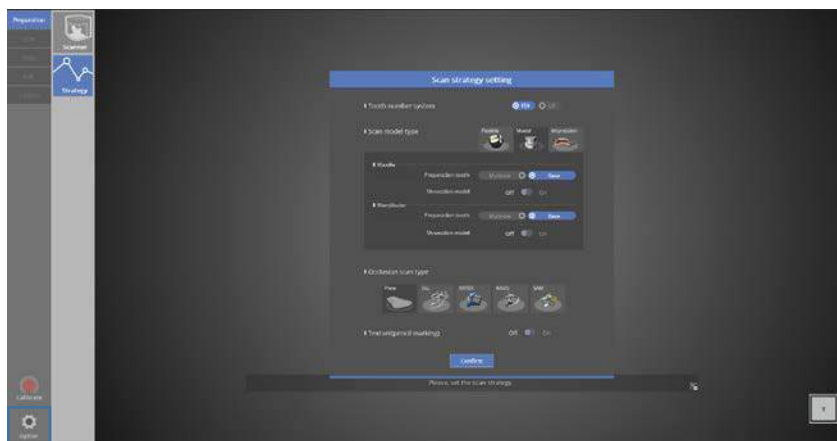
- ✓ Check the projector connection. (Check the network adapter in Device Manager)

## Calibration



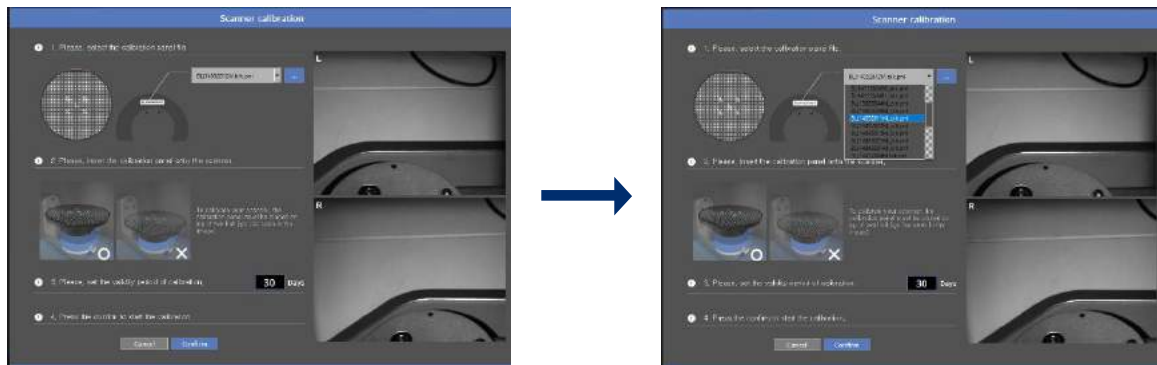
Properly connected status of scanner.

- ✓ Click [Calibrate] to start the calibration process.



- ✓ If your scanner is connected properly, you can start the calibration process whenever you click on the button located at the left bottom of corner.

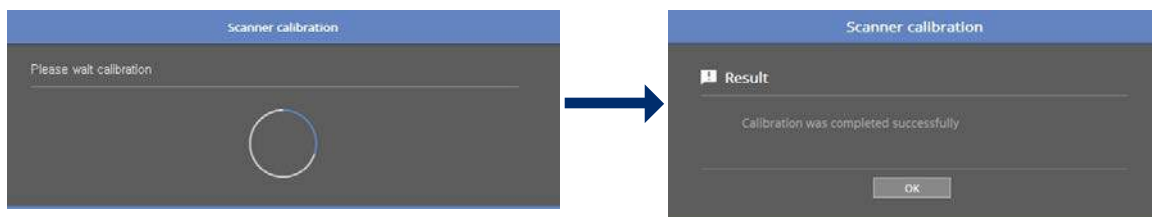
## PNL file selection



- ✓ Check the serial number on the back of the calibration panel and match it with the PNL file. Enter the desired calibration cycle and press the [Confirm] button to start the automatic calibration. The calibration has to be done with two half block jigs as you can see in the below picture.

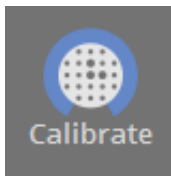


- ✓ Set the calibration panel on top of two half jigs, as seen in the image above.

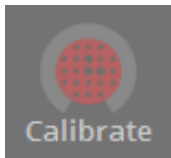


- ✓ The automatic calibration takes about 2 minutes and the result comes out after.
- ✓ When the scanner is connected properly, it will automatically move to [Scan strategy setting] page. Scan strategy will determine the progress of the scan.

### Calibration Timer

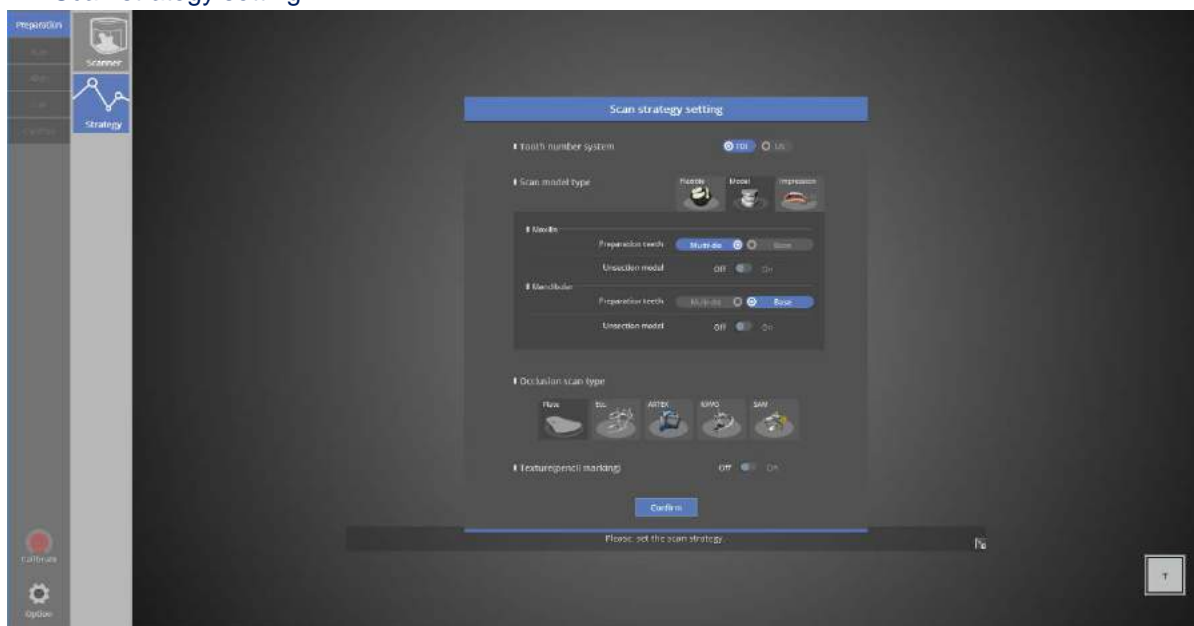


- ✓ Calibration is not required since the last calibration is still valid.



- ✓ Calibration is required since it is overdue.

## ☰ Scan strategy setting



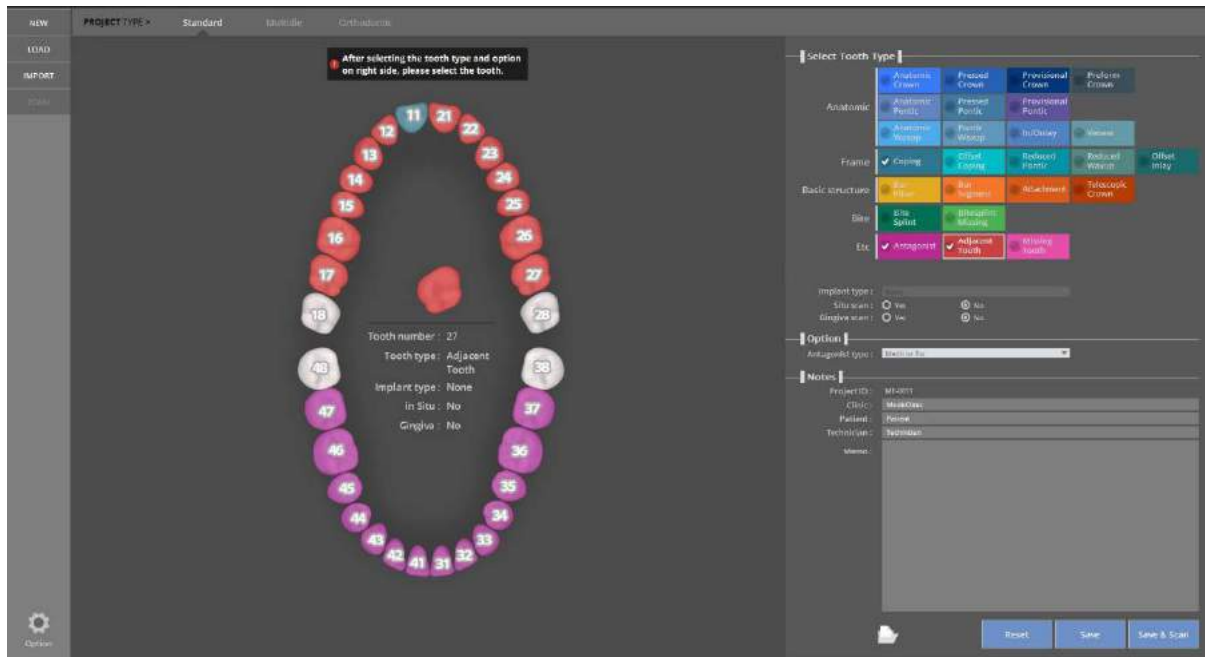
- ✓ Check the tooth numbering system to be used in the program (this will bring up the last selected system)
- ✓ Select 'Flexible / Model / Impression' for scan progress method
  - For upper prep teeth, choose a scan strategy between [Multi-die] or [Base].  
(When scanning in plaster model, divide it into two separate group and scan each group if the prep teeth and adjacent to each other. If scanning in multi-die and the number of prep teeth is over 8, divide them into two separate groups and proceed with the scan. Scanning in multi-die is recommended to reduce the scanning time.)
  - Select also for the unsection model.
- ✓ Set the same scan method for the upper and lower jaw.
- ✓ Select the scan strategy for the articulator.
  - The setting will be the same as the previous page, but you can still edit the setting at this stage.
- ✓ Finally, decide whether to use texture
- ✓ When finished with setup, select [OK] and move to the next step.

# How to use colLab software

## Single coping scan (#11)

### 1. Order form set up

- ✓ Start colLab program



- ✓ Enter the settings for the model you want to scan.
  - ✓ Cut-back coping - #11
  - ✓ Implant type – None | Situ scan – No | Gingiva scan – No
  - ✓ Adjacent Tooth - upper jaw
  - ✓ Antagonist - lower jaw
  - ✓ Antagonist type - Plate

Enter specific details about the order (not required).

  - Refer to <colLab Software GUI Configuration>
- ✓ Click the [SAVE & SCAN] button to begin scanning.

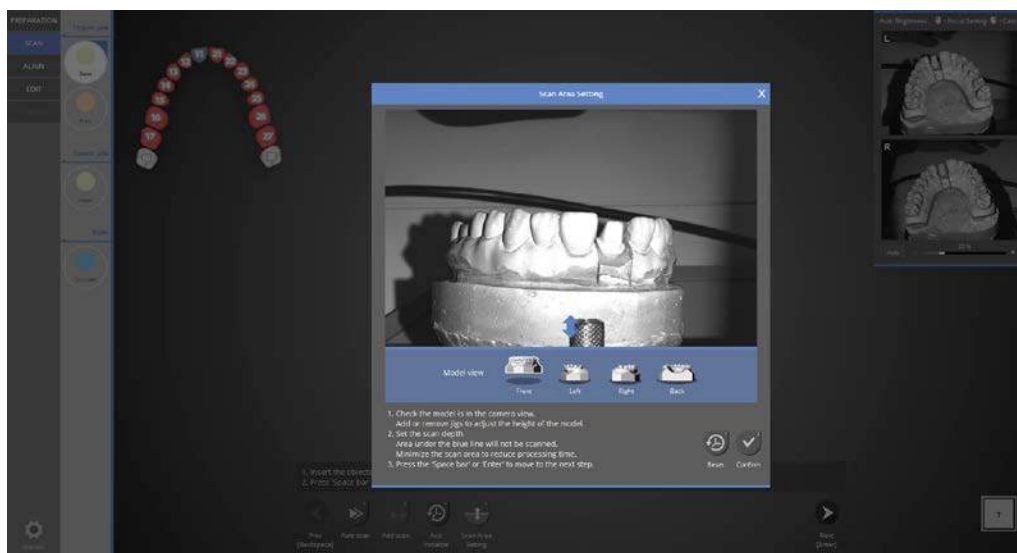
## Preparation - Strategy

- ✓ For single coping, use the model base / for the articulator, and select [Plate] and click [Confirm] to go to the next step.

## Scan



- ✓ As in the image above, follow the instructions in the center and insert the model. Click [Auto scan] to proceed with the full model scan.

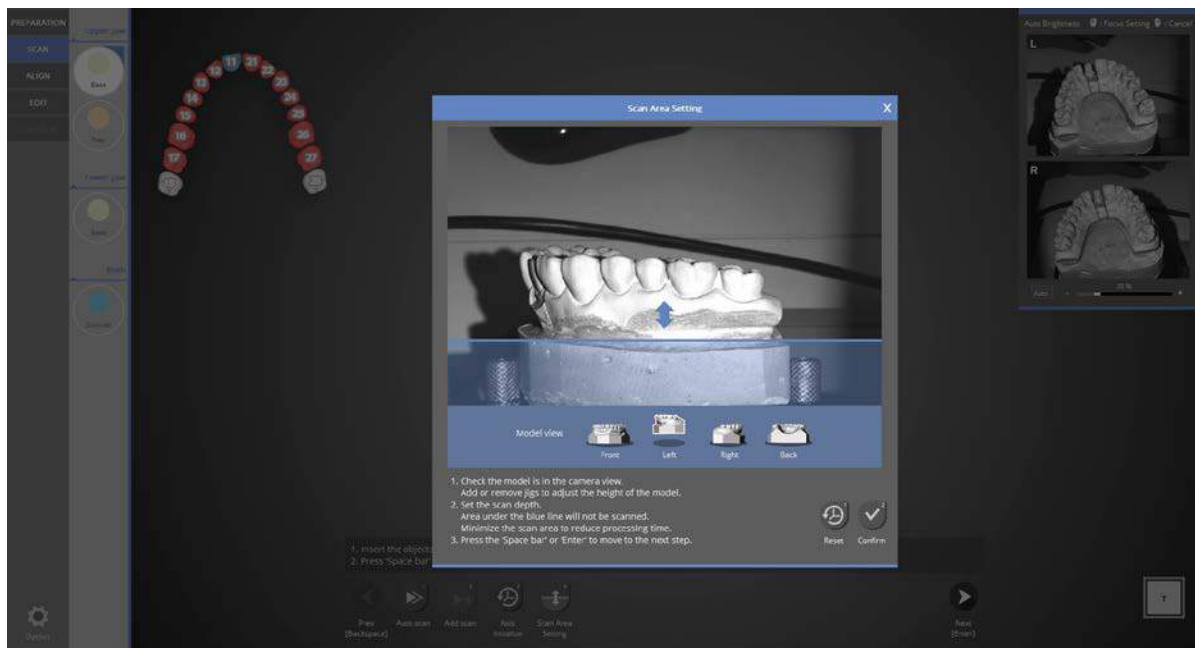


- ✓ Scan depth adjust stage. This will remove needless scan data and reduce the data merging time.





✔ In the model view, select [front][left][right][back] and check the height from each.



i Move the blue arrow and adjust the depth. The portion below the blue line will not be scanned.



- ✓ As in the image above, the model scan is completed.

Refer to the next page for instructions regarding model handling.

### Model handling

You can check the object from various directions in the model view.

Mouse(R) : Mouse right button

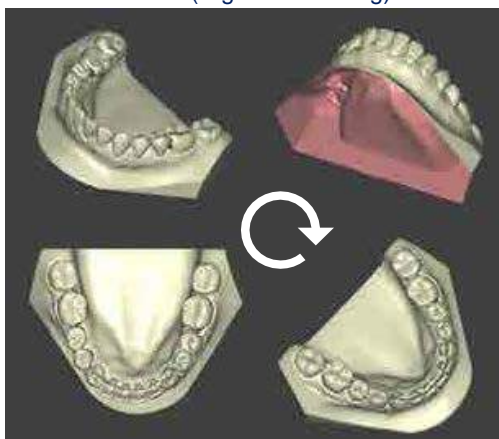
Mouse(L) : Mouse left button

Mouse(W): Mouse wheel button

### 3D rotation

Use the computer's mouse to view the scan from different angles.

Mouse (Right click + drag)



### Pan

Move the scan image horizontally

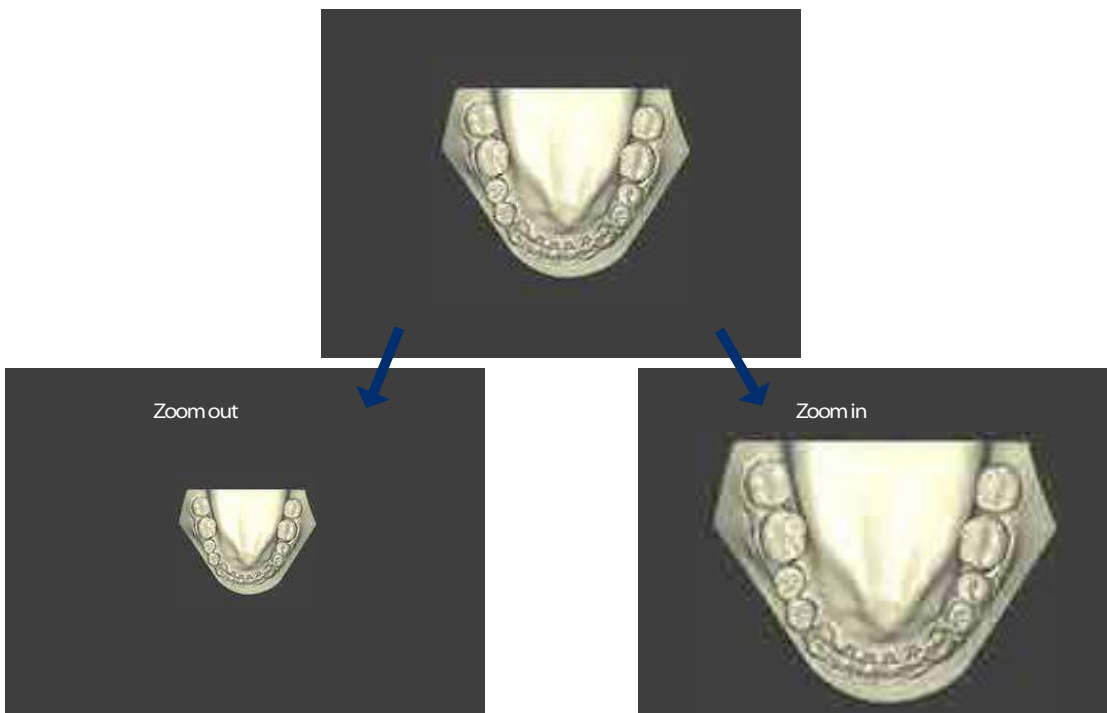
Click [Mouse(W)] + [Drag] or [Mouse(L)] + [Mouse(R)]



### Zoom in / Zoom out

Zoom in and out in the model view window.

Scroll [Mouse(W)] or [Mouse(W)] + [Mouse(R)] + [drag]



- ✔ Rotate the model to verify data.

If the data does not look correct, check the following.

### Caution

✔ Check for incorrect scanning processes.

1. Is the machine calibrated?

- Strong impact or vibration might require the re-calibration of the scanner.
- If you do not move the scanner, or produce impact or strong vibrations, calibration should be performed once per month.

2. Is the scan object within the measurement area of the scanner?

- Make sure the model can be seen in the camera image on screen.

3. Is the scan object shiny or black?

- Identica T500 is able to capture 3D data through reading the projected pattern. However, it can be hard to measure if the pattern is not clearly projected onto the tooth model.
- If scanning is difficult, use a scan spray.

✔ Scan spray

Scan sprays can reduce reflections of black or shiny objects. (Usually, dried plaster models do not need a scan spray.)

Scan spray procedure

- a. In a well ventilated area, place the object on a clean dry surface that can be sprayed. (e.g., newspapers)
- b. Spray from a distance of about 30-50cm at varying angles to ensure that all parts of the scan model are covered.
- c. Do not spray too much. Spray 1-3 seconds on each part.

Precautions when using a scan spray

- Scan spray is flammable. Do not use in areas subject to sparks or fire. Do not inhale the scan spray.
- Do not spray on skin or eyes.

### Using a jig

Attach the clean scan object to a jig.

Spray the object before attaching it to the jig if needed.

Use a tack to attach the scan object to the jig. Shake the jig to make sure it is stable.

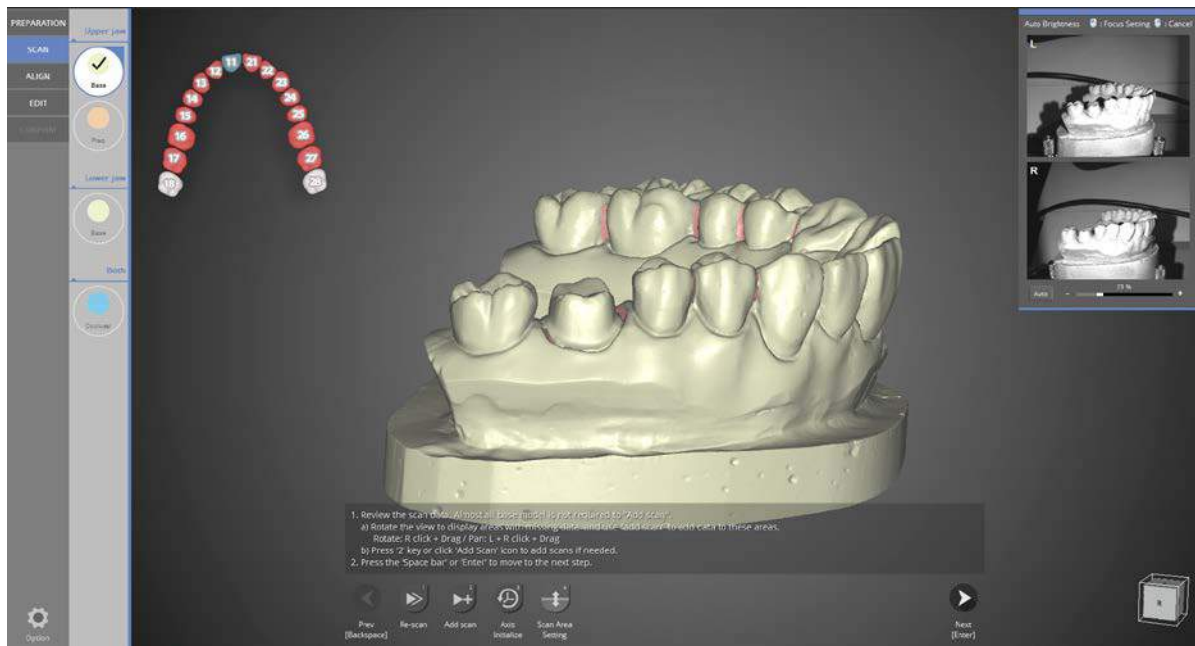
Place a jig in the direction that matches the grooved underside (it will automatically click to connect). The front of the model should be facing the user as you can see in the picture below.



If scan data is not correct, additional scans can be performed if needed. After the scan, rotate the image so that the part needing additional scans is showing in front. Then, click [Add scan] or keyboard shortcut [2].

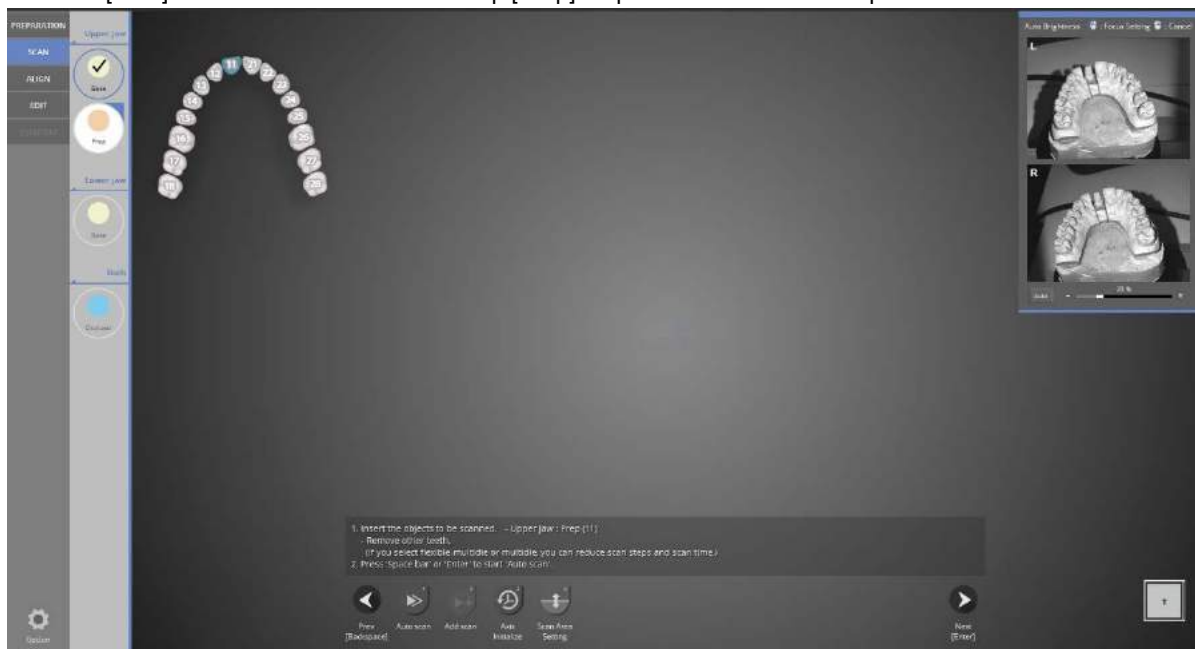


Before Add Scan

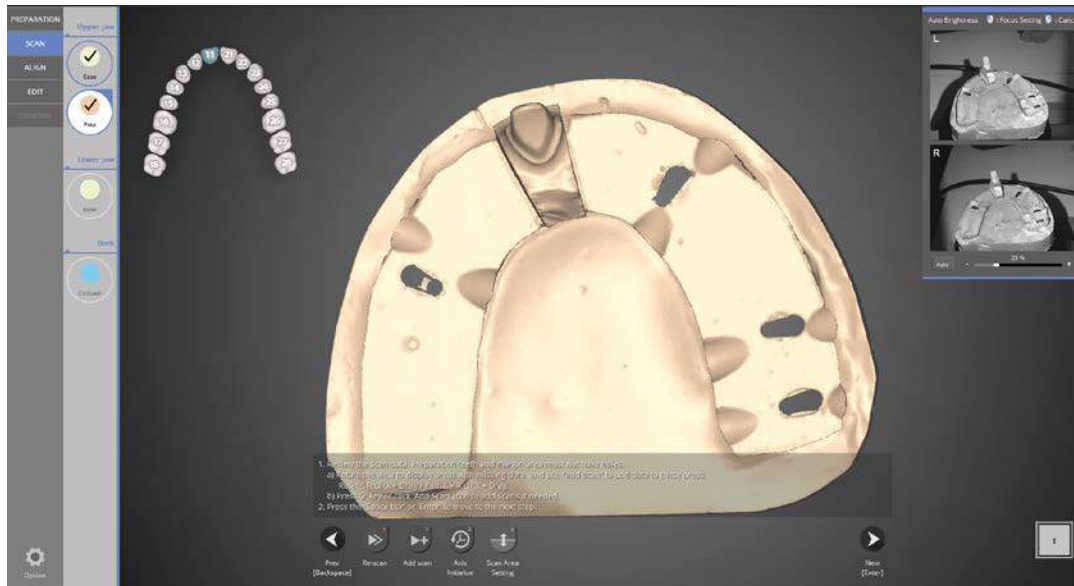


After Add Scan

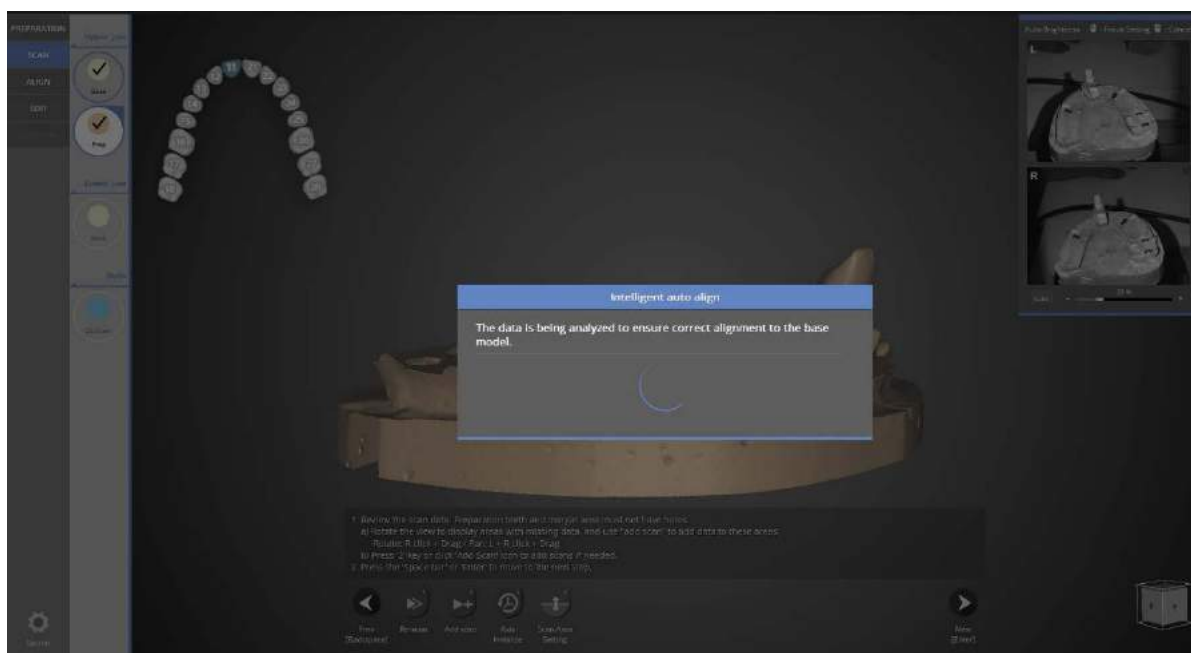
Click the [Next] button to move to the next step [Prep]. Experienced users can skip to their desired location.



Following the instructions on the top left panel, place only the #11 tooth model inserted in the base onto the scanner. Then click [Auto Scan] (or keyboard shortcut 1) to proceed with the scan.



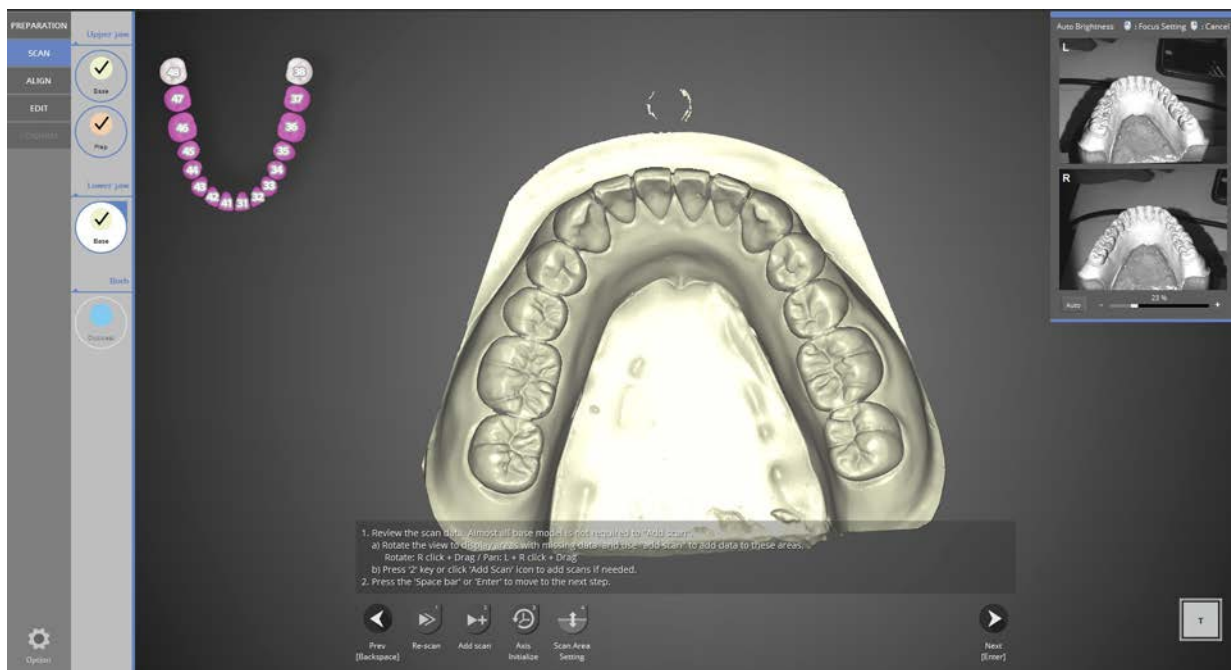
Once the scanning of the prepped #11 tooth is finished, check the data by rotating the model image. If additional scans are needed, click [Add Scan].



Analyze the prep teeth shape, and align it with the base model scan data automatically.



Follow the instructions, click [Auto scan] to proceed with the scan.

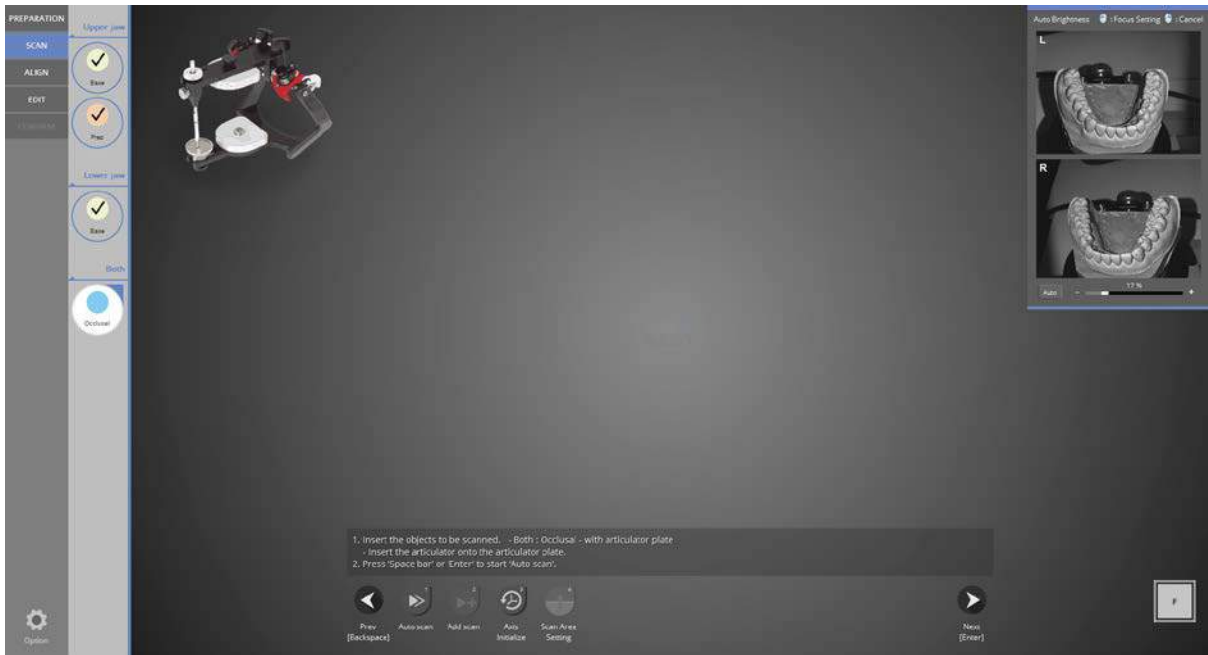


When either lower or base scan is complete, rotate the image to see if additional scans are needed. If needed, click [Add scan]

Normally there is no need of additional scan for antagonist.

When the additional scans are complete, click [Next] to move to the next step for the bite scan. Experienced users can move to any step they wish.



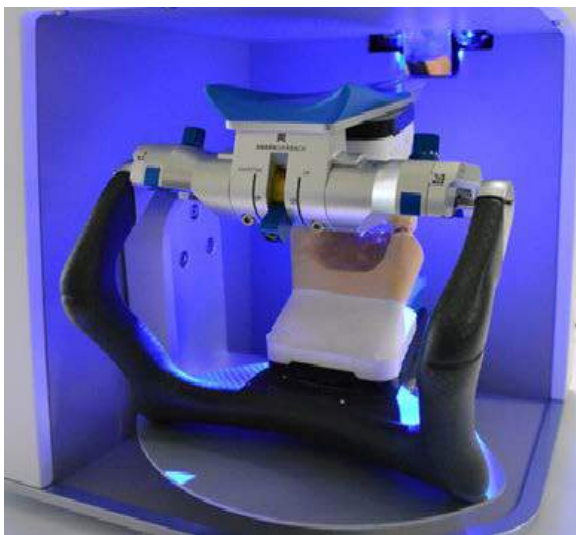
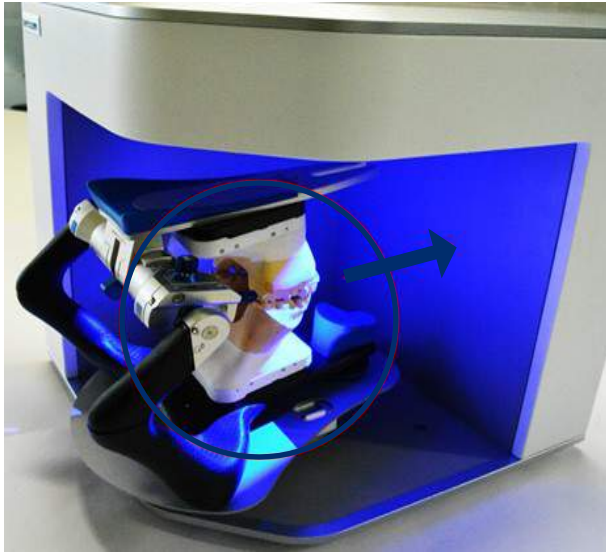


Occlusal scan stage. Place the articulator and its plate onto the scanner as indicated below.

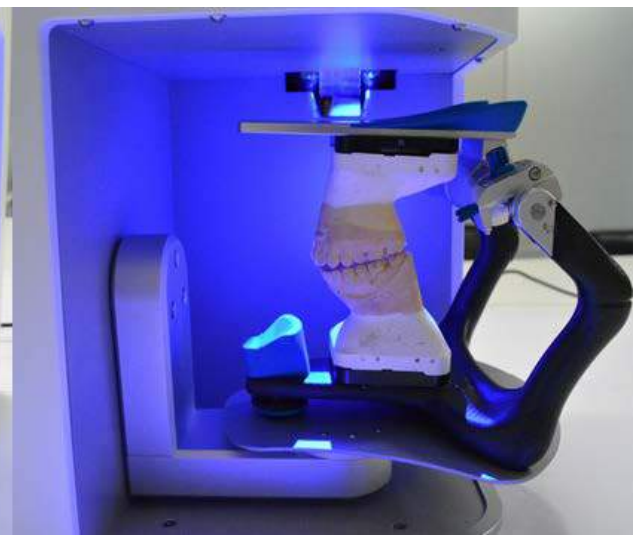


Put the articulator plate onto the scanner as indicated in the above left message.

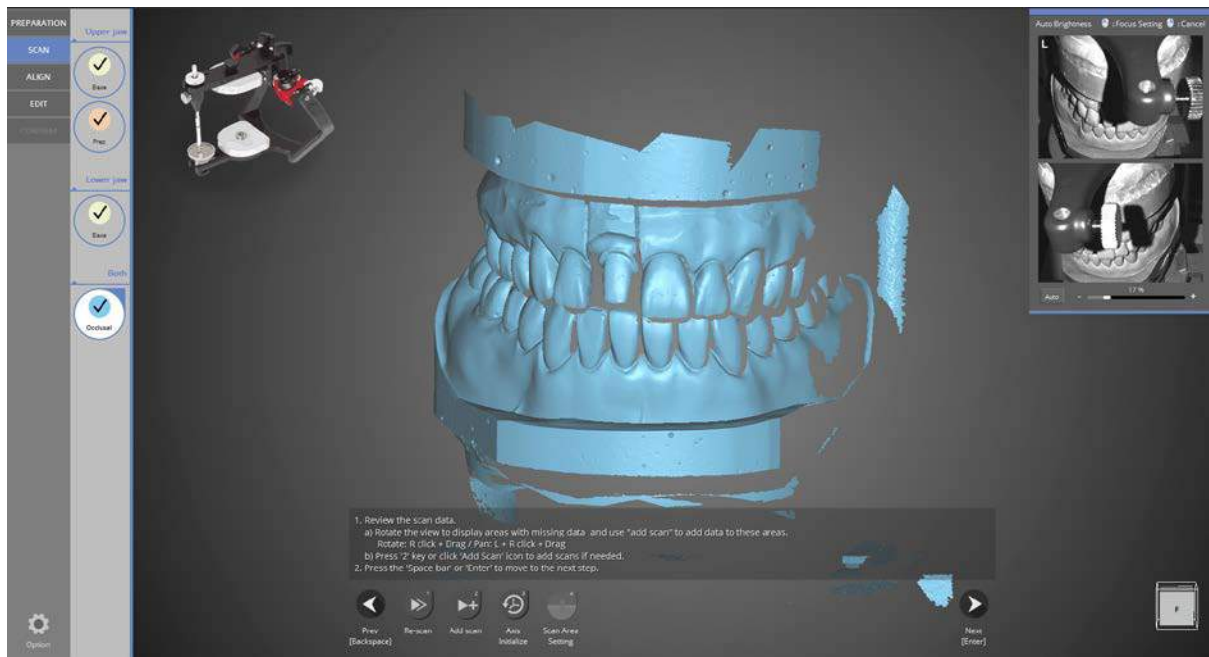
As seen in the image below, place the articulator onto the articulator plate. Then, scanning will proceed capturing 4 cuts.



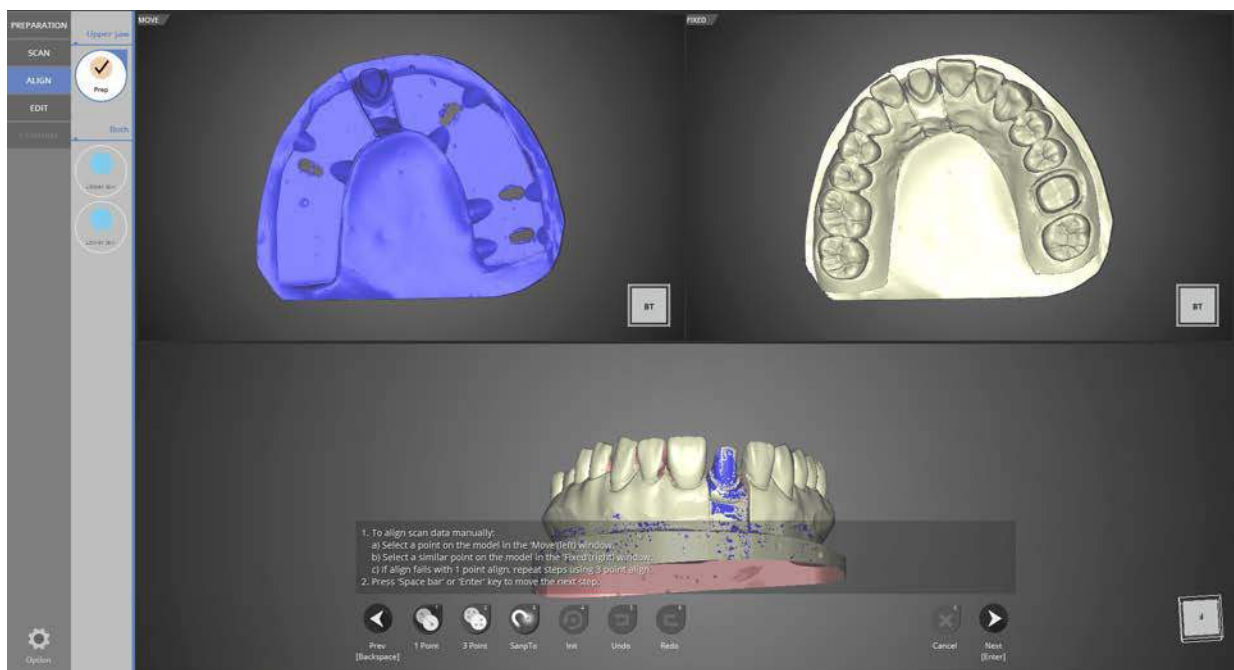
Articulator scan, first position



Articulator scan, last position

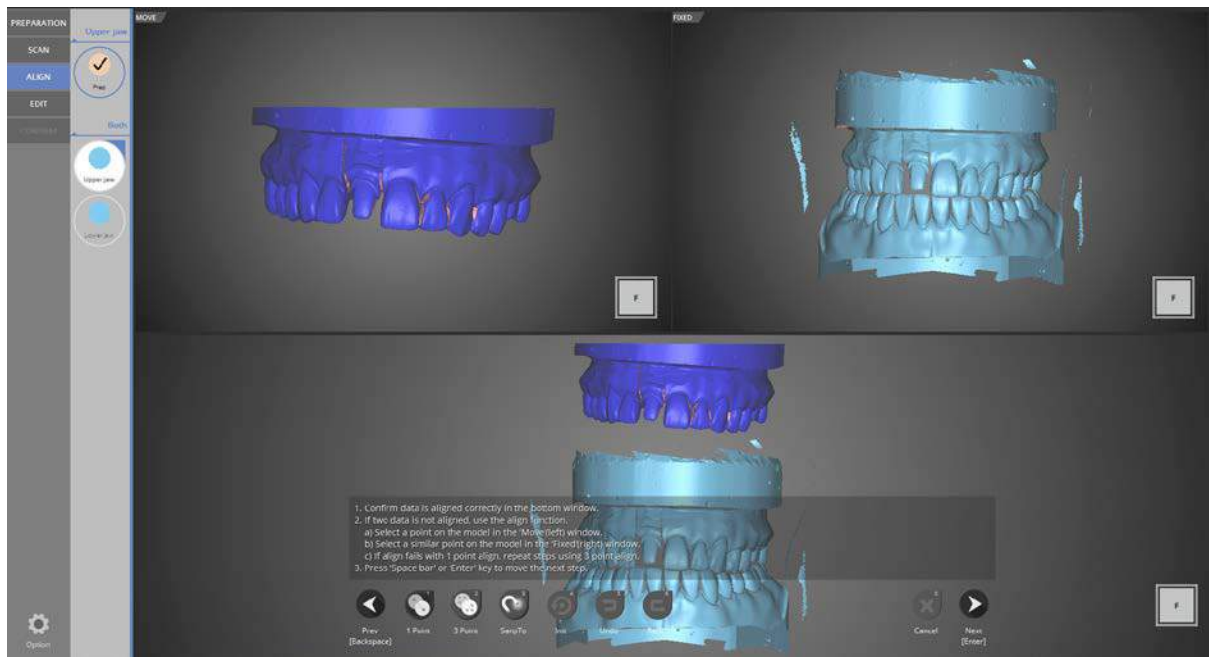


When the articulator scan is completed, click [Next] to proceed to the alignment step.

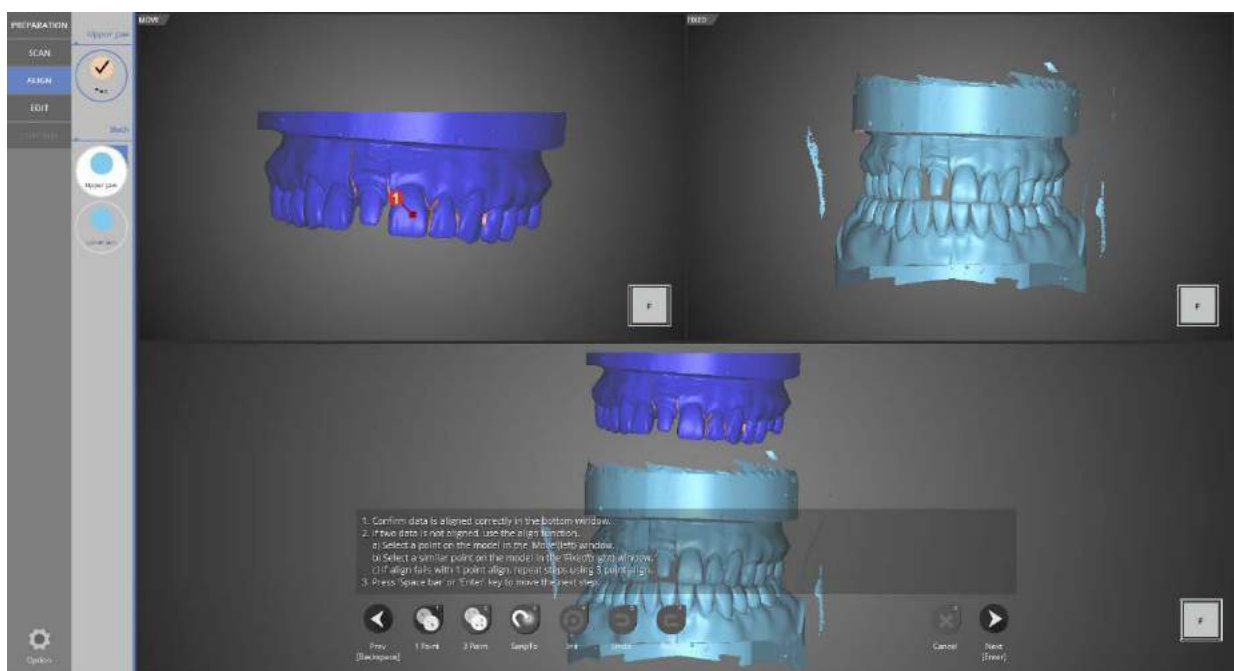


In the first step of alignment, alignment of the base and tooth #11 is completed automatically. If you click [Next] again, you can move to the upper jaw alignment.

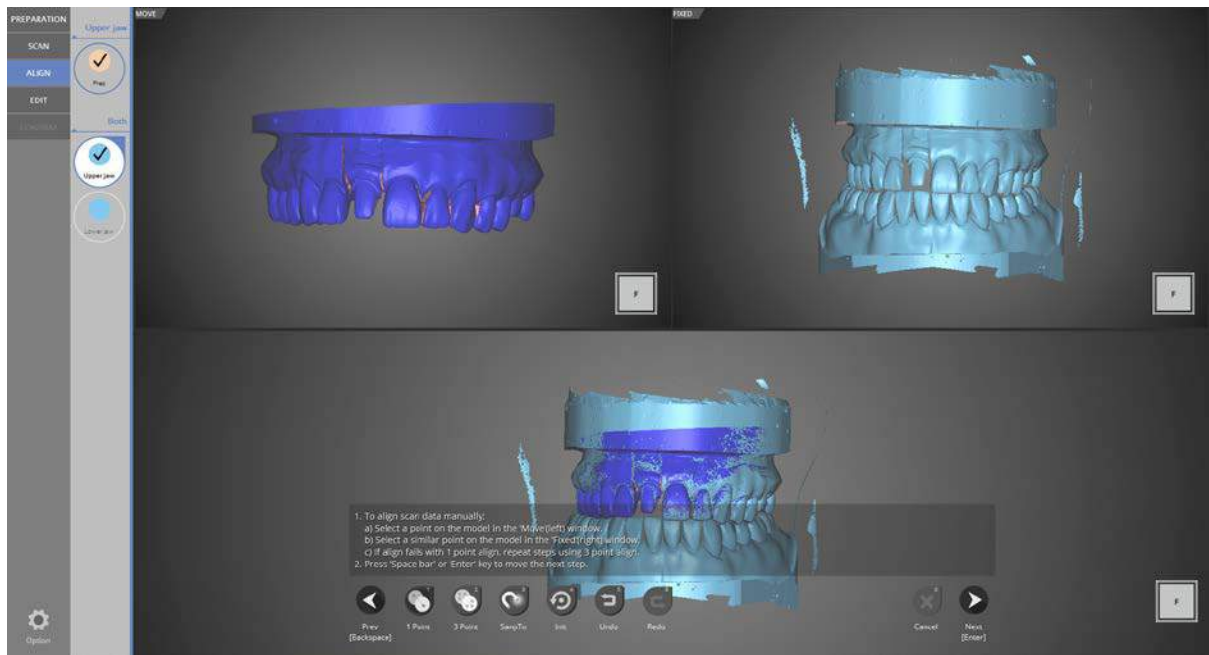
Experienced users can move to any step they wish.



For the upper alignment, click [ALIGN] and choose [1 point] align or [3 point] align. This case will use the 1 point alignment method.

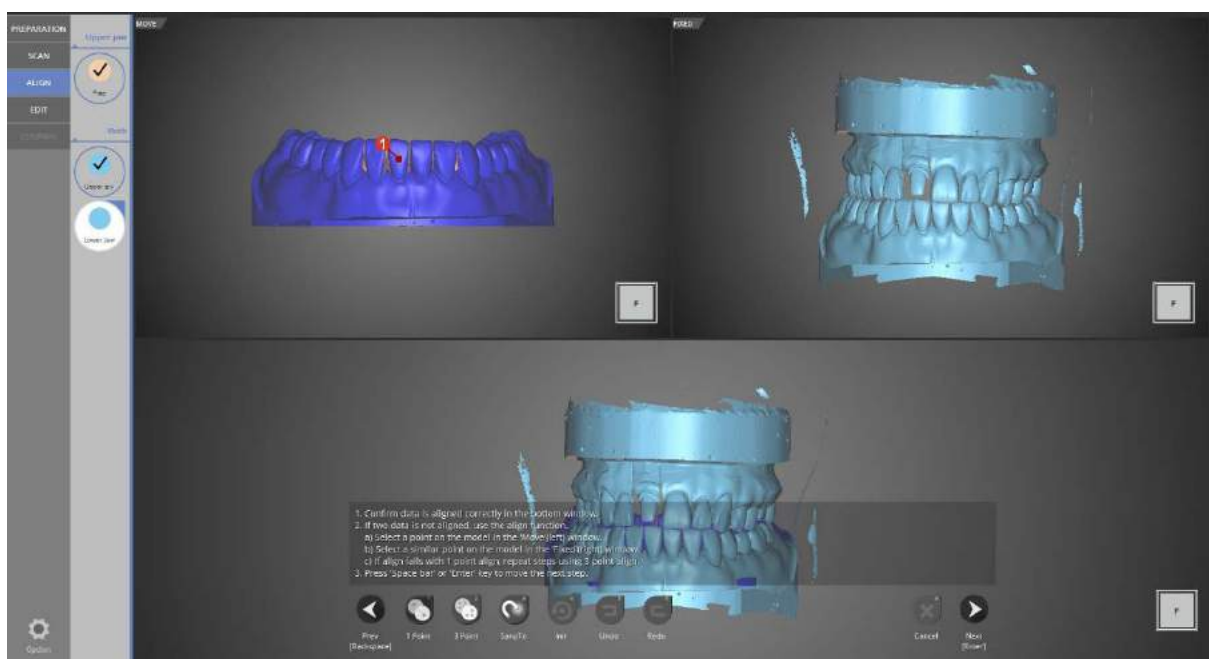


Click 1 point in the upper left image and then click the same point in the right side image.

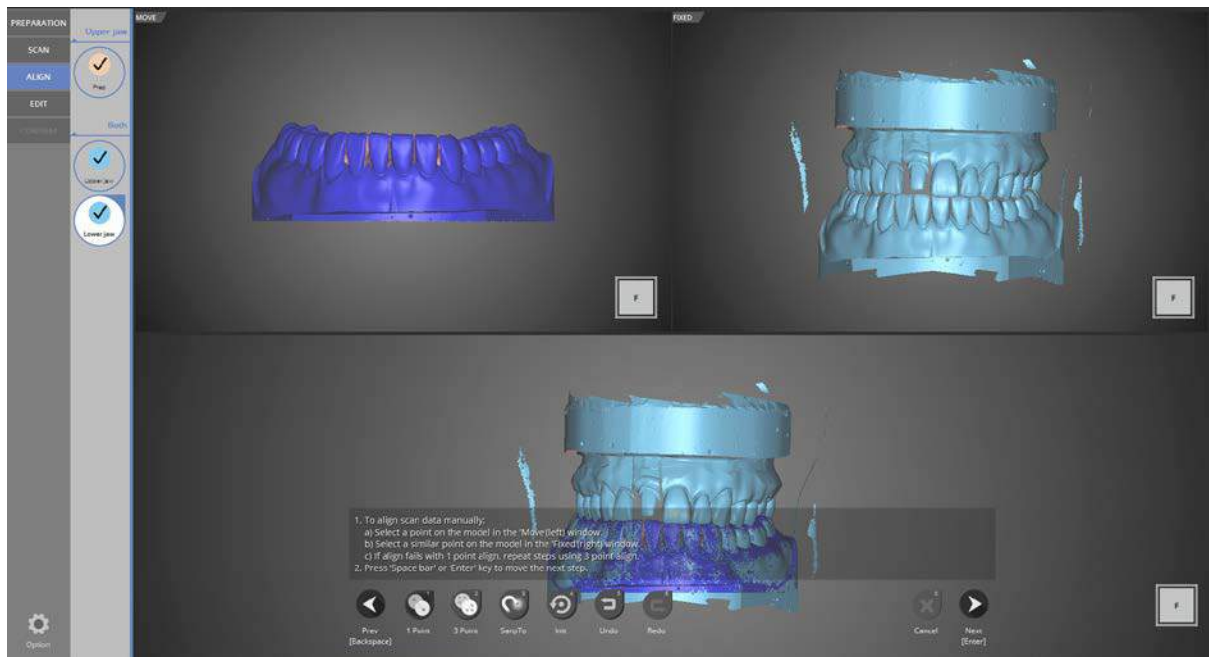


The upper alignment is complete.

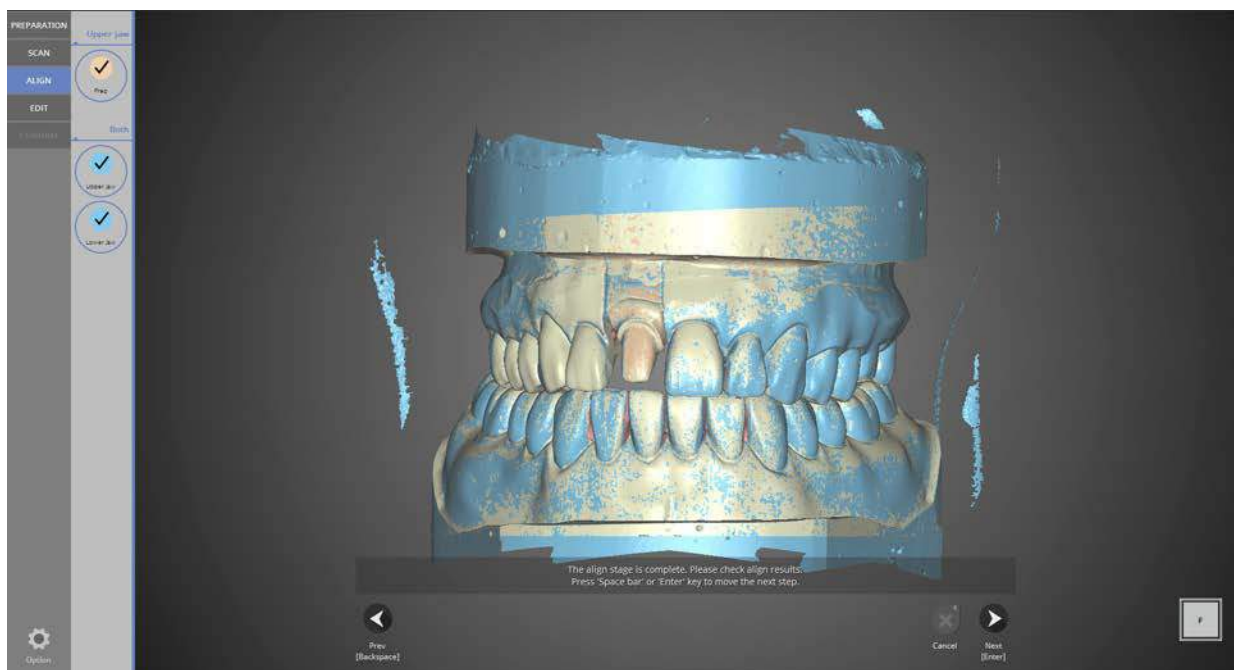
Click [Next] to proceed the lower jaw alignment. Experienced users can move to any step they wish.



To align the upper and lower jaw, the selected point must be the same on each scan using the 1 point alignment.



When the lower jaw alignment is finished, click [Next] to move to the [Edit] stage.

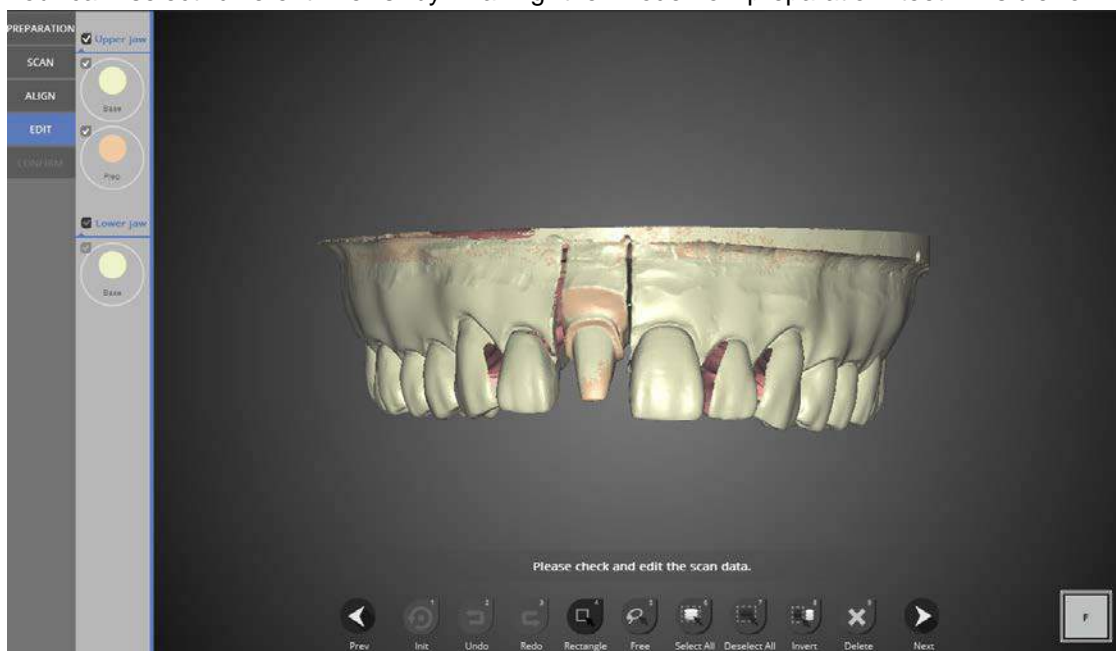


Scan data can be edited in the [Edit] stage.



Only the selected parts ① of the model can be seen.

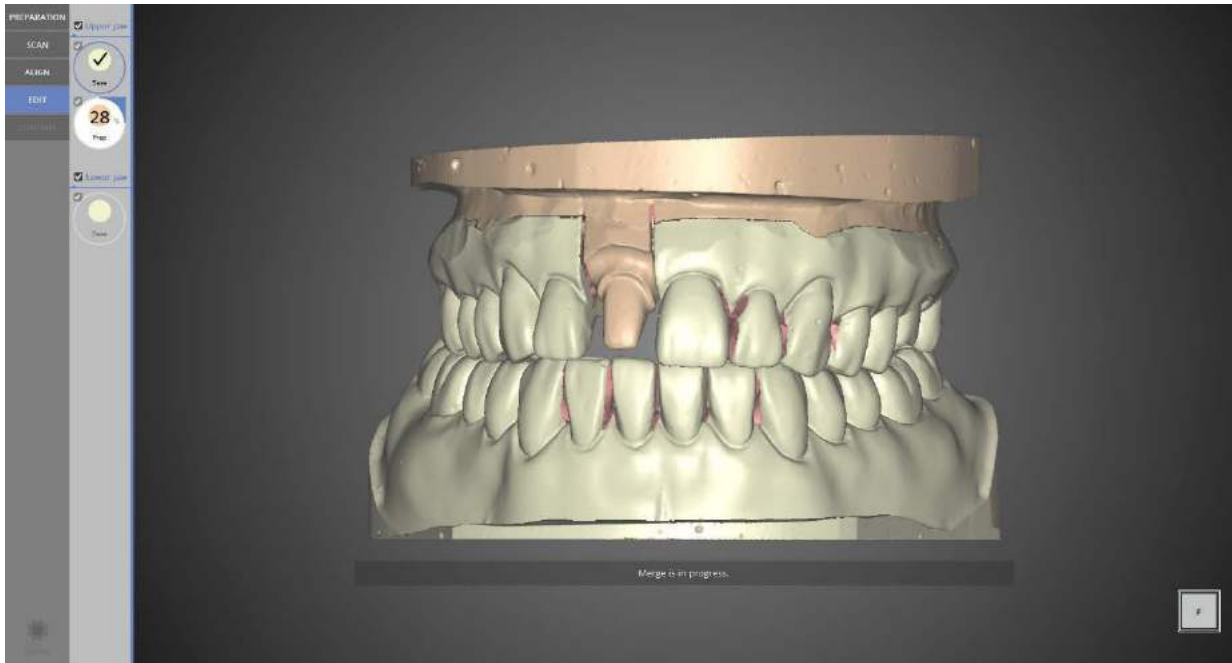
You can select different views by making the model or preparation teeth visible or invisible.



- ☰ Init : go back to initial data. (keyboard shortcut 1 )
- ☰ Undo : undo latest edit. (keyboard shortcut 2 )
- ☰ Redo : after undoing, reverts back to the edited state. (keyboard shortcut 3 )
- ☰ Rectangle : select area in form of rectangle. (keyboard shortcut 4 )
- ☰ Free : draw a selection by freehand. (keyboard shortcut 5 )
- ☰ Select All : select all data. (keyboard shortcut 6 )
- ☰ Deselect All : Cancel all the selected data. (keyboard shortcut 7 )

- ☰ Invert : selects data outside of the current selection. (keyboard shortcut 8 )
- ☰ Delete : erases data. (keyboard shortcut 9 )
- ☰ Edit the data using the features above.

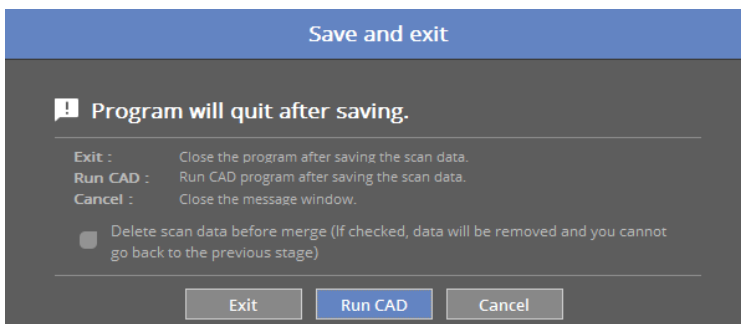
After editing the data, click [Next], and the software will process and produce the scanned file in STL format.



Scan file is complete.

If more edits are needed, simply go back to the previous step.

Click [Next] to store the scanned data file and exit the program.



If you are connected to CAD, you will see the message shown above.

If [Run CAD] clicked, scan program ends and CAD program will start automatically.

#11 single copings scan job is completed successfully.



# Appendix – Scan cases

8 Unit Bridge

Flexible multi-die

Waxup

Waxup bottom

Waxup bottom with flexible multi-die

Single Impression

Double Impression

Double sided impression and plaster stump

Movement Marker

Orthodontics

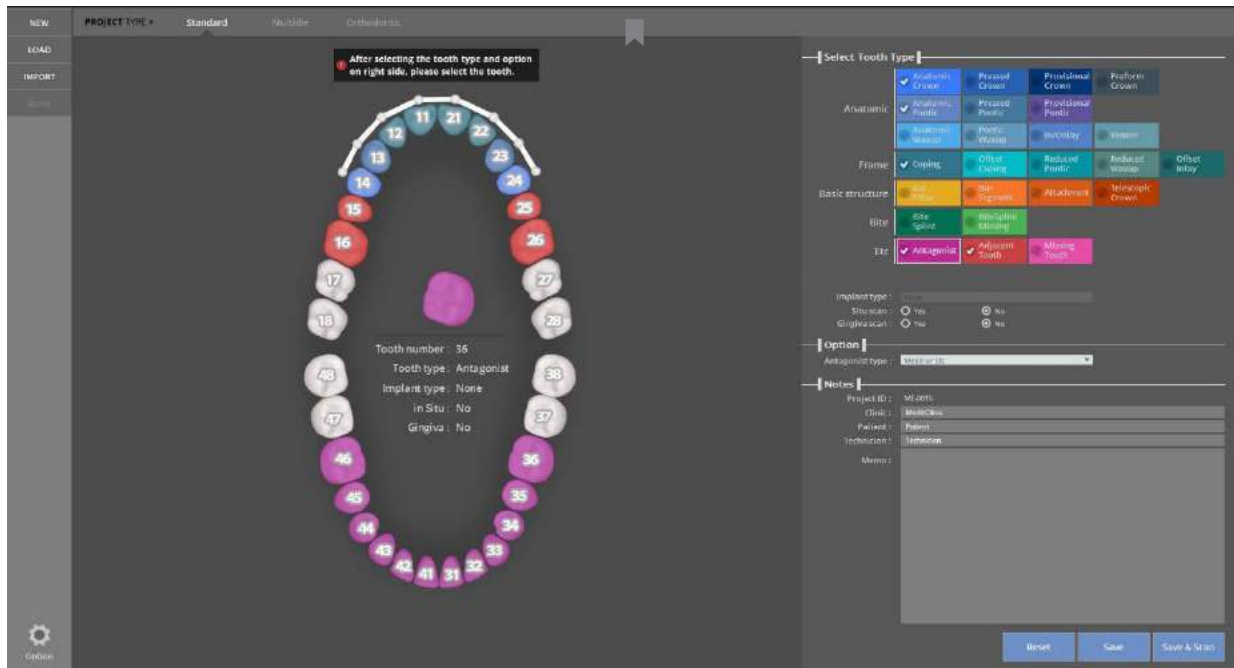
Full Denture model

Implant Scanbody

- 'Separate' feature in model scan
- 'Together' feature in model scan
- 'Shortage' feature in flexible multi-die
- 'Enough' feature in flexible multi-die

## 8-unit bridge

Complete the order form and tooth setting.



Enter the scan settings for the model to scan.

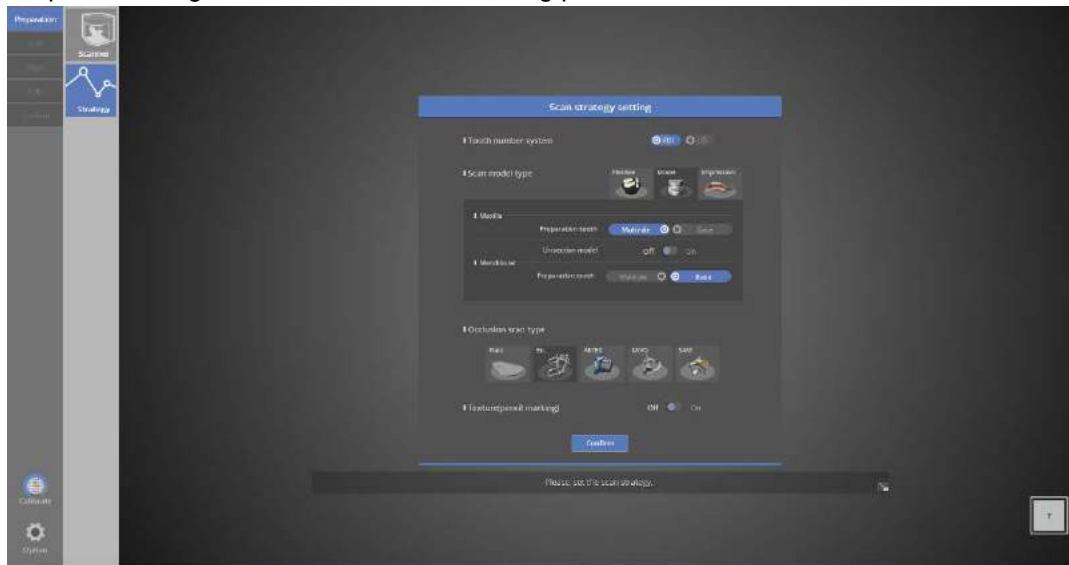
Refer to colLab Software GUI Configuration

Implant type – None | Situ scan – No | Gingiva – No, Antagonist type - Etc.

Click [Save & Scan] to begin scanning.

It will take around 30 seconds to install your scanner for the first time. After the first installation, it will take only 3-5 seconds each time you begin. Also, during the scanner connection process, the projector will momentarily blink, and then the connection will be completed.

When the scanner is connected properly, it will automatically go to the [Scan strategy setting] in the Preparation stage and determine the scanning process



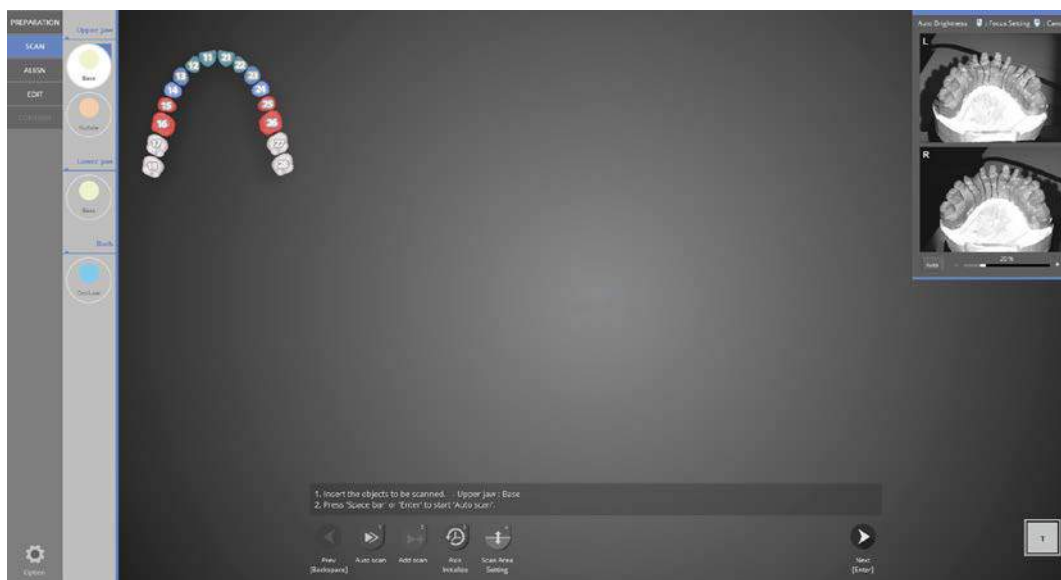
### ☰ Preparation - Strategy

8-unit bridge - For upper teeth prep, scan in [Multi-Die] for the lower base, scan in plaster models; for articulators, scan using [Etc.].

Click [Confirm] to start scanning.

📌 Refer to Single coping scan

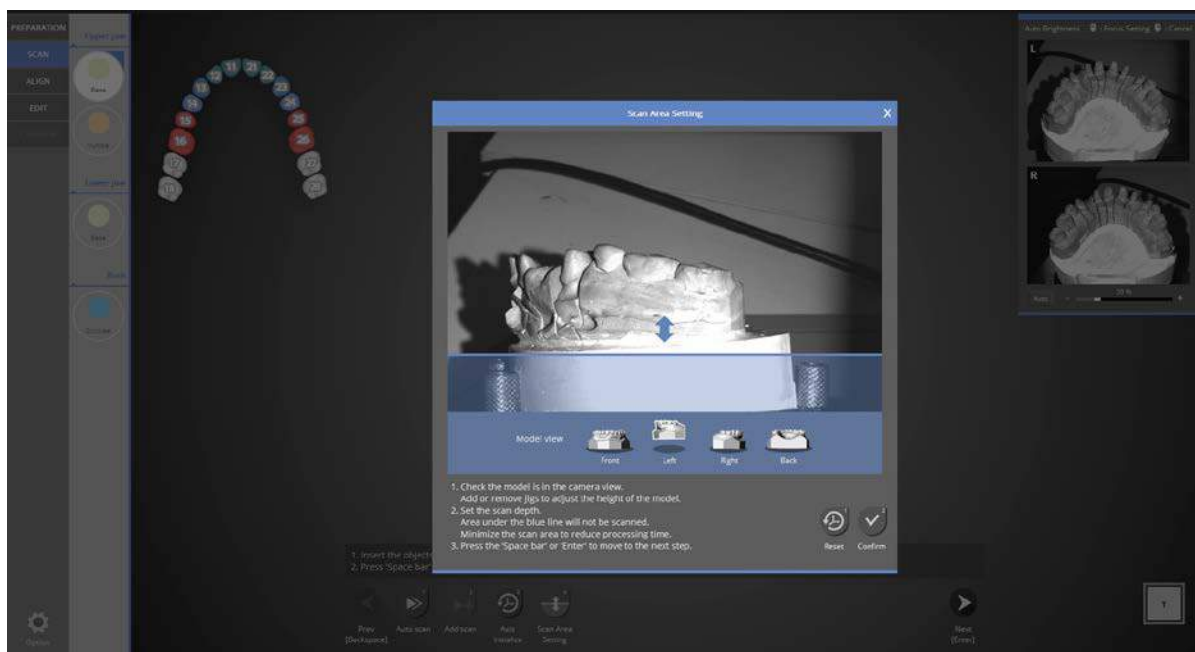
### Scan



As in the image above, insert the upper base model and click [Auto scan] and follow the instructions on the screen.



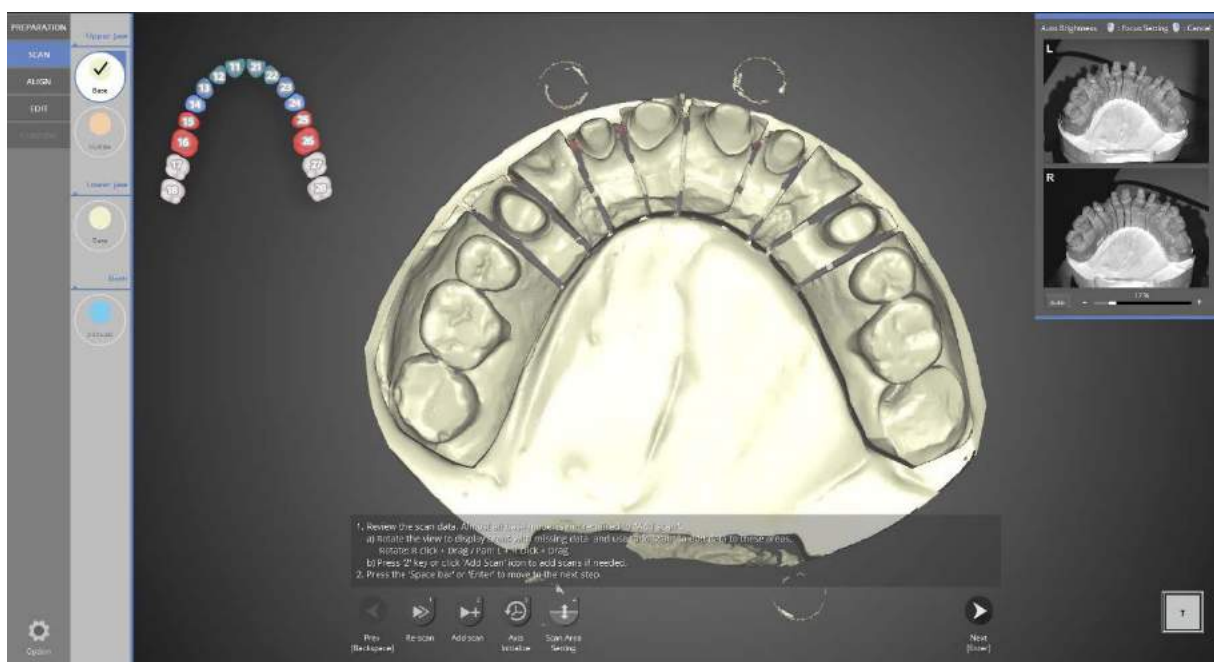
Adjust the scan depth.



Click and drag the blue arrow to set the scan depth, then click [Confirm] to move to the next scanning step.



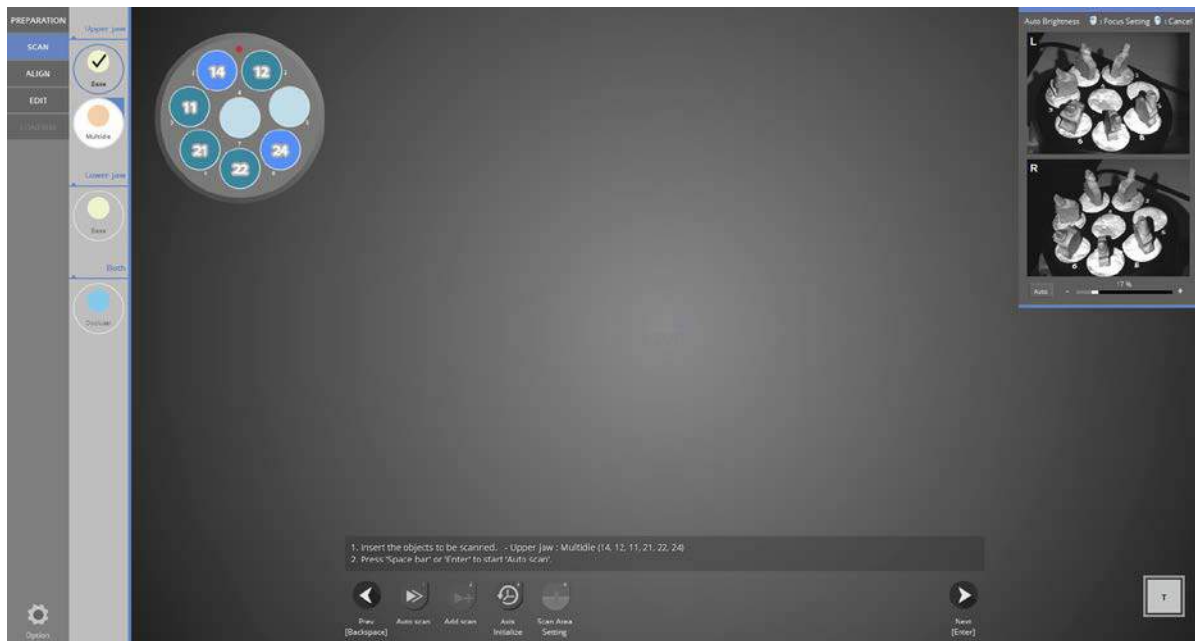
## Scanning



As in the above image, the scan of the upper base model is finished. Check the data file to see if additional scans are needed.

If needed, simply rotate the data image to the desired location and click [Add Scan]. In most cases additional scans are not necessary.

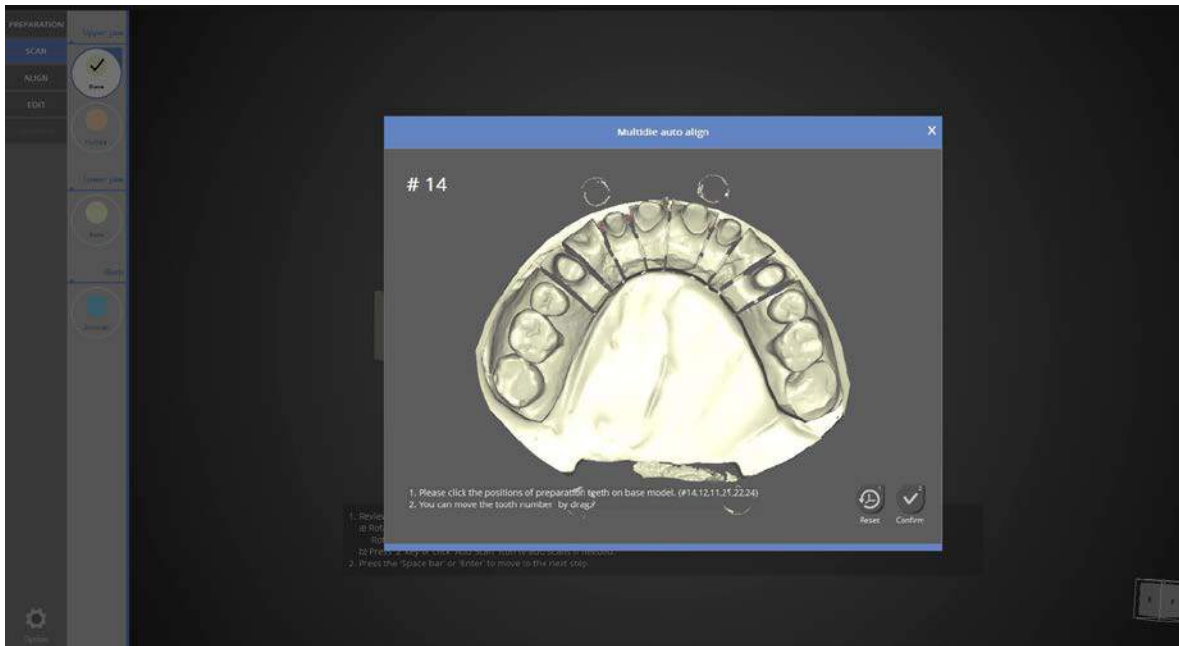
If the scanning is complete, click the [Next] button to move to the [Multi-die] scan stage. Or, select a different scan stage to continue.



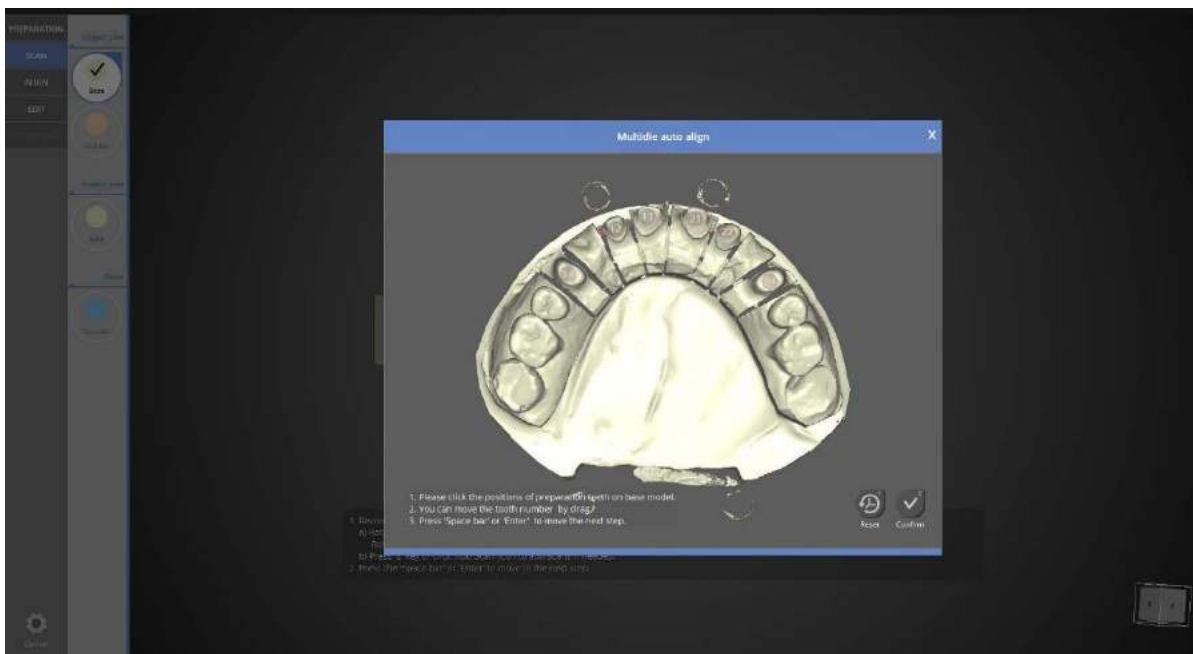
Secure the preparation teeth on the multi-die as shown in the image in the top left corner, and then click [Auto scan]. Press [Next] to proceed with the scan.



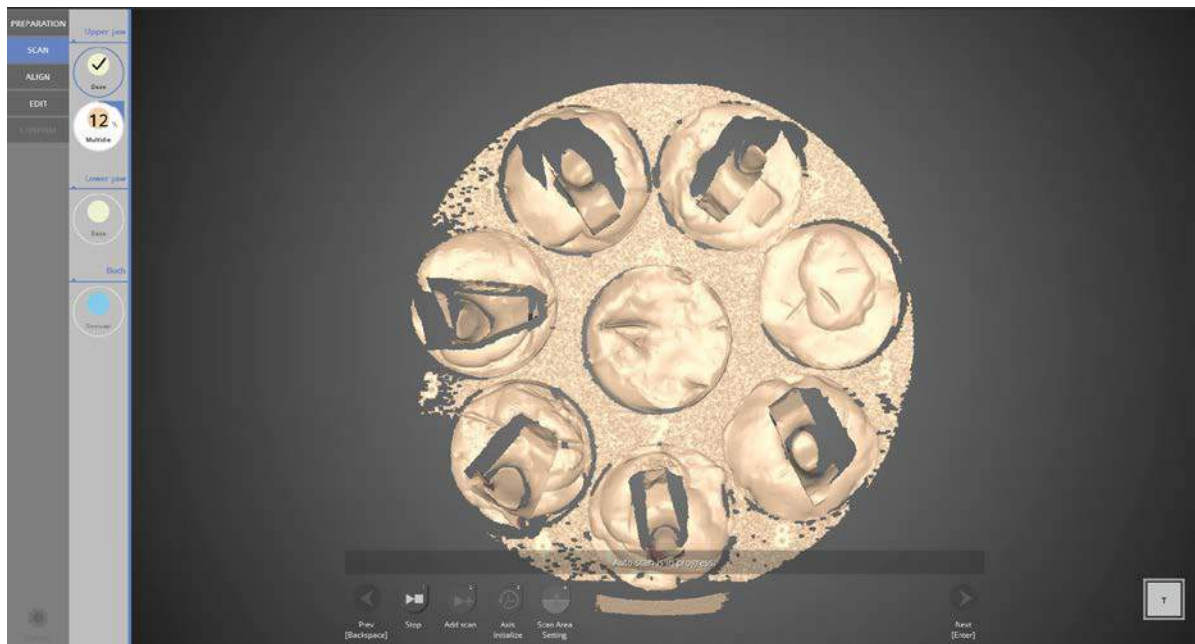
When scanning the multi-die, 2 base jigs must be used.



Click the marked teeth in the upper left on the base model.

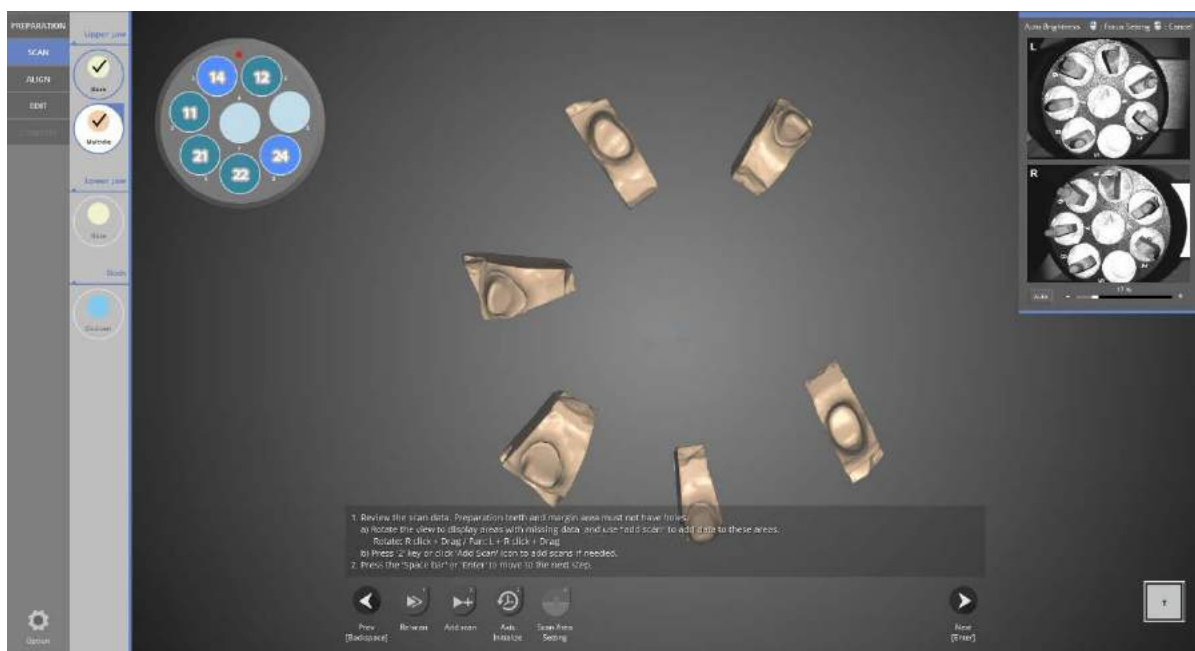


The marked teeth in the upper left on the base model are selected.



Multi-die scanning in progress.

▶ Scanning can progress more easily if the buccal surface of the prep teeth is facing outward.



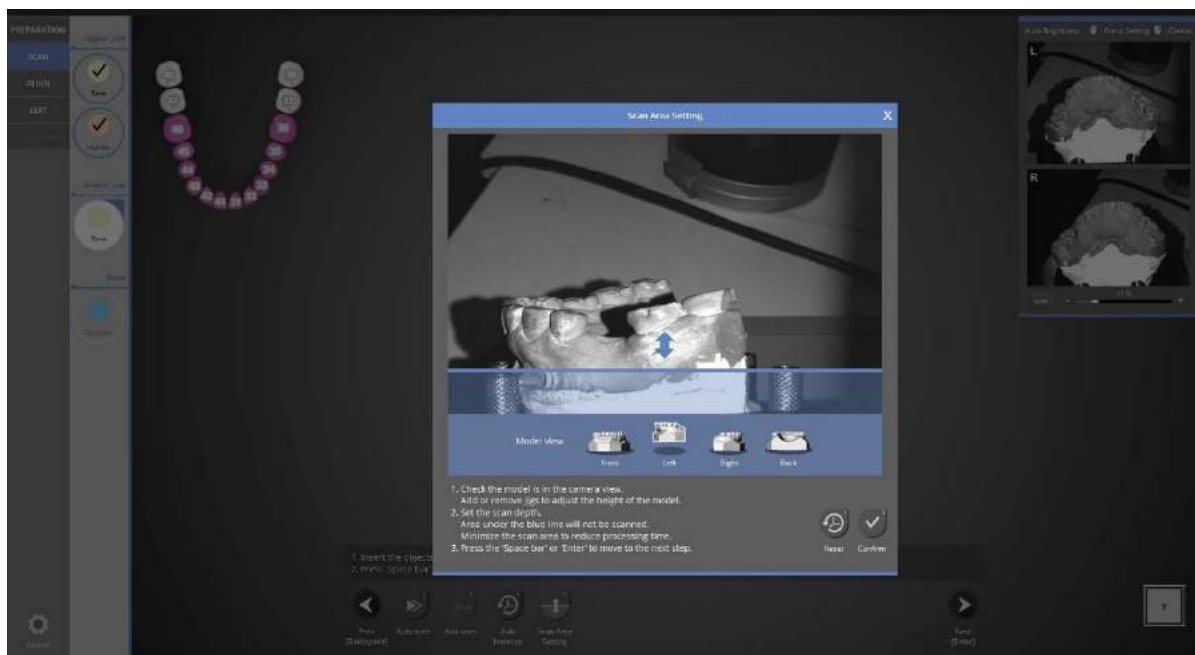
Scan of multi-die teeth prep is complete.

Check the scan data and proceed with additional scans if needed. Click [Next] to move to the next stage.





Following the instructions on the screen, place the lower base model in the scanner and click [Auto scan].



Adjust scan depth by dragging the blue arrow to the desired height. Click [Next] to proceed to scanning.



When scanning is complete (as seen in the image above) check the scan data to see if additional scans are needed. If needed, simply rotate the data image to the desired location and click [Add Scan].



Following the instructions on the screen, place the articular on the scan jig.

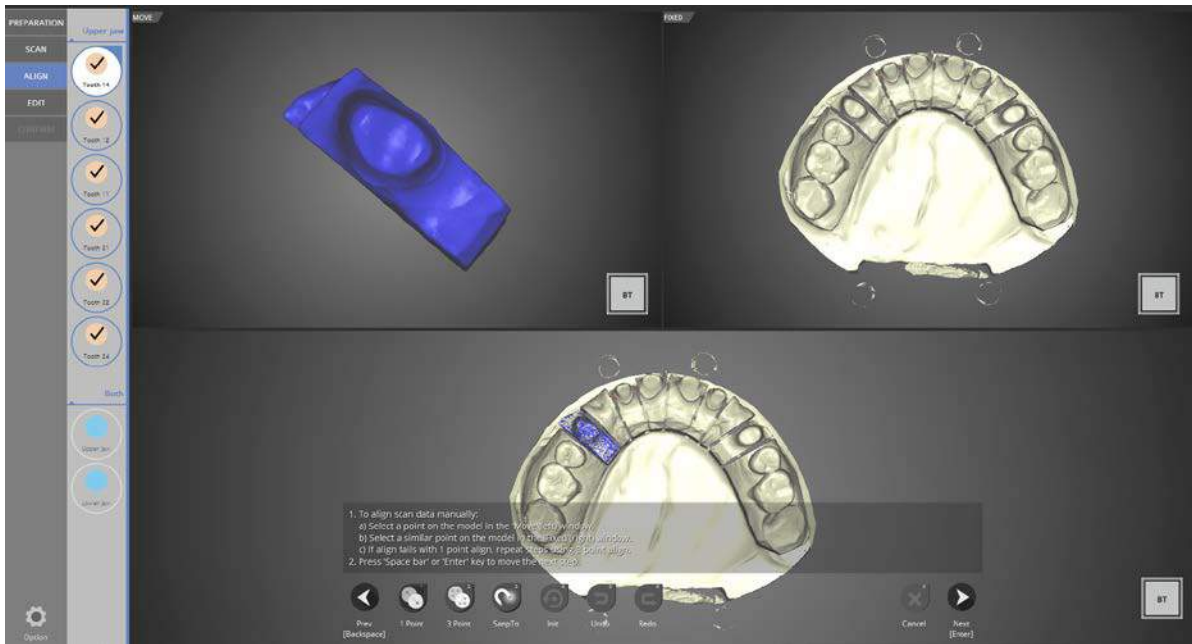


Use a screw jig when scanning the upper and lower base models together.

Be sure that the prep teeth are not needed to scan the bite relationship.



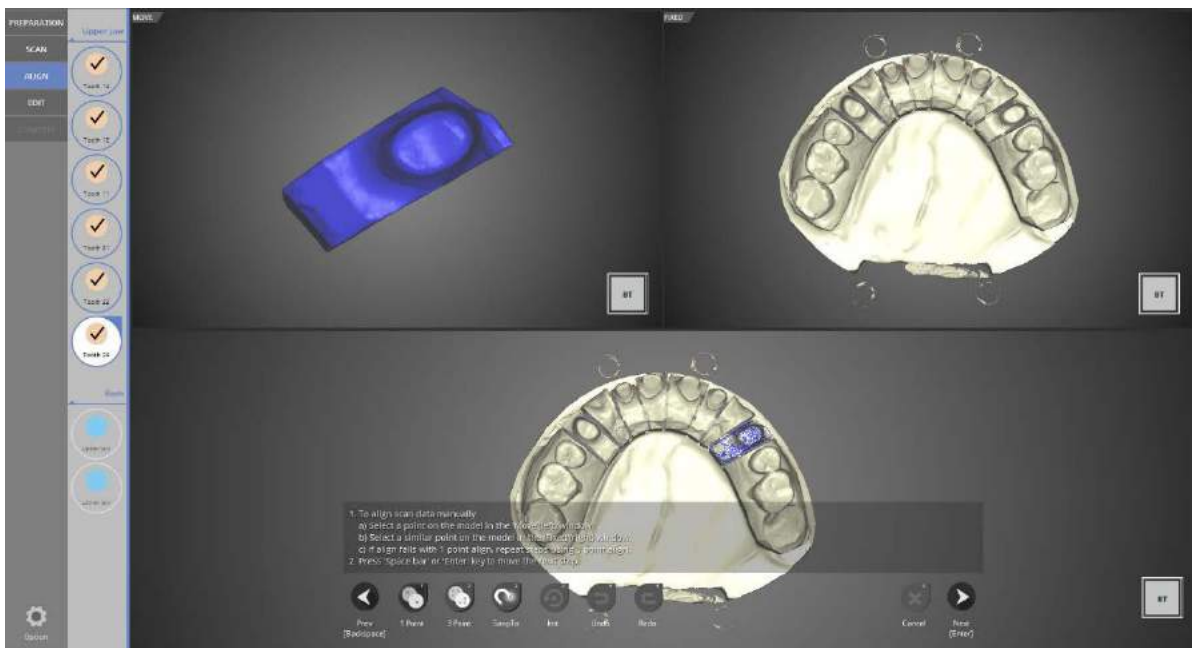
When the articulator scan is finished, click the [Next] button to move to the [Alignment] stage.



Align preparation teeth #14 to #24 using a multi-die.

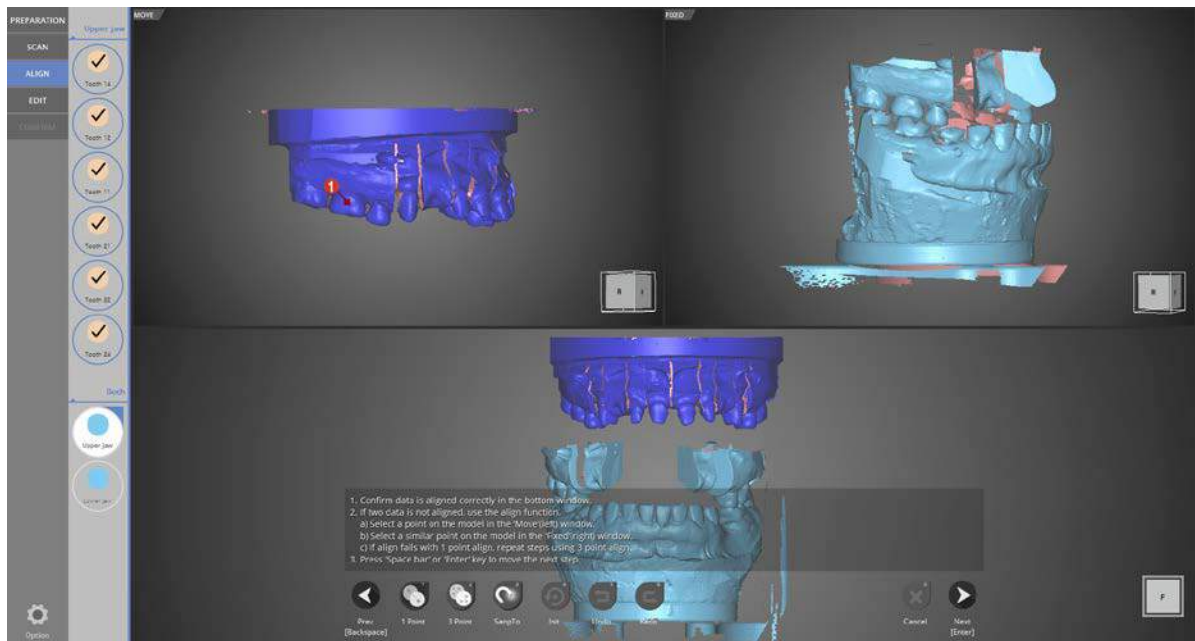
Successful alignment for preparation tooth #14.

Click [Next] to move to the next step.

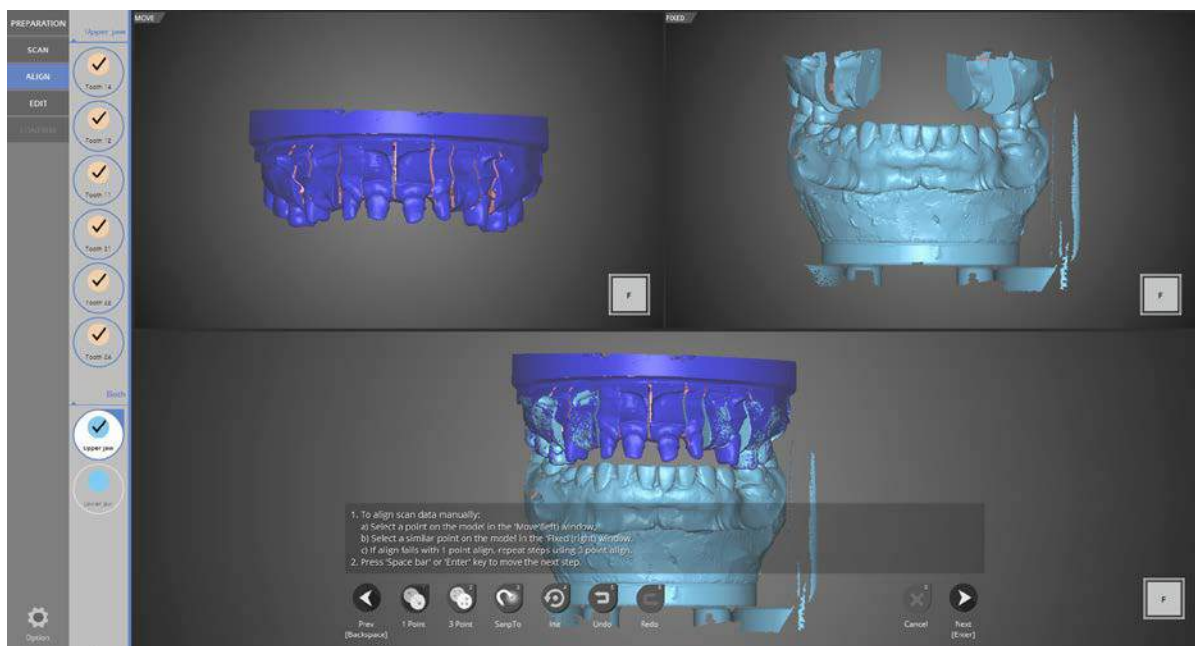


Check if the prep teeth from #14 to #24 are auto-aligned correctly when scanned using the multi-die.

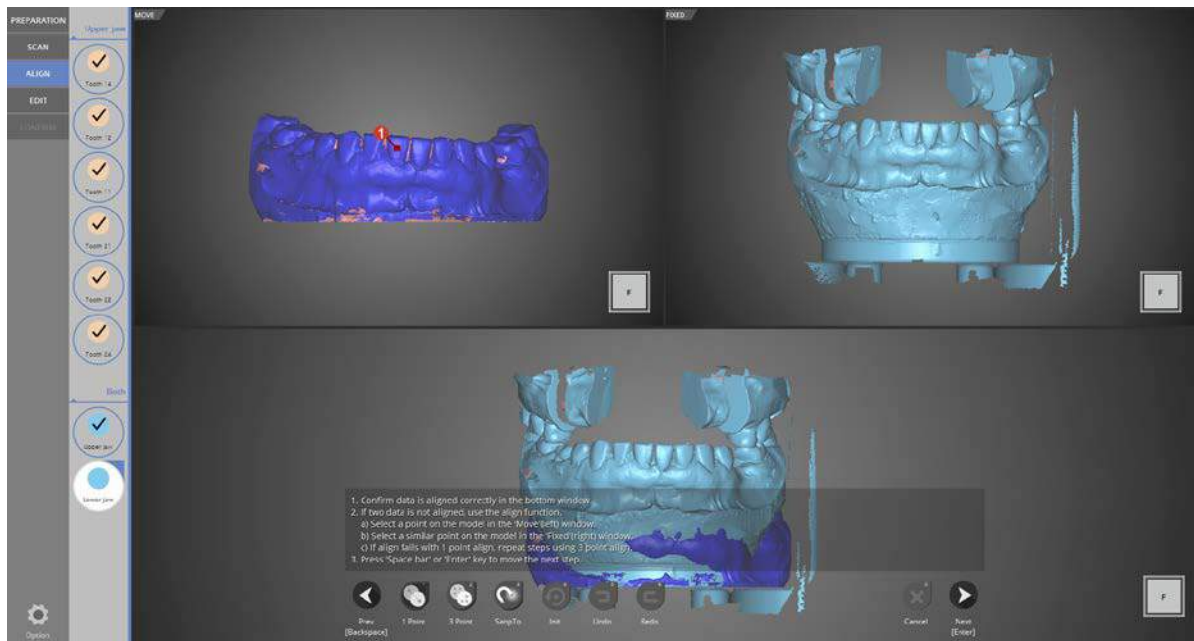
If they are not aligned correctly, align them using [1 point] or [3 point].



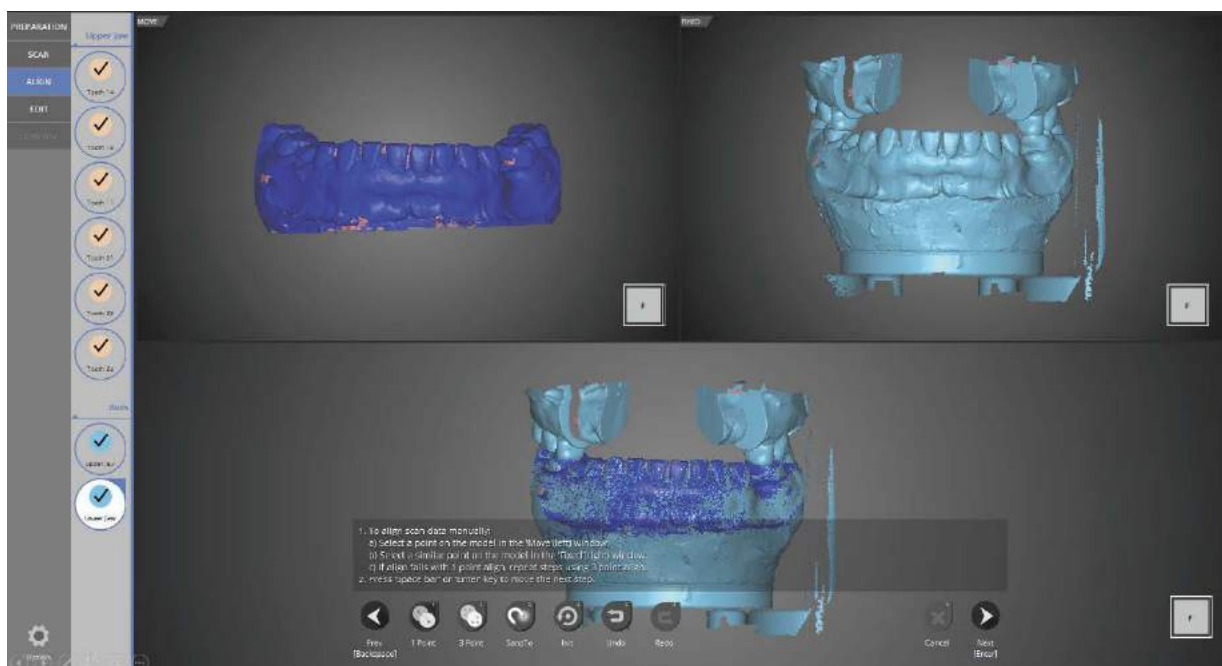
For the upper base articulator alignment stage, select [1 point] or [3 point] alignment and select similar points in the left and right data images for alignment. This case will show [1 point] alignment.



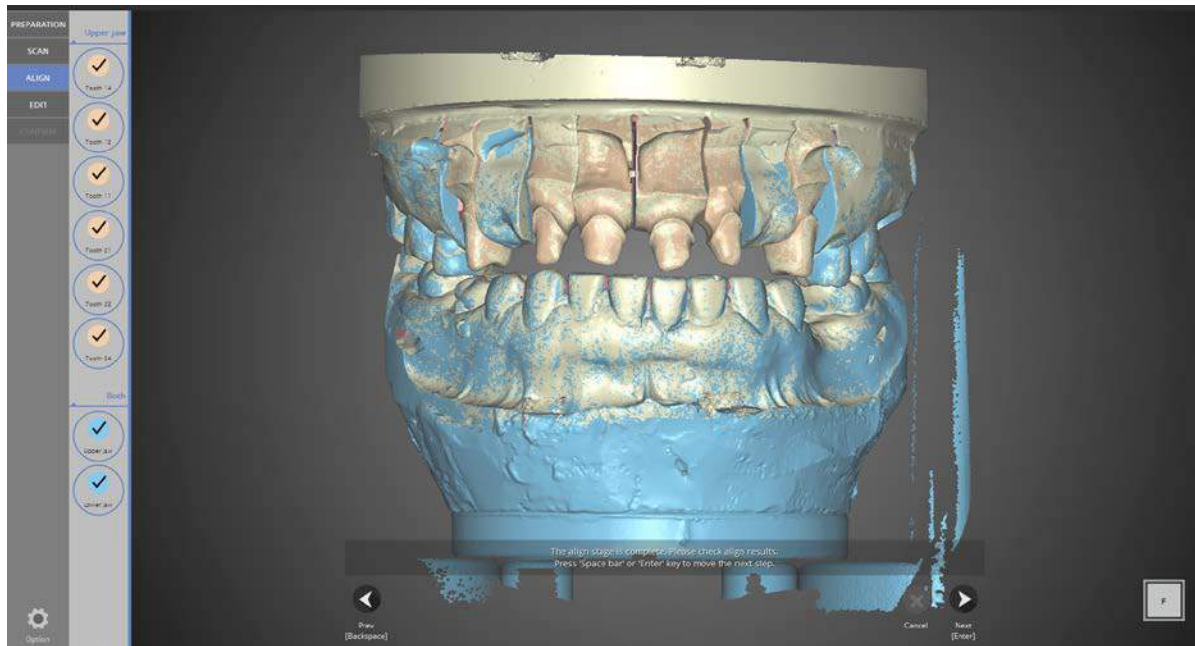
Upper base alignment is complete. Click [Next] to move to the next step.



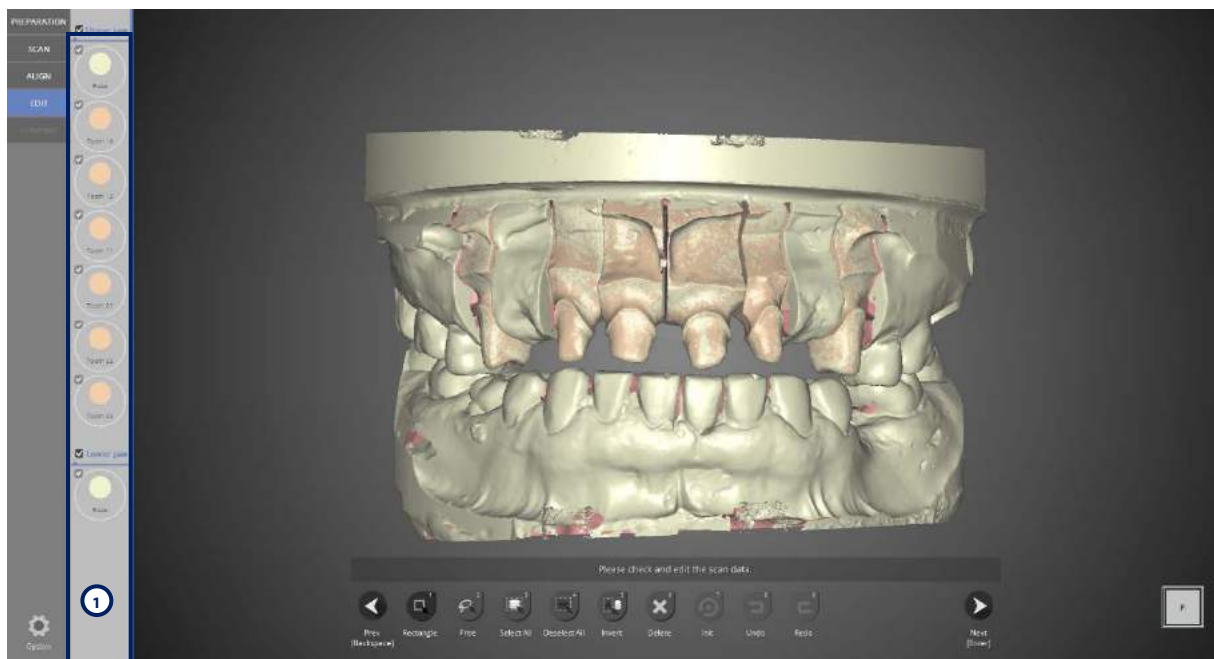
To align the lower jaw, use [1 point] alignment in the same manner as above.



Lower base alignment is complete. Articulator alignment is complete.

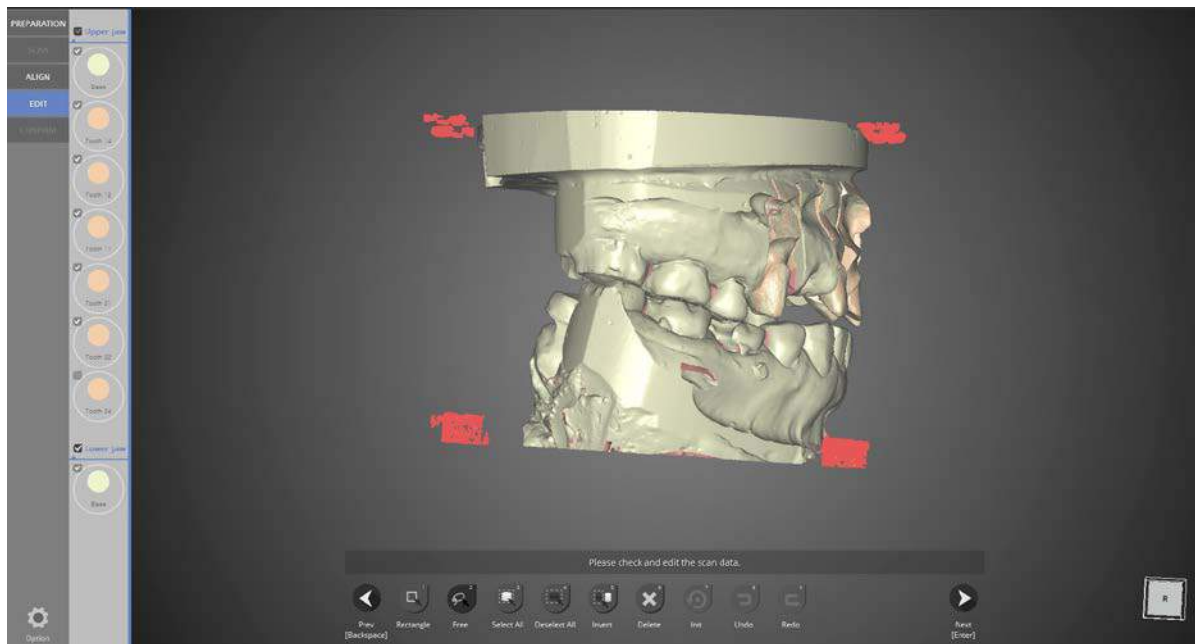


Check the data when alignment is complete. Click [Next] to move to the next step.

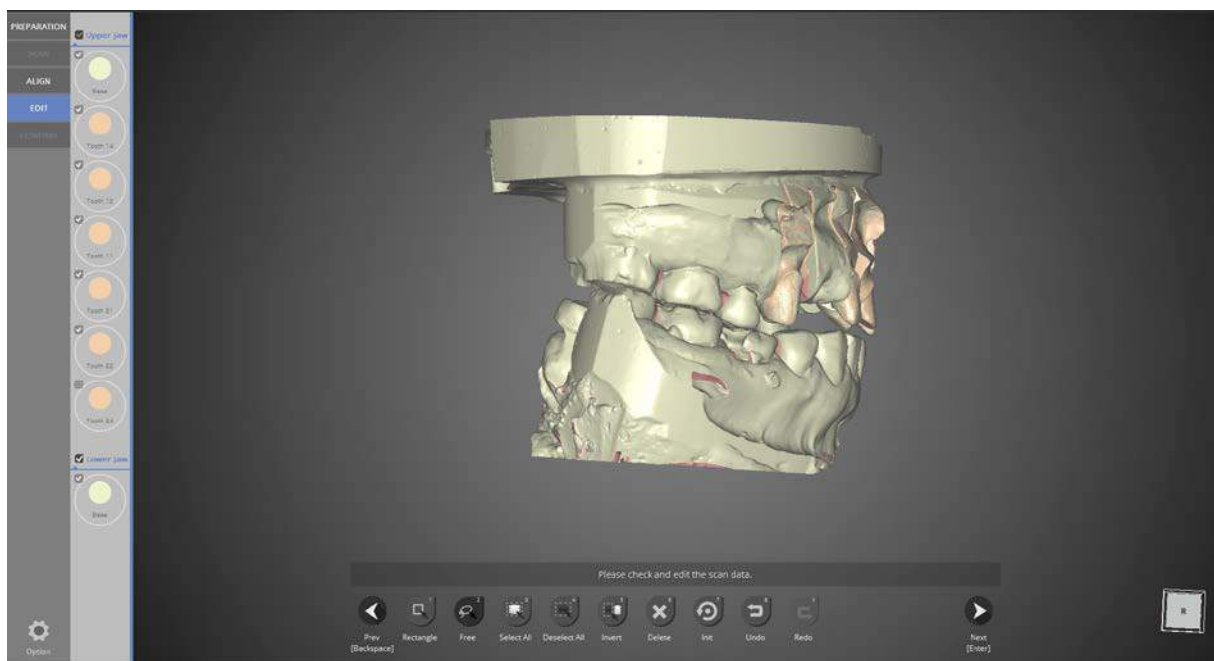


In the [Edit] stage, check or un-check the data images on the left to see them on the screen. Use the icons at the bottom of the screen to continue editing the scan data.

Refer to the [Single Coping Scan] section for detailed descriptions of the icons.

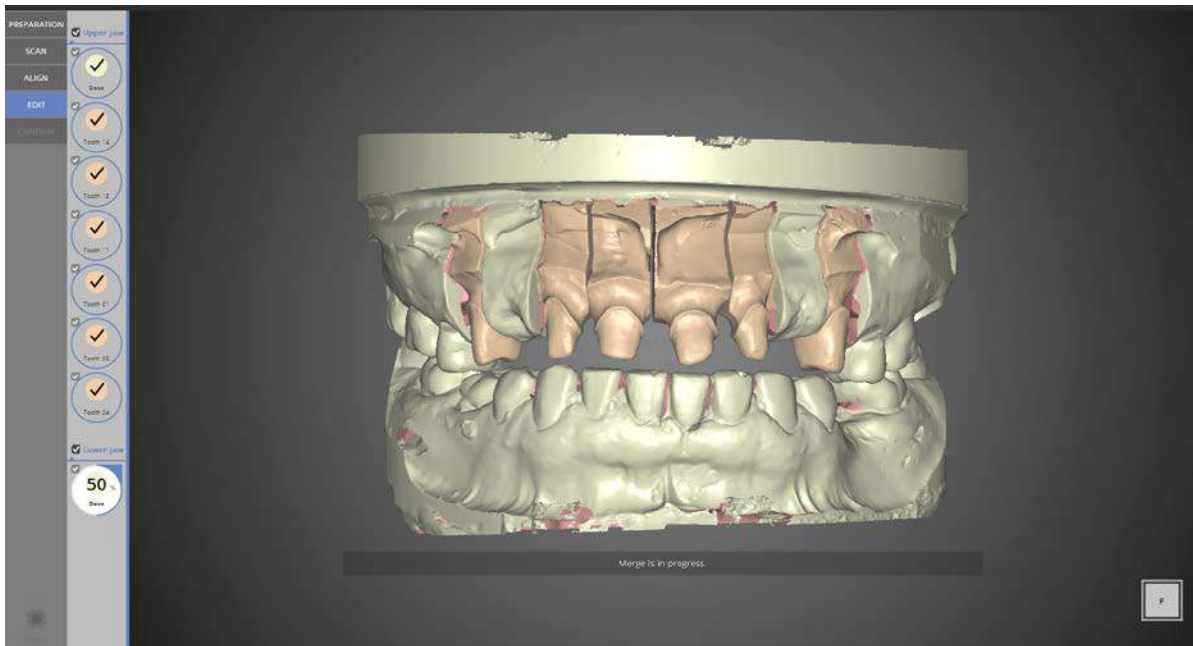


When [Free] is selected, users can trace any selection desired on the data image. After selecting the desired area, click [Delete] to delete the selected part.

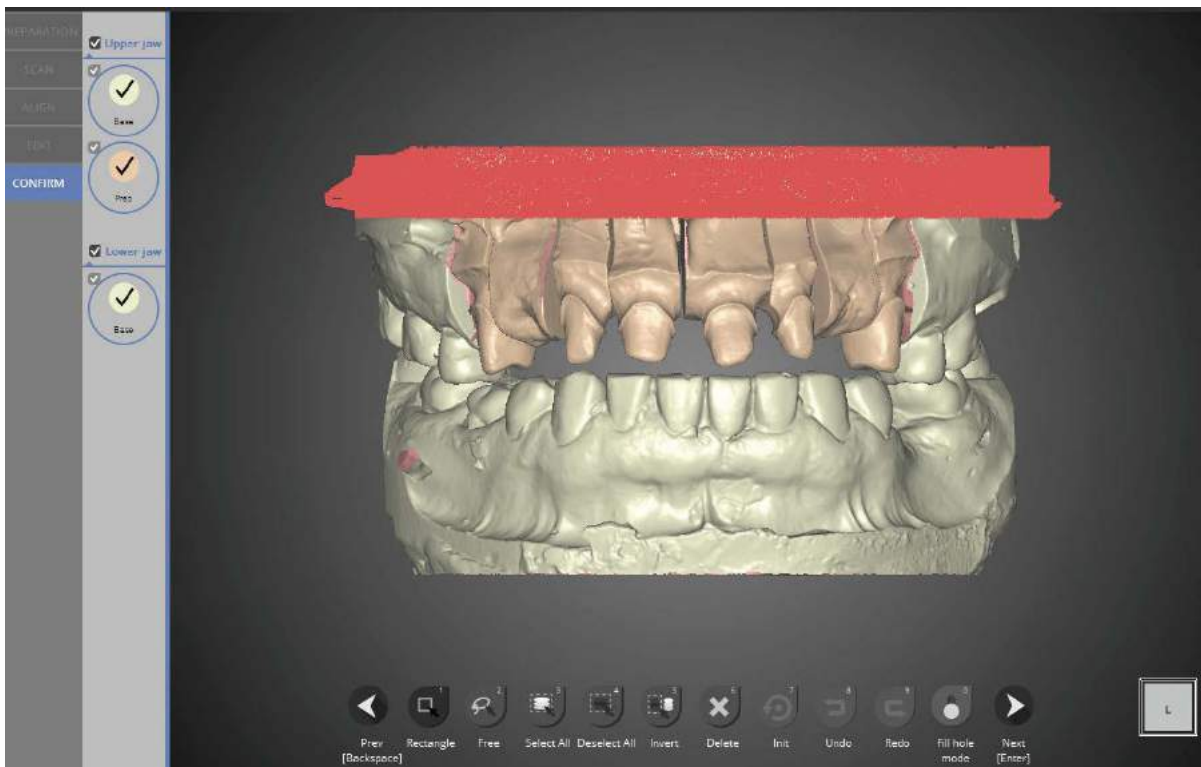


When finished with editing, click [Next] for data processing and STL file production.

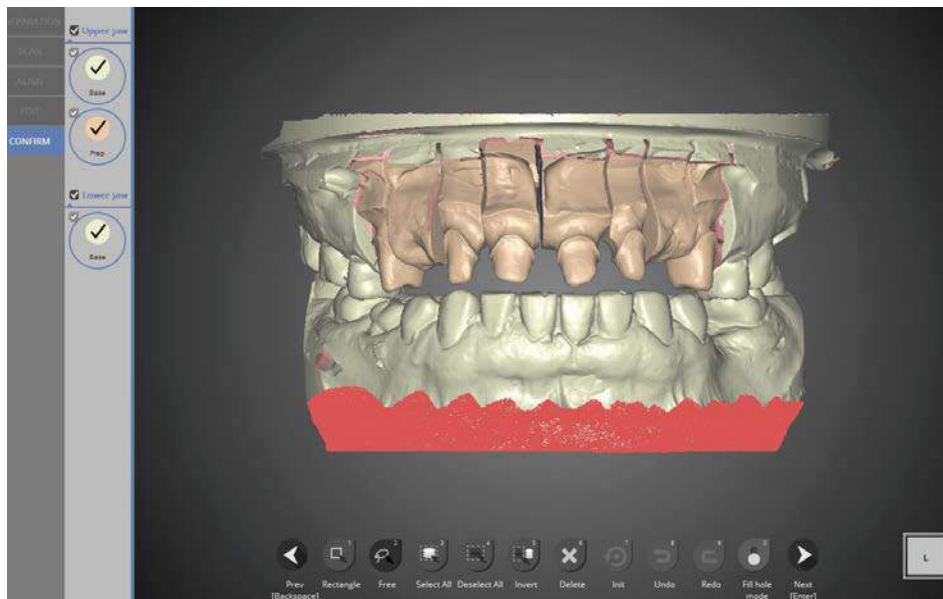




Scan file production is complete. Editing is still possible in this stage.



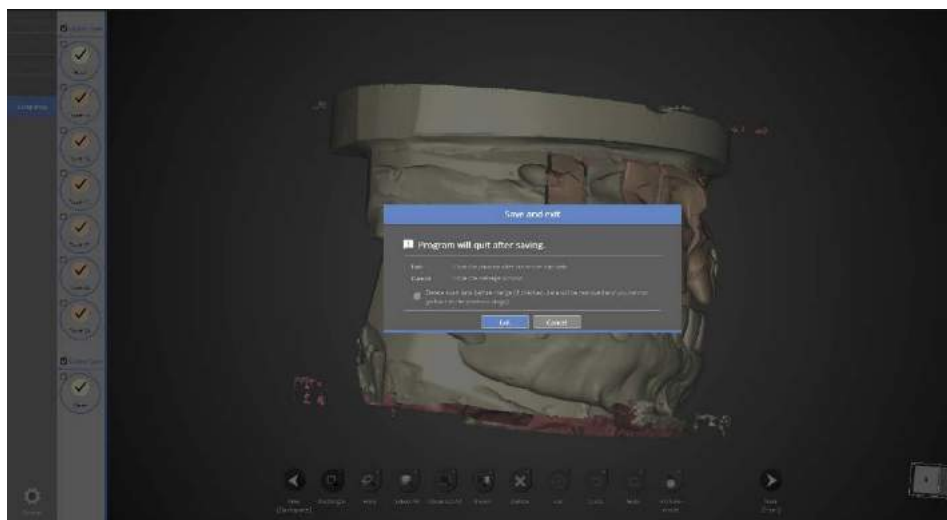
[Rectangle] is selected on the screen



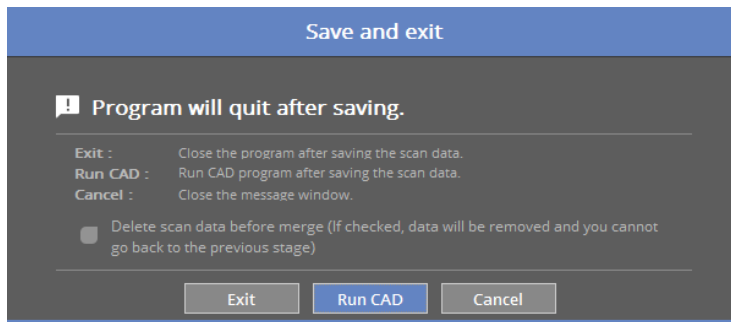
[Free] is selected on the screen.

After selecting the desired area, click [Delete] to delete the selected part.

When you are finished with editing, click [Next] to save the scanned data and exit the program.

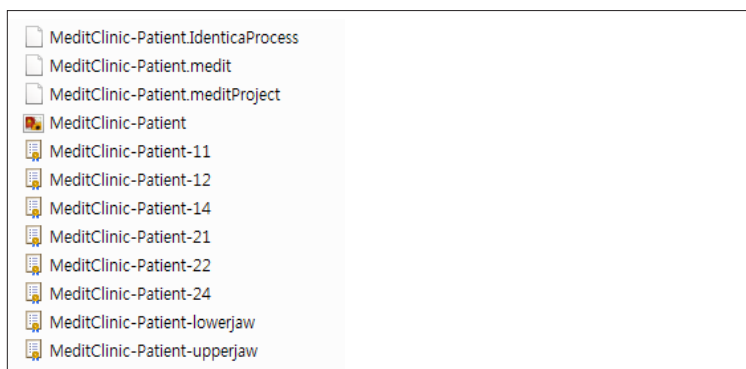


When the scanning is completely finished a prompt will appear. Click [Exit] to save the scanned data and exit the program.



If you are connected to CAD, you will find the message indicated above.

If [Run CAD] clicked, scan program ends and CAD program will start automatically.



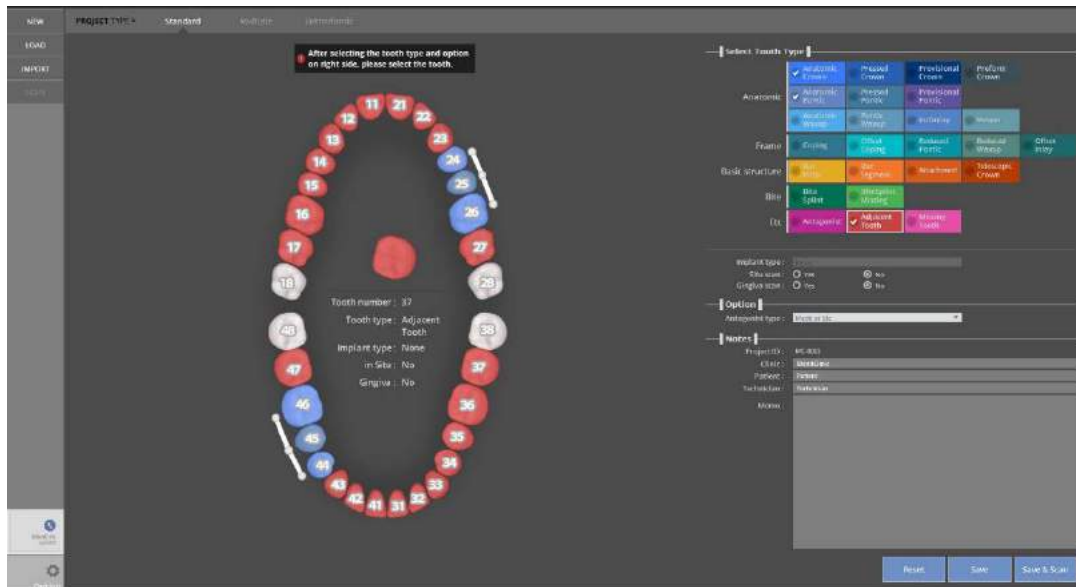
8-unit bridge for teeth #14-24 is complete.

The data can be checked in the Settings folder.

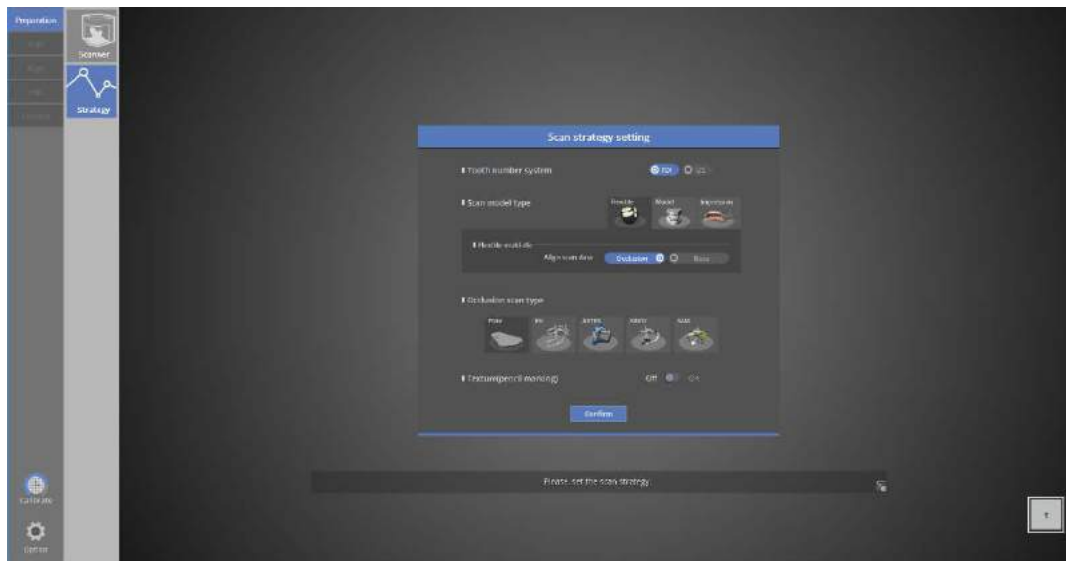
# Flexible multi-die


Complete the order form and tooth setting.

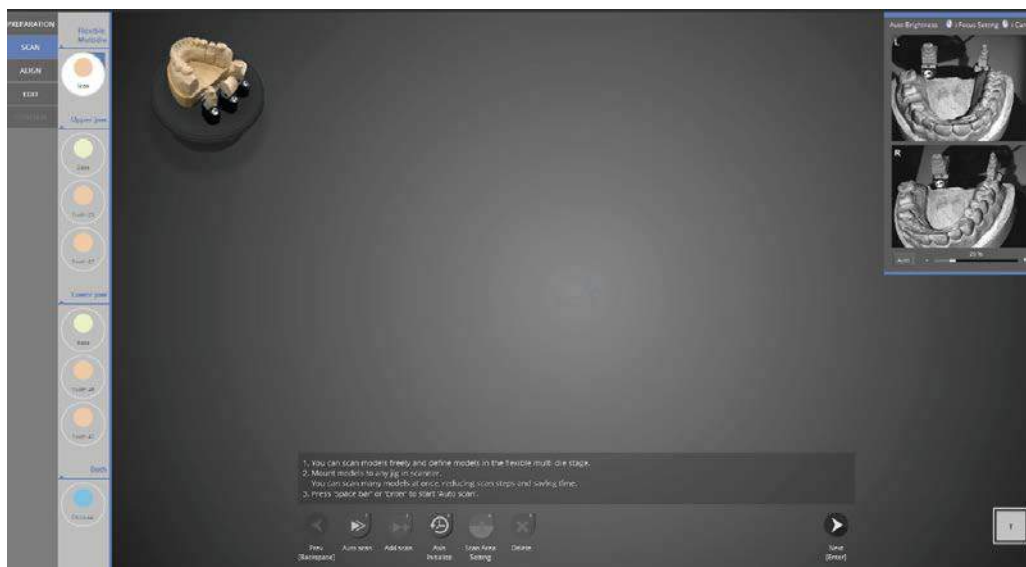
- 1 Start colLab program.



Set the setting for the tooth model to be scanned and click [Save & Scan] to move to [Scan strategy setting] under preparation.



Use flexible multi-die scanning for the upper and lower #3 bridge.  
 Check the [Flexible Multi-die] in the scan strategy and the other options including the articulator.  
 Then click [Confirm] or press [Enter 



Flexible multi-die scan  
 Assign the scan data after scanning.  
 All cases except the occlusal scan can be scanned using the flexible multi-die.

### Flexible multi-die scanning

When scanning with a flexible multi-die, users can set their own scan strategy.

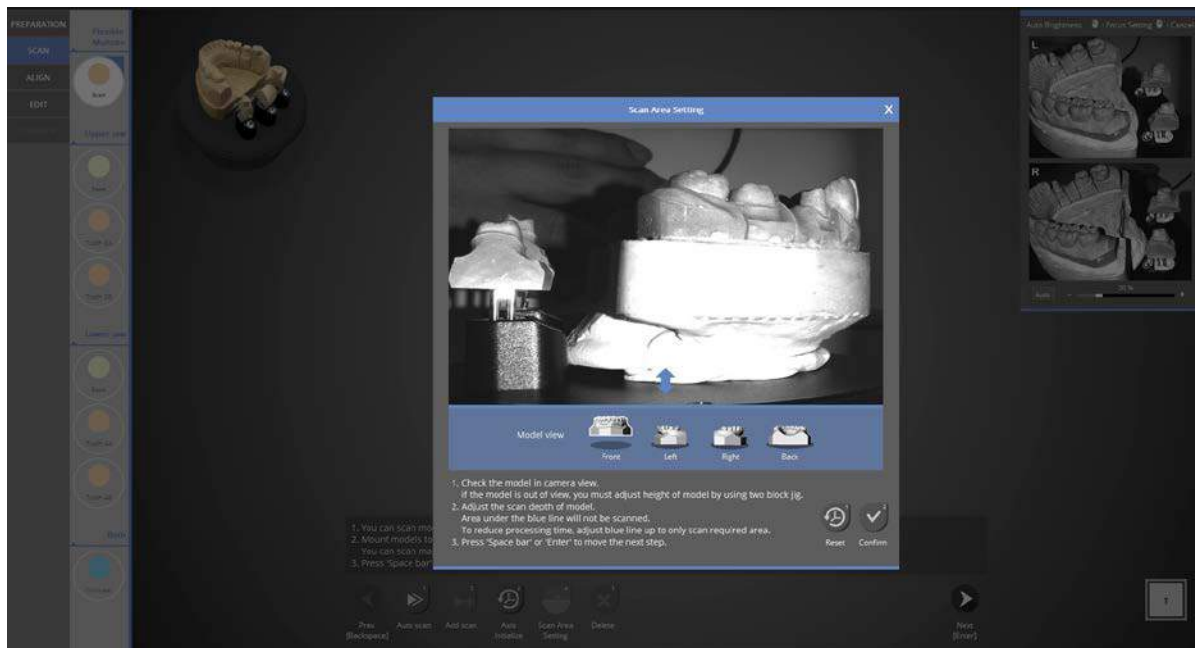
For scanning the upper and lower #3 bridge case, follow this sequence.

Lower base/upper prep. teeth >> Upper base/lower prep. teeth >> occlusal.



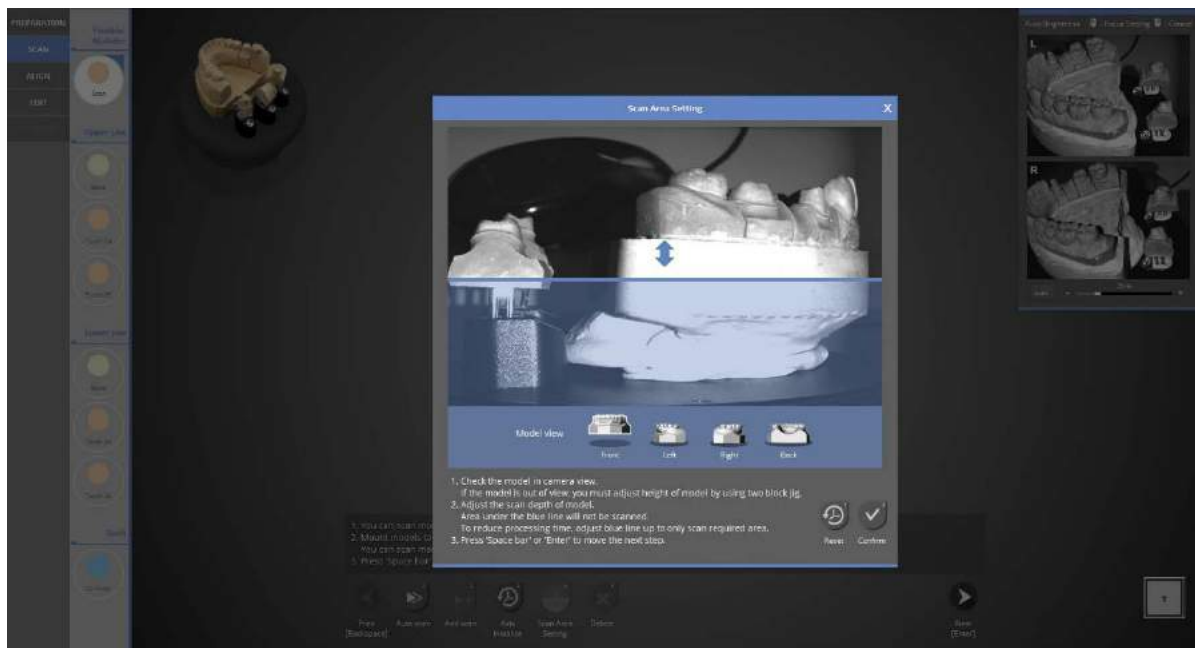
Place the scan models on the flexible multi-die. Please refer to the above image.

To keep the scanning sequence of the [lower base/upper prep. teeth >> upper base/lower prep. teeth >>occlusal], put the lower base/upper prep onto the flexible multi-die, and insert it into the scanner.

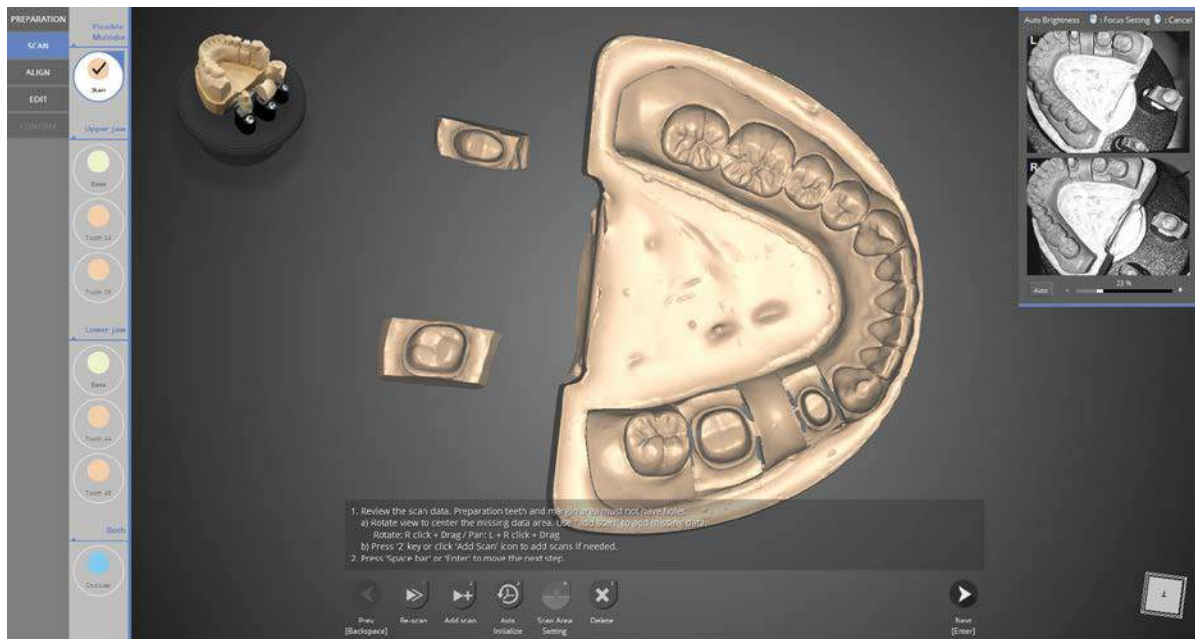


Check if the teeth model appears on the screen.

You can check the scan area from every direction by clicking the direction icon. Adjust the position of the half block jig to position the model within camera view.



Adjust scan depth by dragging the blue arrow to the desired height. Click [Confirm] to proceed to scanning.



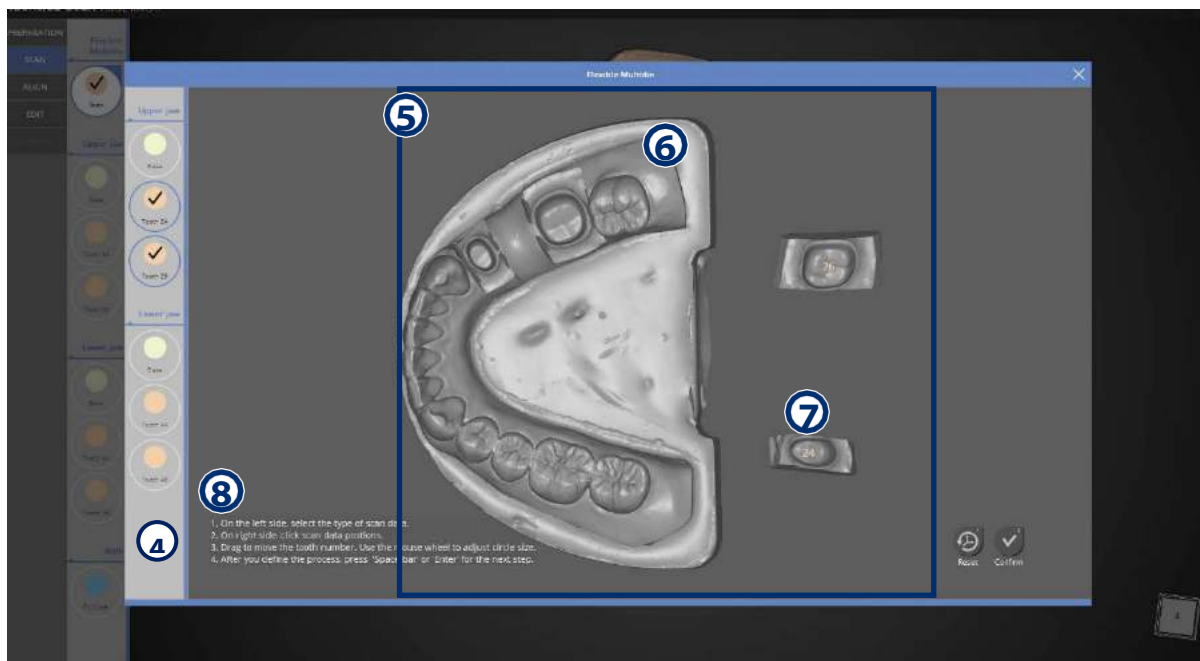
Click [Auto scan] to begin scanning. Check the data image and click [Next] to continue.



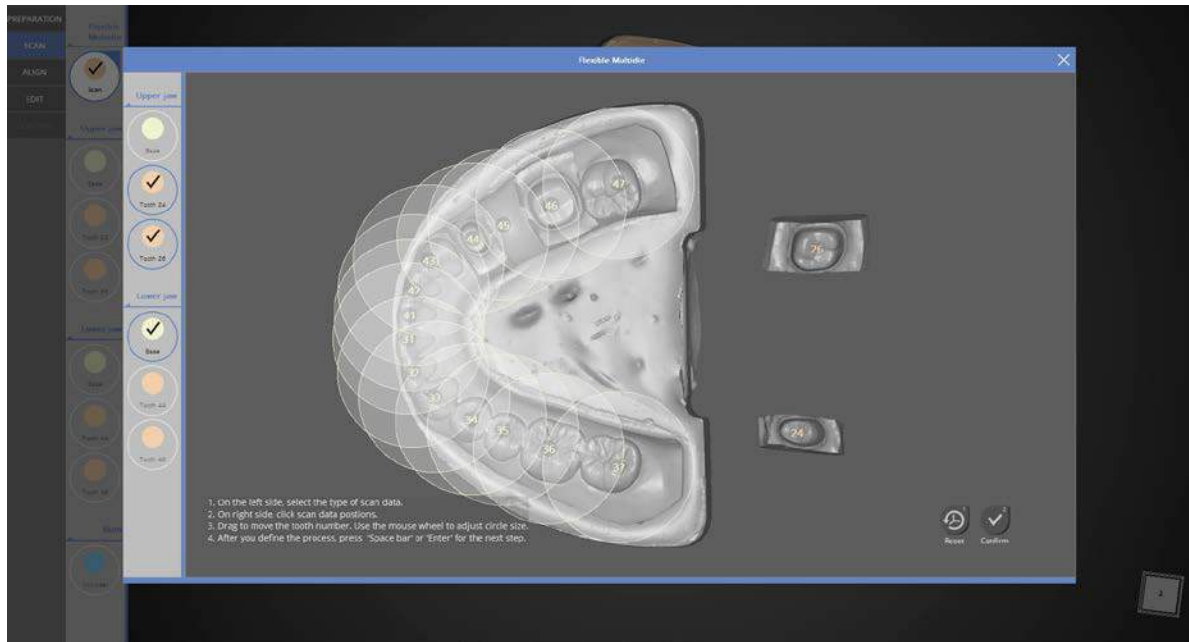
Click the [Next] button and select the appropriate button.

- ① Reset : Reset the specified tooth elements.
- ② Confirm : Confirm the specific elements.
- ③ X : Cancel the job and return to the previous job.





- ④ Item button: Select the item to define it on the screen.
- ⑤ Designated screen: Scanned data will be displayed on the monitor. When you select the items with Item button ④ then you can see the updated message on the upper center as ⑧ . You can choose the tooth with a left click of the mouse, following the message as explained.
- ⑥ Selecting data/teeth: If the item includes more than two teeth, all of the teeth should be selected. The selected area is indicated as a circle and the selected tooth should be within the circle. You can adjust the size of the circle by scrolling the mouse wheel while the mouse cursor is on the number in the middle. You can also adjust the position of the circle by dragging & dropping with the left mouse button while the mouse cursor is on the number in the middle.
- ⑦ Designating Data / Individual tooth: If the item consists of a single tooth, the selected area will be marked with numbers by clicking the [Confirm] button after the selection the 3D data nearest to the button will be extracted. After selection, put your mouse cursor in the middle of the number circle. To move the numbers, drag & drop with the left click of the mouse.
- ⑧ Alert Message : Notifies the current process.

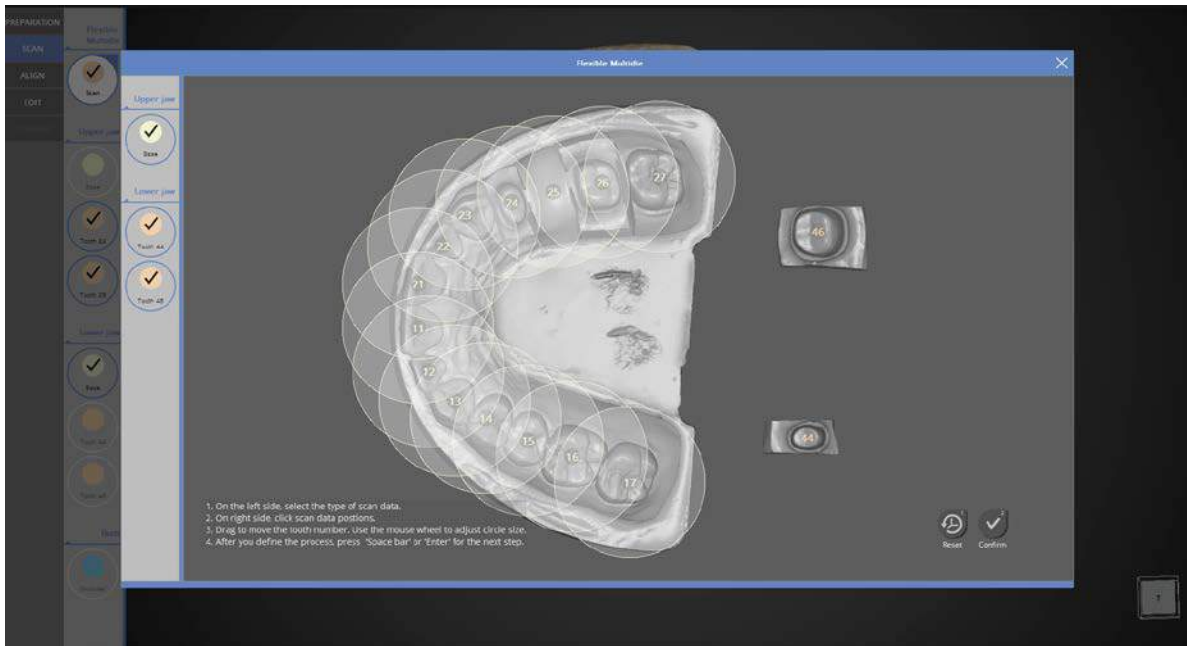


Press [Confirm] after selecting all of the data.

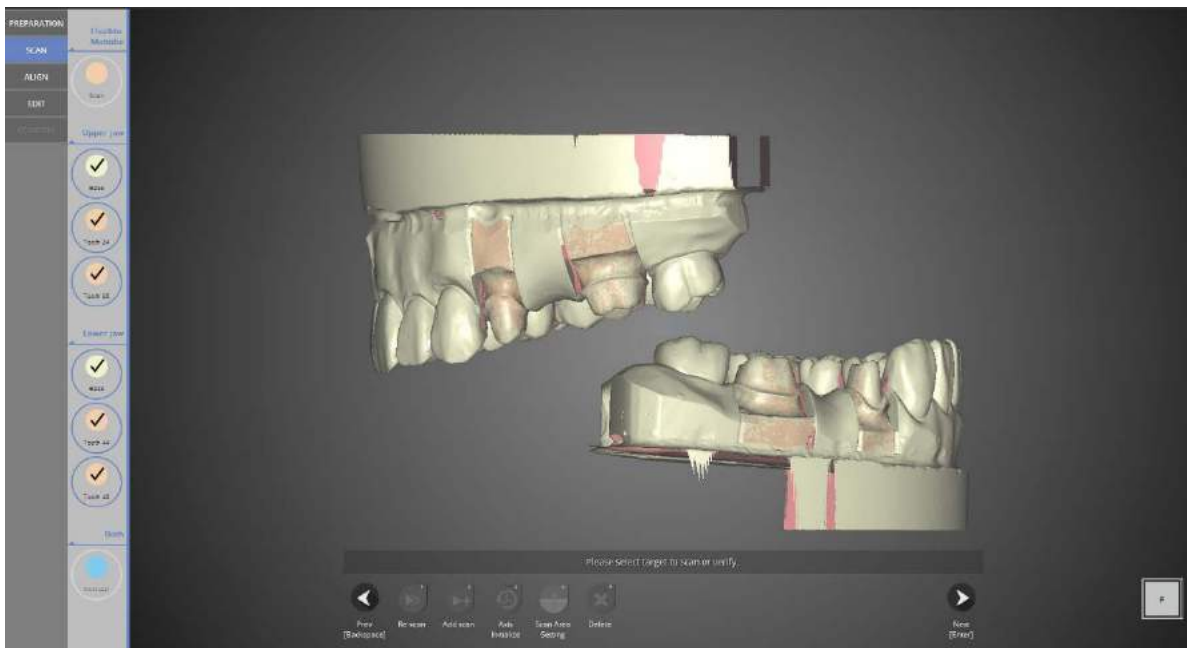
On the left menu, select each data image that should appear on the screen. Or, select the data to be deleted and click [Delete].



Place the upper base/lower prep teeth onto the flexible multi-die and start scanning.



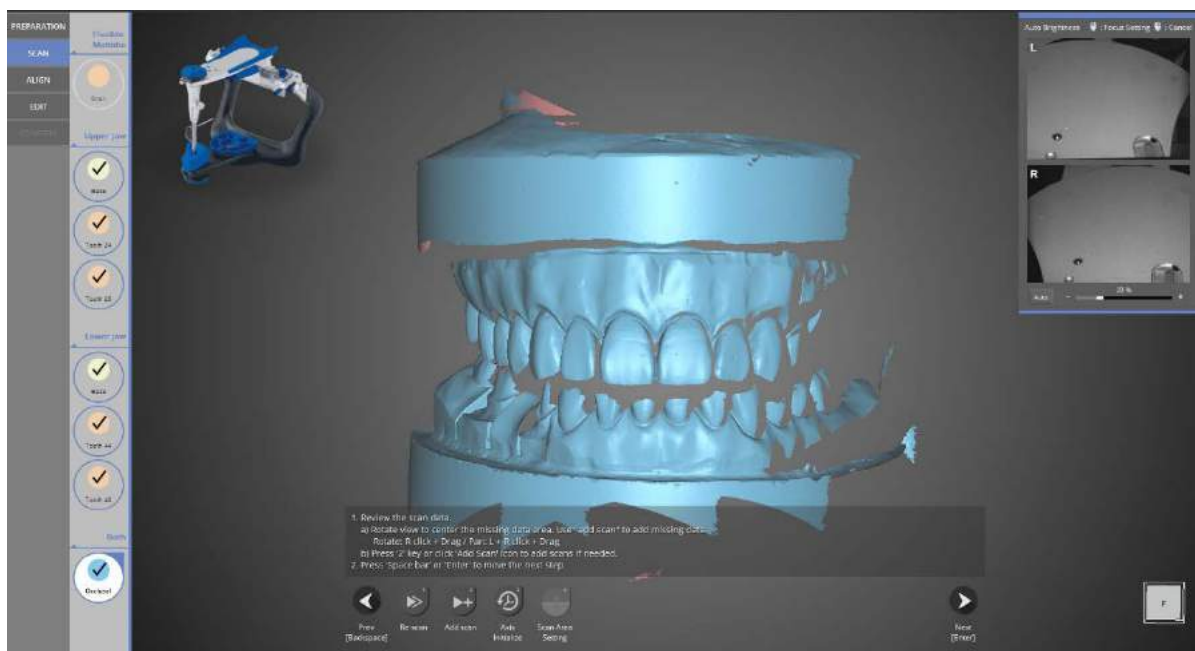
On the left menu, each data selection will appear and be checked.



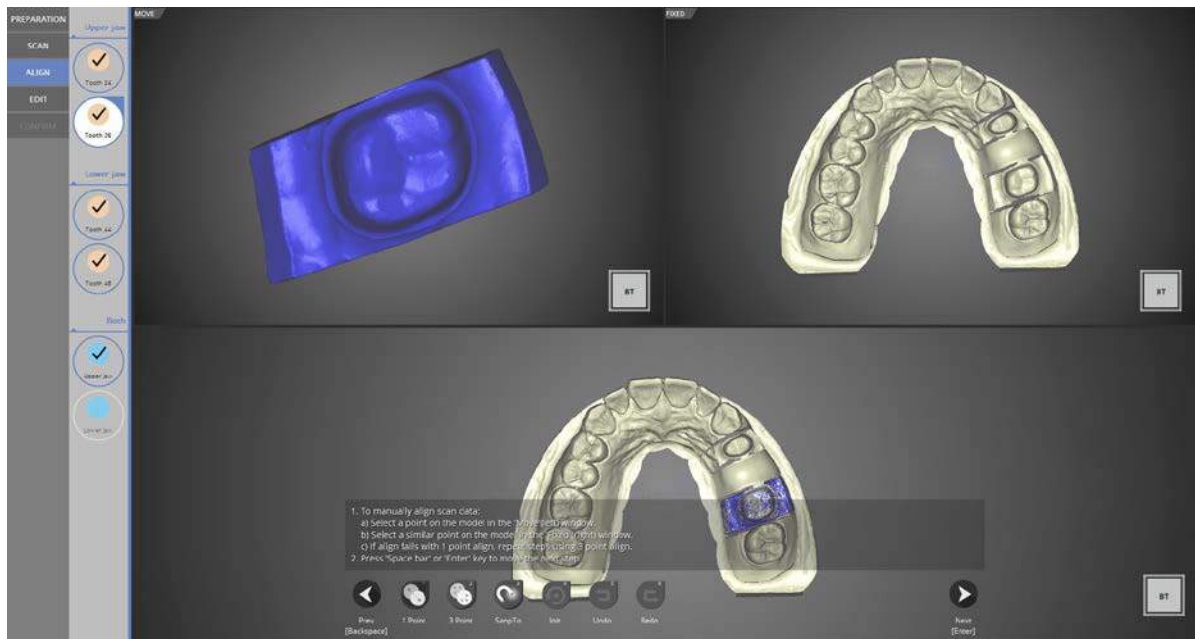
You can find the scan data for every item except the occlusal.



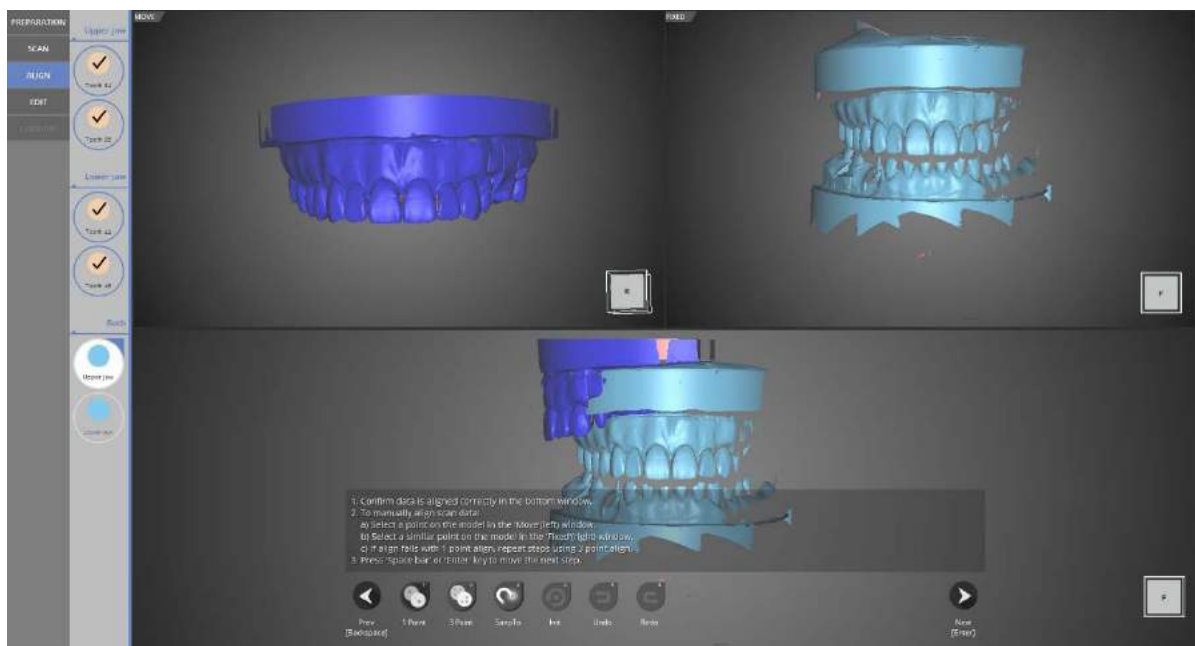
Place the Artex articulator onto the articulator plate and remove the half block jig. Then place them onto the scanner.



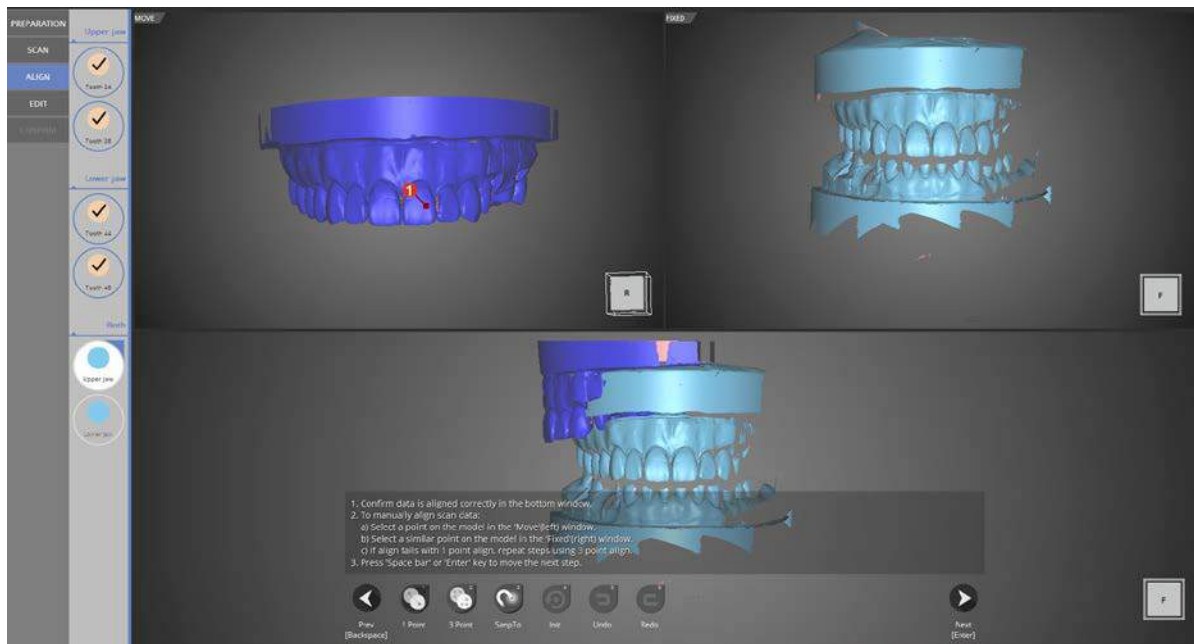
All scanning is complete. Proceed to the next step to align the data.



The preparation teeth were aligned automatically. Check if the data is aligned properly and then move to the next step.

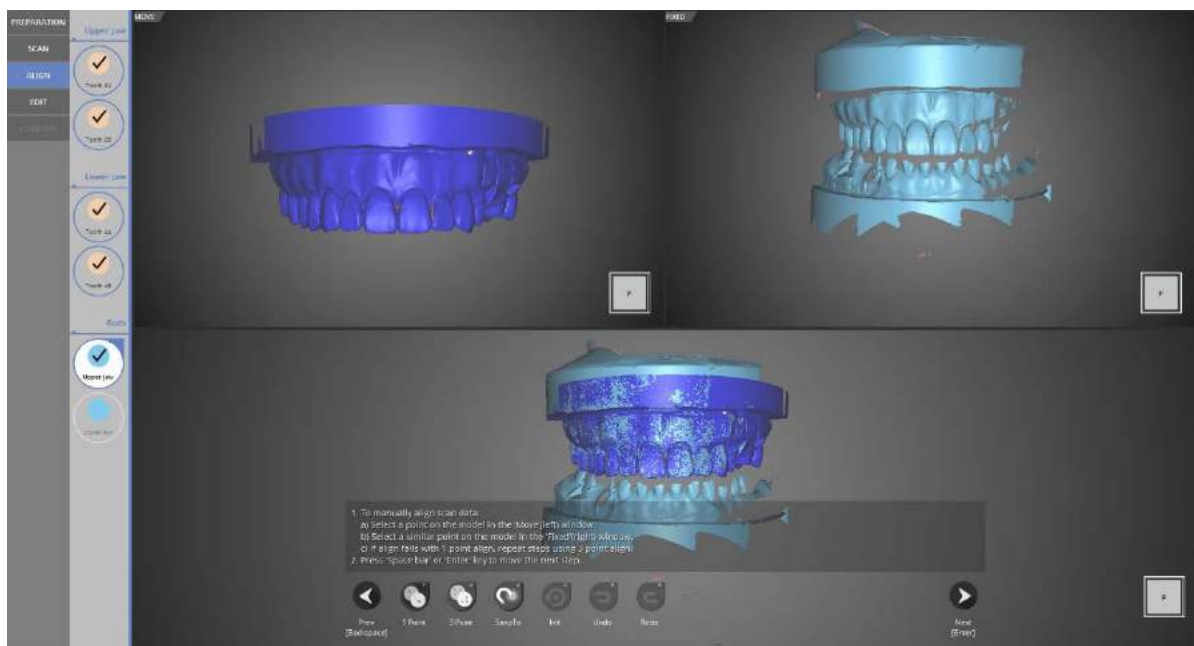


The vestibular alignment step appears above.

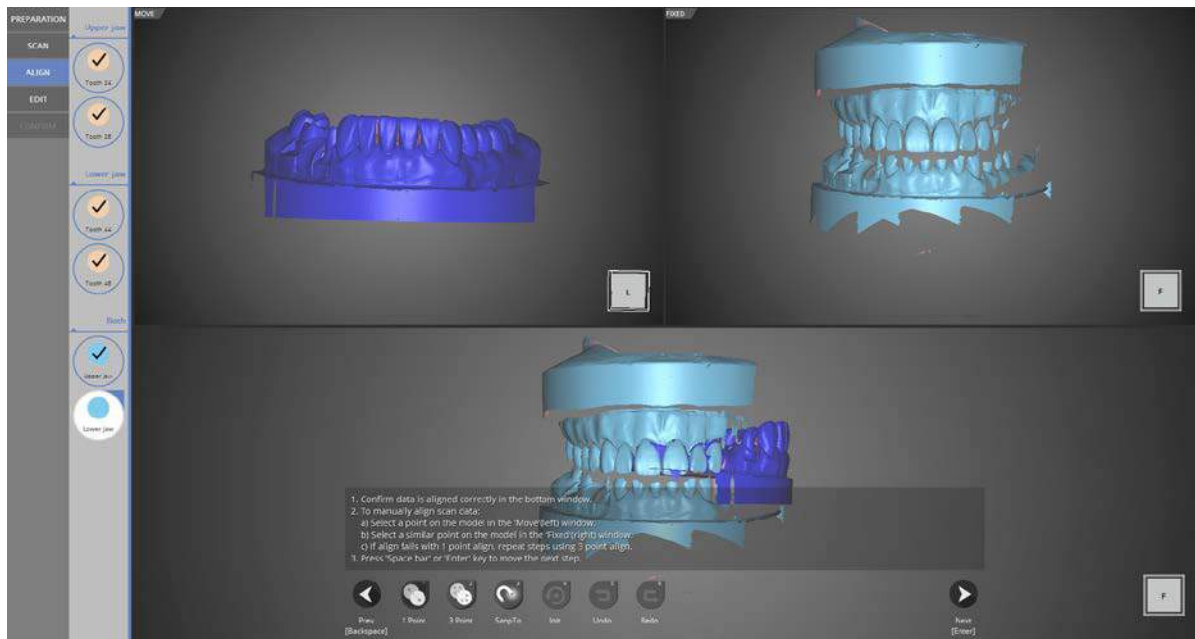


Align the data using the [1 point] alignment function.

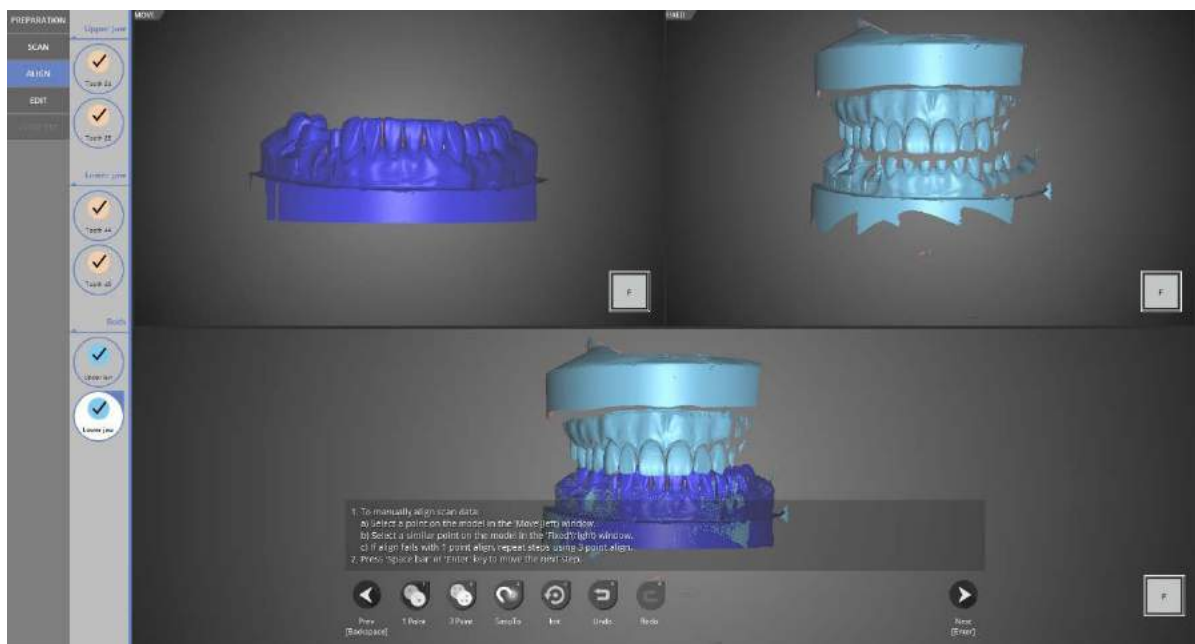
Click one point in the top left data image and then click the same point in the top right data image.



Upper vestibular alignment has been completed.



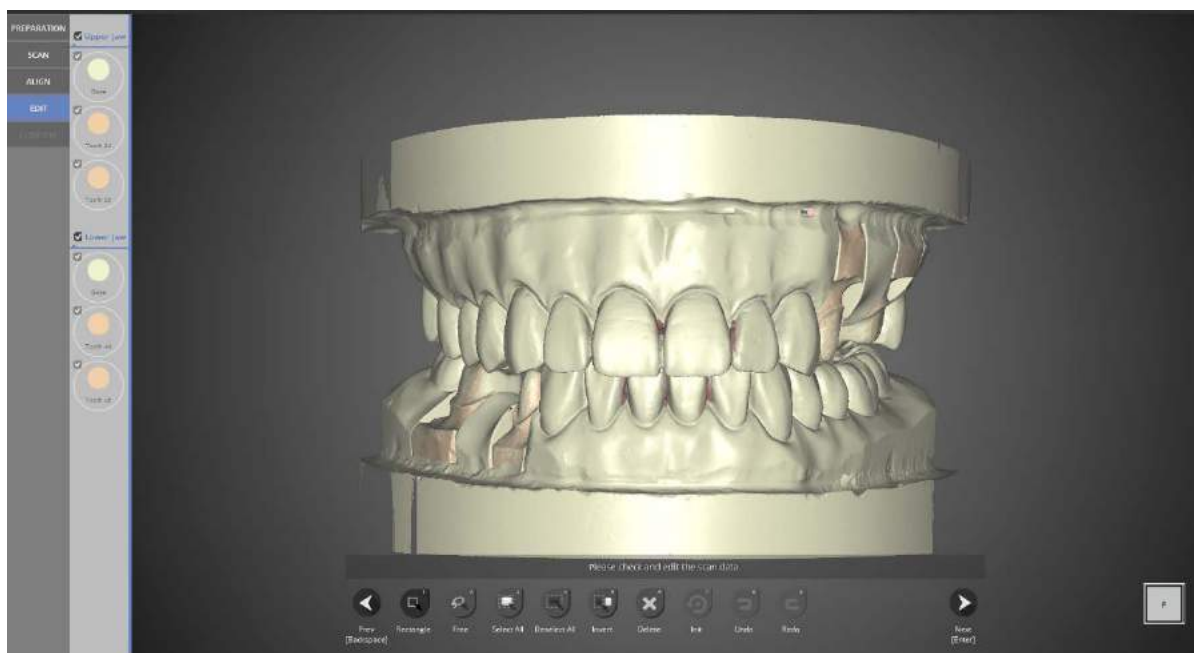
Occlusal relationship of the lower jaw alignment stage.  
Like the upper model, align the data using [1 point] alignment.



The lower occlusal relationships alignment has been completed.



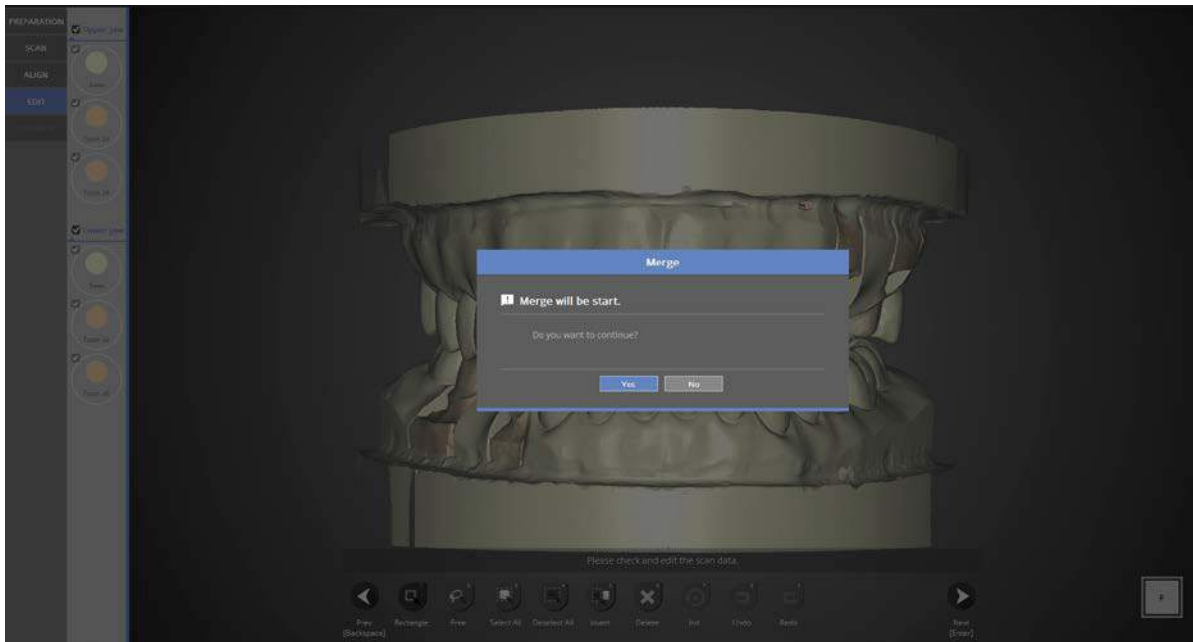
All occlusal relationship alignments have been completed. Proceed to the next step after checking the data for errors.



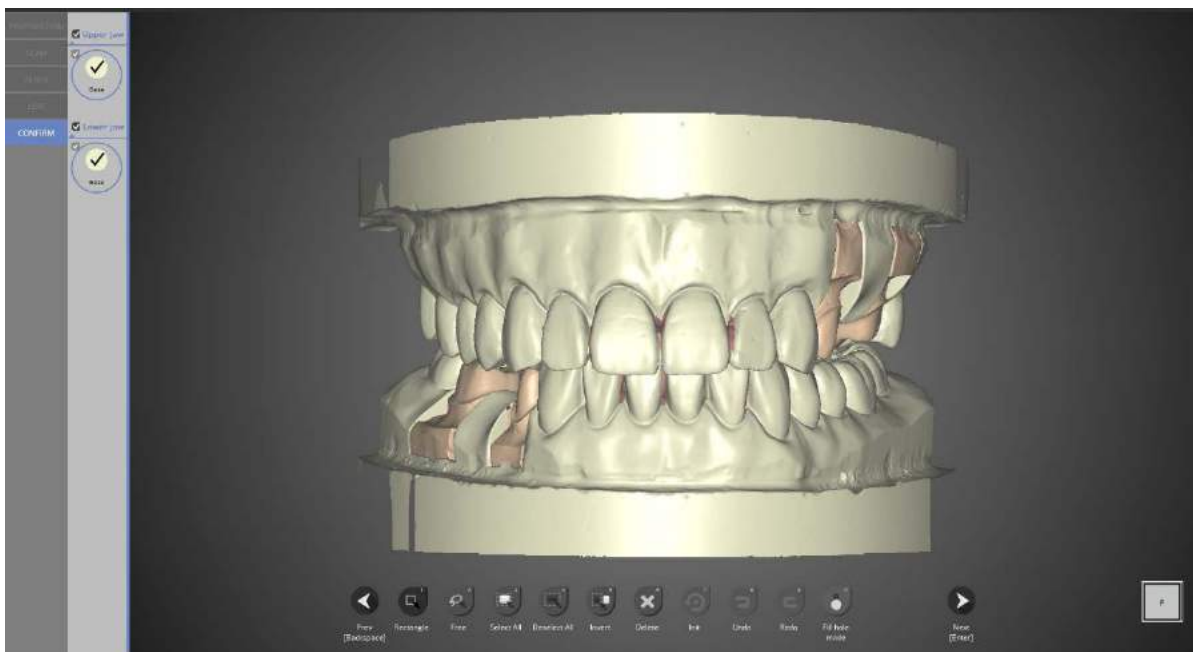
### Editing stage

Select the parts of the data to delete and click [Delete]. Click [Next] after editing to move to the next step.

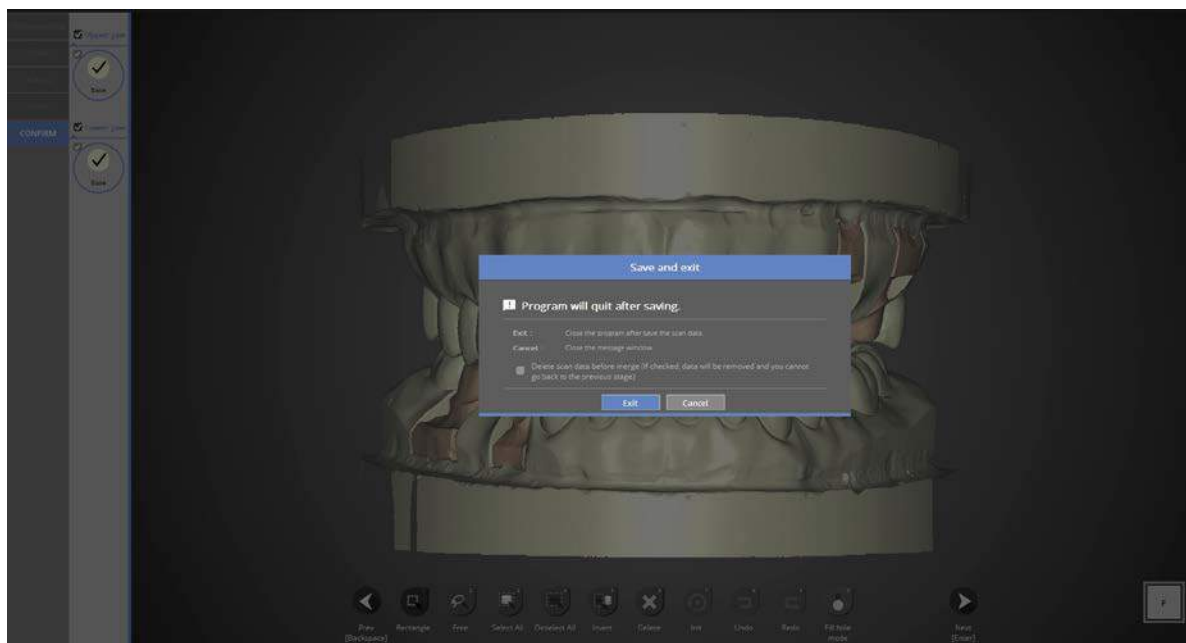




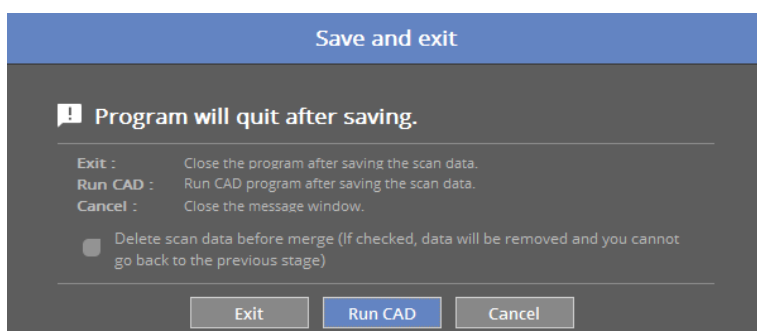
Proceed to the next step to merge the data.



Data merging has been completed.

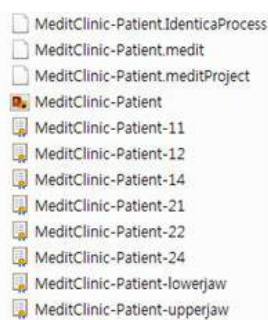


Click [Next] to save the scanned data and exit the program.



If you are connected with CAD, you will see the message indicated above.

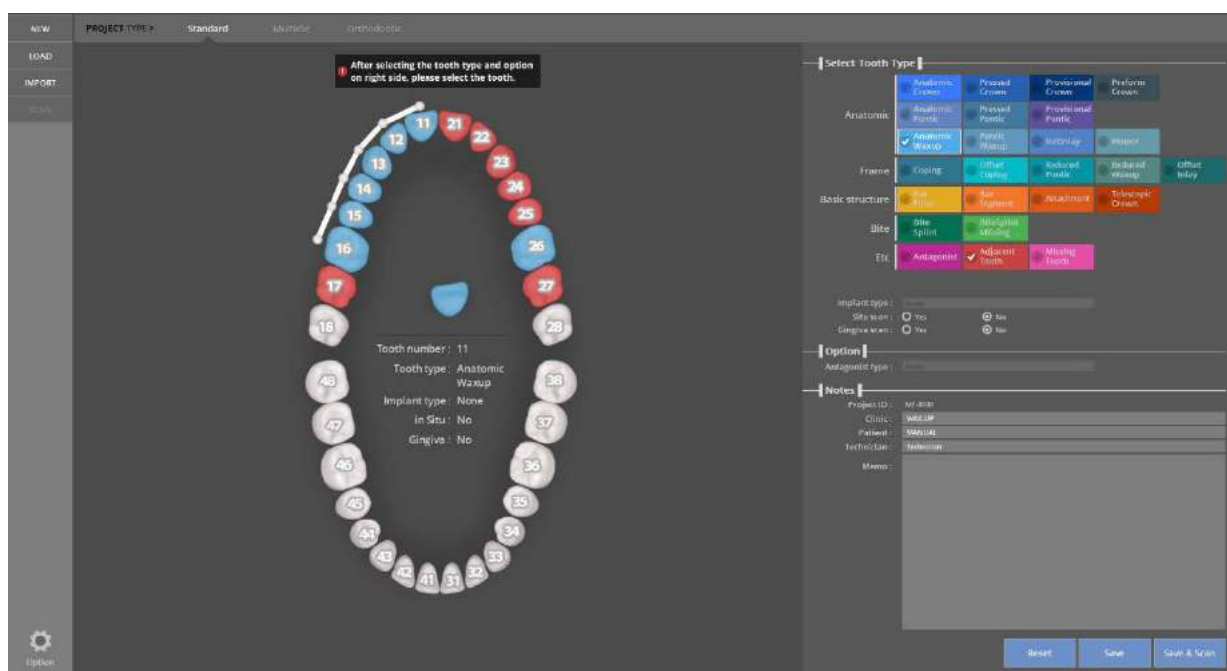
If [Run CAD] is clicked, the scan program will end and the CAD program will automatically start.



The scanning of the upper and lower 3-unit bridge is successfully completed. Scan data has been successfully saved in the selected folder.

# Waxup

Complete the order form and tooth setting.



Enter the settings for the scan model.

Refer to [Teeth Settings].

Proceed with cases #11 – 16, #6 unit waxup bridge framework and #16 waxup crown.

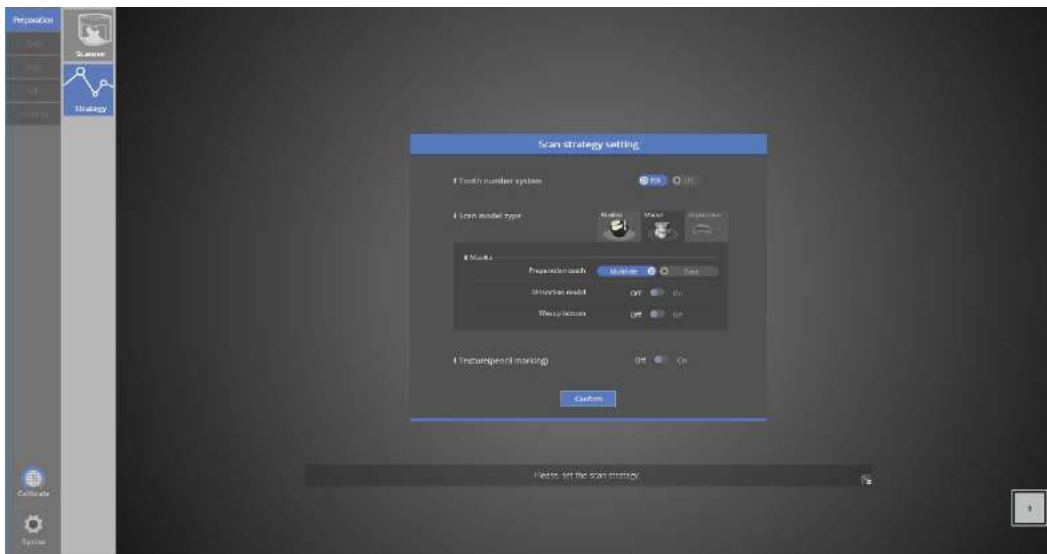
Implant type – None | Situ scan – No | Gingiva scan – No

Antagonist - None

Press the [Save & Scan] Menu button and scanning will begin.

The first time you connect your scanner, it will take around 30 seconds to boot. After the first installation, it will take around 3-5 seconds. During the scanner connection process the projector will momentarily blink, and then the connection will be completed.

When the scanner is connected properly, it will automatically advance to the [Scan strategy setting] step and determine the scanning process.



## ☰ Preparation - Strategy

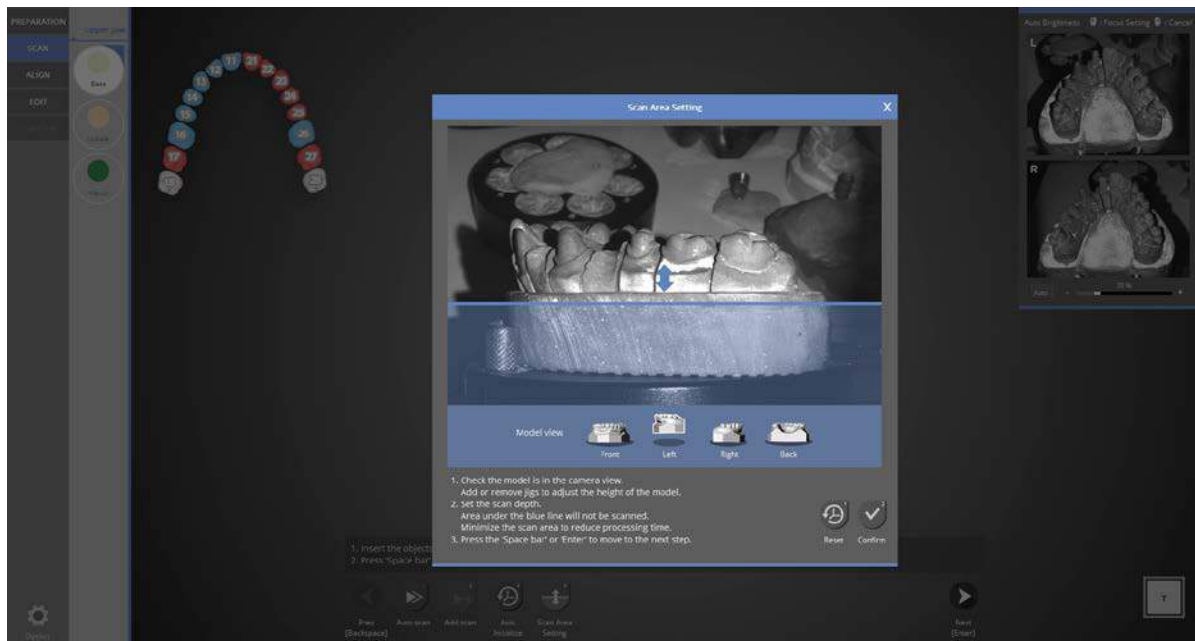
For scanning 6 unit bridges and crowns, use the [Multi- die] feature in the scan strategy.

📖 See [Single Scan Coping] section for more information.

## Scan

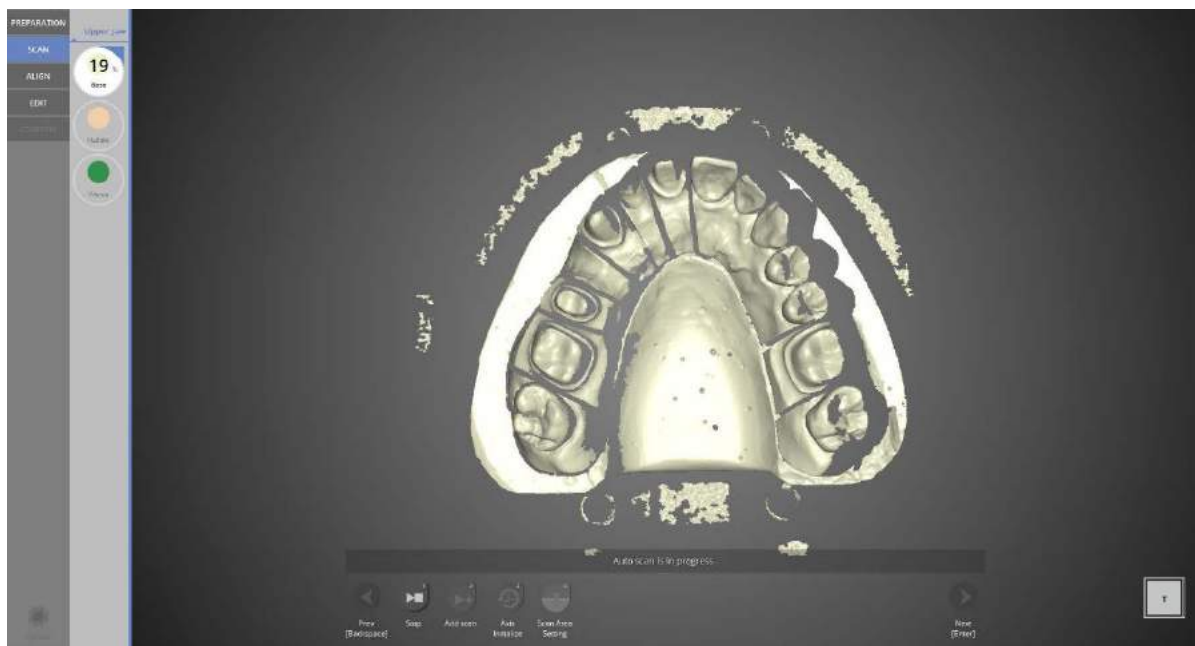


As in the image above, follow the directions in the upper left corner, insert the lower jaw model and click [Auto scan] to proceed with scanning.



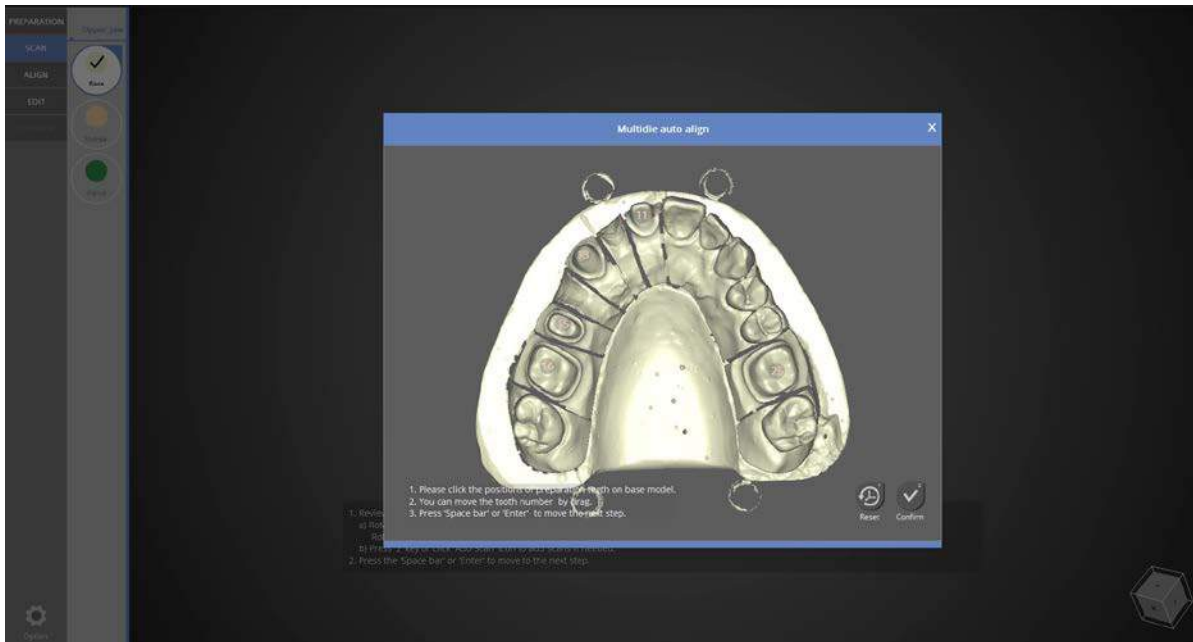
Determine scan height.

Drag the blue arrow to determine the height of the scanning area. Click [Confirm] to proceed to scan the entire model.



The picture above shows the completed scan of the upper teeth base model.

If the scanning data does not meet the desired result, proceed with extra scanning. Rotate the data image to the location that requires additional scans and click [Add Scan]. In most cases, you will not need any additional scanning.




Click and assign the position of the prep teeth on the base model scan data.

You can start with waxup scanning since the scanning sequence can be changed according to the preferred process. Click waxup from the upper left group to proceed to the waxup scanning step.

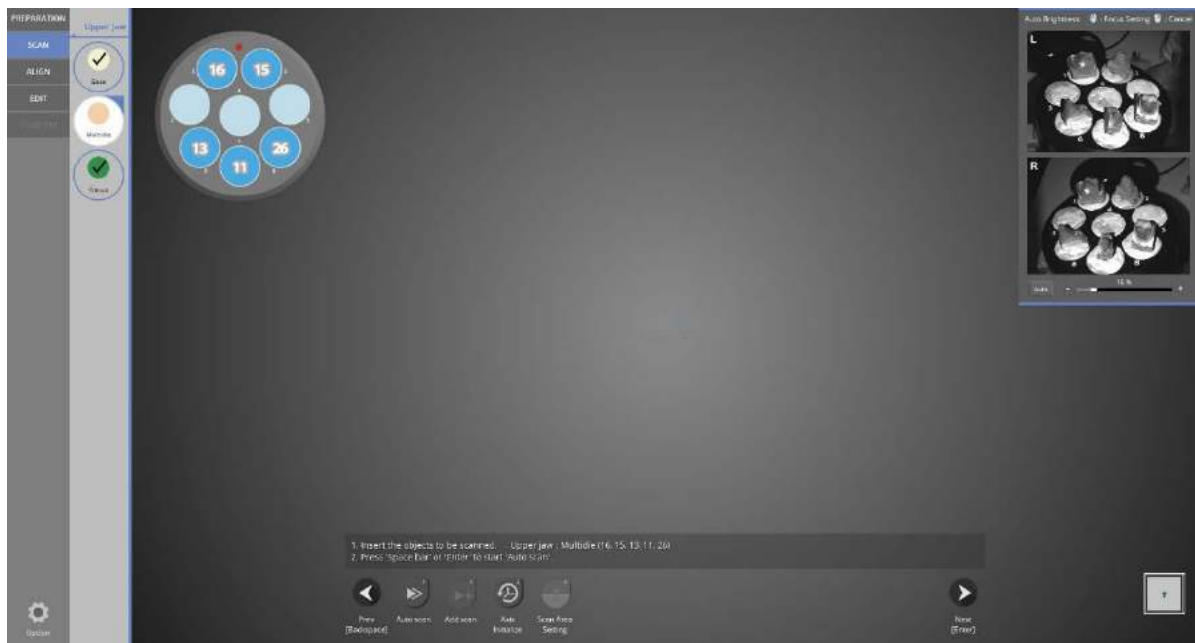


Leave the upper base and prep teeth as indicated, and place waxup on the scanner .

Click [Next 




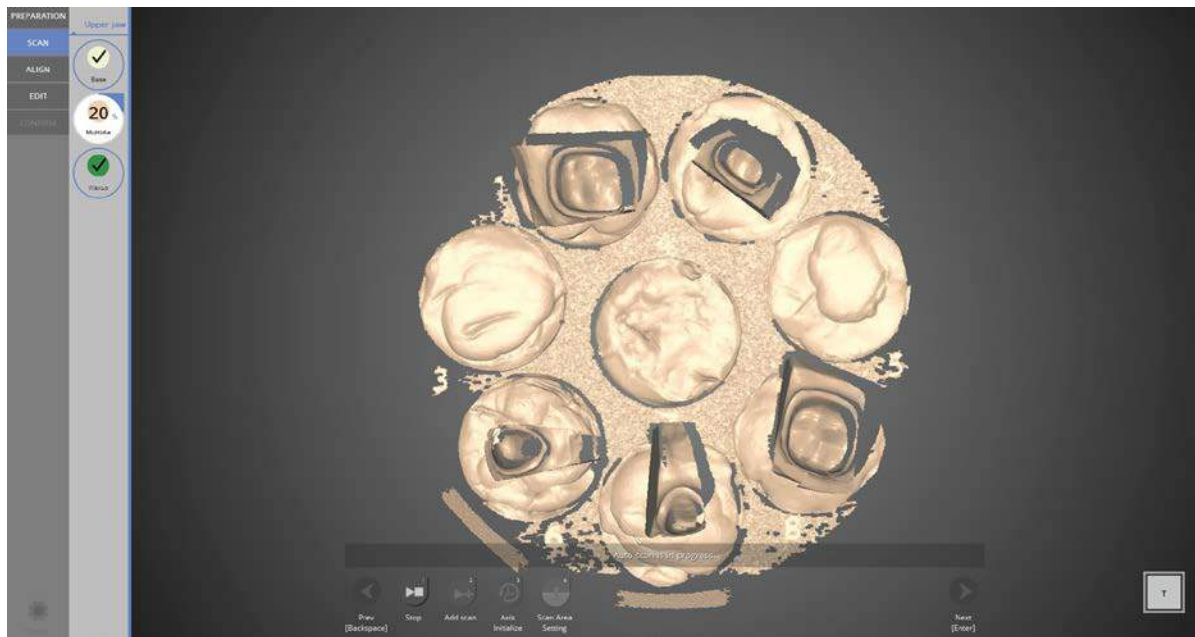
When the waxup scan is complete, check the scan data to see if additional scans are needed. Click [Add scan] to process additional scans and the [Next] button to move to the alignment stage.



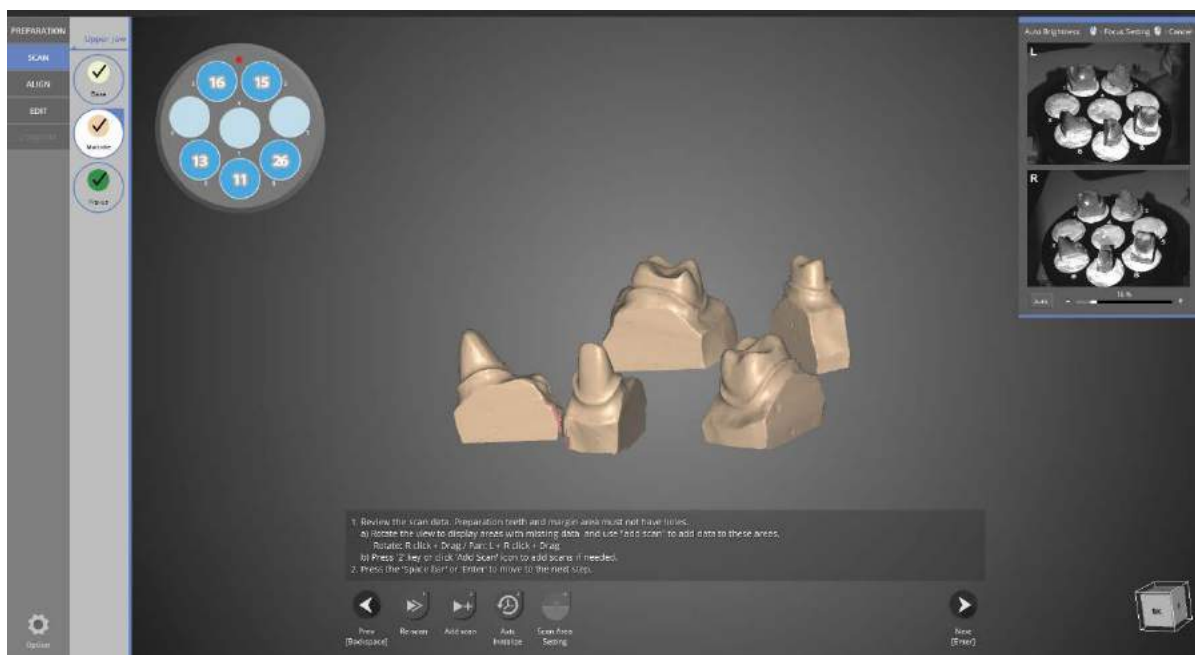
Prep teeth scanning using a multi-die.

Place the prep teeth onto the multi-die as shown in the left upper and set it on the scanner.


Click  to start auto- scanning.



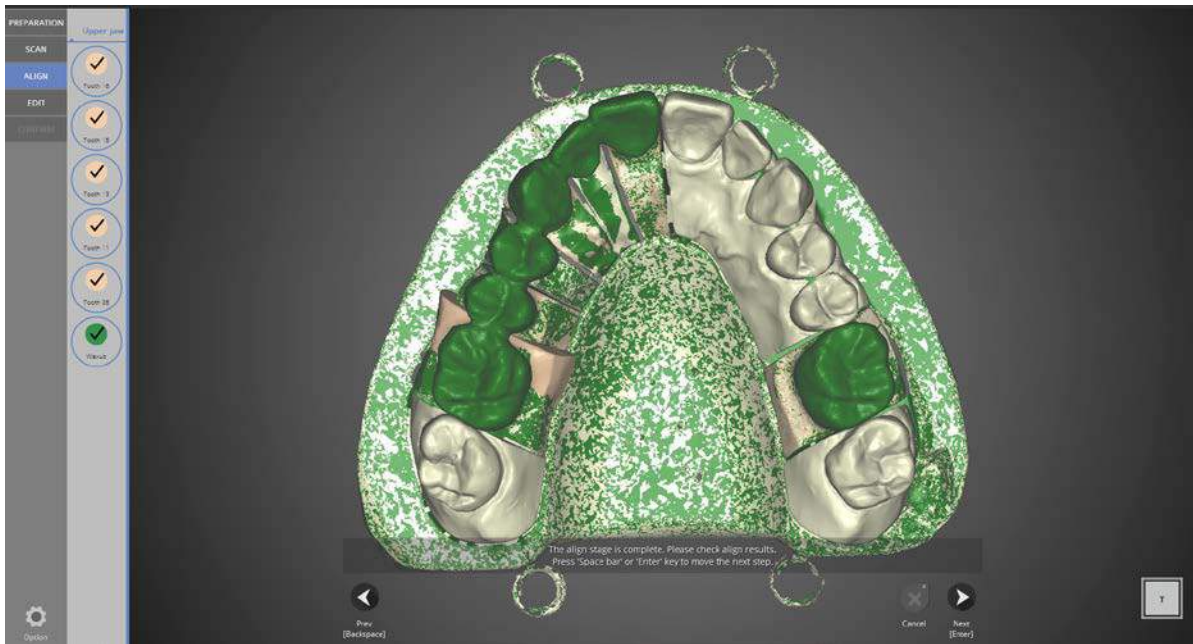
Scanning of the prepped model using the multi-die is in progress.



Prep teeth scanning using the multi-die is complete.

Click the add scan if additional scans are needed, click  to proceed to the next step.

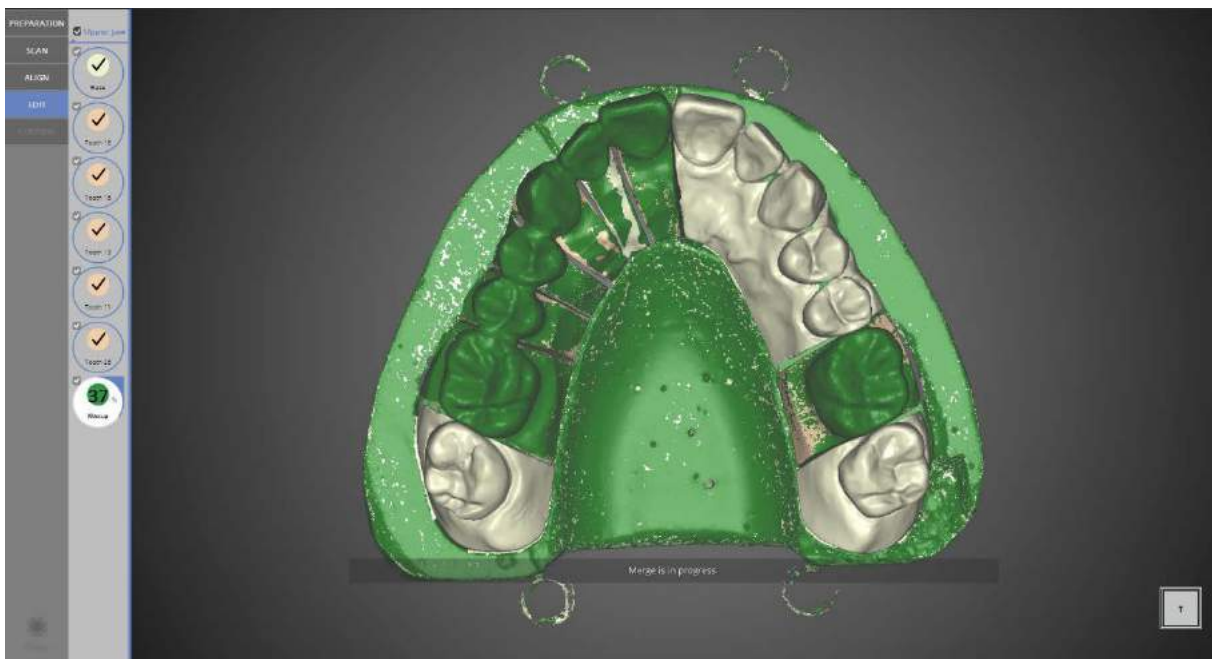




[Align] stage

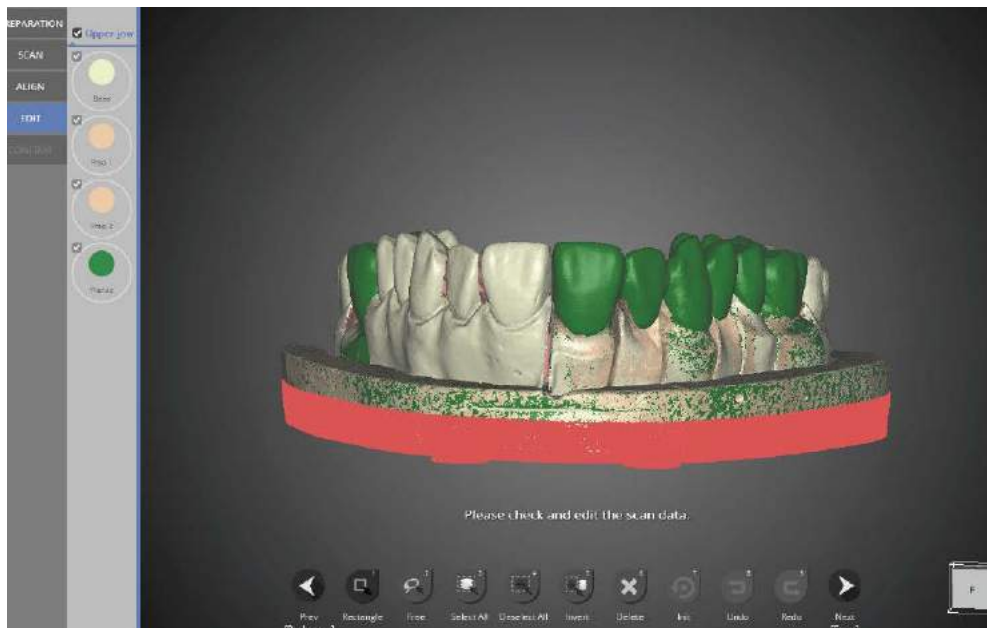
Check the alignment between the model and dies.

As in the image above, alignment is automatic. Click [Next] to move to the next stage.



[Edit] stage

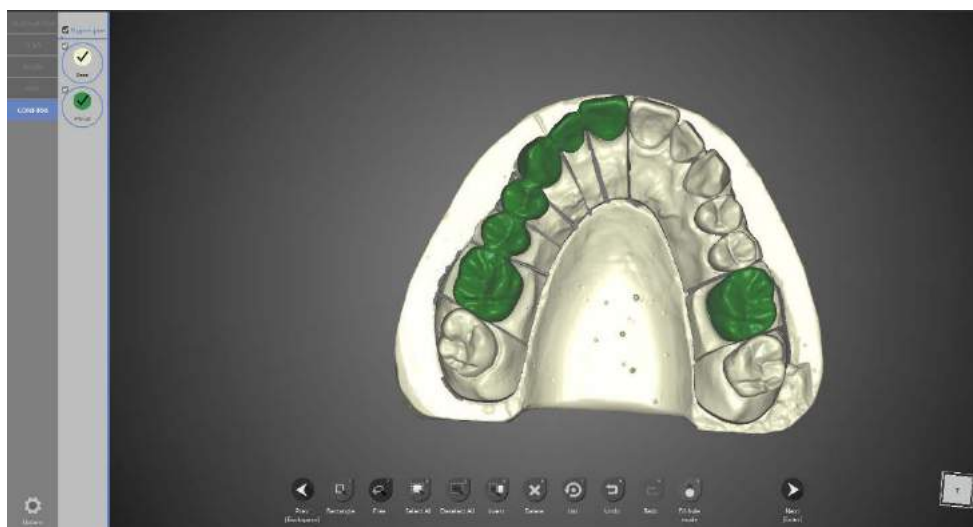
Check the appropriate model numbers on the left to select the model to edit. Users will only see the checked models.



Use the editing features at the bottom of the screen to edit the data.

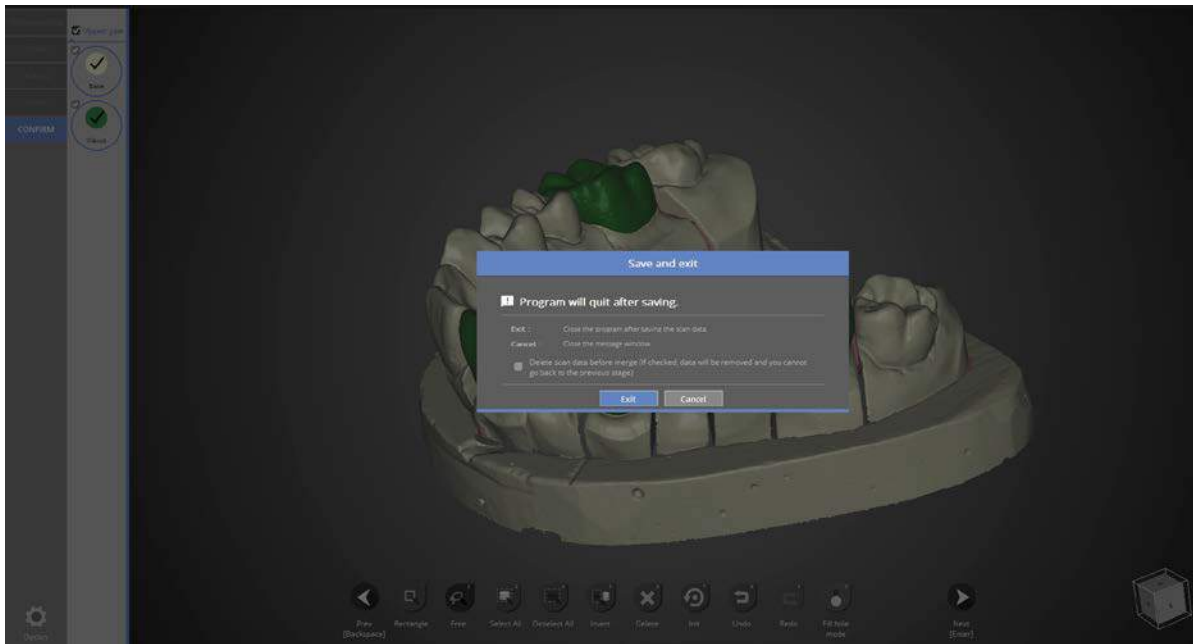
When [Rectangle] is selected, users can trace any selection desired on the data image. After selecting the desired area, click

[Delete] to delete the selected part. When finished with editing, click [Next] for data processing and STL file production.

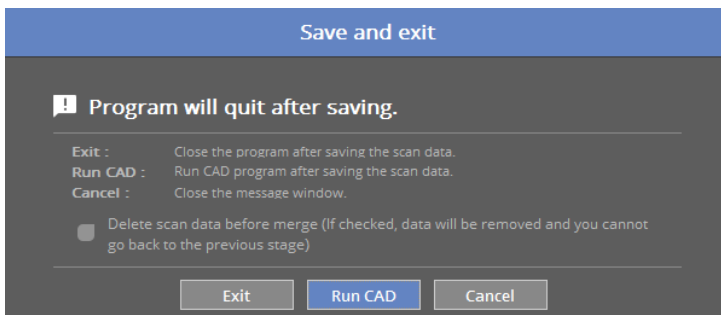


The scan file has been produced. Editing is still possible, as shown in the previous step.

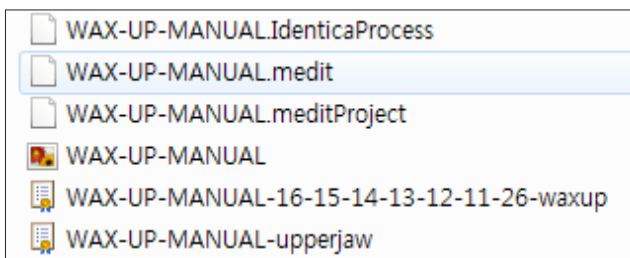
After editing is complete, click [Next] to end the scan job.



This window is to inform you that the program will close. Click [Close] to save the data and end the program.



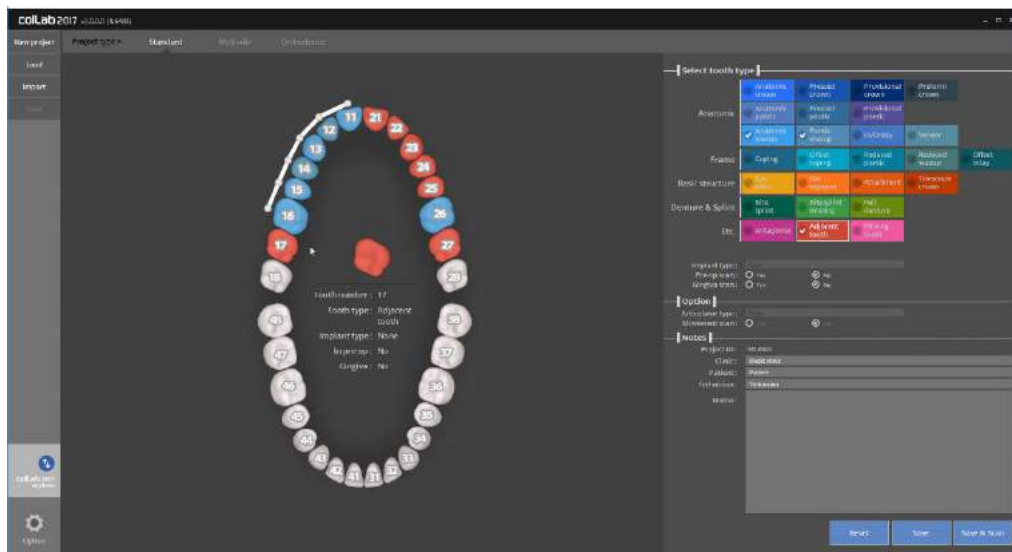
If you are connected with CAD, you will see find the message indicated above.  
 If [Run CAD] clicked, scan program ends and CAD program will start automatically.




Waxup scanning operation has been completed successfully.  
 The data can be checked in the folder.

## Waxup bottom case

### Teeth setting



- Please input the setting for the model you wish to scan. Please refer to  Teeth setting.

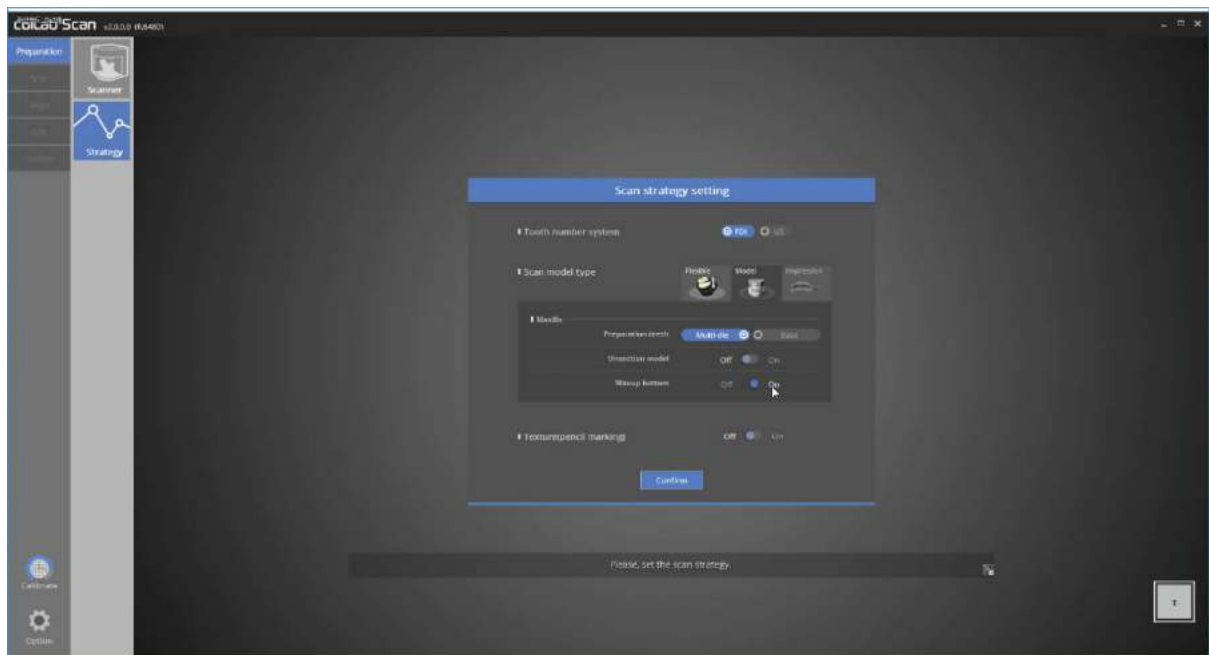
In this manual, we will be showing the case of a 6 unit waxup bridge framework from tooth No. 11 to 16, and Waxup crown on tooth No. 16

- Implant type\_None | Pre-op scan\_No | Gingiva scan\_No
- Click on the [Save & Scan] button to start scanning.

Approximately 30 seconds are required for connection when the scanner is first installed.

After the initial installation, it takes around 3~5 seconds for the software to connect to the scanner.

When the scanner is successfully connected, it will automatically proceed to “Scan strategy setting” to set the scan strategy.



### Scan strategy setting

For 6 Unit bridge and crown, Select [Multi-die] for upper jaw in scan strategy, and click [Confirm] to move on to the next stage.

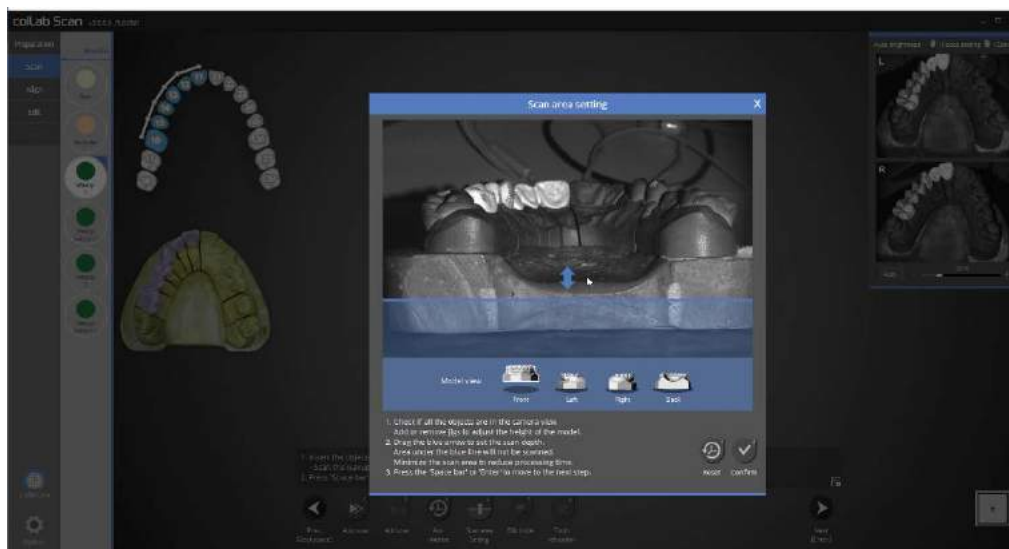
▶ Please refer to “Single coping scan” stage for detail.



## Scan

For the Waxup scan, as the advantage of this program is that scanning can be done in any order at any stage, we will begin with scanning waxup1.

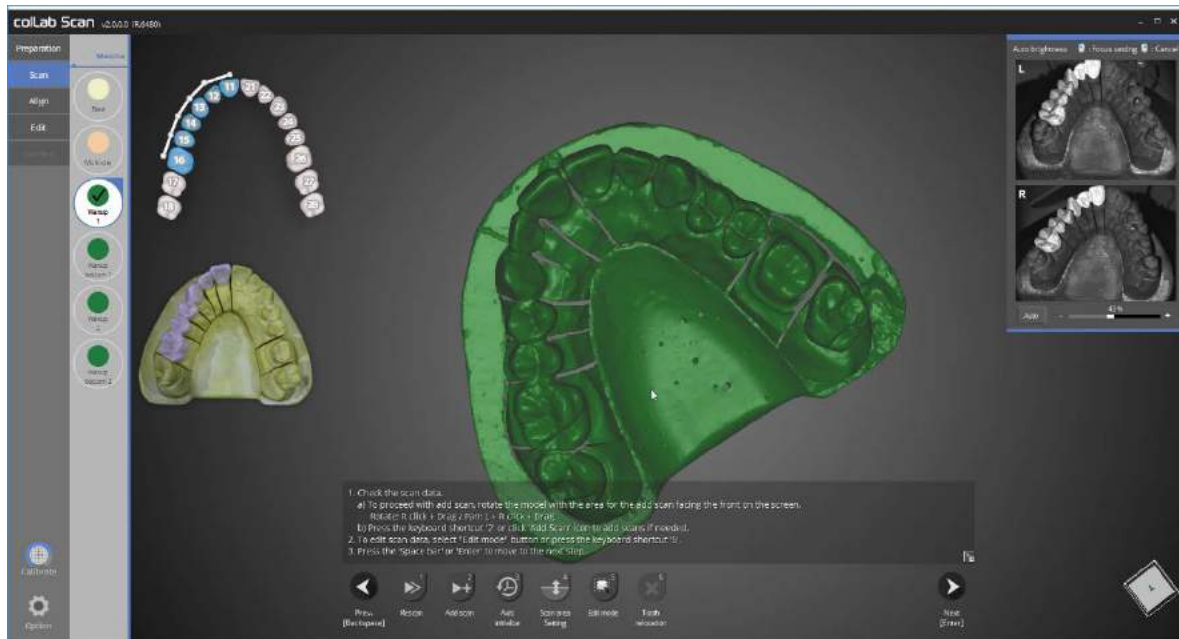
When the instruction appears as shown in above picture, follow the instruction and place the waxup1 and entire model in the scanner and proceed to scan by clicking [Auto scan]



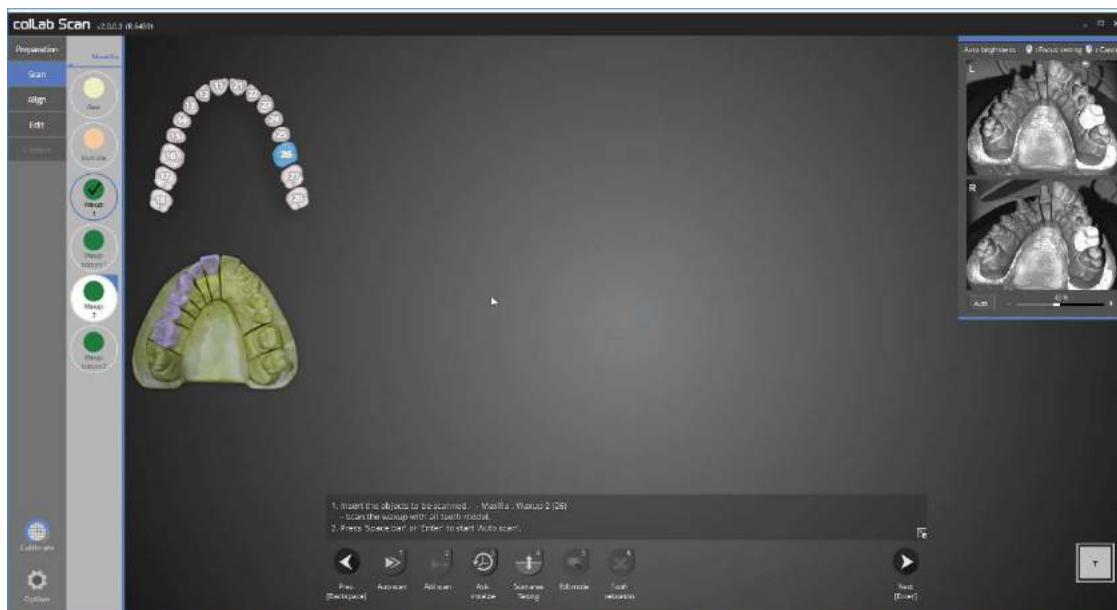
In this stage, we will determine the height of scanning area.

Drag the blue arrow to determine the scanning area.

Click on [Confirm] to begin scanning waxup1

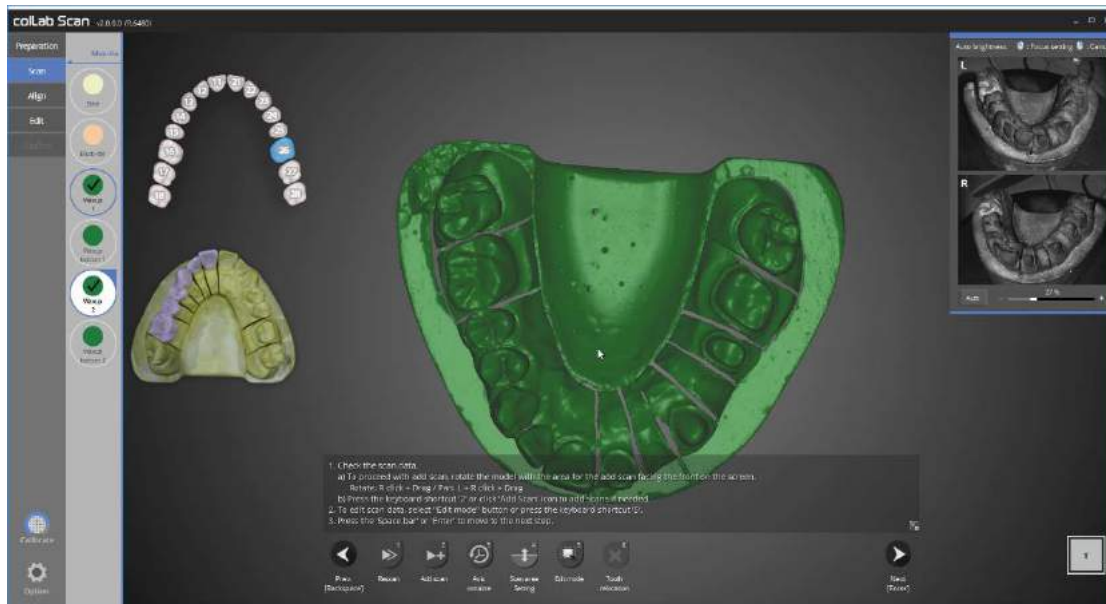


Waxup1 and the entire base model scan is complete as displayed in the picture above. Proceed with scanning if additional scanning is required. Rotate the part where the additional scan is needed to the front of the screen, and click [Add scan] or use the hotkey.



This time, we will be scanning waxup2. Click on waxup2.

When the instruction appears as in the picture above, follow the instruction and place waxup2 and the entire model in the scanner and click on [Auto scan] to start scanning.



Waxup2 and the entire base model scan is complete as displayed in the picture above.

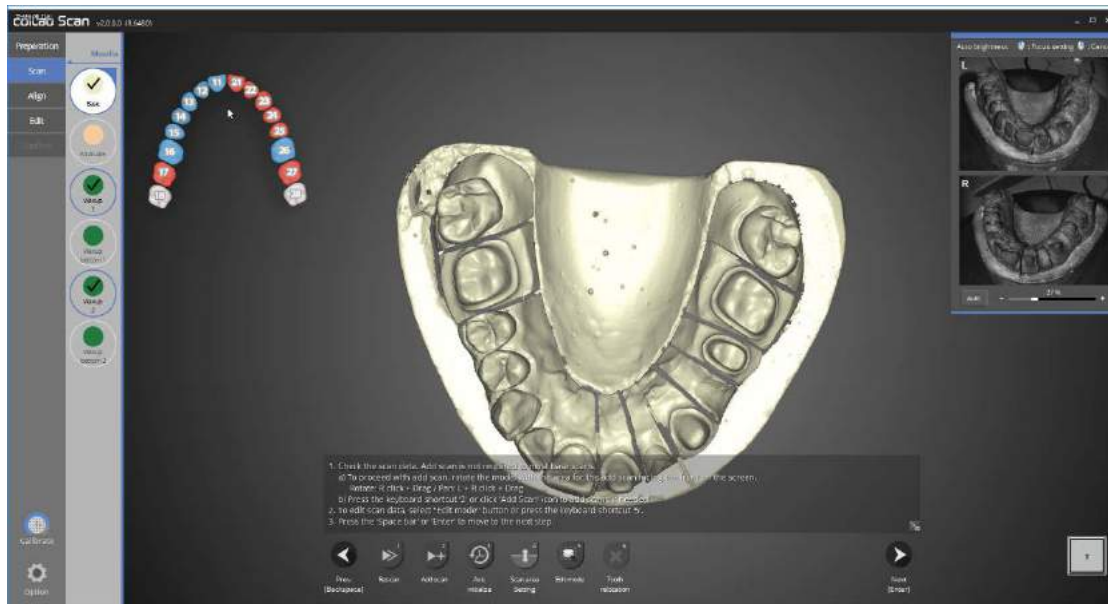
Proceed with scanning if additional scanning is required. Rotate the part where the additional scan is needed to the front of the screen, and click on [Add scan] or use the hotkey [2].



This time, we will scan the entire base model. Click on the base scan stage.

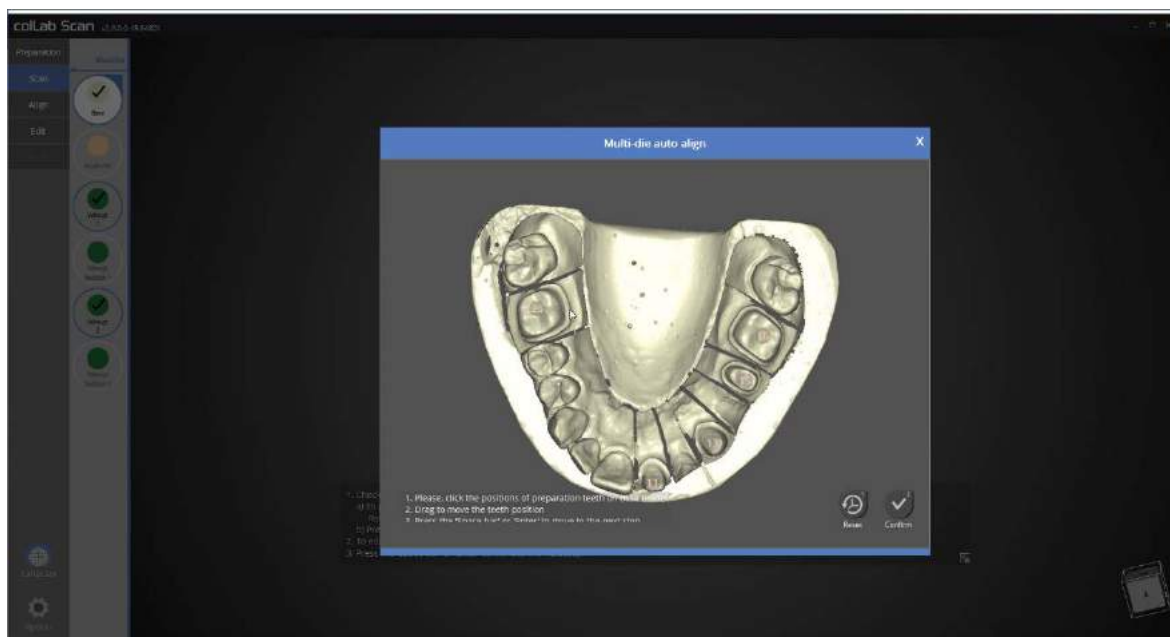
When the instruction appears as above picture, follow the instruction and place the entire base model in the scanner and click on [Auto scan] to start scanning.





Upper jaw base model scan is complete as displayed in the picture above.

Proceed with scanning if additional scanning is required. Rotate the part where the additional scan is needed to the front of the screen, and click on [Add scan] or use the hotkey [2].



Click on the scan data to set suitable position for preparation tooth.



Now we will scan the preparation tooth on the multi-die.

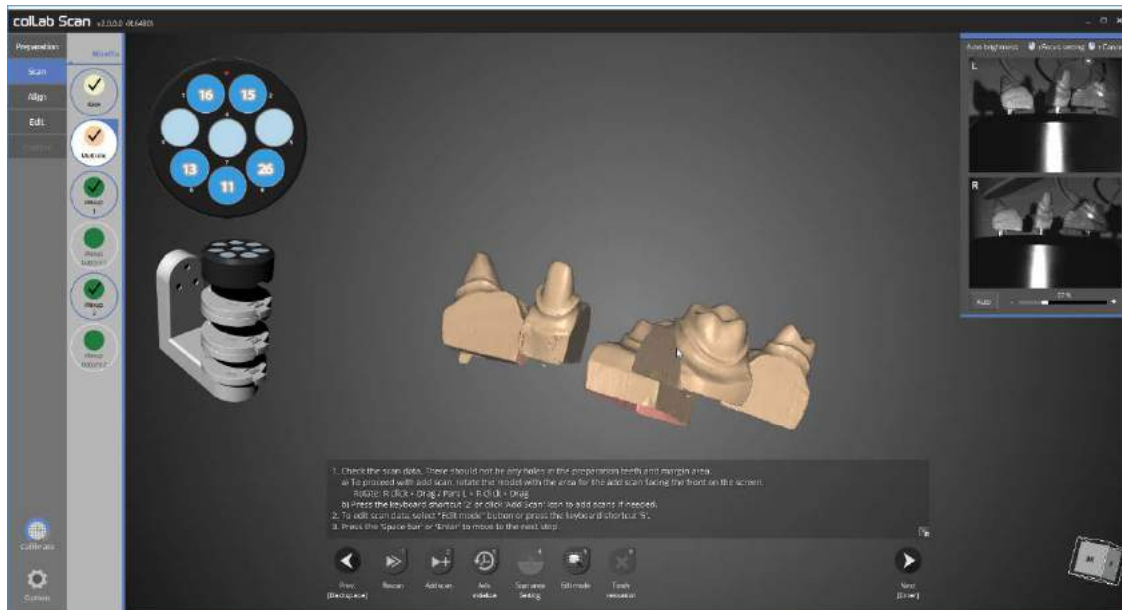
Place the preparation tooth on the multi-die as shown in the upper left corner of the picture and install it on the scanner.

The multi-die must be positioned on top of the 2 half block jigs.

Click [Next] and start the auto scan.

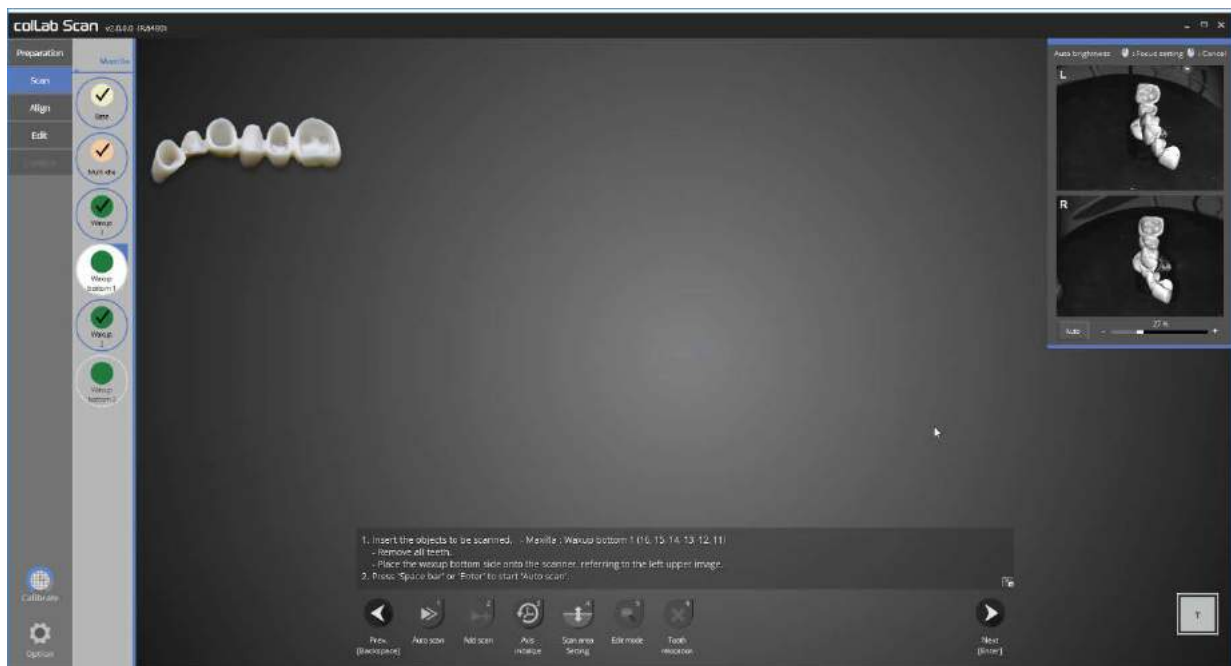


It is currently scanning the preparation tooth on the multi-die.



Scanning of preparation tooth using the multi-die is now complete.

Proceed with scanning if additional scanning is required, and click [Next] to proceed to next stage.



We will now move on to scanning the waxup bottom 1.

Flip the waxup upside down as shown in the upper left picture, fix it to the jig and place it in the scanner.

Most waxups require spraying.

Then press [Next] to start the auto scan.



Now we will determine the height of scanning area for waxup bottom1.

Drag the blue arrow to determine the scanning area. We recommend setting the height to right below the waxup, to make the editing easier.

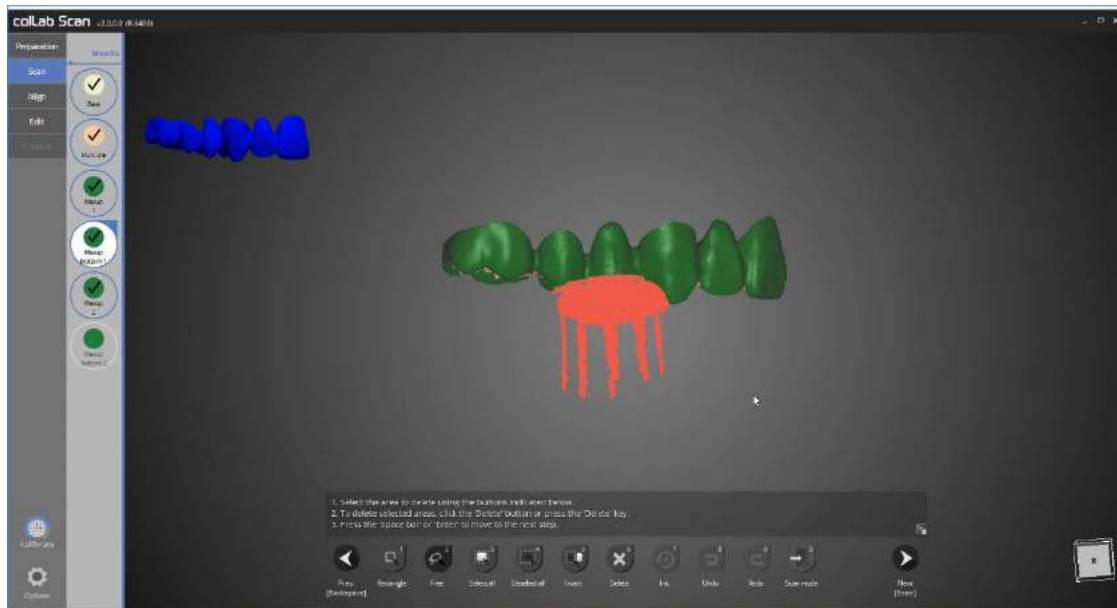
Click on [Confirm] to begin scanning waxup bottom1.



Scanning the waxup bottom1 is complete.

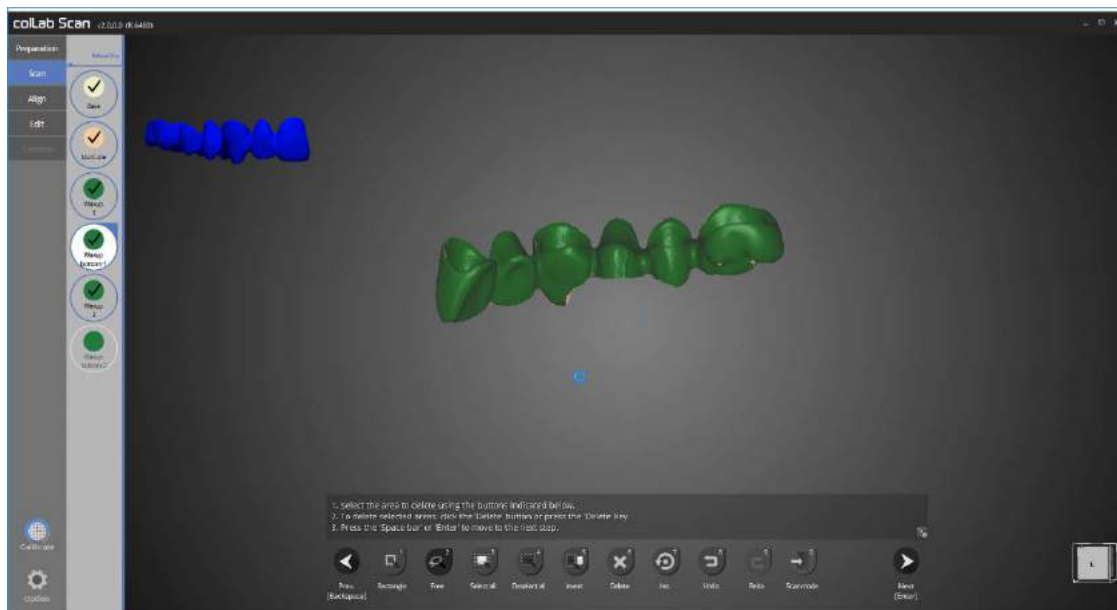
Proceed with scanning if additional scanning is required. Rotate the part where the additional scan is needed to the front of the screen, and click on [Add scan] or use the hotkey [2].

Next step is editing of waxup bottom1.



This time, we will edit waxup bottom1.

Click [Free] on the bottom of the screen, and select to delete the parts that are not waxups.



Delete the unwanted parts using the edit function to leave waxup part only as shown in the picture above. This stage is a necessary requirement for waxup bottom function.

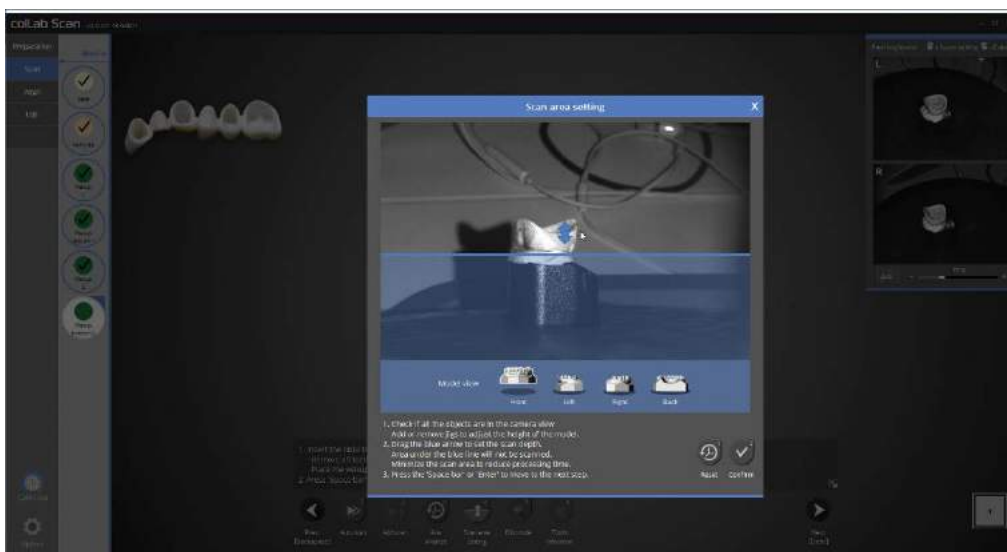


We will now scan the waxup bottom2.

Flip the waxup upside down, fix it to the jig and place it in the scanner.

Most waxups require spraying.

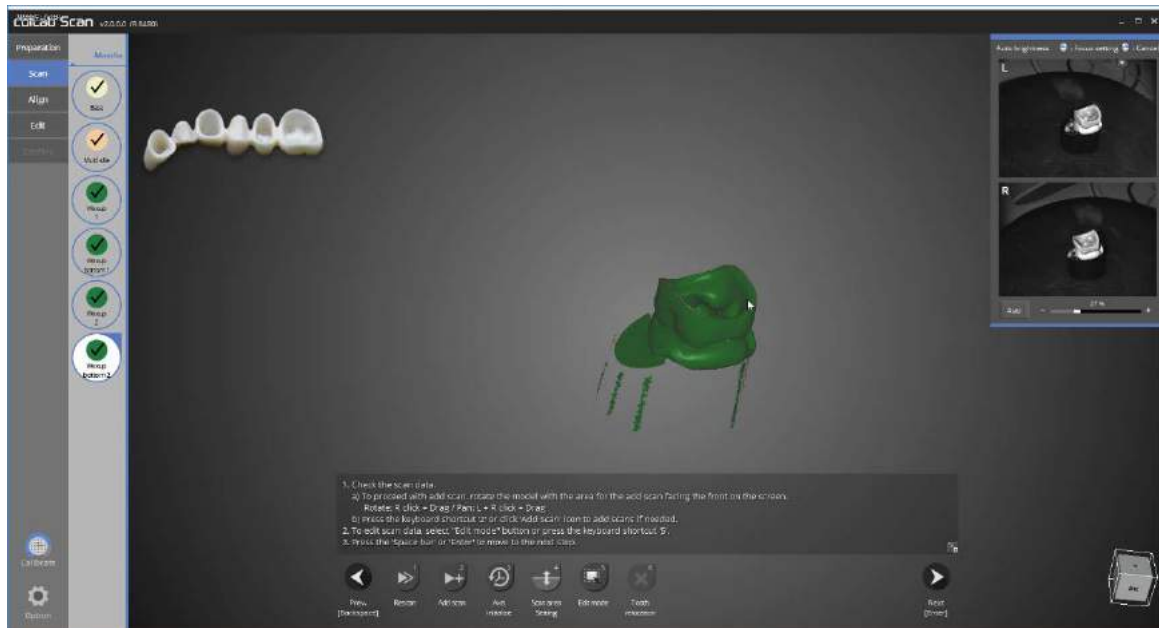
Then press [Next] to start the auto scan.



Now we will determine the height of scanning area for waxup bottom2.

Drag the blue arrow to determine the scanning area. We recommend setting the height to right below the waxup, to make the editing easier.

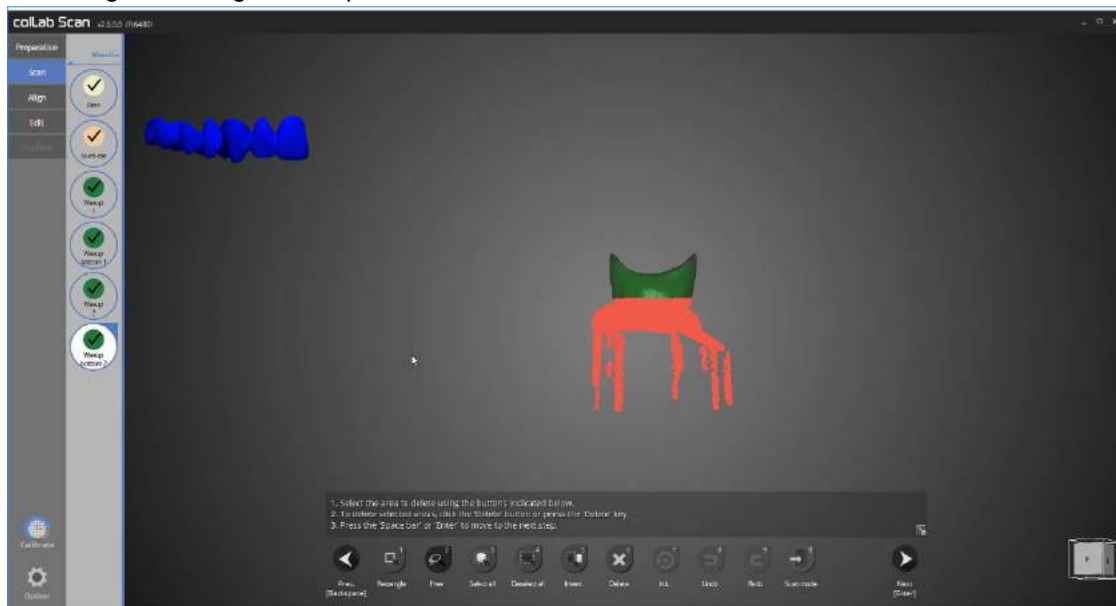
Click on [Confirm] to begin scanning waxup bottom2



Waxup bottom2 scan is complete as displayed in the picture above.

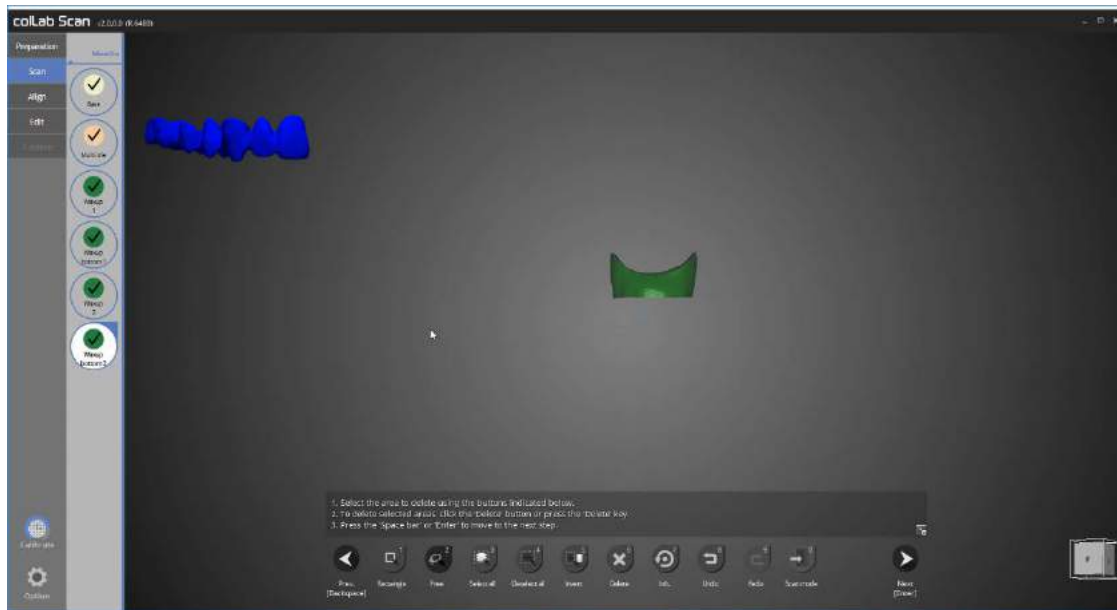
Proceed with scanning if additional scanning is required. Rotate the part where the additional scan is needed to the front of the screen, and click on [Add scan] or use the hot key[2].

Next stage is editing of waxup bottom2.



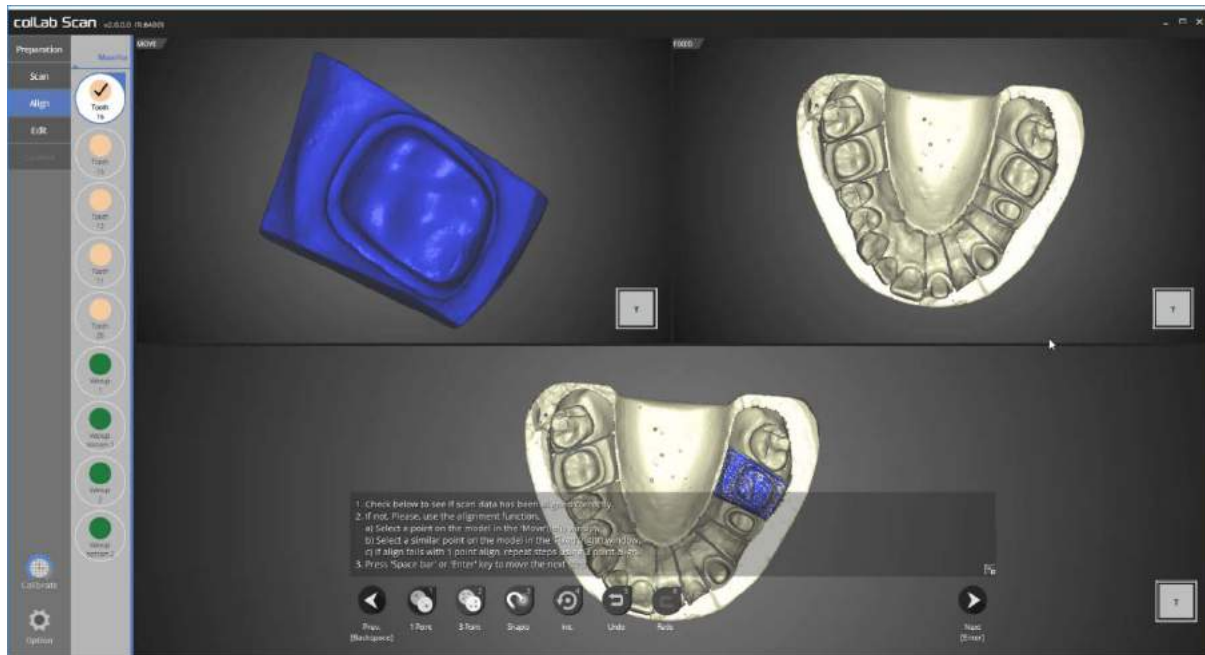
This time, we will edit waxup bottom2.

Click [Free] on the bottom of the screen, and select to delete the parts that are not waxup.



Delete the unwanted parts using the edit function to leave waxup part only as shown in the picture above. This stage is a necessary requirement for waxup bottom function.

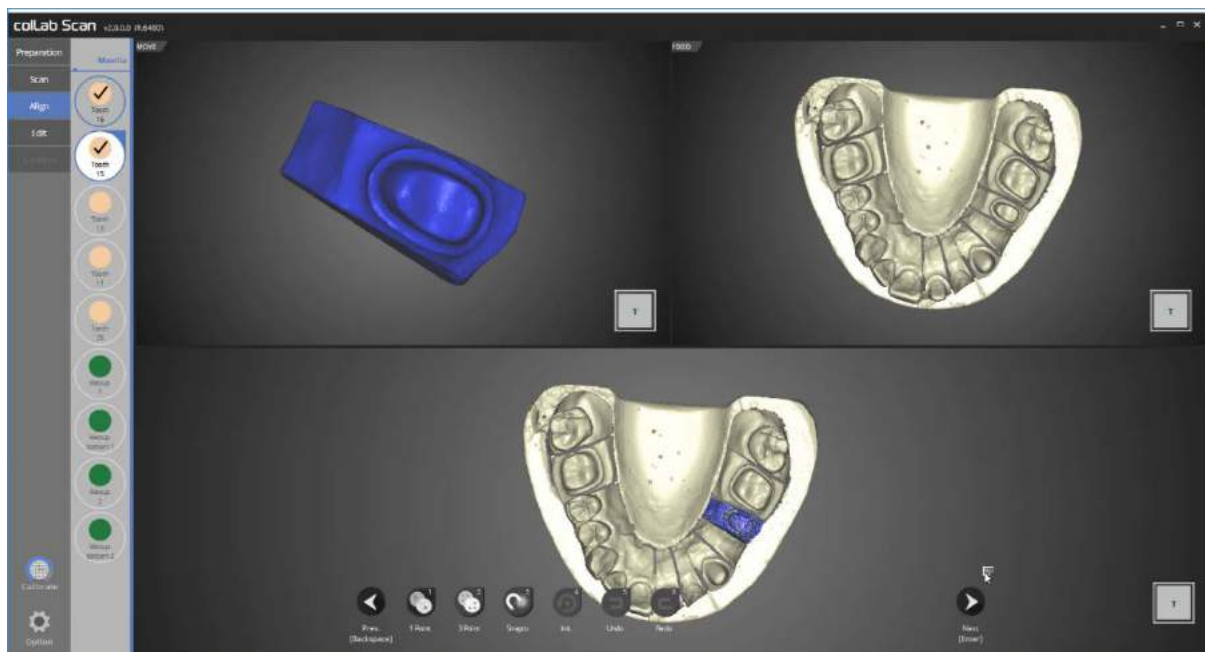




Please check the status of auto alignment for preparation tooth No. 16.

Proceed to next step if no errors are found.

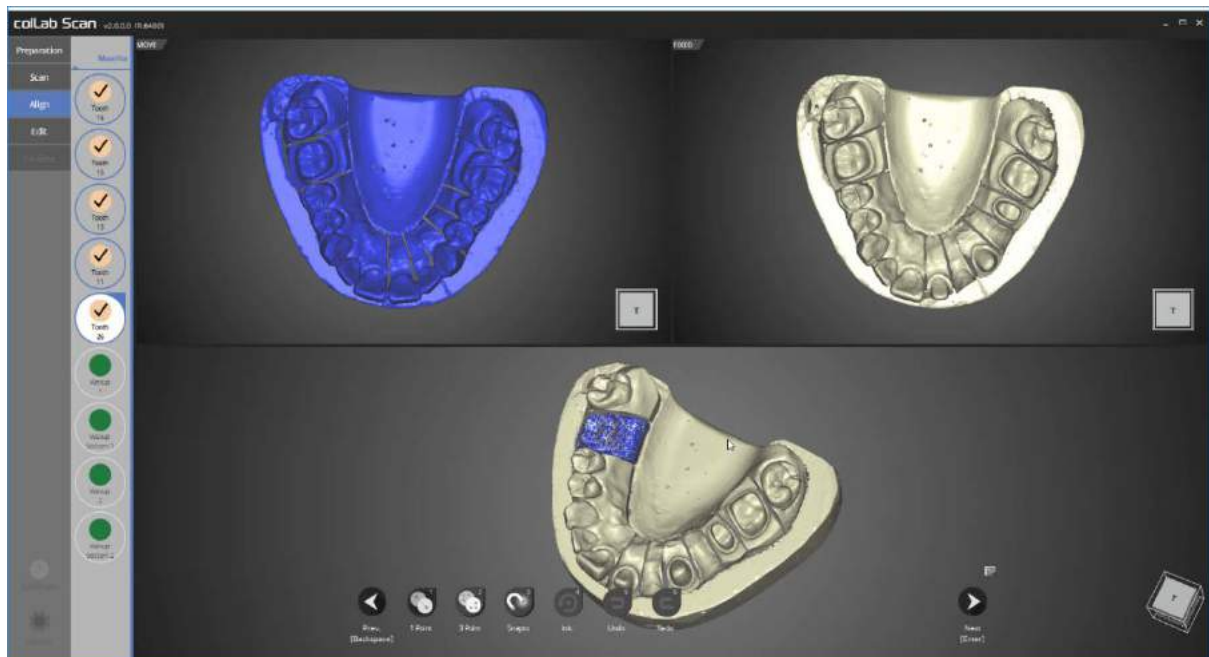
If auto alignment is not done correctly, use [1 Point] alignment or [3 point] alignment to align the two data.



Please check the status of auto alignment for preparation tooth No. 15.

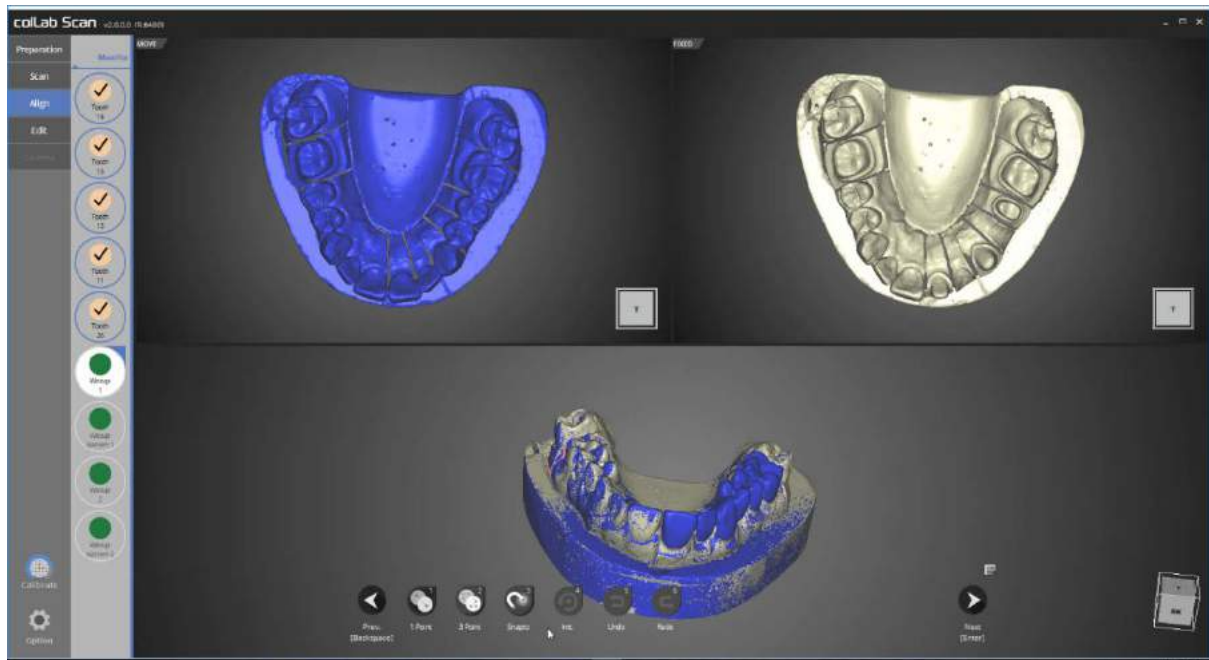
If the guide message interferes with viewing the data, you can click on the hide icon on the bottom right corner to hide the message as shown in the picture.

Please proceed to the next step if no errors are found in alignment status.



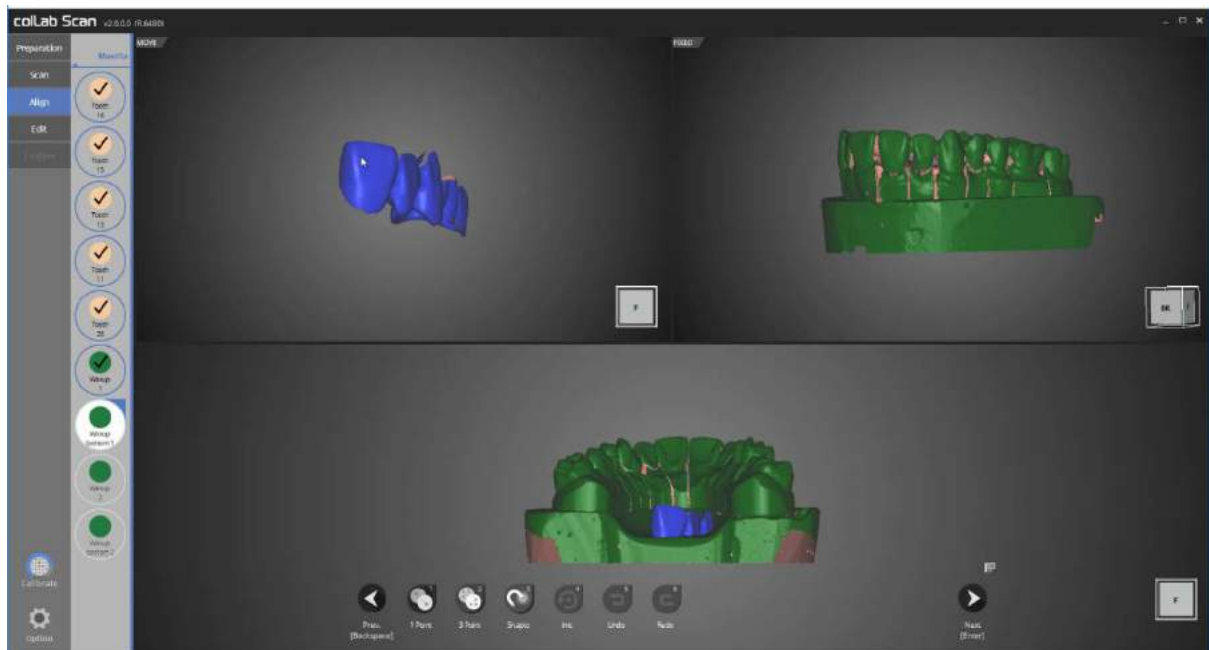
Check the auto align status of preparation teeth No. 13, 11, and 26 in order.

Please proceed to the next stage if no errors are found.



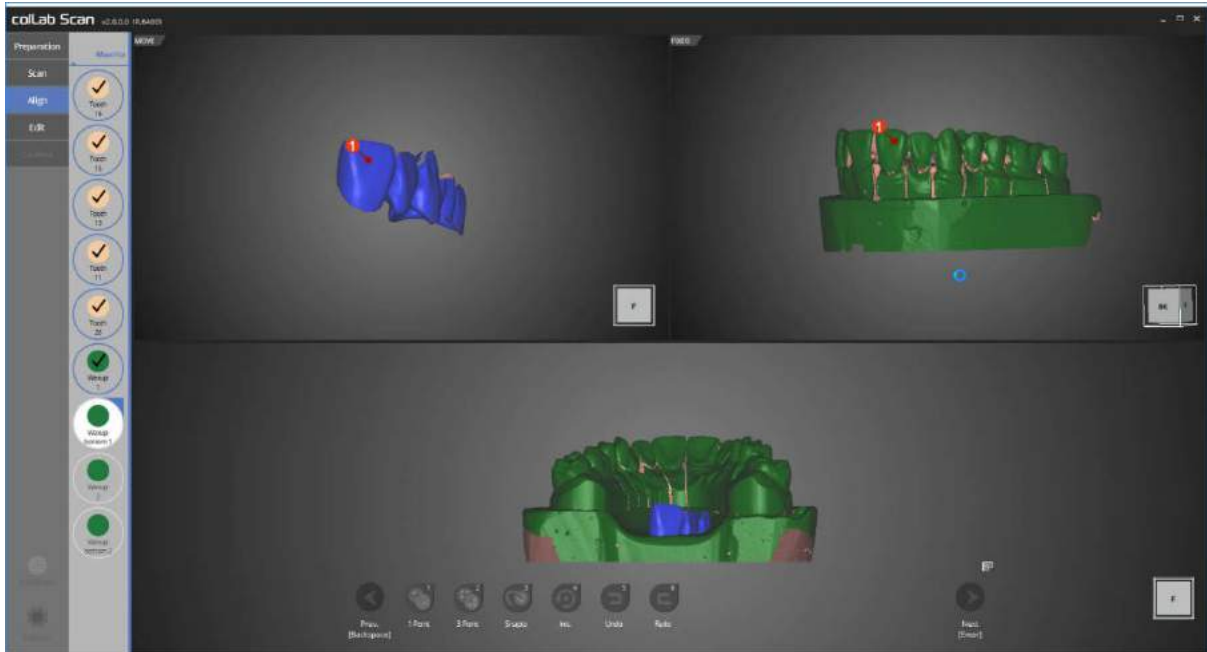
In this stage, we will check the auto align status of base and waxup1.

If auto alignment has not been done correctly, use [1 Point] alignment or [3 point] alignment to align the two data.

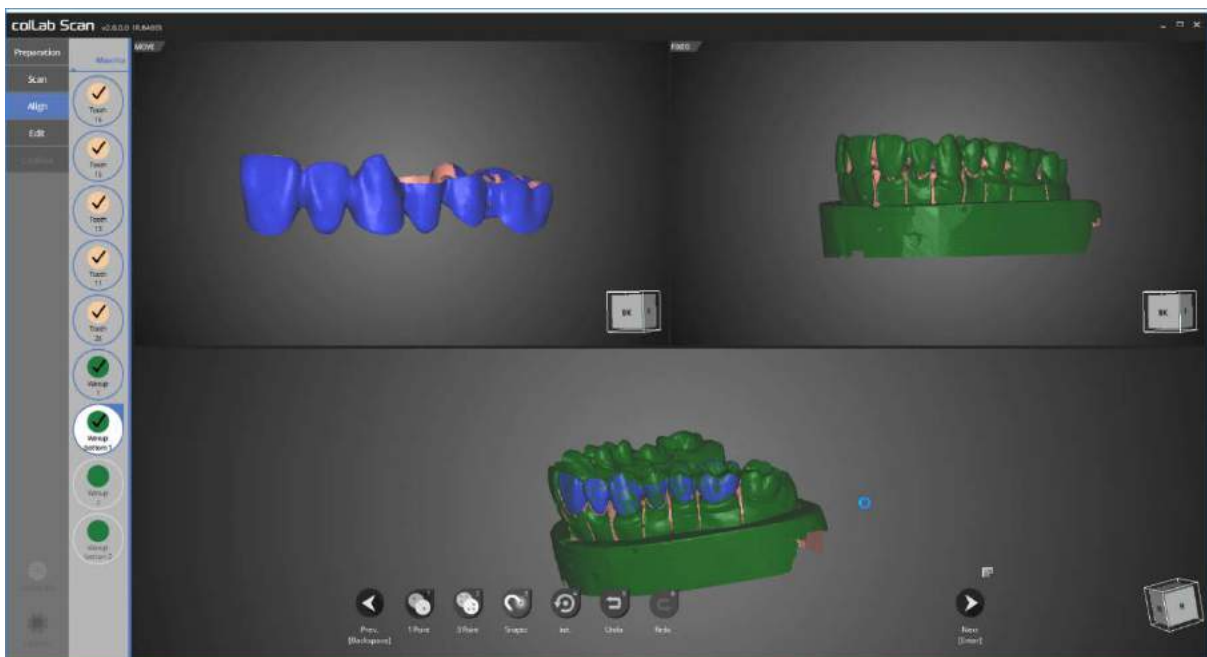


We will now move on to alignment stage for waxup bottom1 and waxup 1.

Manual alignment must be carried out in this stage.

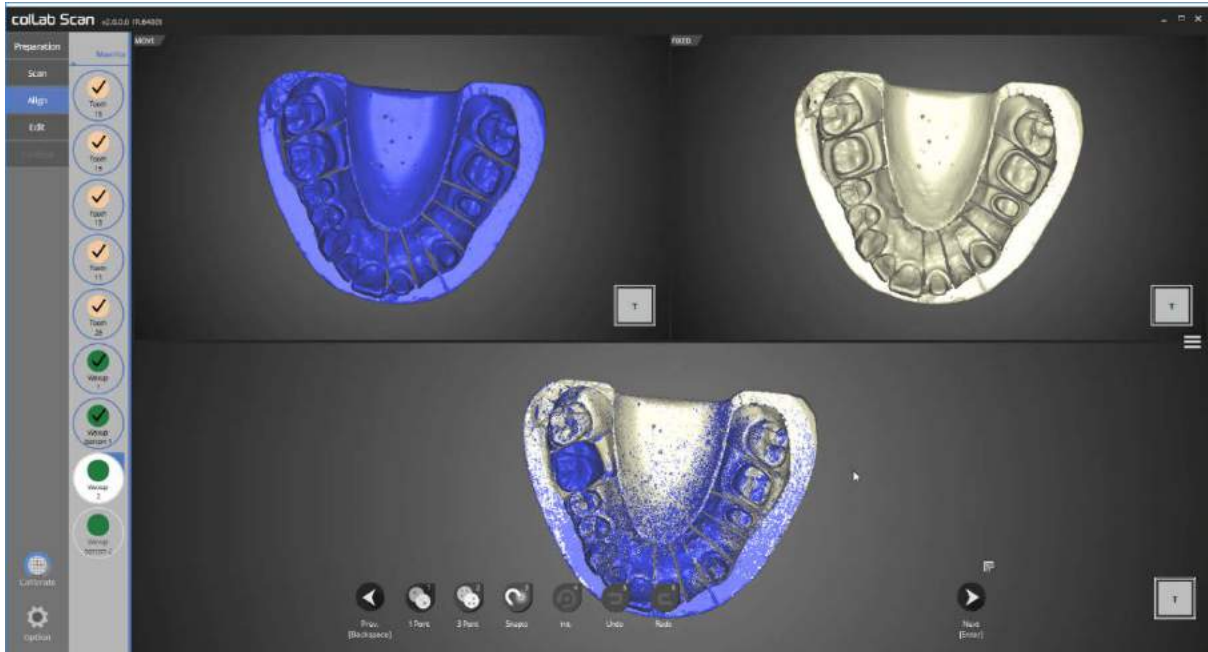


Proceed with alignment process by using [1 Point] alignment, clicking on parts to be aligned with waxup bottom1 on the upper left corner, and waxup1 on upper right corner.

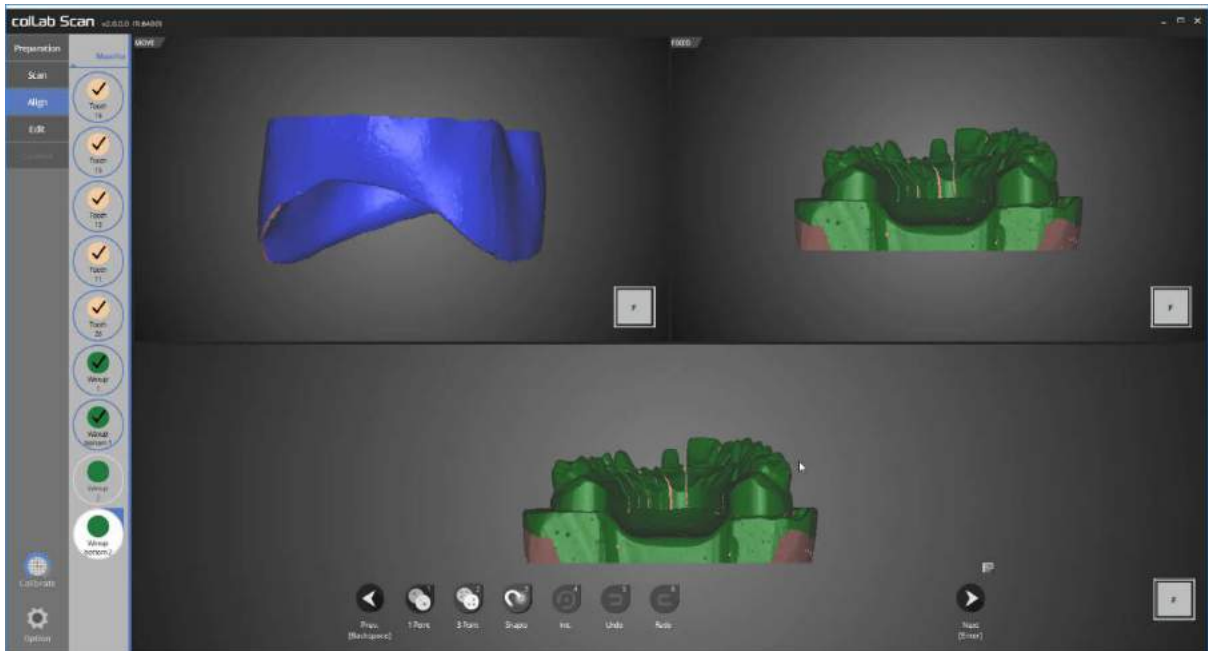


The alignment process for waxup bottom1 and waxup1 is complete.

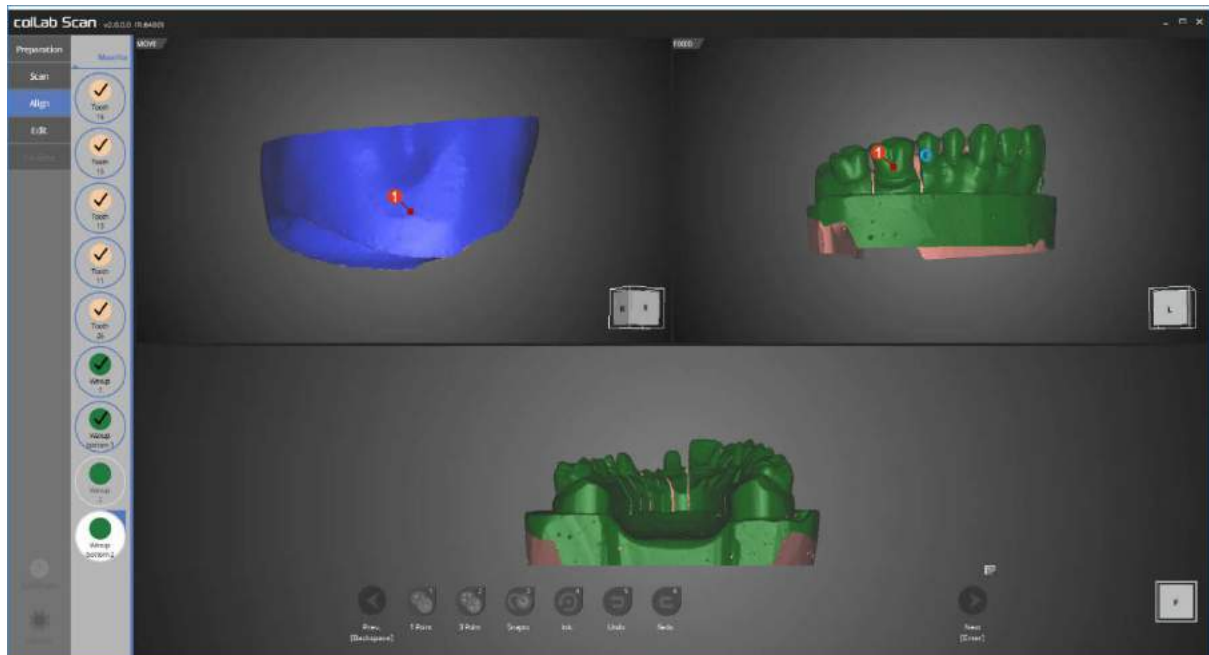
We will move on to the next stage.



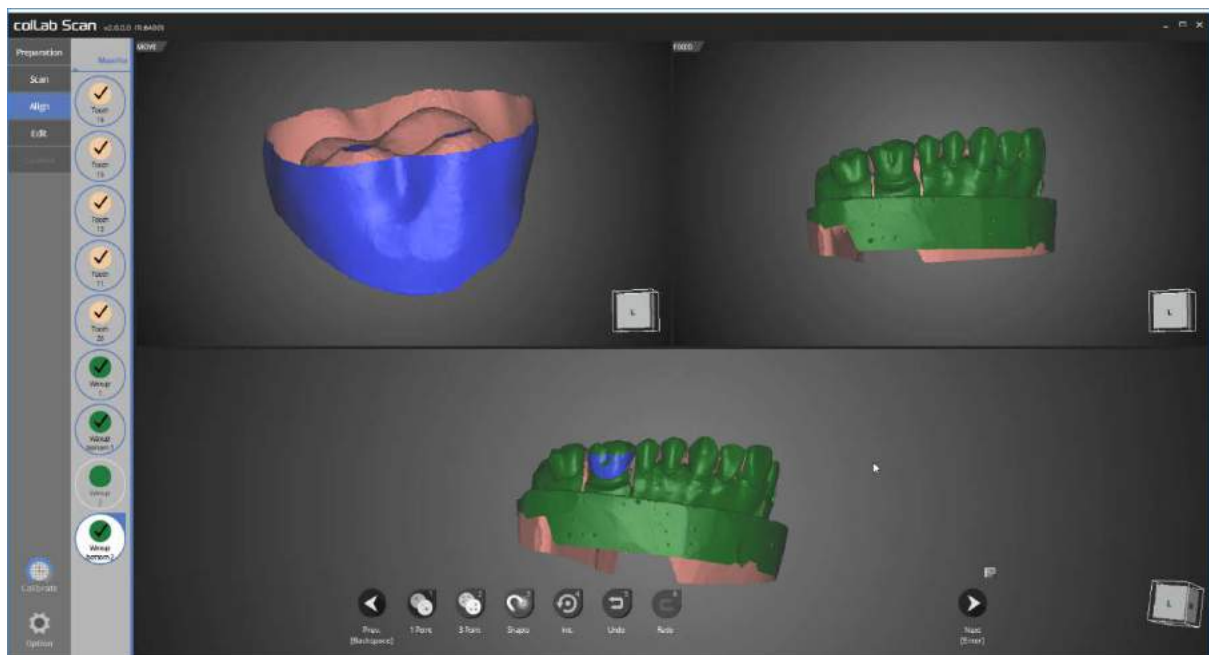
Please check the auto align status of the base and waxup2.  
If auto alignment has not been done correctly, use [1 Point] alignment or [3 Point] alignment to align the two data.



In this stage, alignment for waxup2 and wax bottom2 will be done.  
Manual alignment must be carried out in this stage.



Proceed with alignment process by using [1 Point] alignment, clicking on parts to be aligned with waxup bottom2 on the upper left corner, and waxup2 on upper right corner.

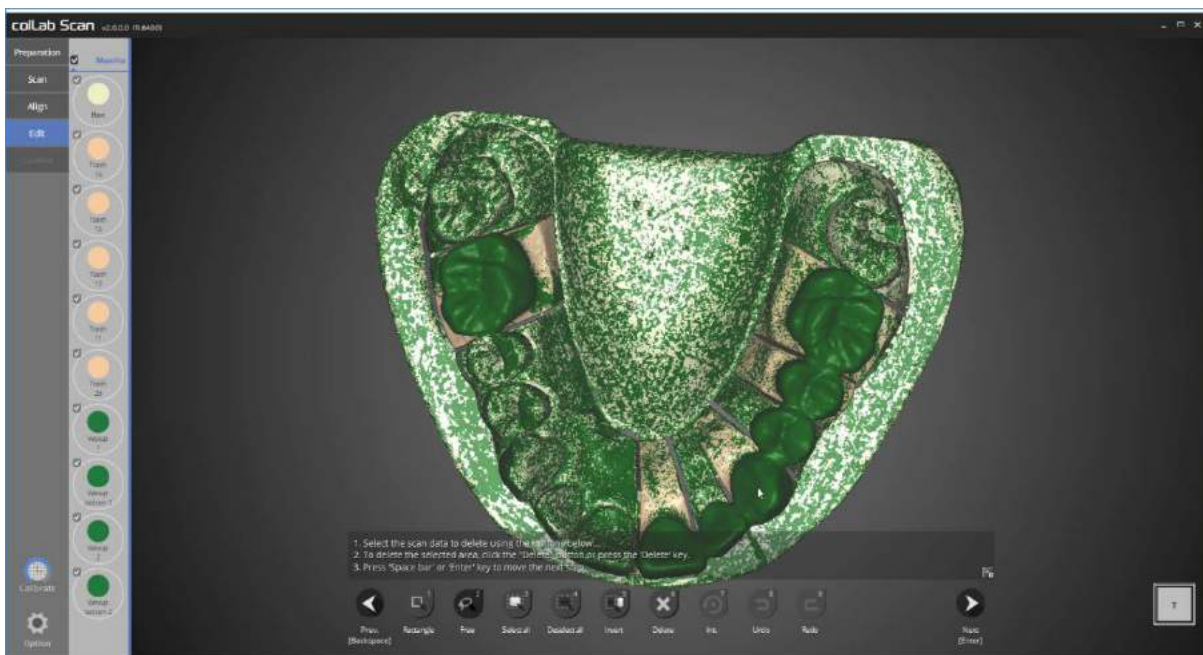


The alignment process for waxup bottom2 and waxup2 is complete.

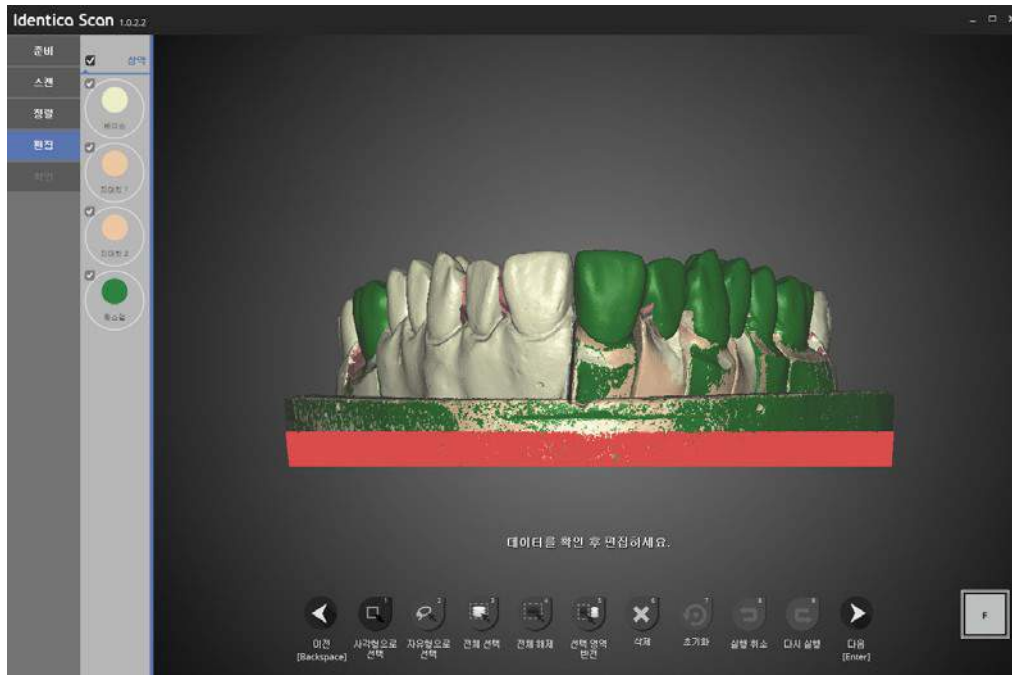
We will move on to the next stage.



Please check the alignment status for all data.  
Proceed to next step if no errors are found.



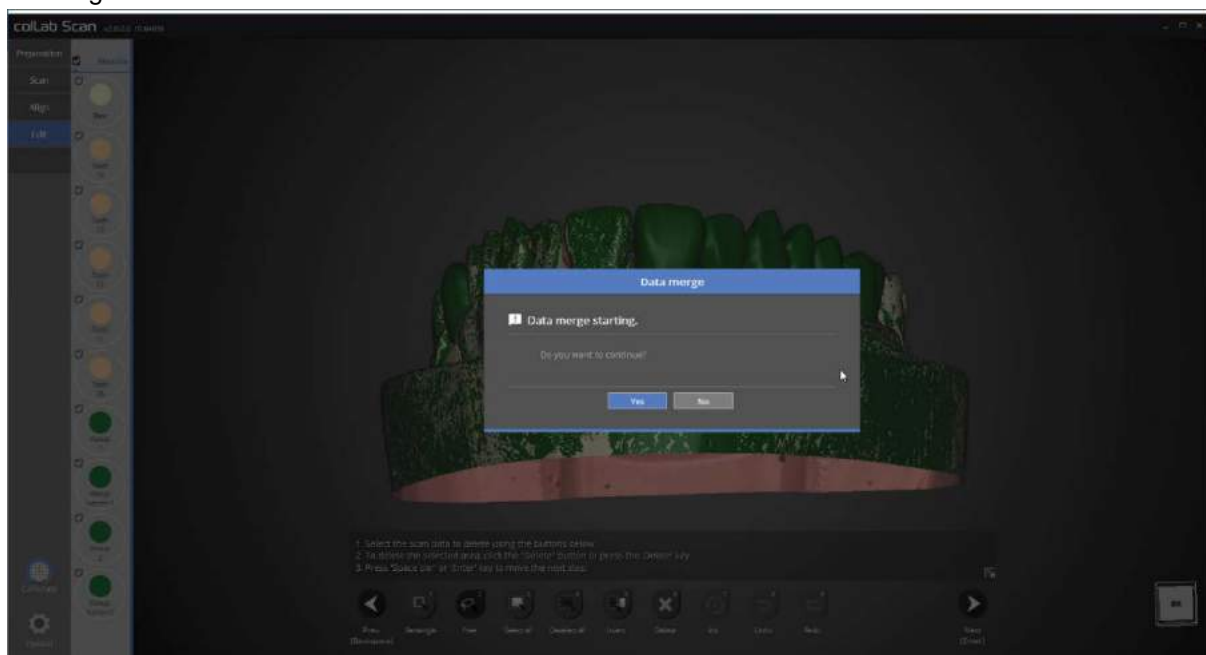
This is the data editing stage.



Edit the scan data using the icons on the bottom.

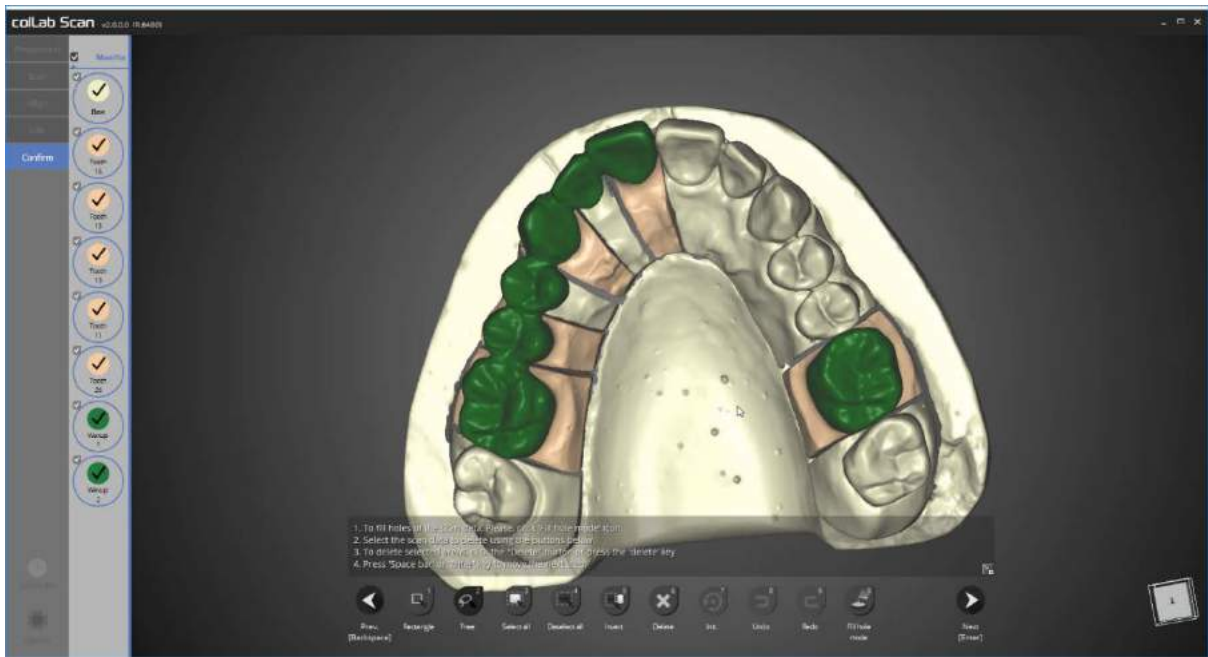
Use the [Rectangle] to select unwanted base parts and click [delete] to delete the selected sections of the data.

When editing is done, please press “next”, and data merging will commence and STL format scan file will be generated.



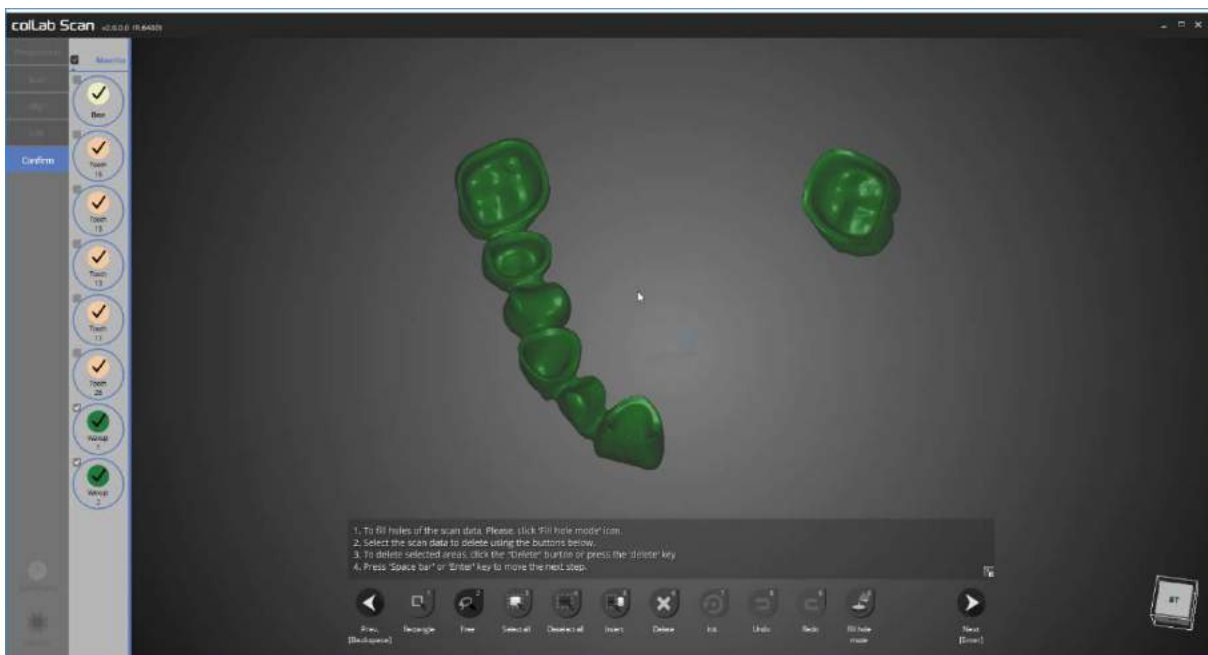
Press [Yes] to start to merge the data. Data merging may take time, hence if there are urgent tasks to be done prior to merging, please press [Cancel] and restart the data merge process after the task is finished.





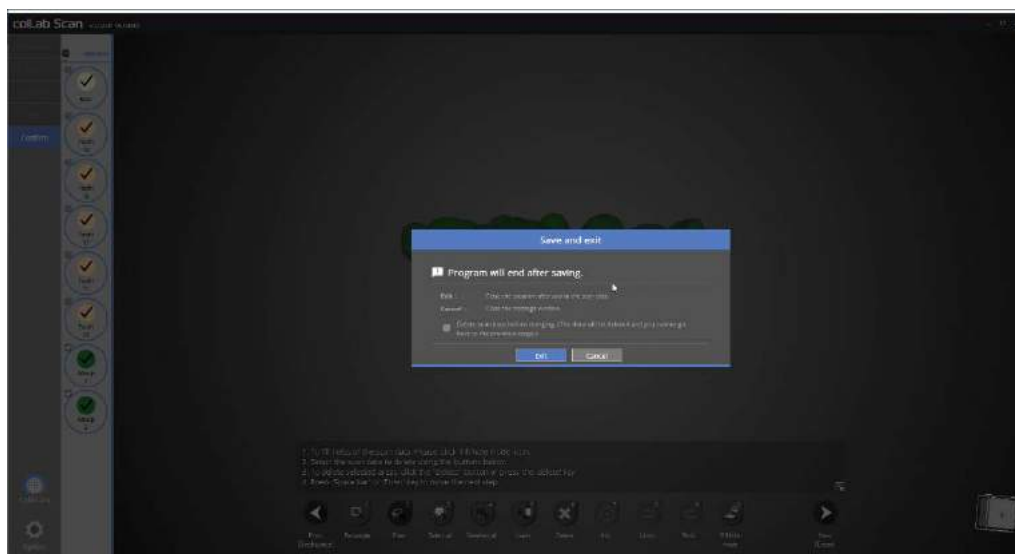
The scan file is generated.

You may also edit the scan data at this stage as done in the editing stage.



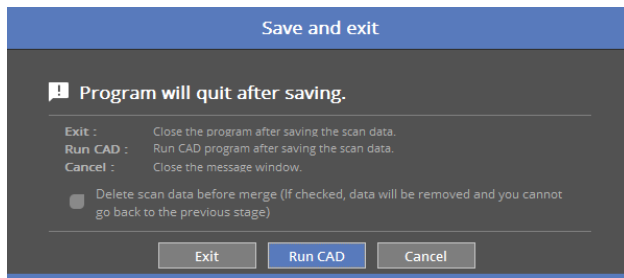
We can see the top and bottom of waxup is merged smoothly into one data.

When editing is complete, please click [next], save the data and close the program.



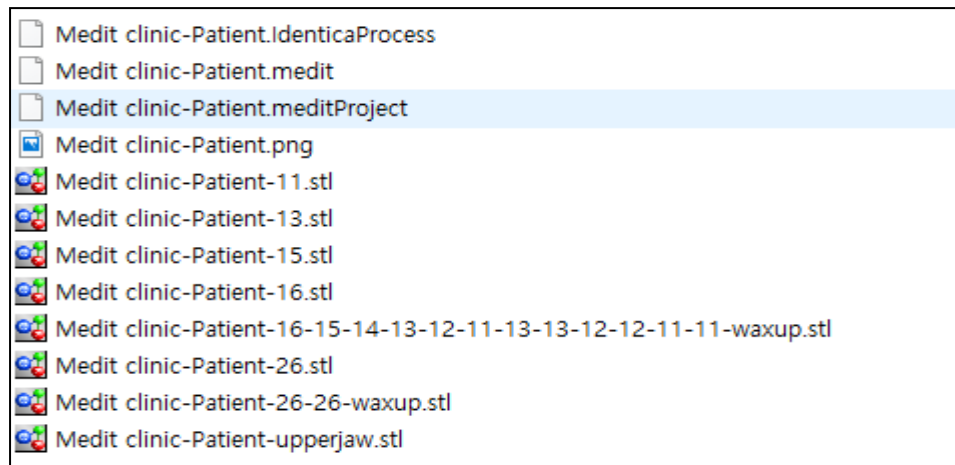
This window will popup when closing the program.

Clicking on [yes] will scan the data and exit the program.



If your device is connected to CAD, you will see the above popup message.

By clicking the 'Run CAD', the scan program will be closed and connect automatically to CAD program which will open.



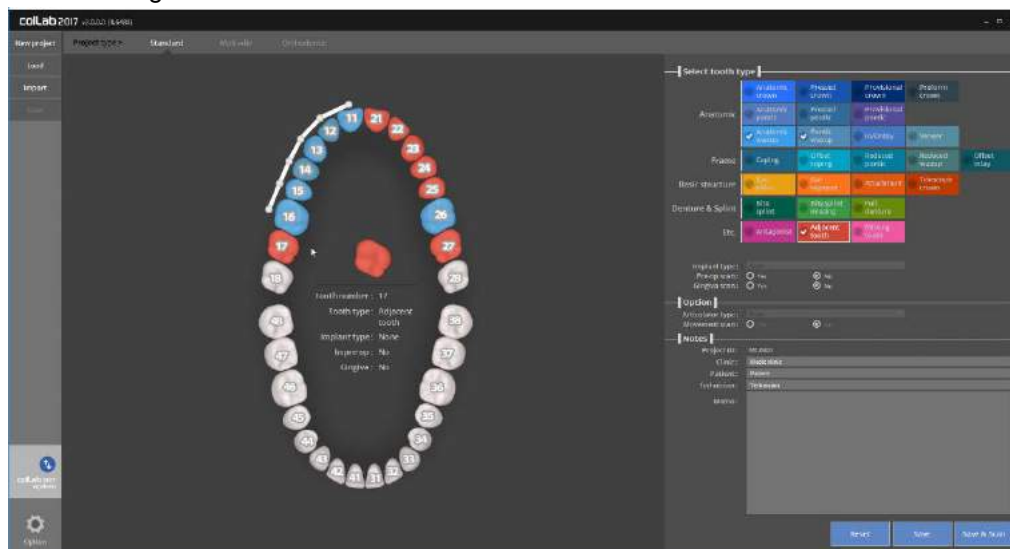
The scan process of waxup and the wax bottom is now complete.


The data can be reviewed in the settings folder.

## ► Waxup bottom with flexible multi-die

3 step scan process for waxup bottom case on flexible multi-die (usually requires 7 steps scan process)

### Teeth Settings



- Please input the settings for the model you wish to scan. Please refer to  Teeth setting.

In this manual, we will be showing the case of 6 unit waxup bridge framework from No. 11 to 16, and waxup crown of No. 16

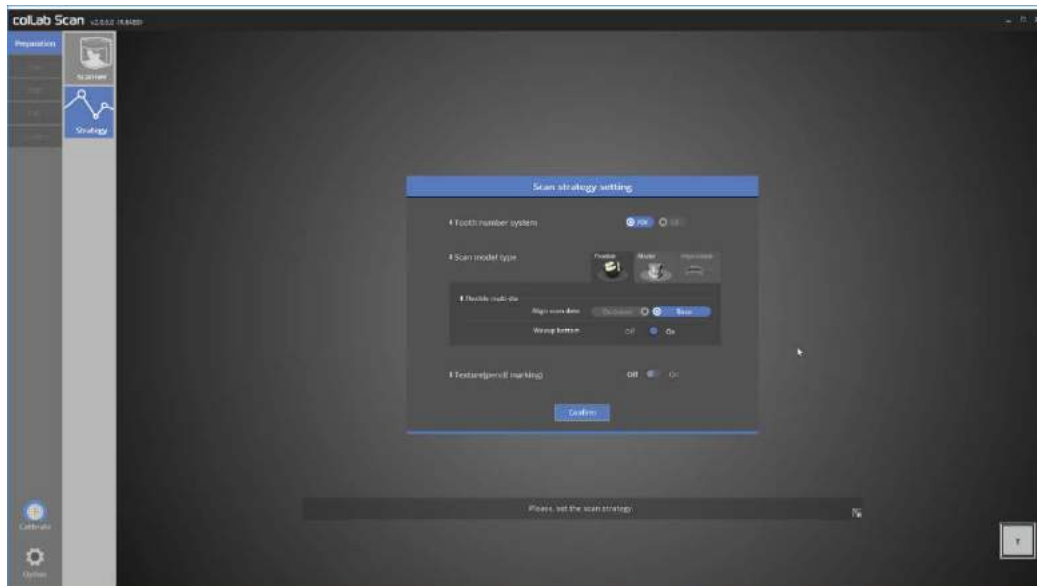
- Implant type\_None | Pre-op scan\_No | Gingiva scan\_No
- Click on the [Save & scan] button to start scanning.

Approximately 30 seconds are required for connection when the scanner is initially installed.

After the initial installation, it takes around 3~5 seconds to connect to the scanner.

Also, the projector will flash temporarily while connecting the scanner.

When the scanner is successfully connected, it will automatically proceed to [Scan strategy setting] to set the scan strategy.



### Scan strategy setting

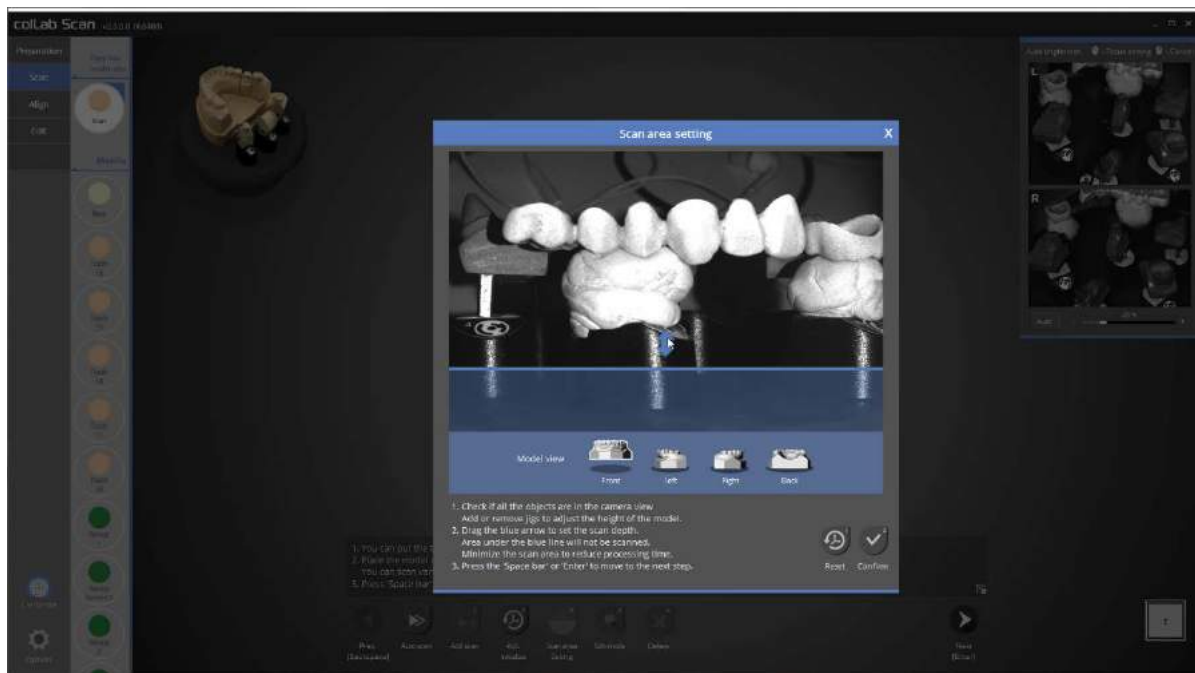
For 6 unit bridge and crown, Select [Base] alignment on flexible multi-die in scan strategy, and click [Confirm] to move on to the next stage, scan.

📖 Please refer to “Single coping scan” for detail.



There is no limitation for scanning order or scanning model for flexible multi-die.

Simply place the object you wish to scan on the scanner and begin scanning, in this case, we will simultaneously scan all the preparation teeth and waxup bottom 1, and 2.



In this stage, we will determine the height of scanning area.

Drag the blue arrow to determine the scanning area.

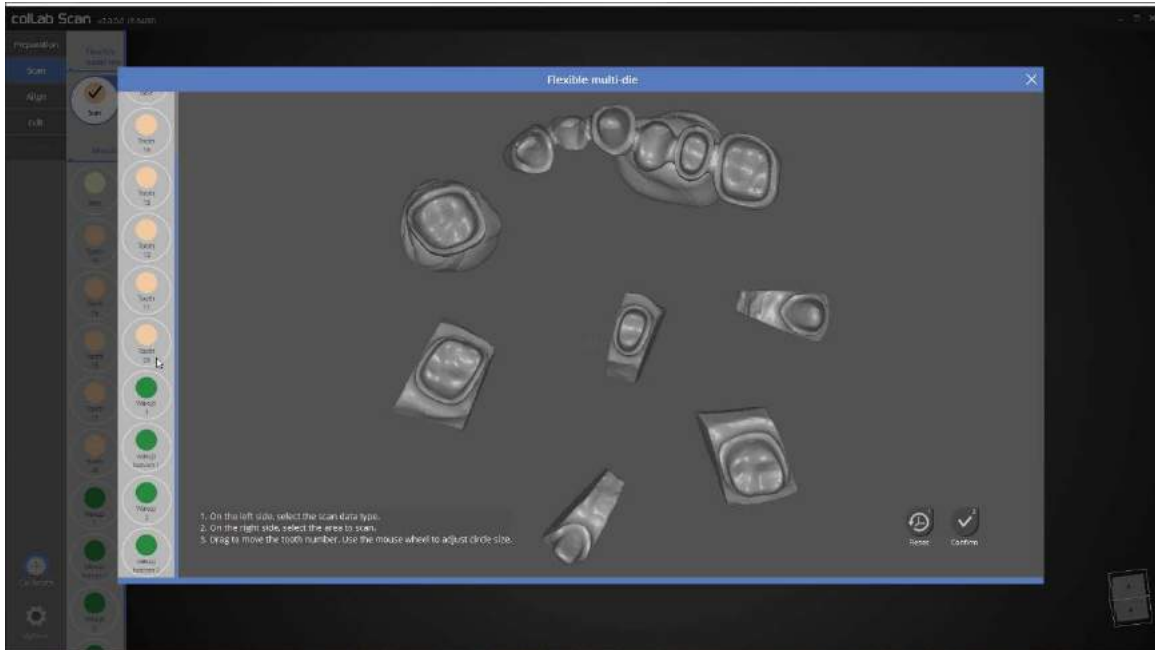
Click on [confirm] to begin scanning.



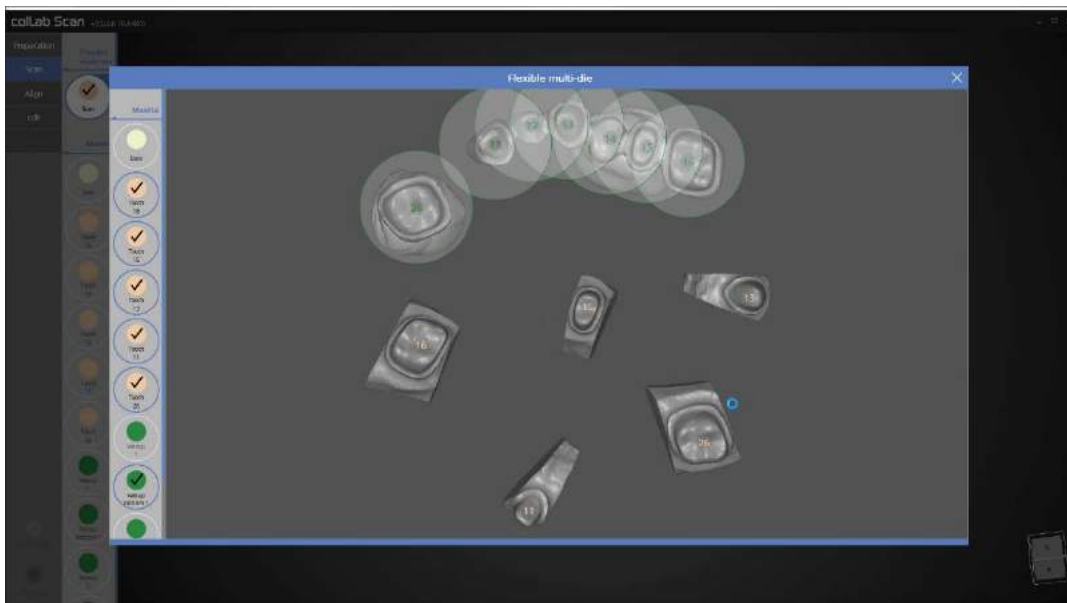
As you can see in the picture above, scanning of all preparation teeth and waxup bottom1, and 2 have been completed simultaneously.

If this was done in a normal scanning process, the scanning process must be split up into 4 steps,

However, it can be done in one step if the flexible multi-die function is used.



This step defines the scan data.

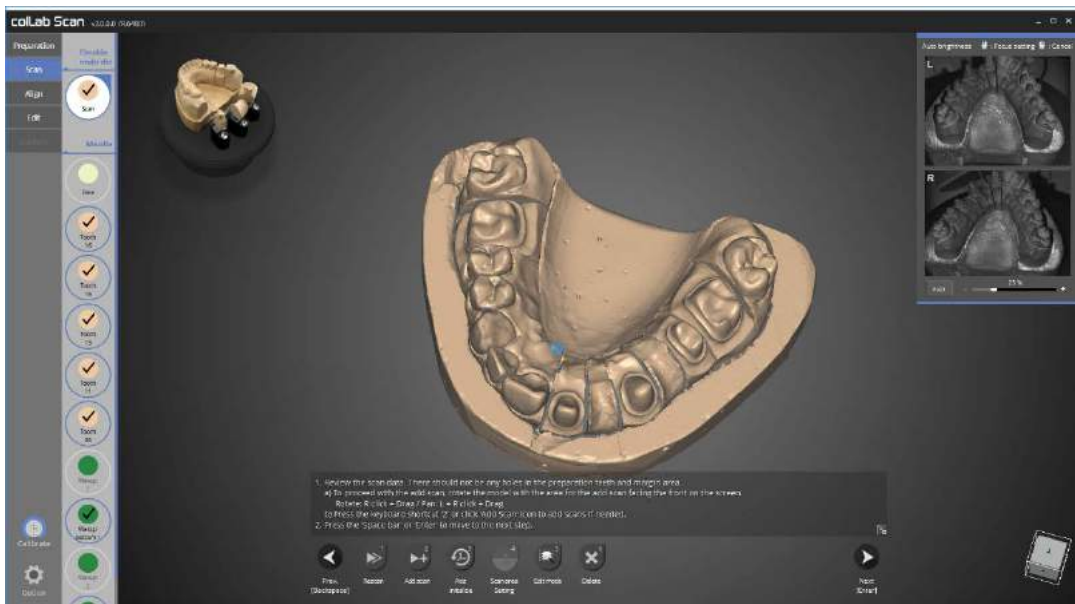


Click on each preparation teeth and waxup bottom as shown in the picture above to define the data.



This time we will scan the base model.

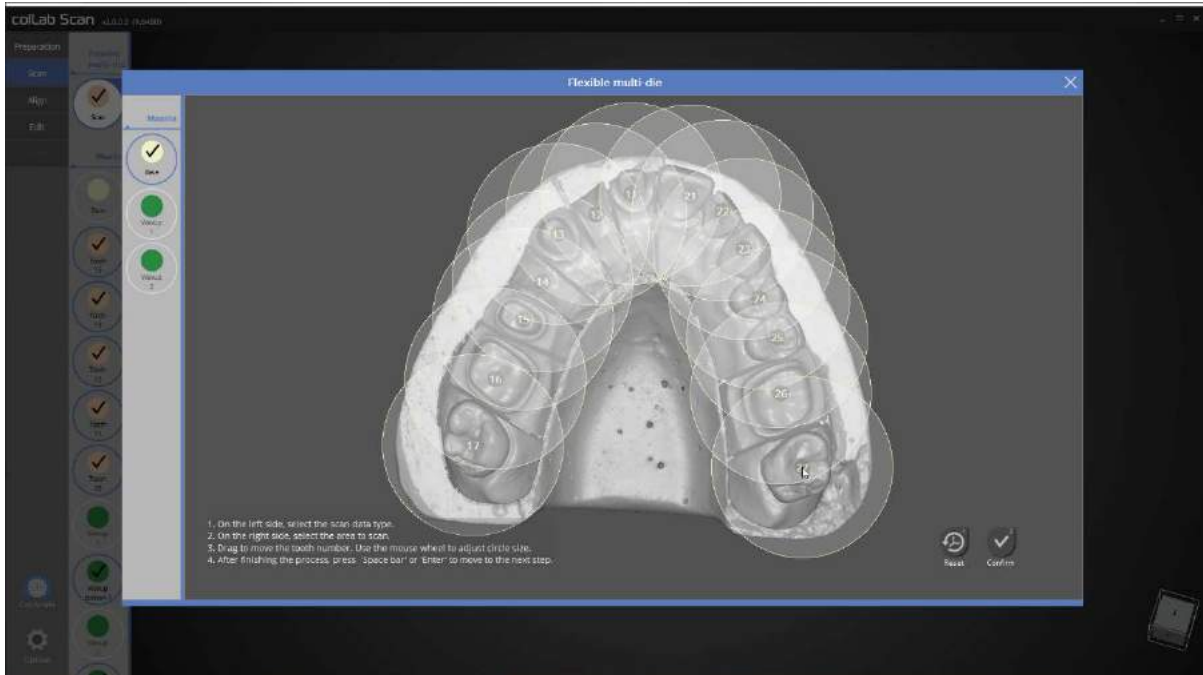
Place the base model in the scanner and click on [Auto scan] to start scanning.



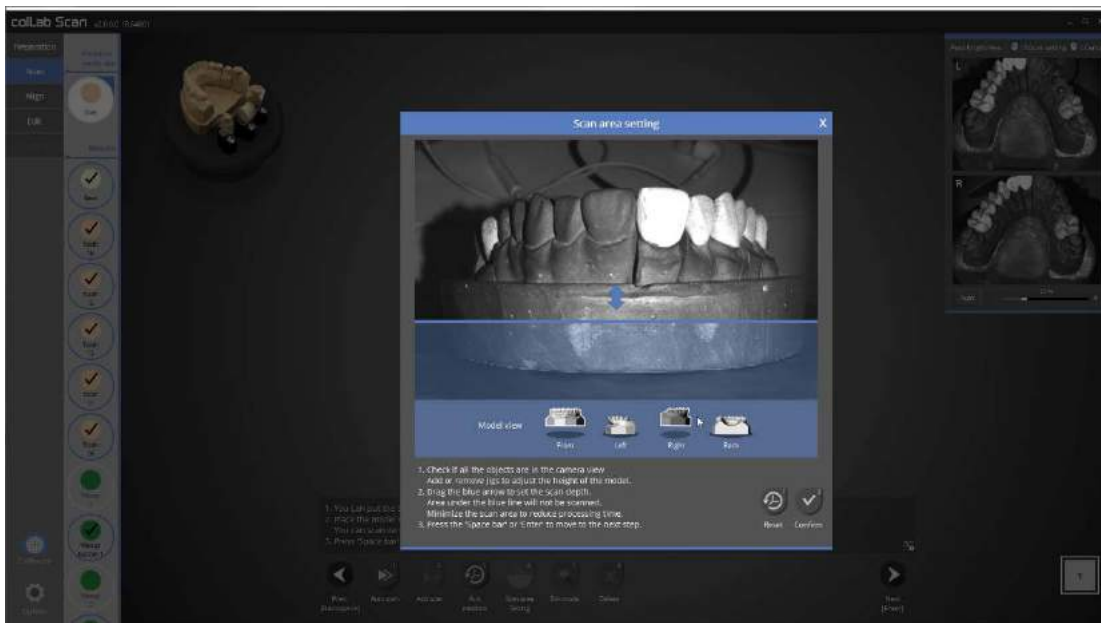
As shown in the picture above, the scan of entire upper jaw base model is complete.

Proceed with scanning if additional scanning is required. Rotate the part where the additional scan is needed to the front of the screen, and click on [Add scan] or use the hot key[2].





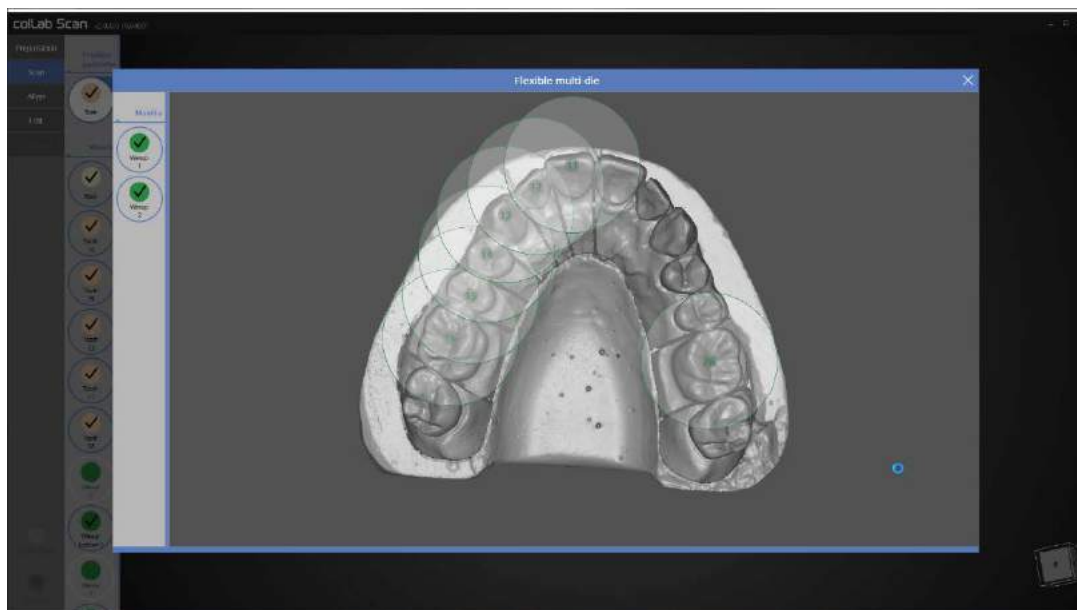
Define the teeth position in the base scan data.



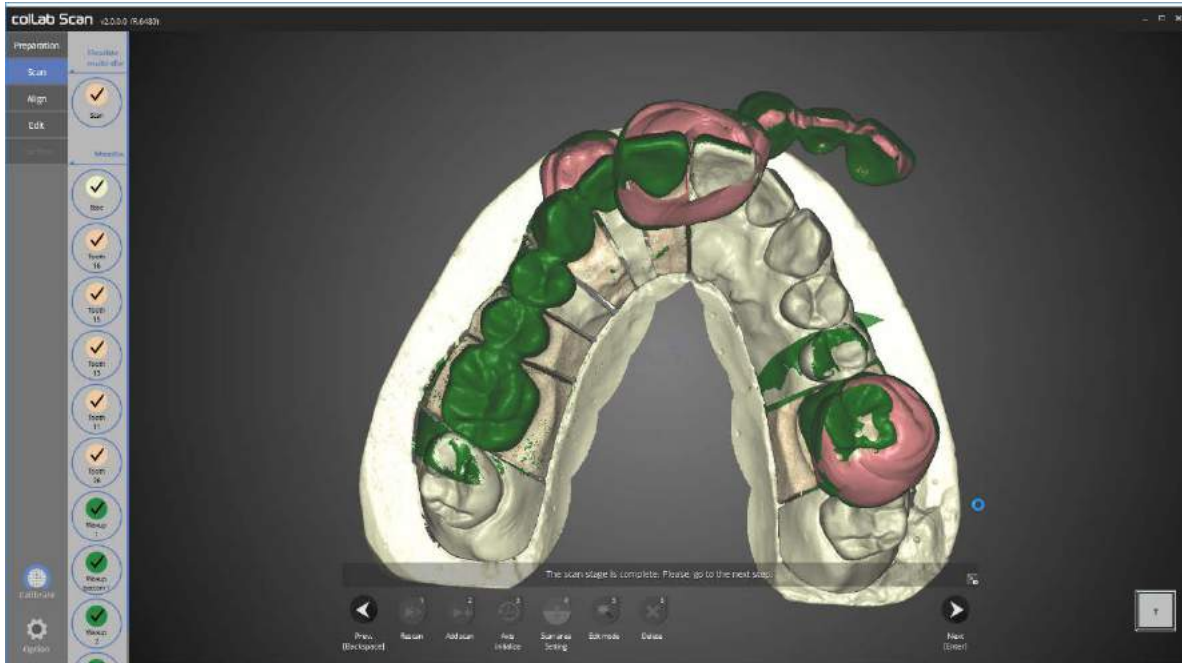
Finally, scan the waxup1, and 2 simultaneously.



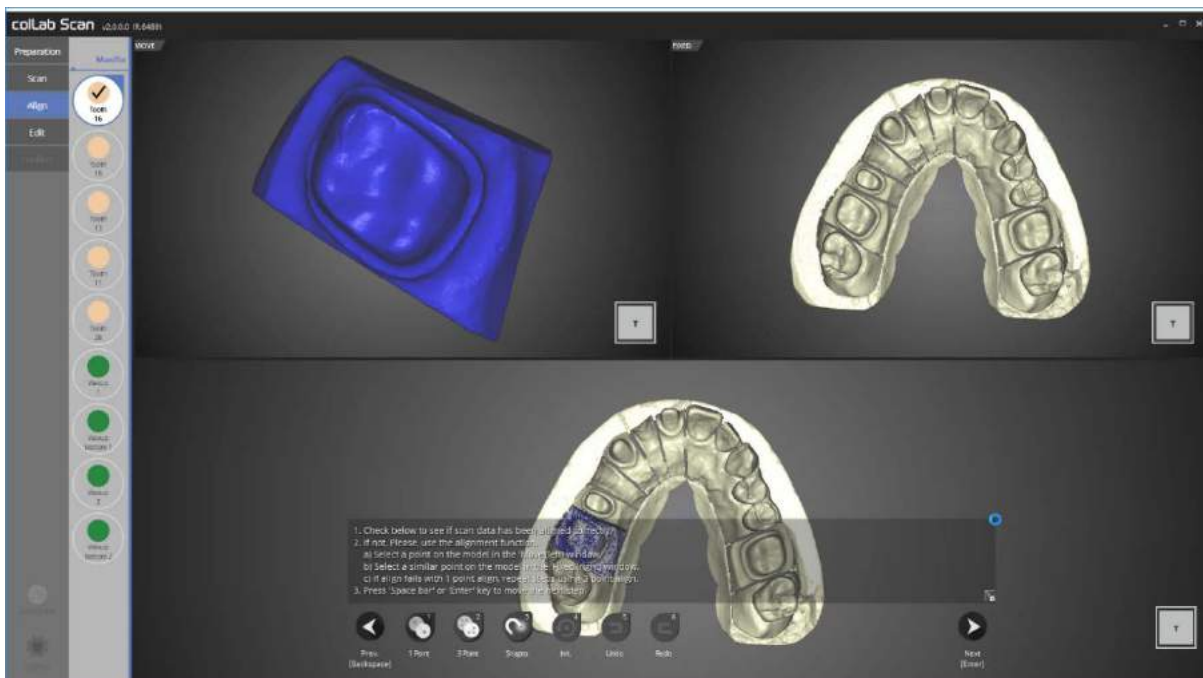
The waxup1, and 2 scan is complete.



Define the position of waxup1, and 2.



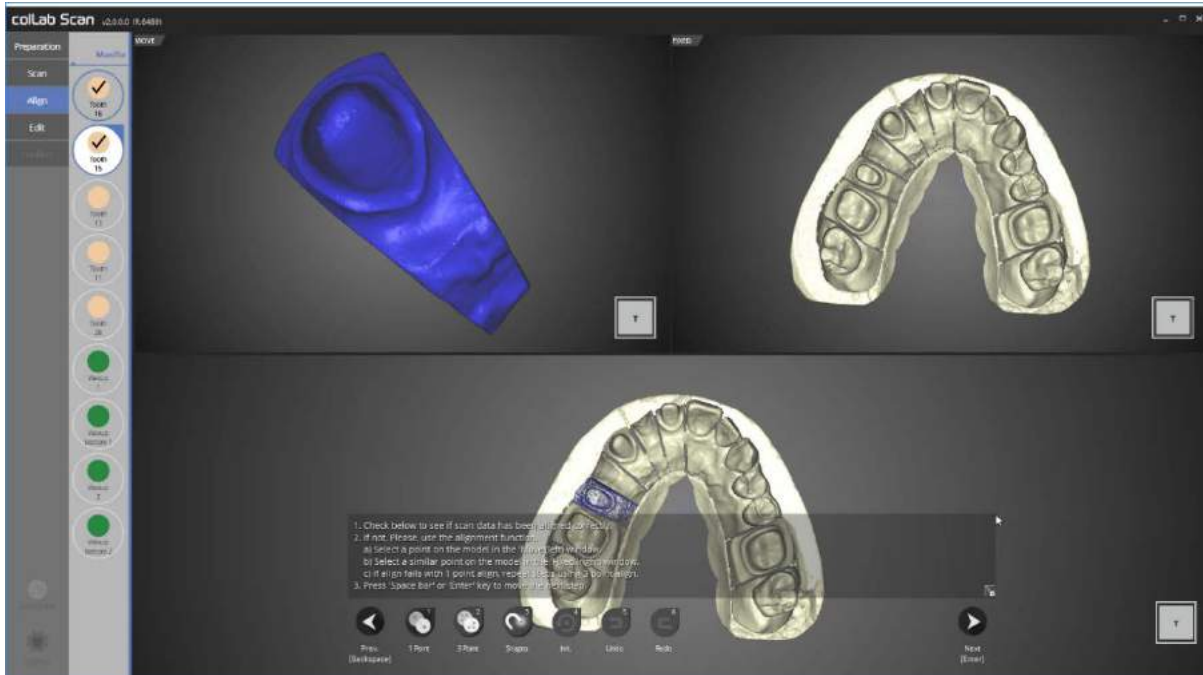
The scan of all necessary data is finished.  
We will now proceed to the alignment stage.



Please check the status of the auto alignment for preparation tooth No. 16.

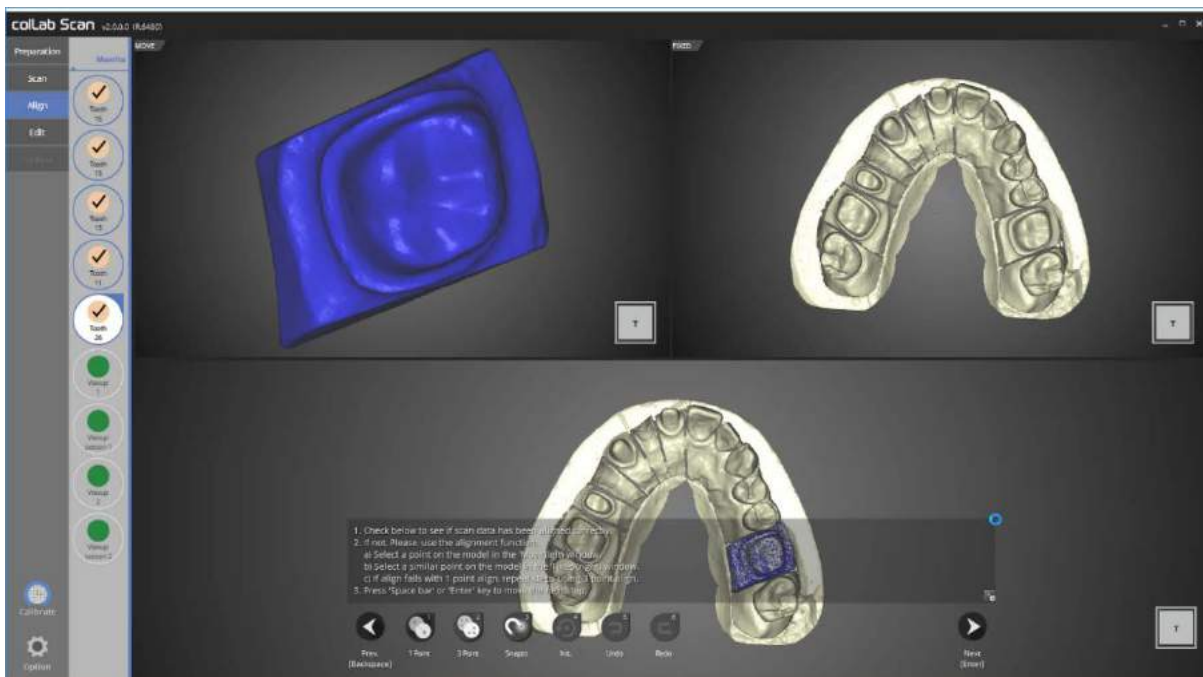
Please proceed to the next step if no errors are found in alignment status.

If the auto alignment has not been done correctly, use [1 Point] alignment or [3 point] alignment to align the two data.



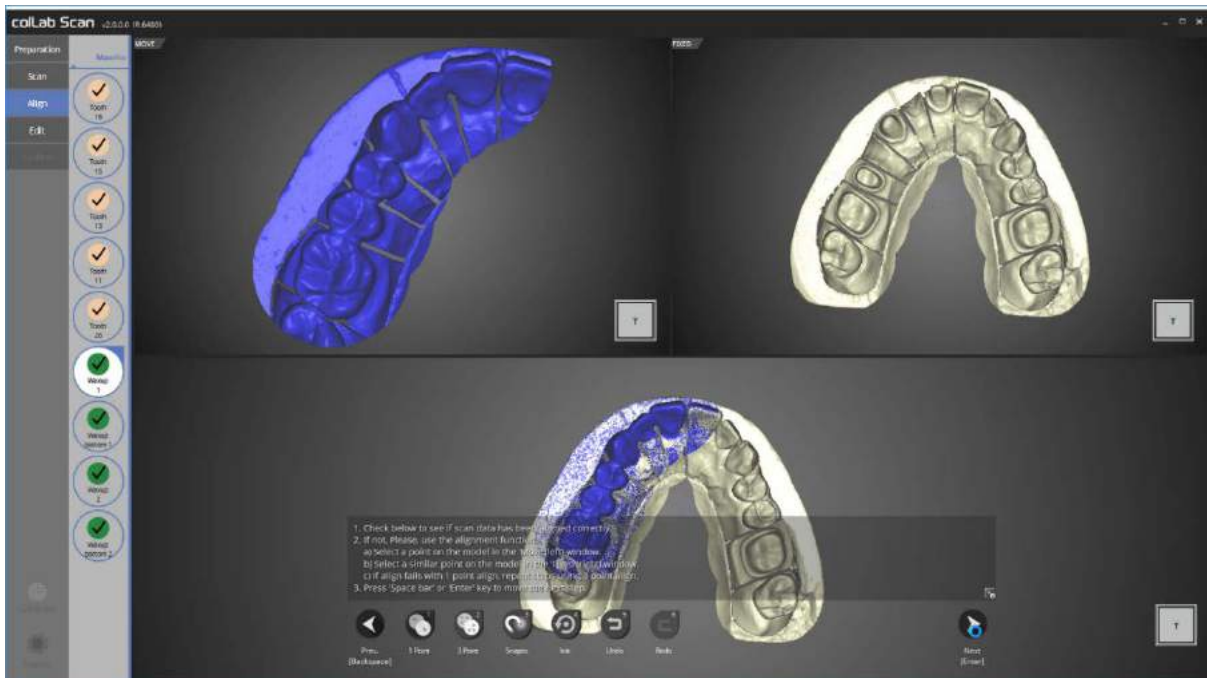
Please check the status of the auto alignment for preparation tooth No. 15.

Please proceed to the next step if no errors are found in the alignment status.



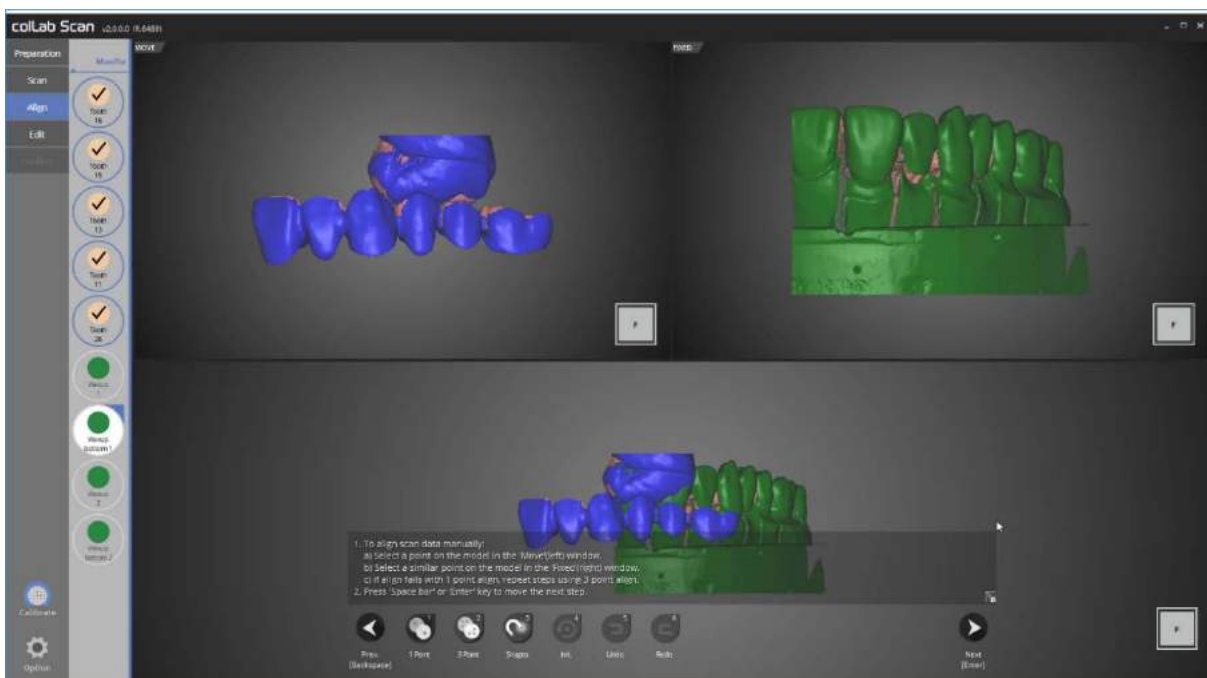
Please check the status of the auto alignment for preparation tooth No. 13, 11, and 26 in order.

Please proceed to the next step if no errors are found in the alignment status.



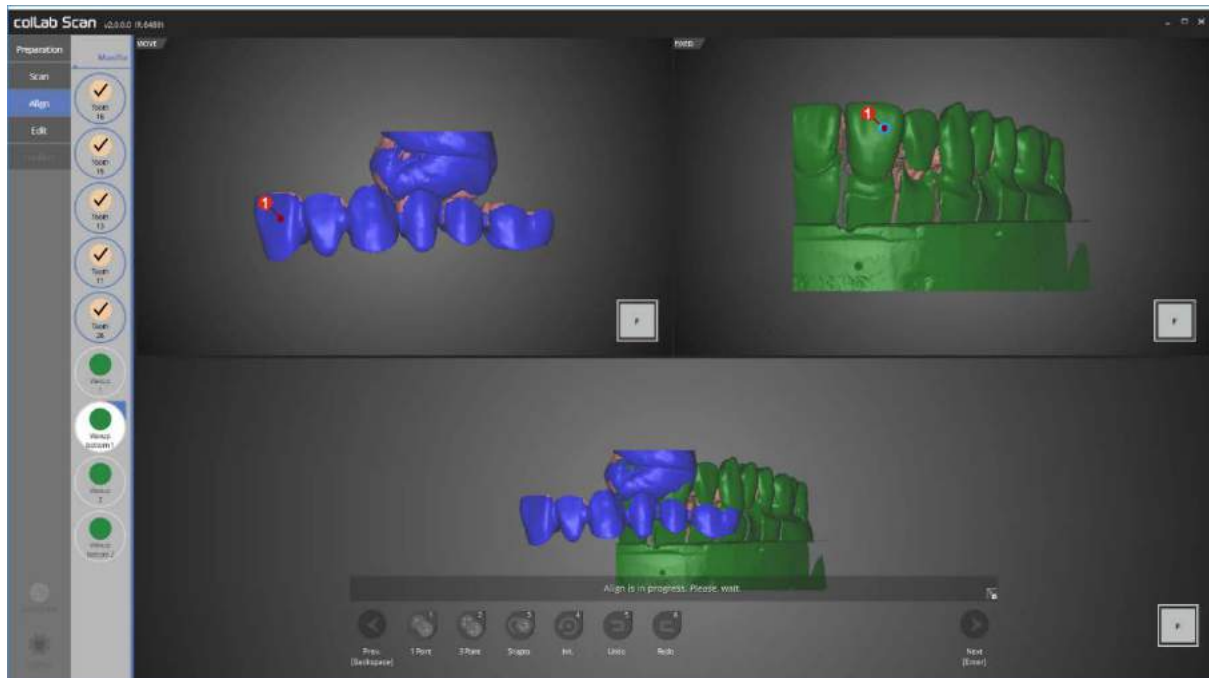
In this step, we will check the status of the auto alignment for the base and waxup1.

If the auto alignment has not been done correctly, use [1 point] alignment or [3 point] alignment to align the two data.

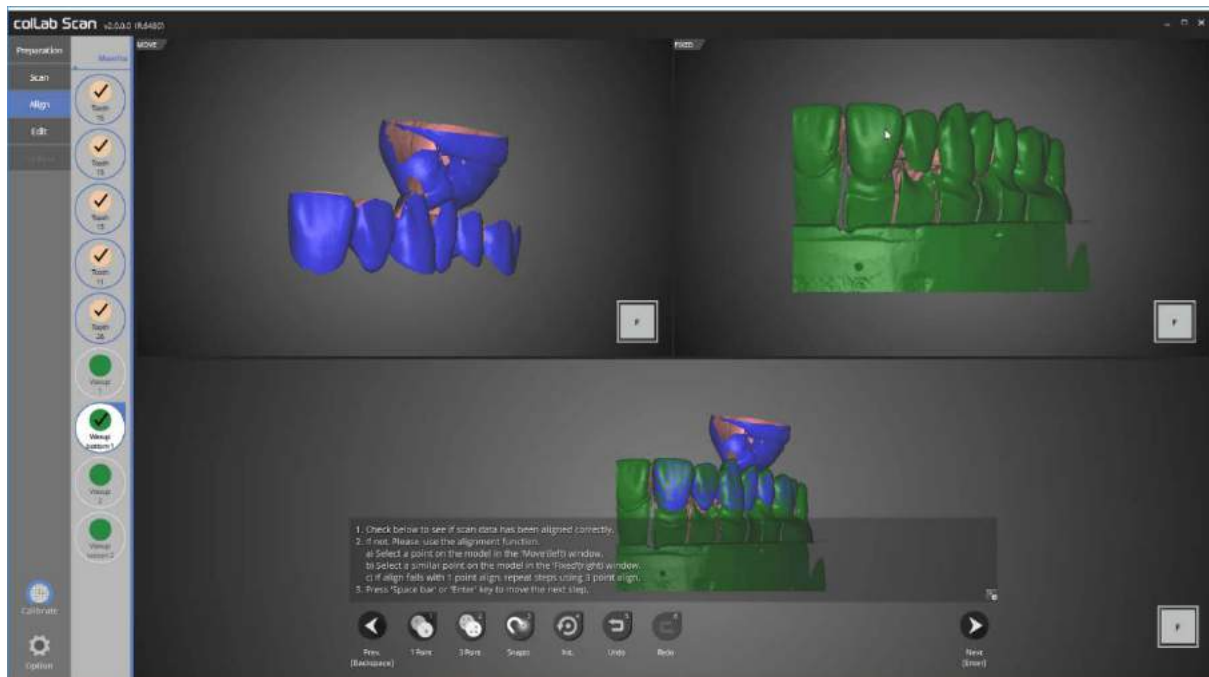


We will now move on to the alignment step for waxup bottom1 and waxup1.

Manual alignment must be carried out in this stage.

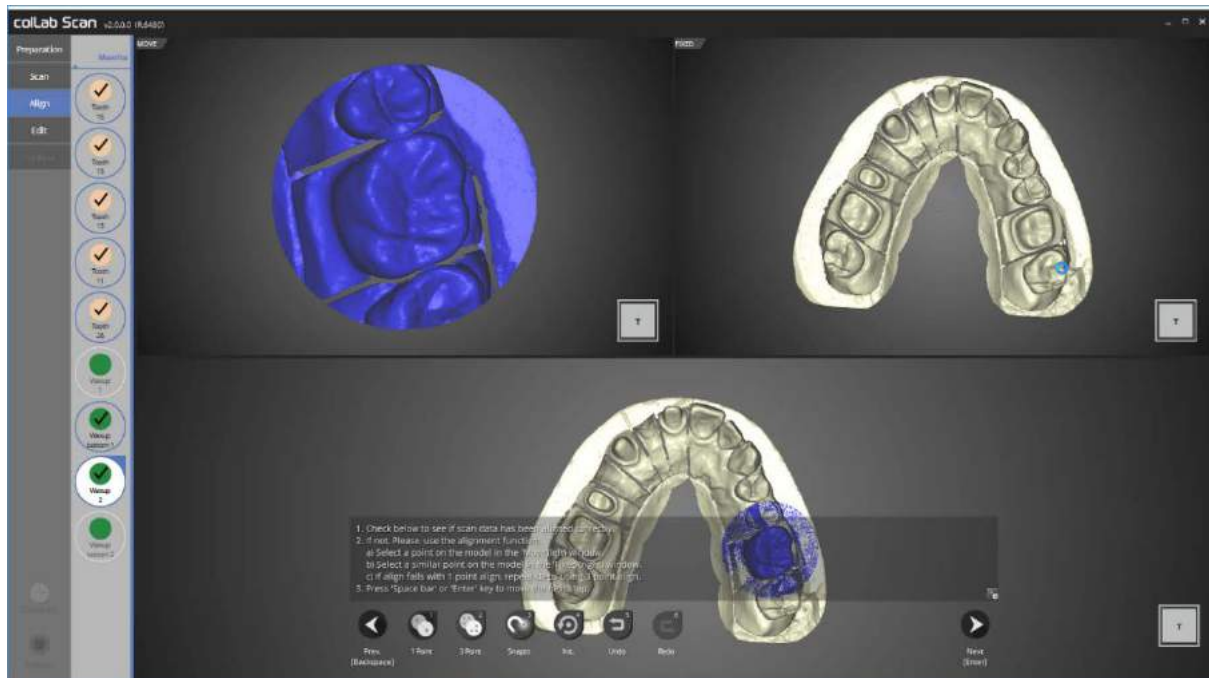


Proceed with alignment process by using [1 point] alignment, clicking on parts to be aligned with the waxup bottom1 on the upper left corner, and the waxup1 on upper right corner.



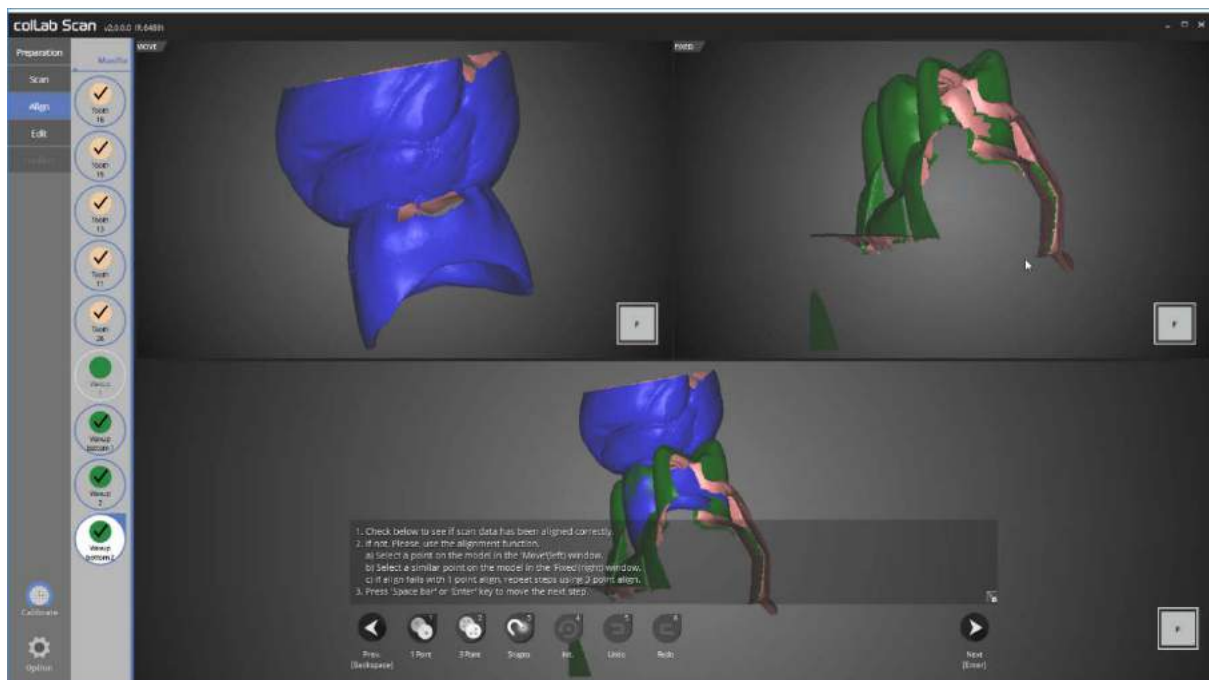
The alignment process for waxup bottom1 and waxup1 is complete.

We will move on to the next step.



Please check the auto align status of the base and waxup2.

If auto alignment has not been done correctly, use [1 point] alignment or [3 point] alignment to align the two data.

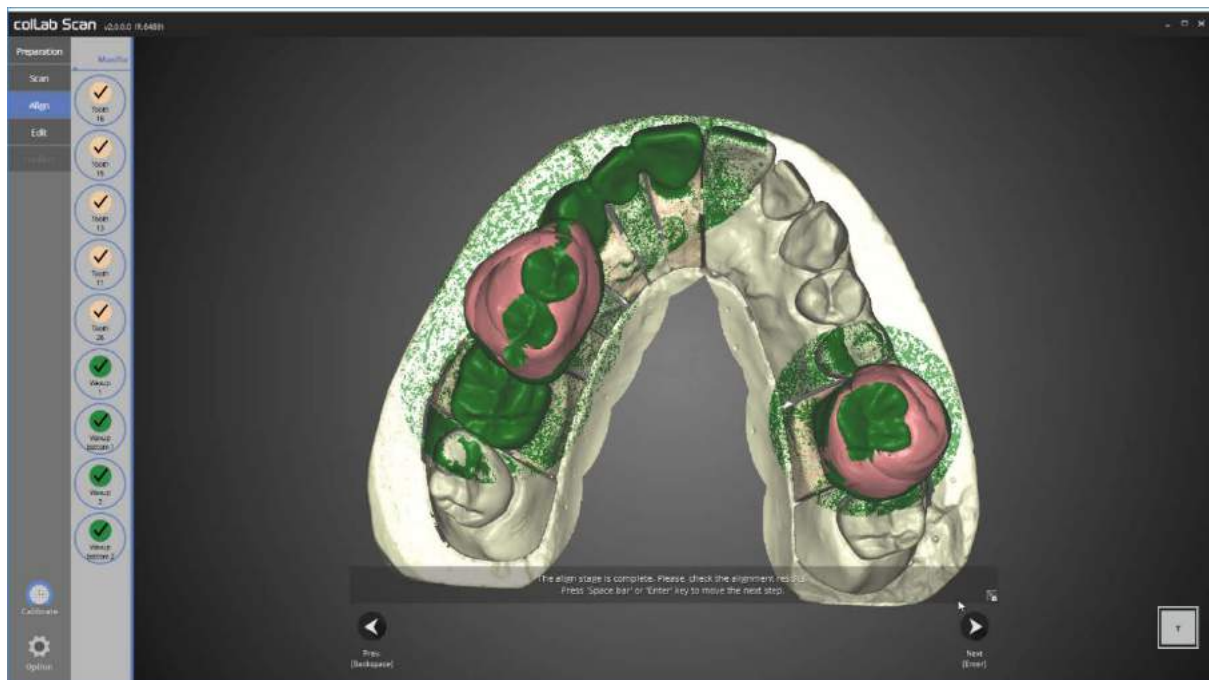


This is the alignment step for waxup bottom2 and waxup2.

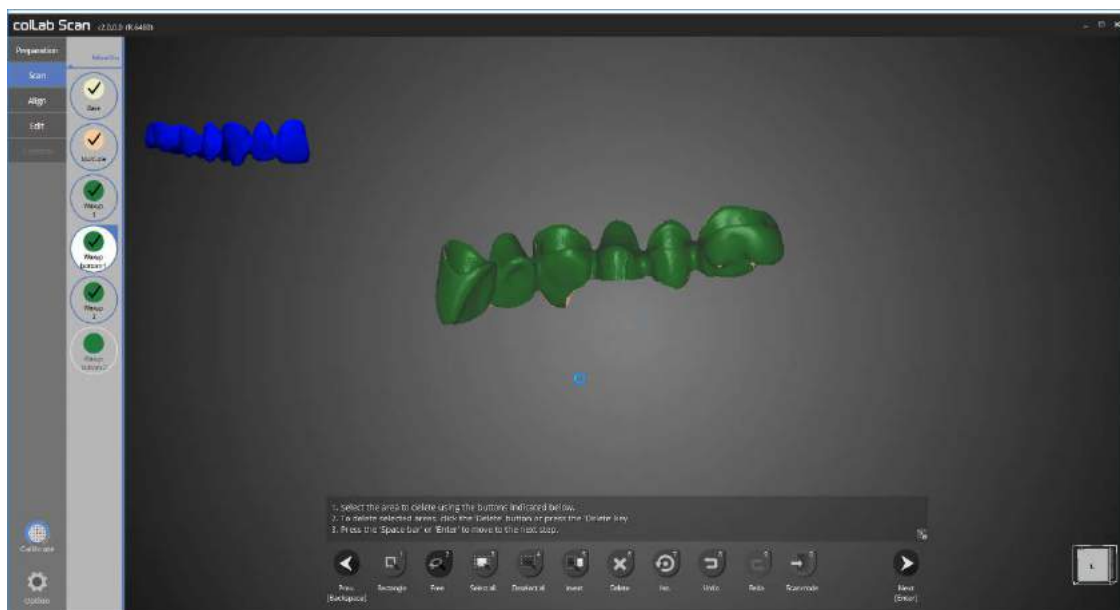
Manual alignment must be carried out in this step.

The alignment of waxup bottom2 and waxup2 is now complete.

We will move on to the next step.

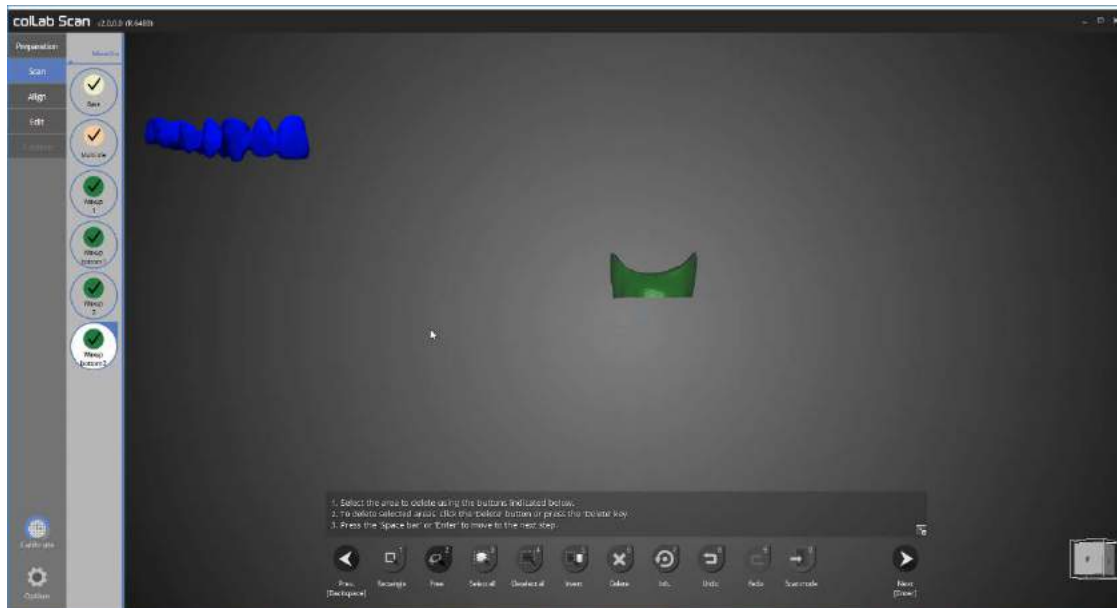


Please check the alignment status for all data.  
Proceed to next step if no errors are found.



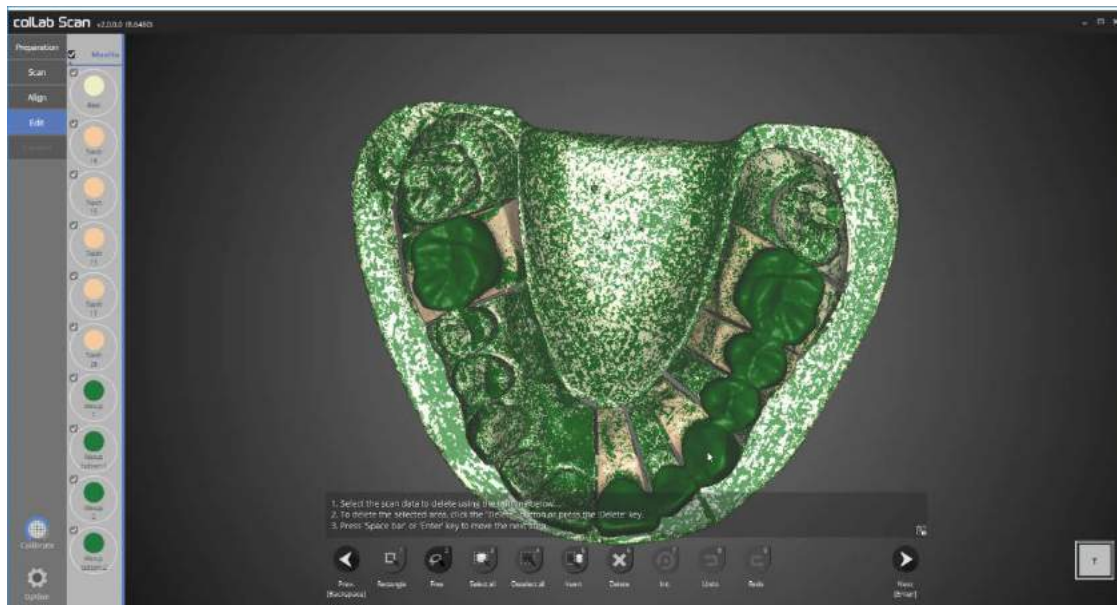
Delete the unwanted parts in the editing step to leave waxup1 part only as shown in the picture above.  
This step is a necessary requirement for the waxup bottom function.





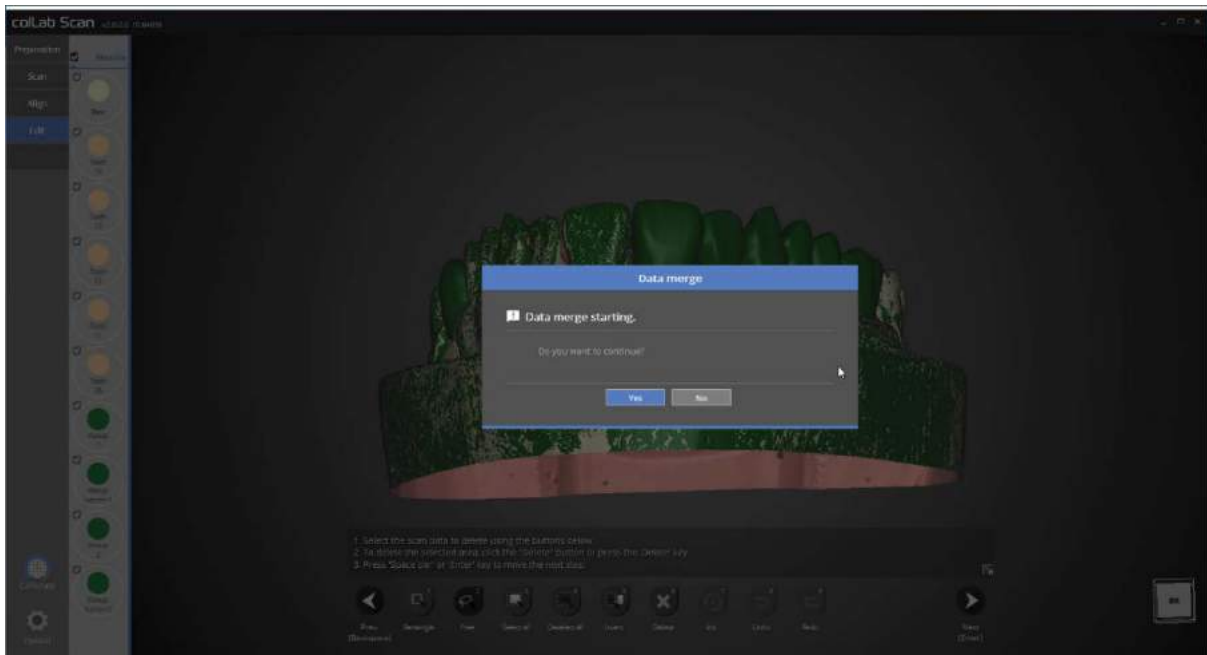
The next step is editing of waxup bottom2.

Delete the unwanted parts using editing function to leave waxup part only as shown in the picture above. Editing function is a crucial requirement for the waxup bottom function.



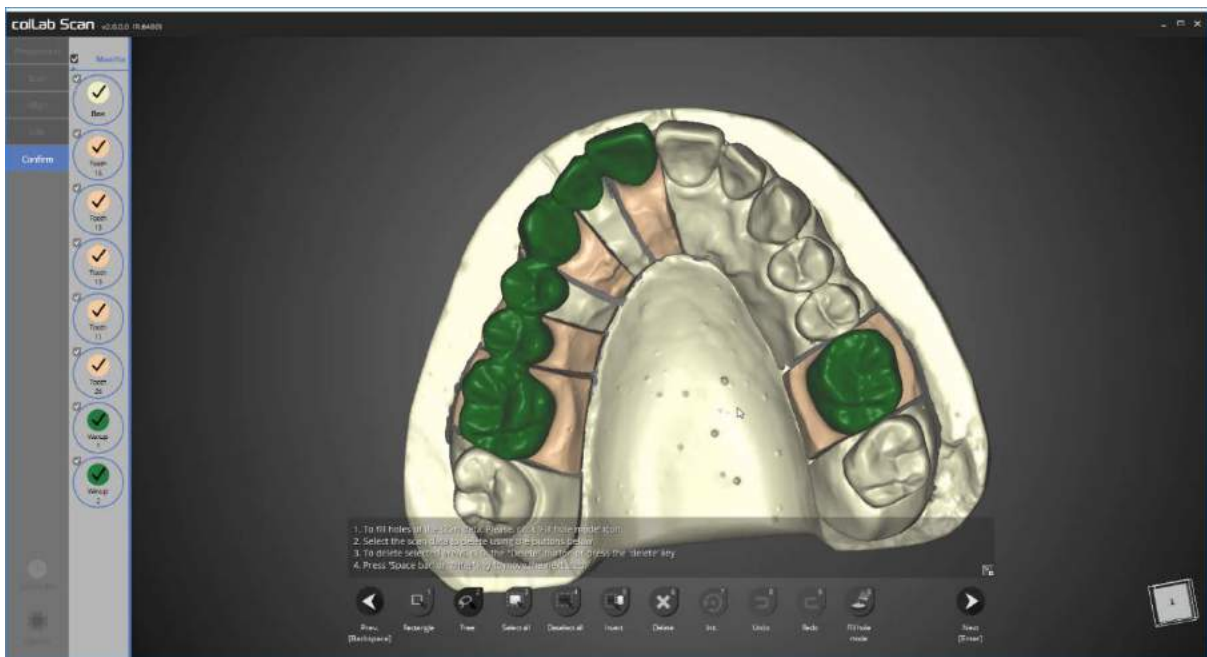
Data processing required for all waxup bottom scan is complete.

Check for any possible errors and proceed to the next stage: merging.



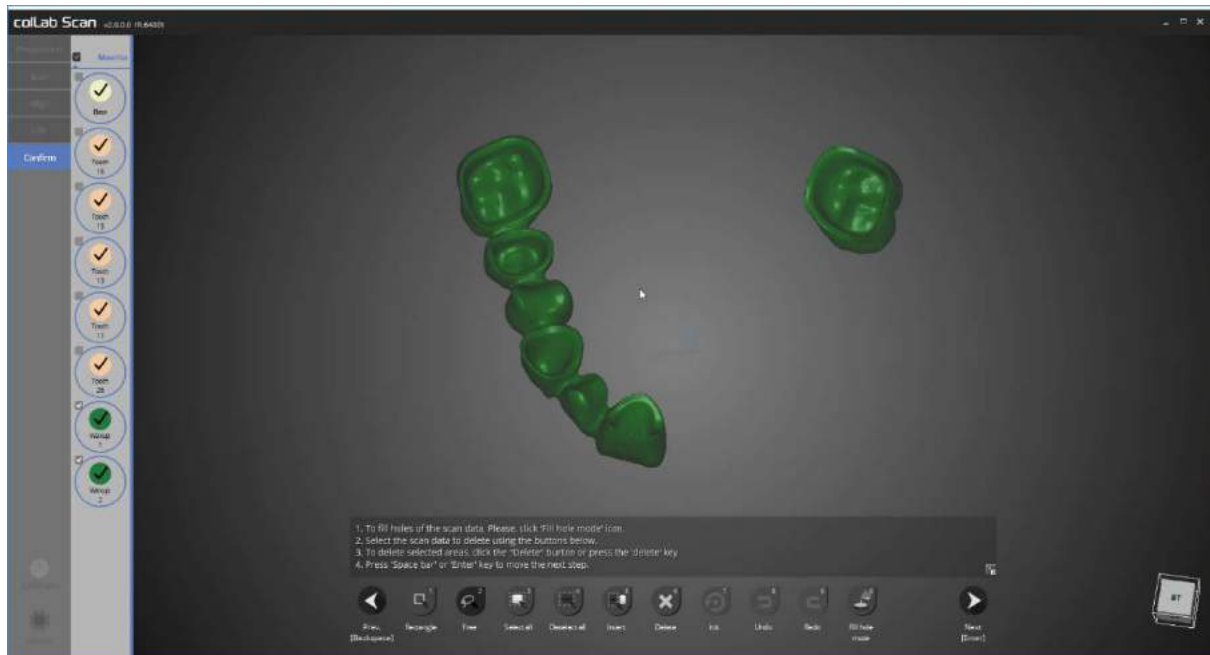
Press [yes] to merge the data.

Data merging may take time, hence if there are urgent tasks to be done prior to merging, please press [Cancel] and restart the merging process after the task is finished.

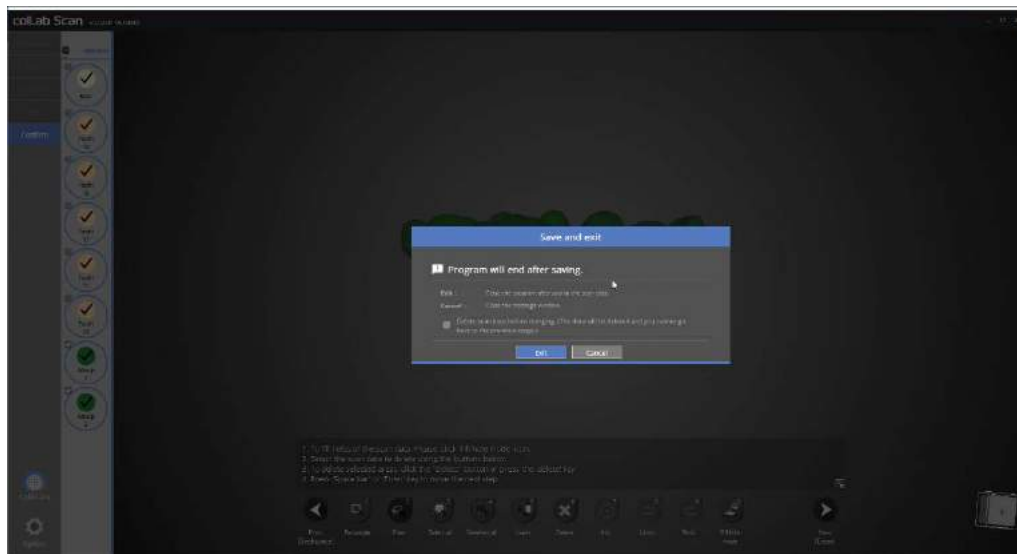


Scan files are generated.

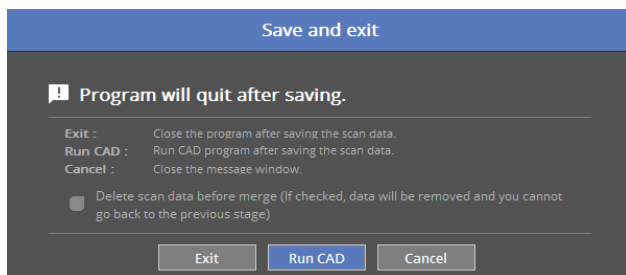
You may also edit the scan data at this stage as did in the editing stage.



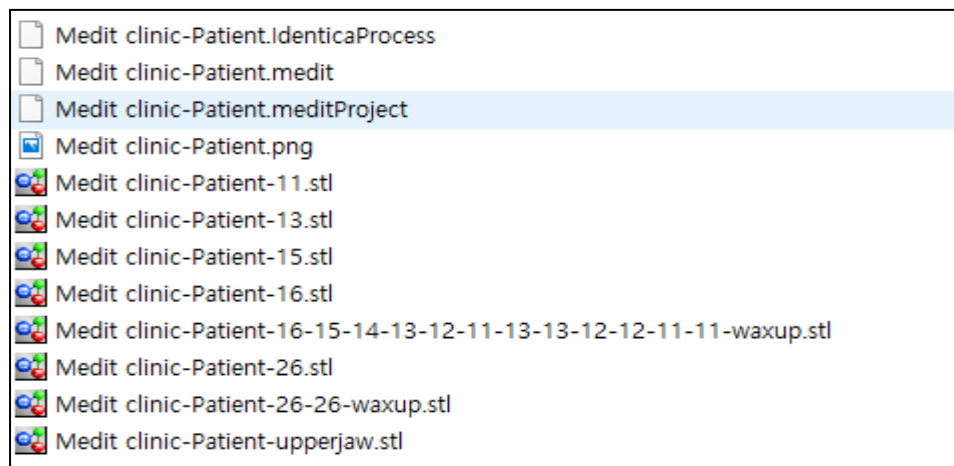
We can see the top and bottom data of waxup is merged smoothly into one data.  
When editing is complete, please click [next], save the data and close the program.



This window will popup upon closing the program.  
Clicking on [Exit] will scan the data and exit the program.



If your device is connected to CAD, you will see the above popup message.  
By clicking the [Run CAD], the scan program will close and start automatically the linked CAD program.

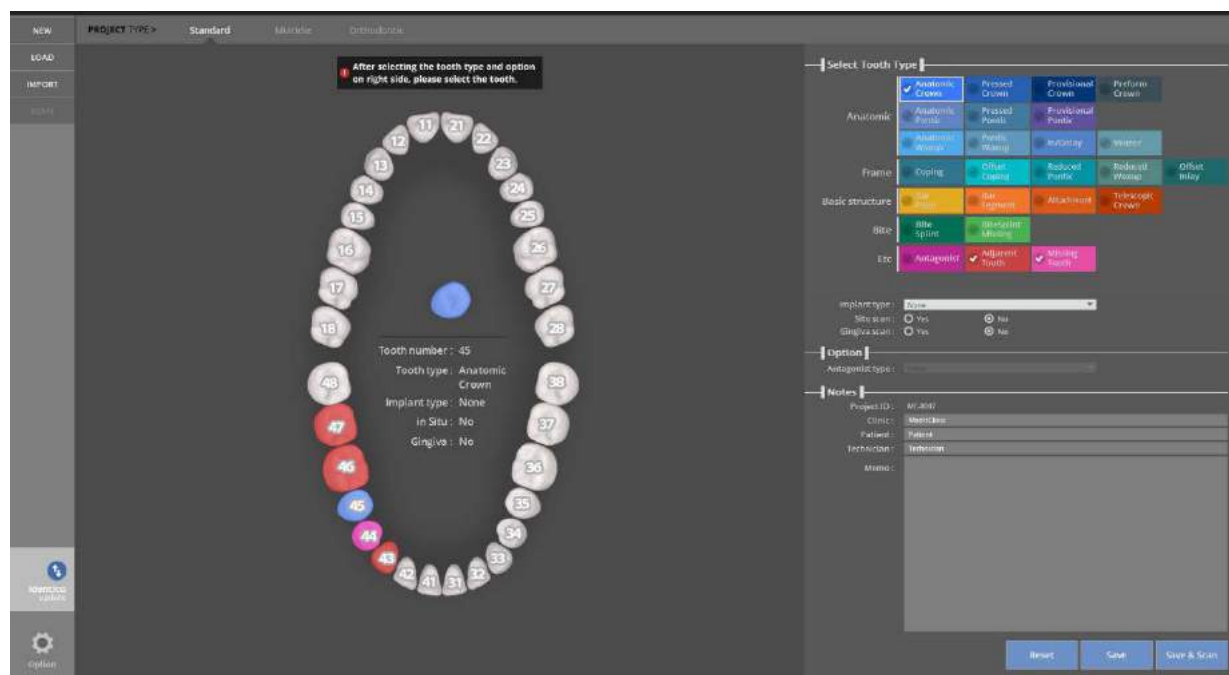


The scan process of waxup and the waxup bottom is now complete.

The data can be reviewed in the settings folder.

# Single Impression

Complete the order form and tooth setting.



Enter the settings for the model you want to scan.

Refer to [Teeth Settings].

This crown case will use tooth #44.

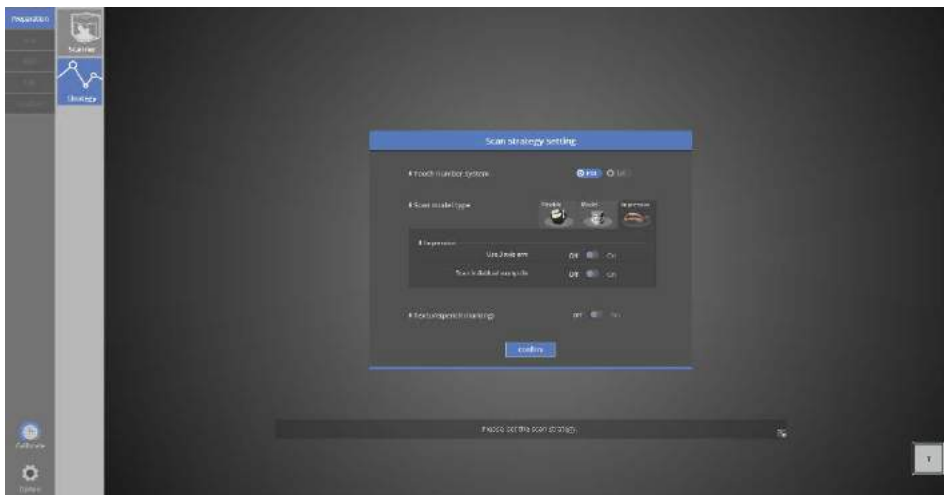
Implant type – None | Situ scan – No | Gingiva scan – No

Antagonist - None

Click the [Save & Scan] button to start scanning.

The first time you connect your scanner, it will take around 30 seconds to boot. After the first installation, it will take around 3-5 seconds. During the scanner connection process the projector will momentarily blink, and then the connection will be complete.

When the scanner is connected properly, it will automatically advance to the [Preparation Strategy] stage and determine the scanning process.



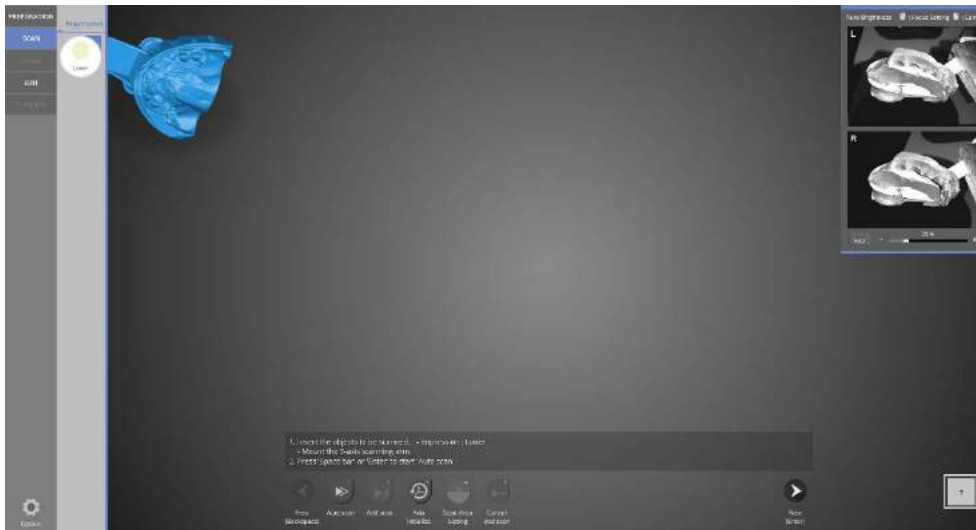
### Scan strategy setting

One-sided impression scanning is only possible if you selected the impression you are using and there is no antagonist teeth. (If your scanner is the Identica T500, select [Use 3 Axis arm].)

▮ You can perform the impression scan conveniently if you use the 3-axis arm.

Click [Confirm] to proceed to the next step.

▮ Refer to [Scan the single coping] step for the detailed information.



### Scan

When this screen appears, insert the 3-axis arm (T500 scanner) and the impression, following the instructions. Click the [Next] button to start to the [Auto scan].



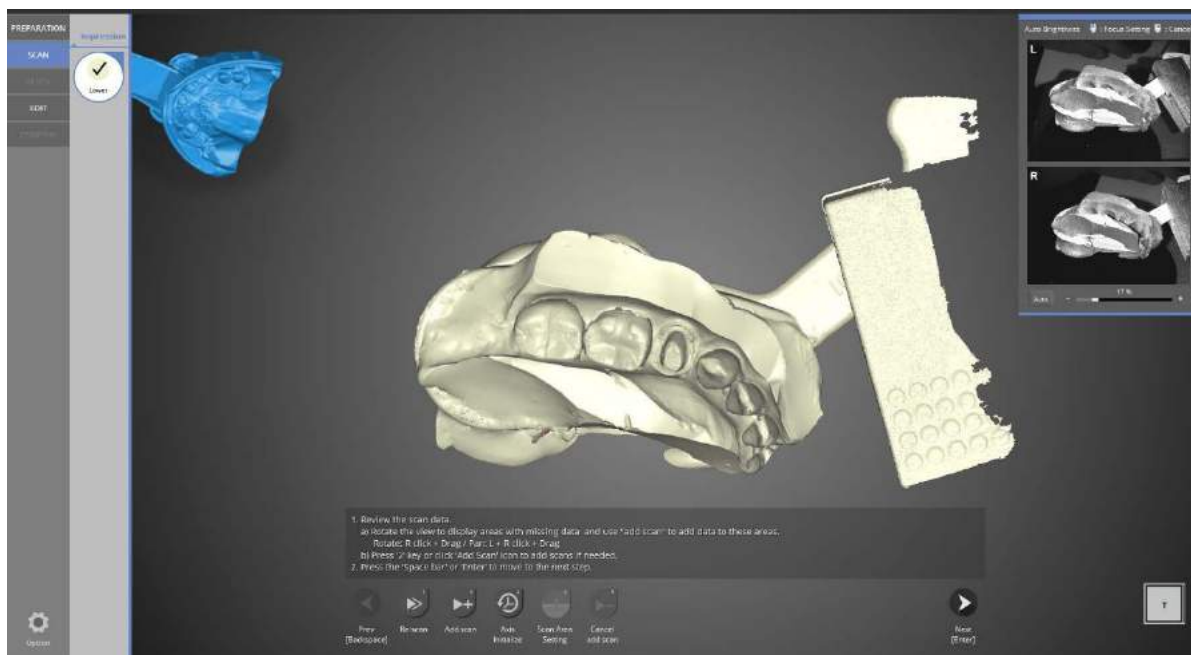
Open the 3-axis connection button manually.



Connect the 3-axis arm to the scanner.

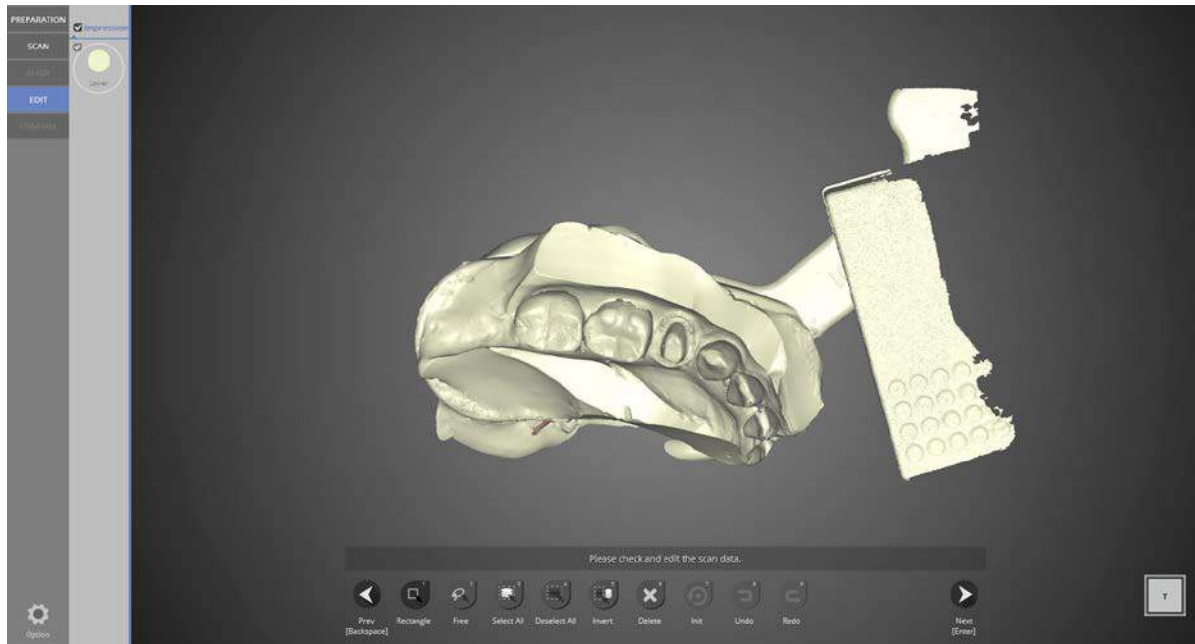


Put the impression on the impression jig and mount onto the scanner. Click [Auto scan] to proceed with scanning.



Impression scan is complete.

Click the [Add Scan] if additional scans are needed, click [Next] to proceed to the next step.

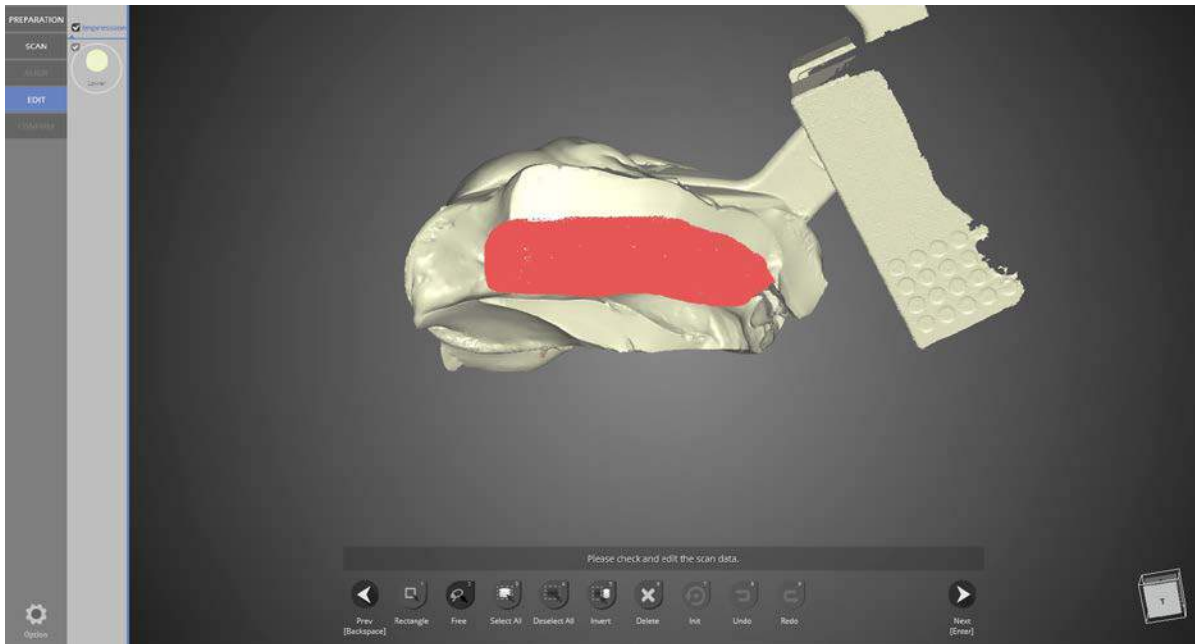


In the [Edit] stage, use the icons at the bottom of the screen to edit the data.

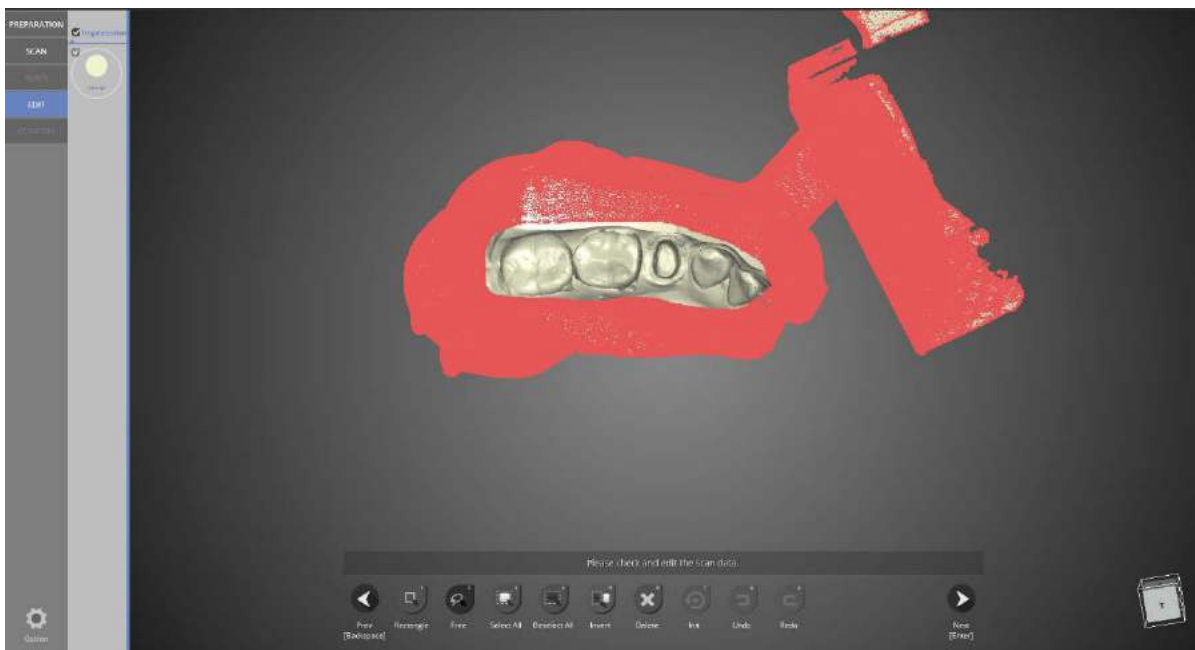
Refer to [Single coping scan] for more detailed information.

Click [Next] to move to the next step and merge the data.

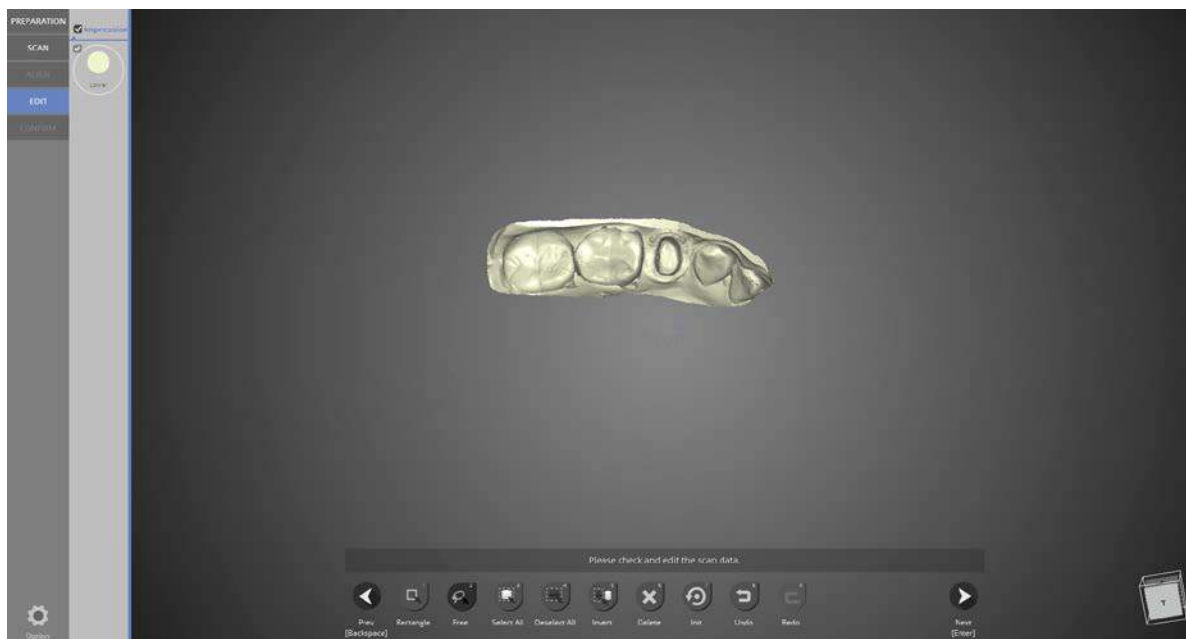




Select the [Free] icon to draw your crop margins.

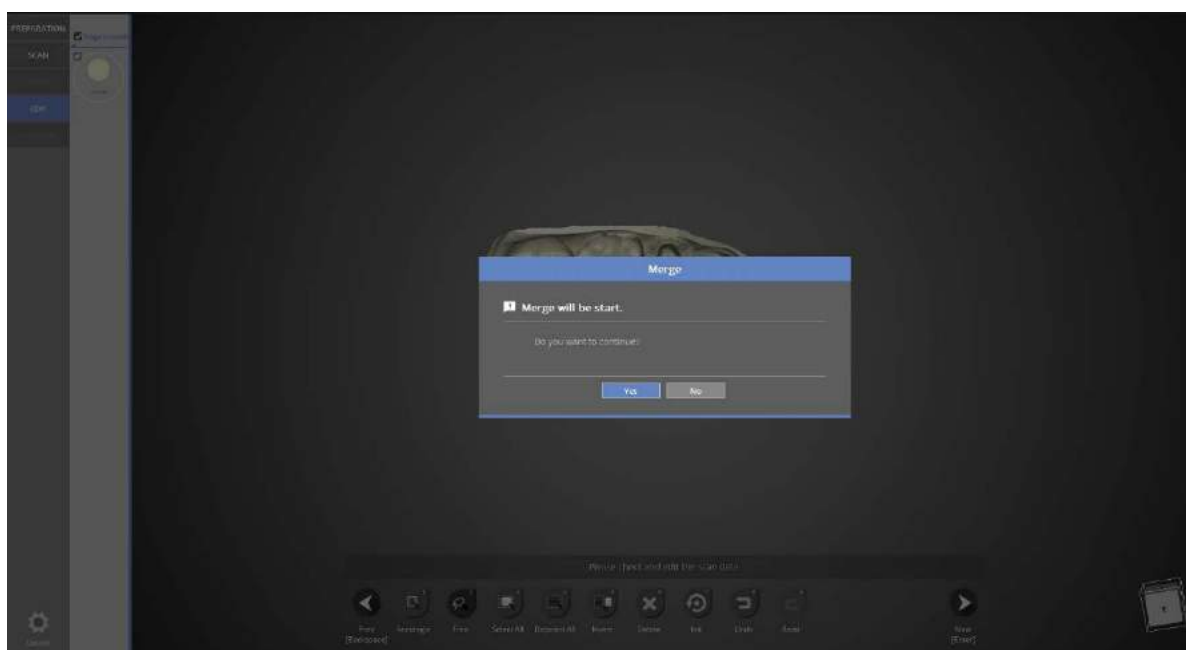


Select the [Invert] icon to invert the selected area.

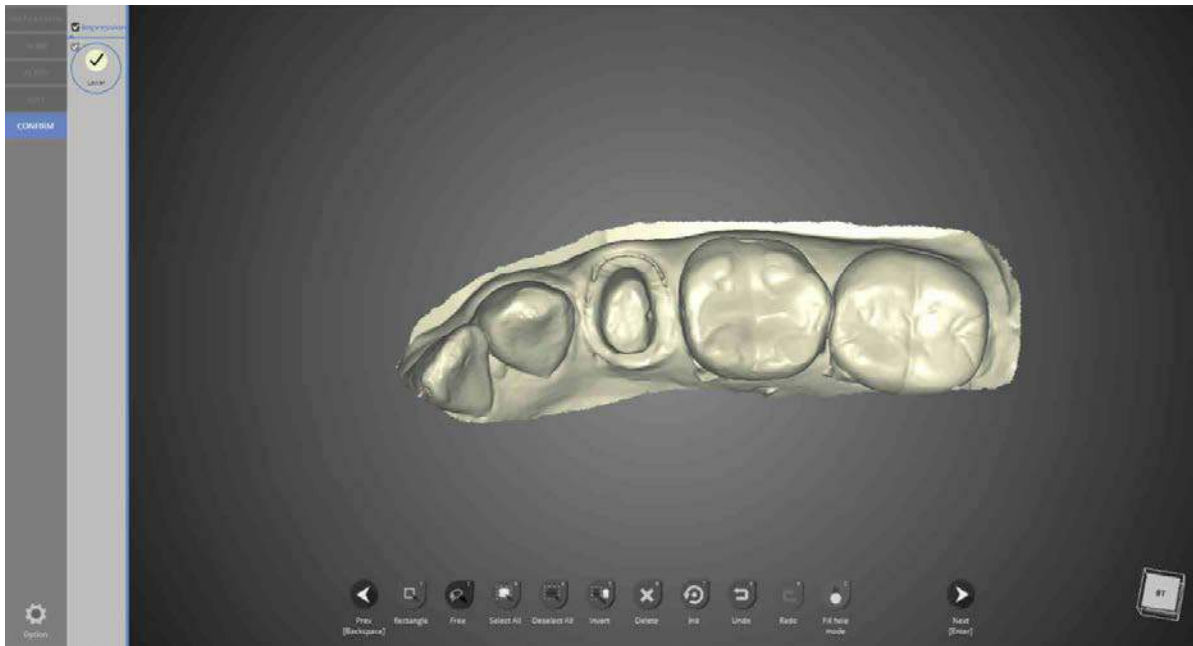


Click [Delete] to delete the data from the selected portion.

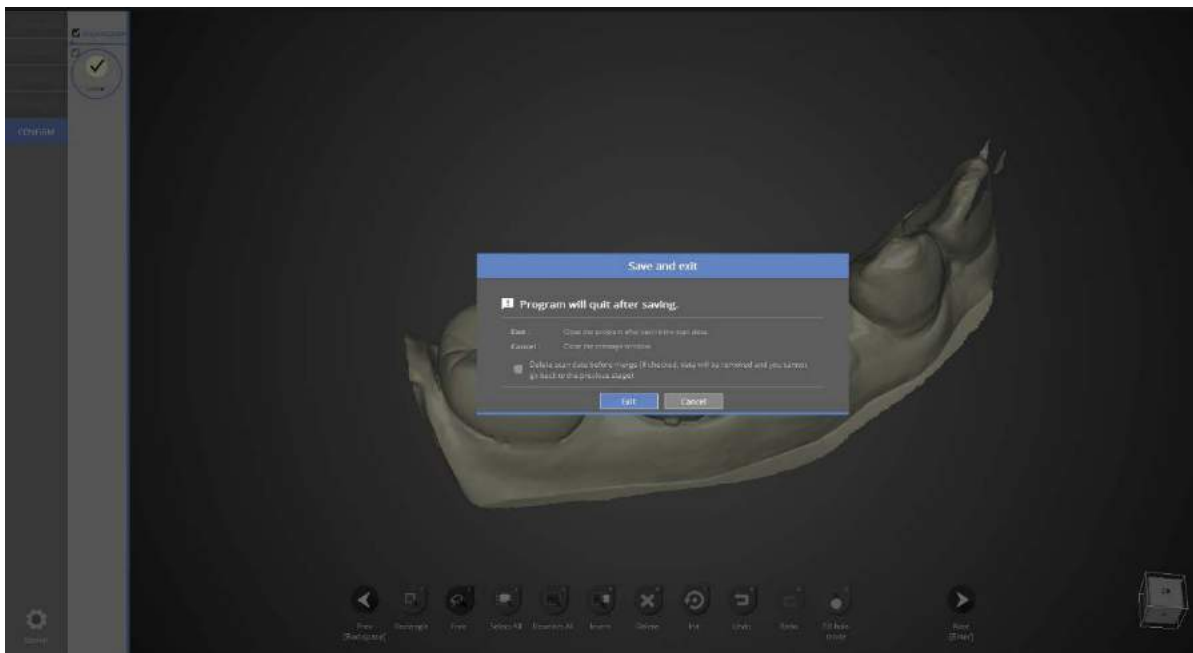
When editing is complete, click [Next] to proceed with the data merging.



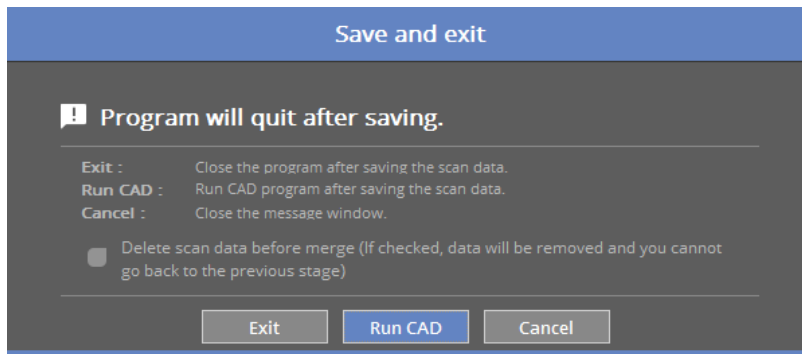
This window is to inform you that data merging will begin. Click [Yes] to start data merging and create an STL file.



Data merging has been completed. Click [Next] to save the scanned data and exit the program.

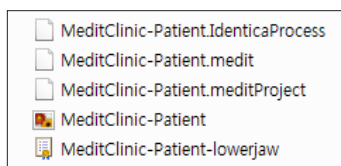


This window is to inform you that the program will close. Click [Exit] to save the data and end the program.



If you are connected to CAD, you will find the message indicated above.

If [Run CAD] is clicked, the scan program ends and CAD program will start automatically.

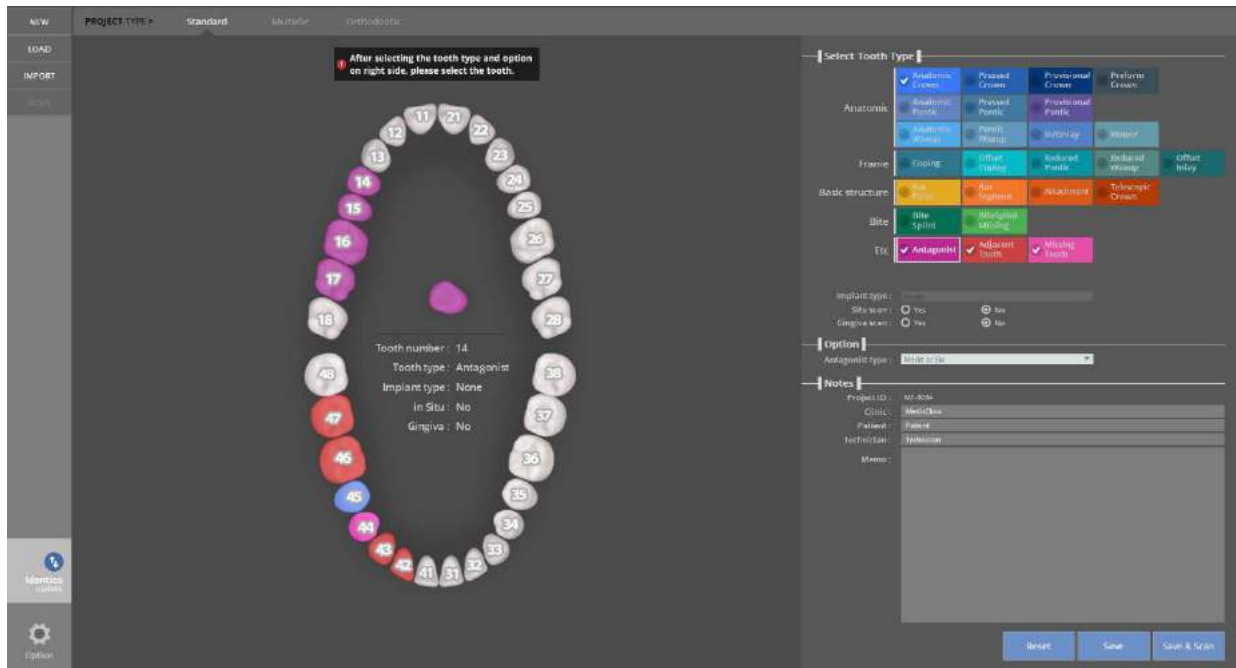


The scan for #44 crown using impression is properly completed.

Verify stored data in the storage folder.

# Double Impression

Complete the order form and tooth setting.



Enter the settings for the model you want to scan.

Refer to [Teeth Settings].

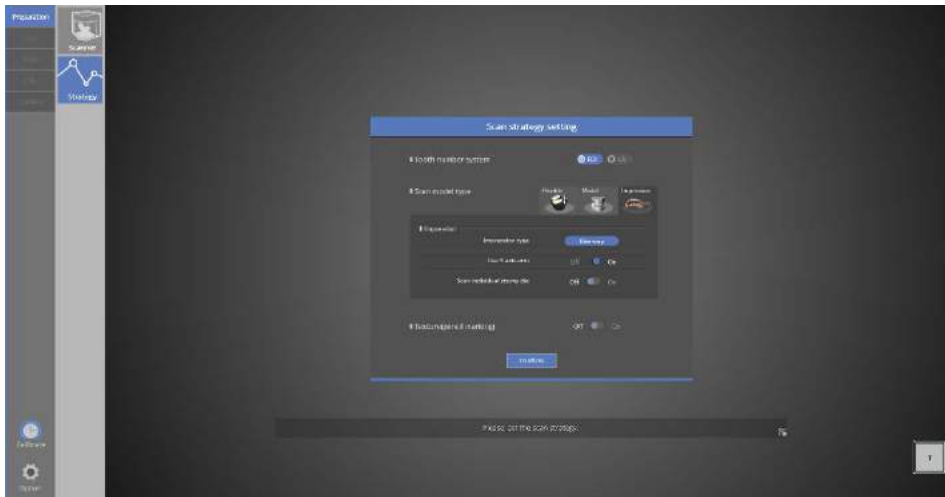
Following is the scan case of #44 crown using bite tray impression.

Implant type - None | Situ scan – No | Gingiva scan – No Antagonist type - Etc.

Click the [Save & Scan] button to start scanning.

The first time you connect your scanner, it will take around 30 seconds to boot. After the first installation, it will take around 3-5 seconds. During the scanner connection process the projector will momentarily blink, and then the connection will be completed.

When the scanner is connected properly, it will automatically advance to the [Scan strategy] and determine the scanning process.



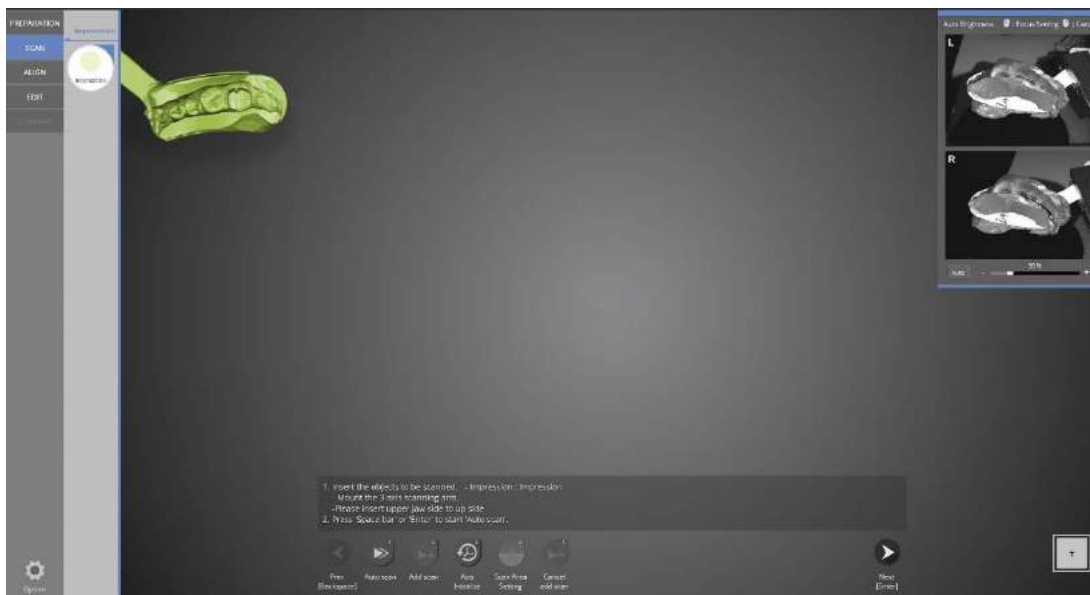
### ☰ Scan strategy setting

[Impression Model] for the type of teeth and [Double Impression Model] for the type of impression model is selected. If your scanner is Identica T500, choose [Use 3 axis arm].



📌 Impression scanning can be conducted easily by using the 3-axis scan

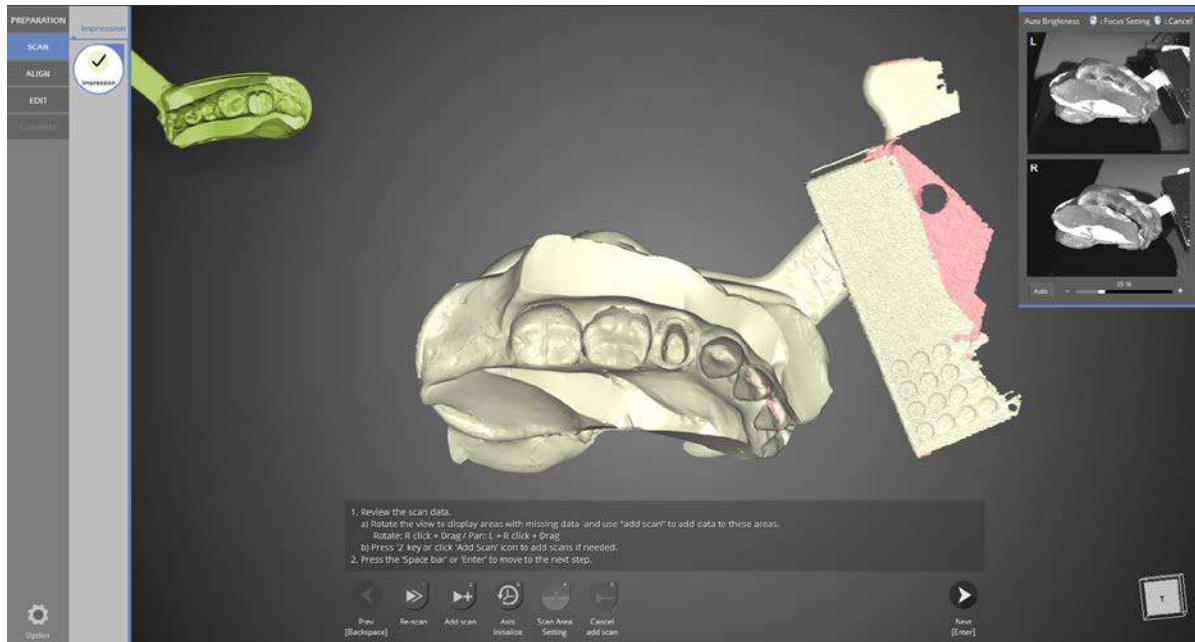
Click [OK] to move to the next step.

📌 For more details see [Single coping scanning].



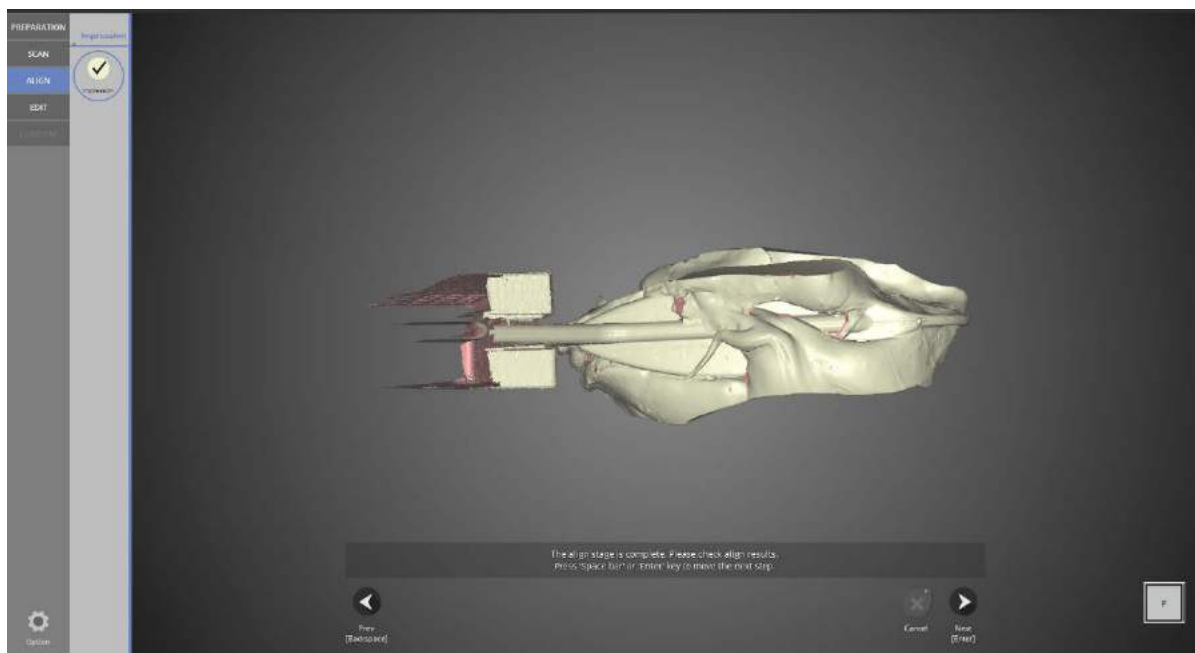
### ☰ SCAN

When this screen appears, insert the 3-axis arm and impression, then select [Auto scan] or press [The Space Bar ] or [Enter ] which are the shortcuts to proceed with the impression bite tray scanning.



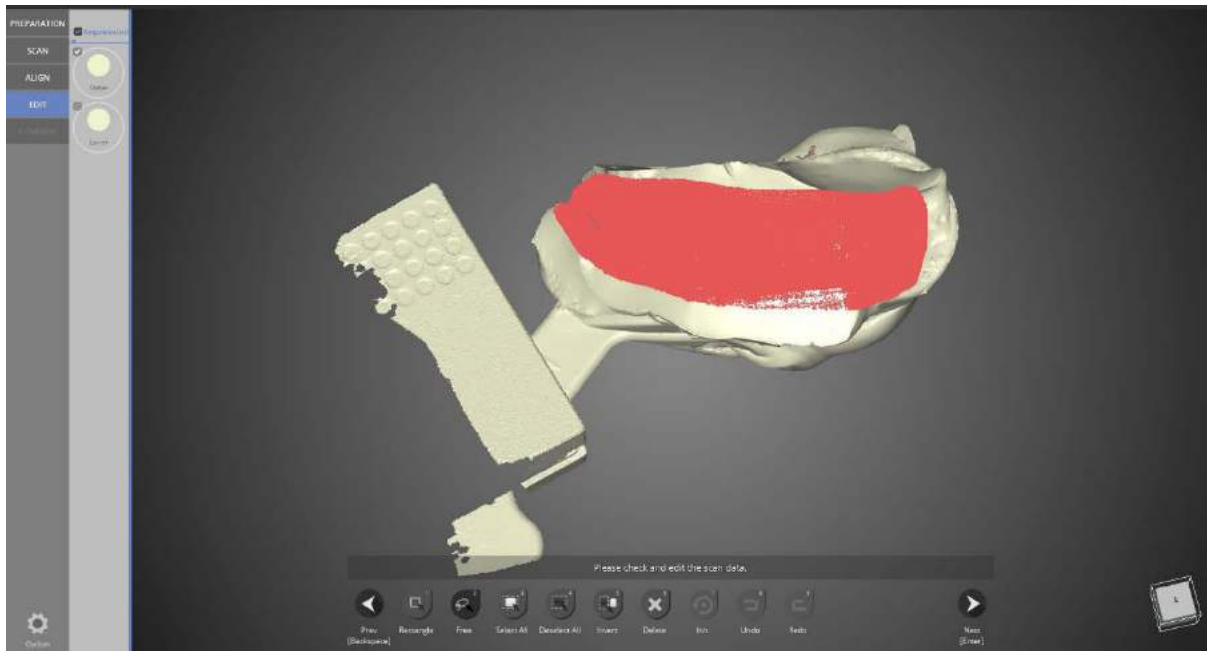
As in the image above, the upper and lower bite tray impression scan is complete.

Click the [Add scan] if additional scans are needed, click [Next] to proceed to the next step.



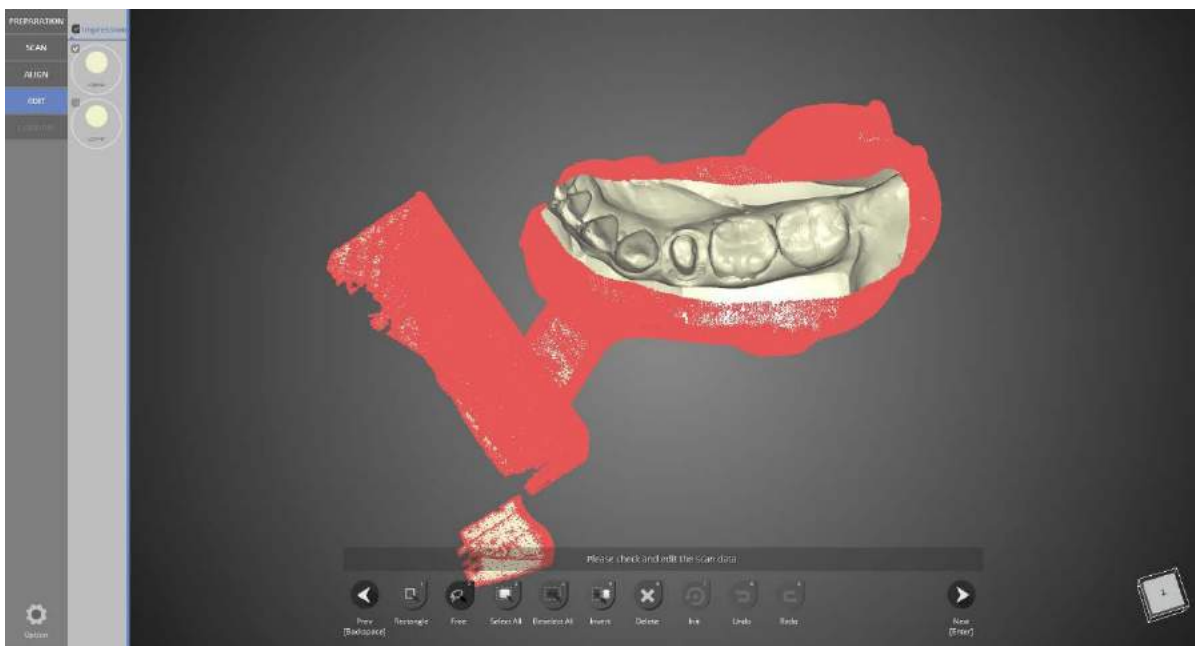
## ALIGN

Click  after checking the data to proceed to the next step.



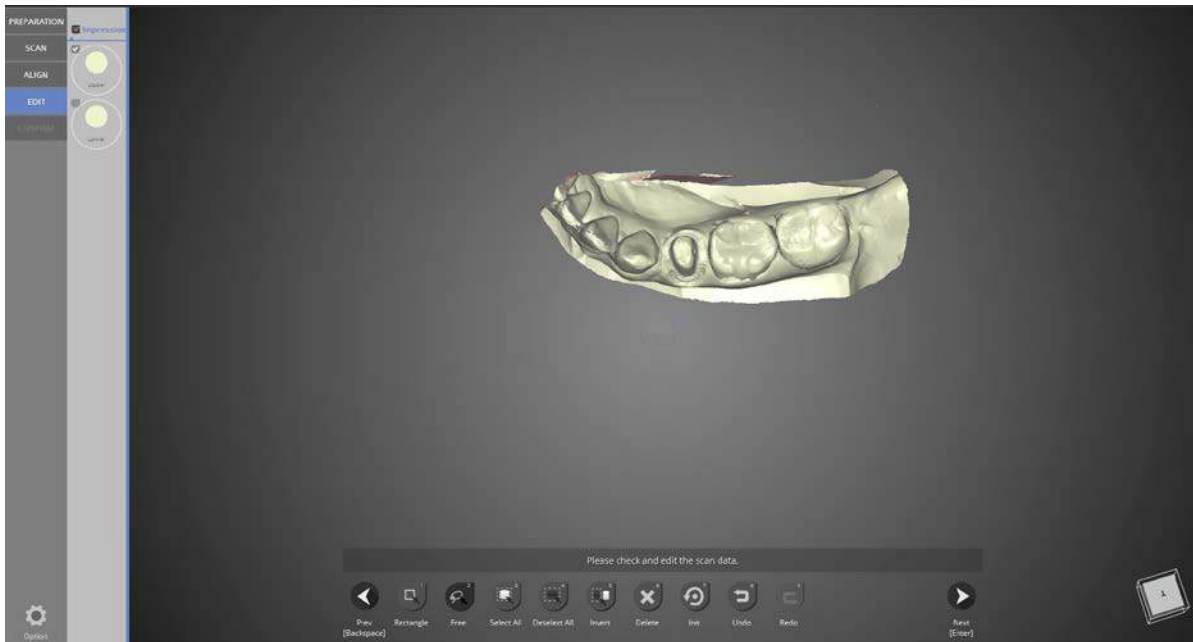
### EDIT

Use the icons at the bottom of the screen to edit the data. Select the [Free] icon and select the portions to be edited.

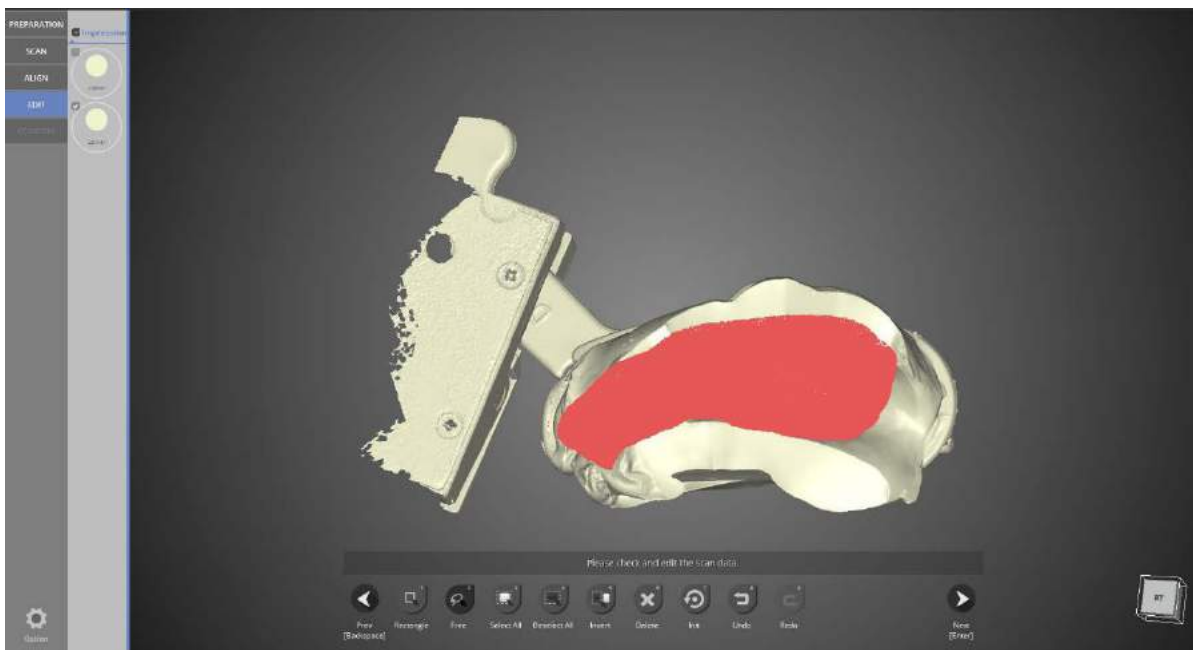


Select the [Invert] icon to invert the selected area.

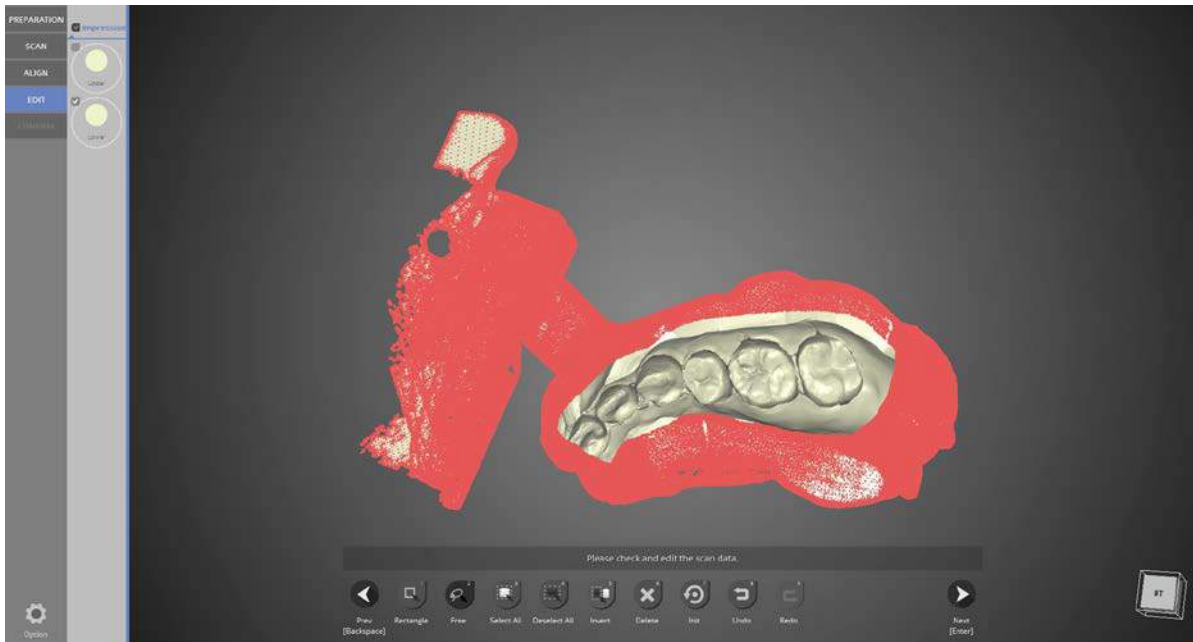




Click the [Delete] icon to delete the selected part.



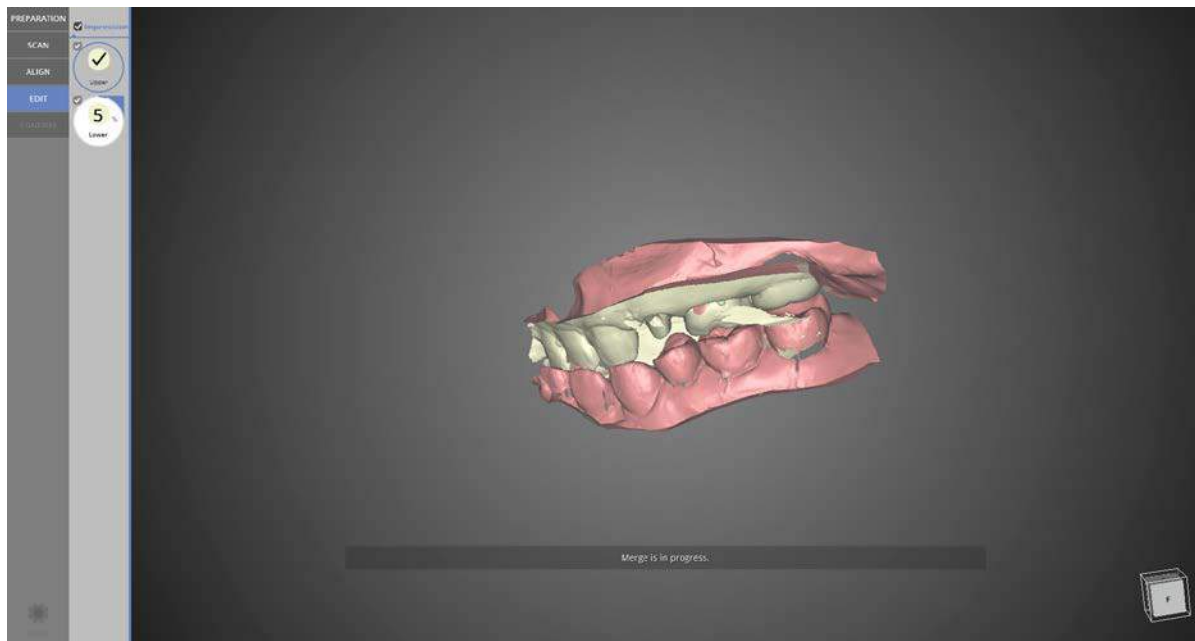
These parts from the lower jaw scan data will be edited using the [Free] button.



Remove all data from the selection using [Invert].



Click the [Delete] icon to delete the selected part.



Check the upper/lower data together after merging.

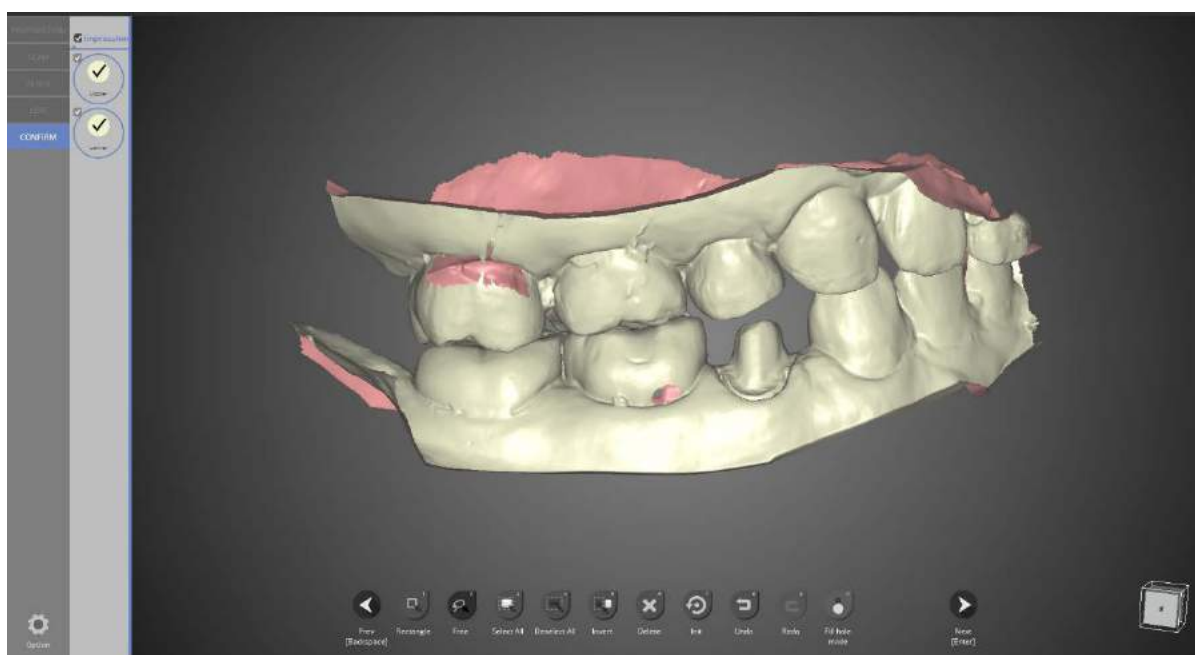
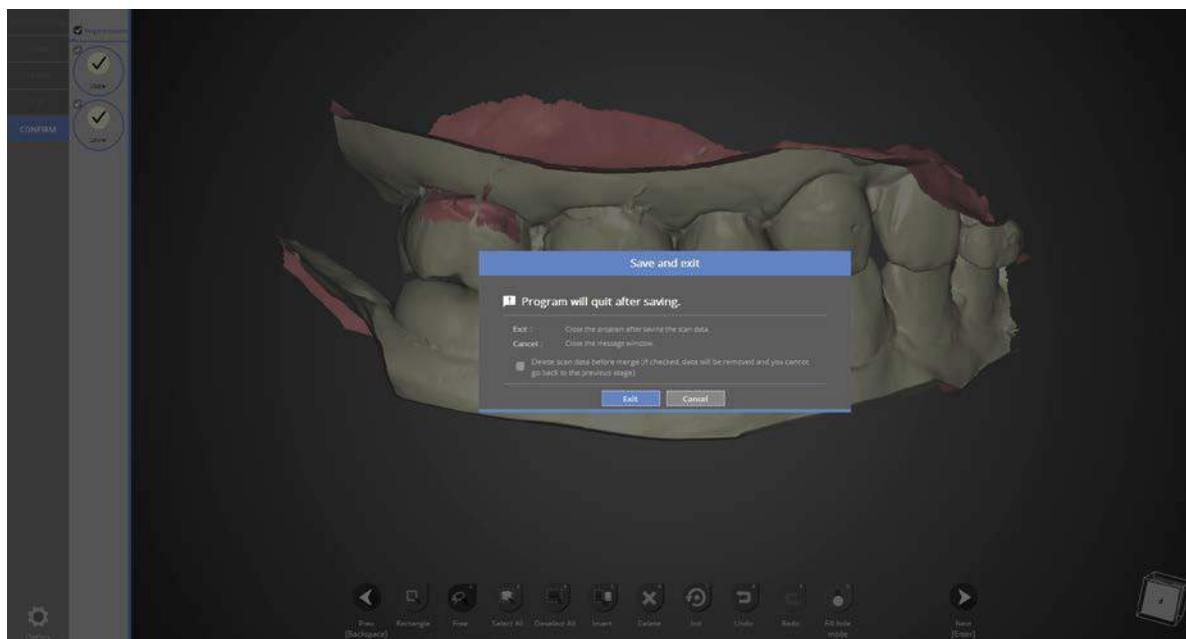
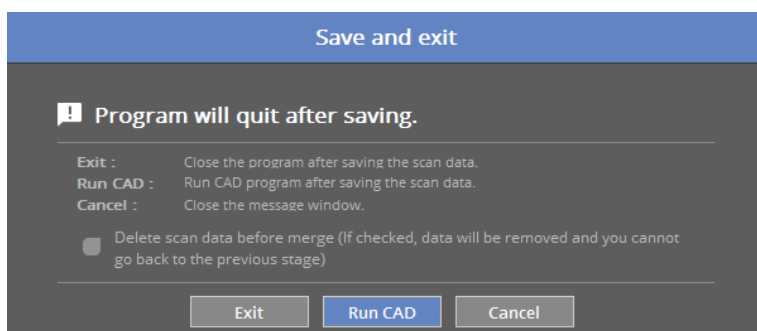


Image of the scan data after merging.



This window is to inform you that the program will close. Click [Exit] to save the data and end the program.



If you are connected with CAD, you will see the message indicated above.

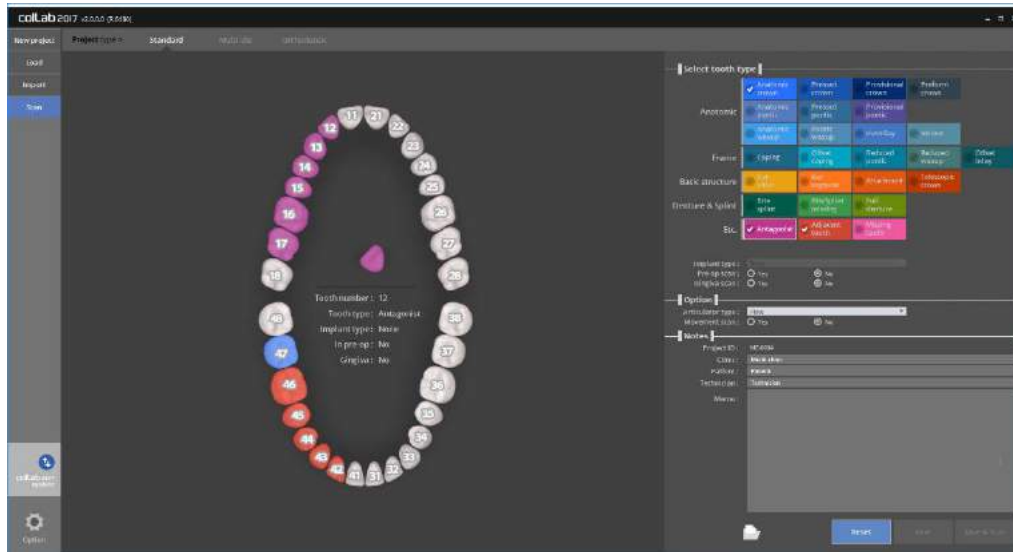
If [Run CAD] is clicked, Scan program ends and CAD program will start automatically.



The scanning for crown #44 using the bite impression is complete. The data can be checked in the settings folder.

## Double sided impression and plaster stump

### Teeth setting



Please input the settings for the model you wish to scan. Please refer to [Teeth setting](#).

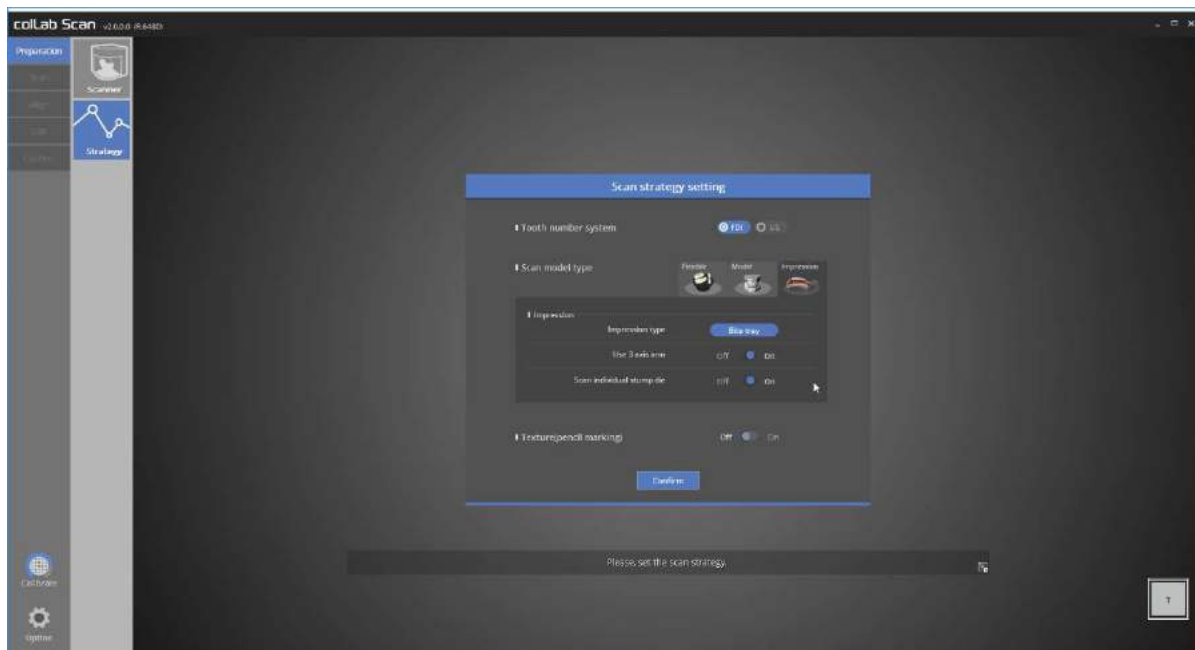
We will be showing the case of No. 47 crown case using the bite tray impression.

\* Implant type\_None | Pre-op scan\_No | gingiva scan\_No

- Occlusion type\_Plate

- Click on the “Save & Scan” button to start scanning.

When the scanner is successfully connected, it will automatically proceed to “Scan strategy setting” to set the scan strategy.



### Preparation\_Scan strategy

[Impression] was chosen for scan strategy, double sided impression scan was selected.

[use 3 axis arm], and [Scan individual stump die] scan option was selected.

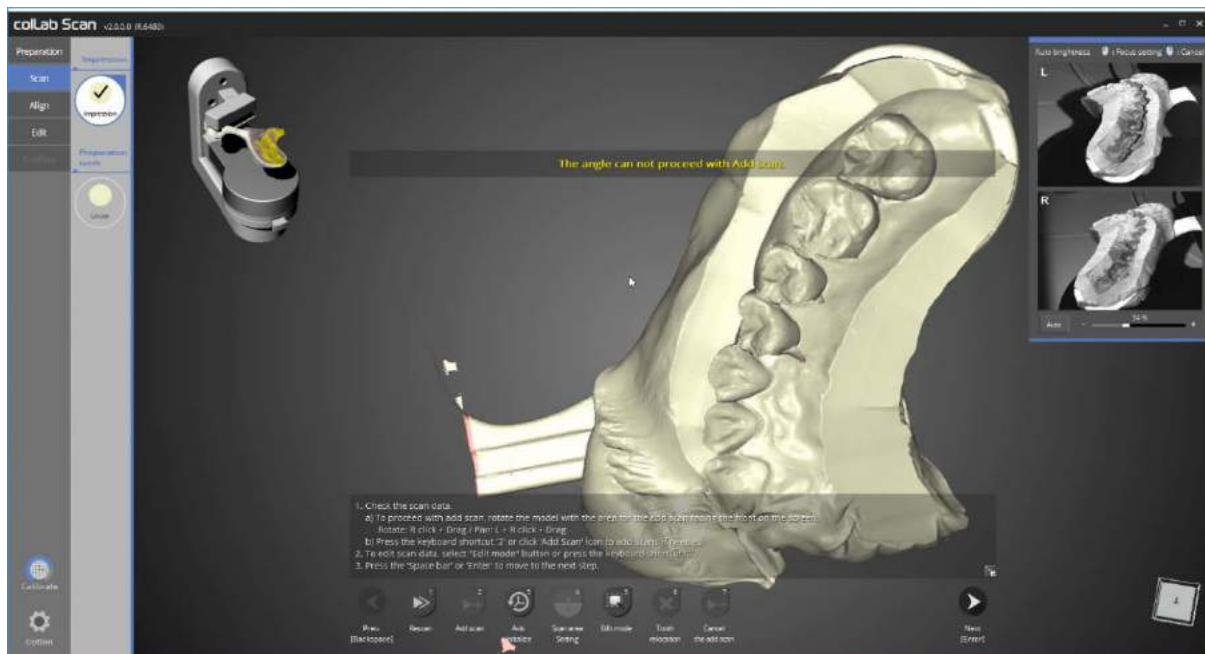
Click [Confirm] to move on to the next stage, scan.

📌 Please refer to “Single copying scan” step for detail.



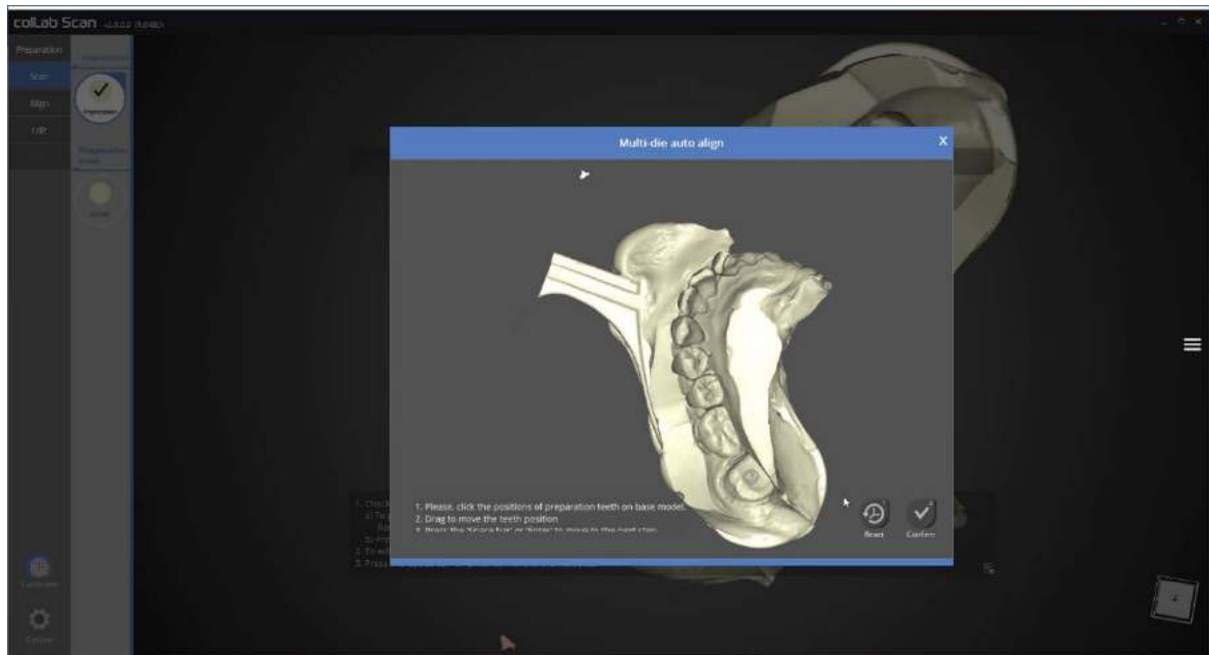
### Scan

When the instruction appears as above picture, follow the instruction and refer to the picture on the upper left corner to place 3 axis arm and the impression in the scanner and click on [Auto scan] or press the hotkey [space bar] or [enter] to start scanning of bite tray impression.



The scan of bite tray impression of upper/lower jaw is complete as shown in the picture above.

Proceed with scanning if additional scanning is required. Once the scanning is finished, click next to proceed to the next stage.

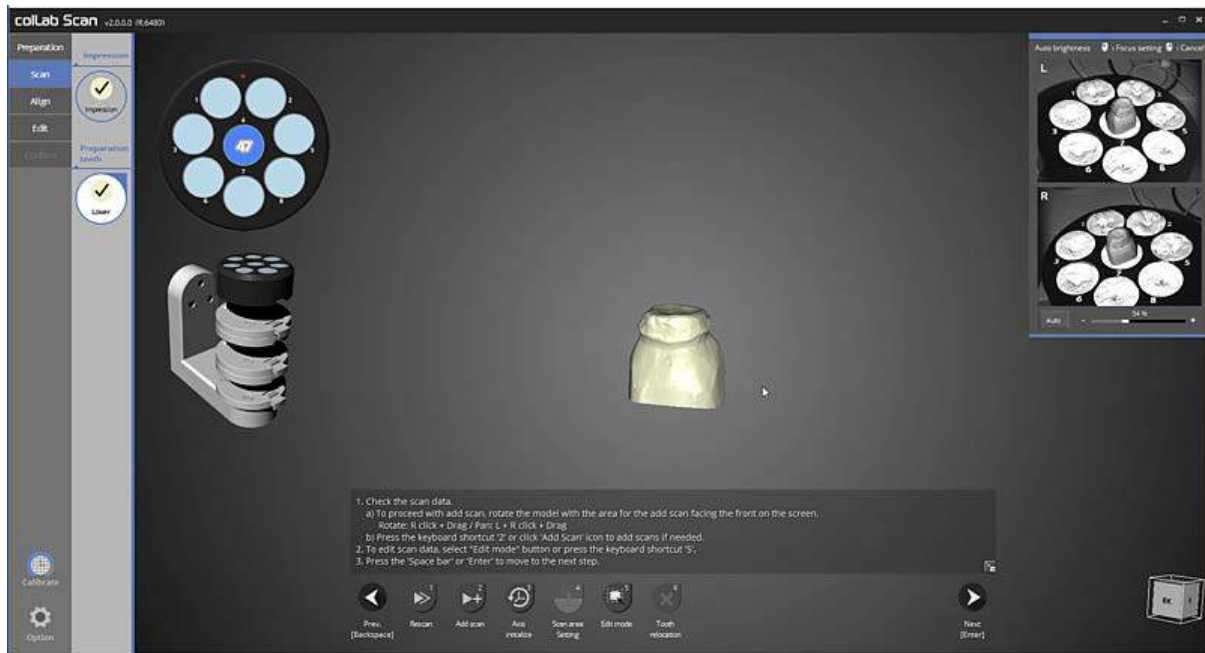


Please select the position of preparation tooth on the impression



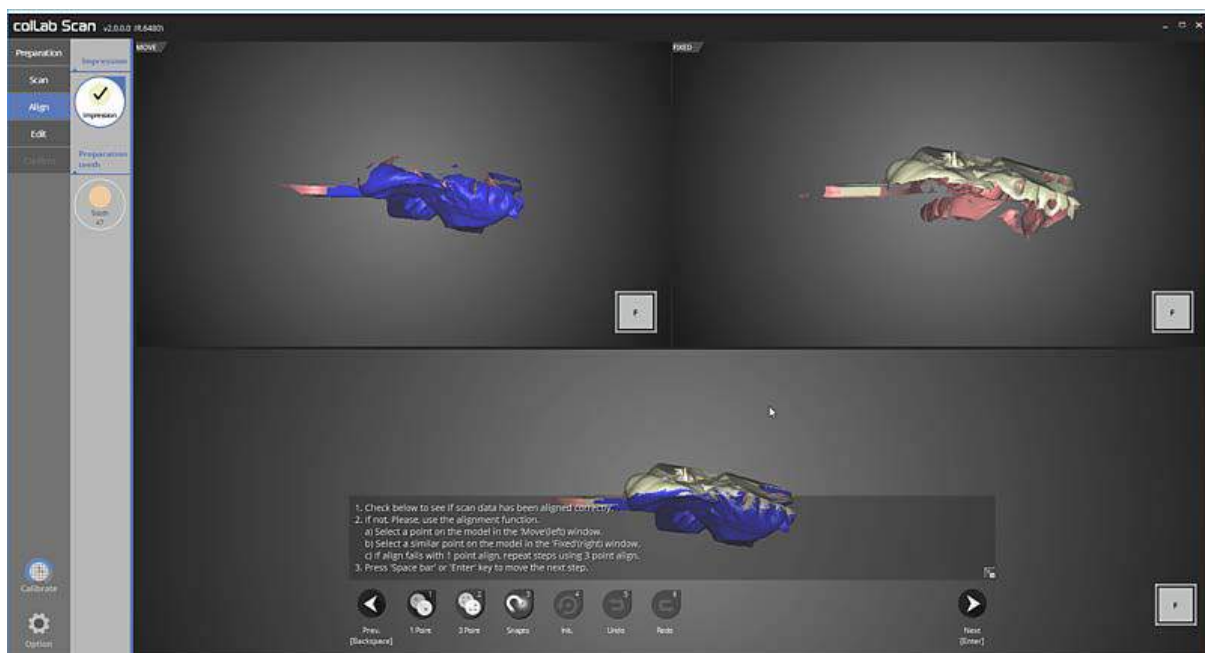
Follow the instruction provided in the upper left corner picture, fasten the preparation tooth on the multi-die, and start scanning. (Multi-die must be scanned together with 2 half block jigs.)





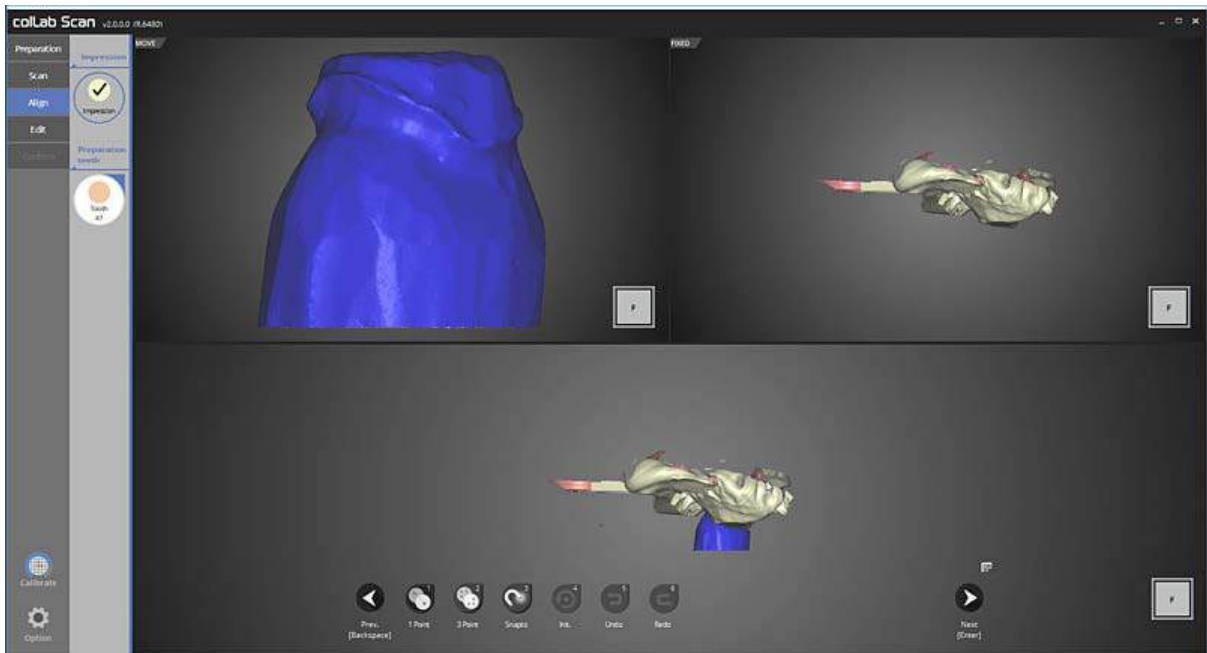
Scan of No. 47 preparation tooth is complete

Proceed with scanning if additional scanning is required, then move on to the next step.

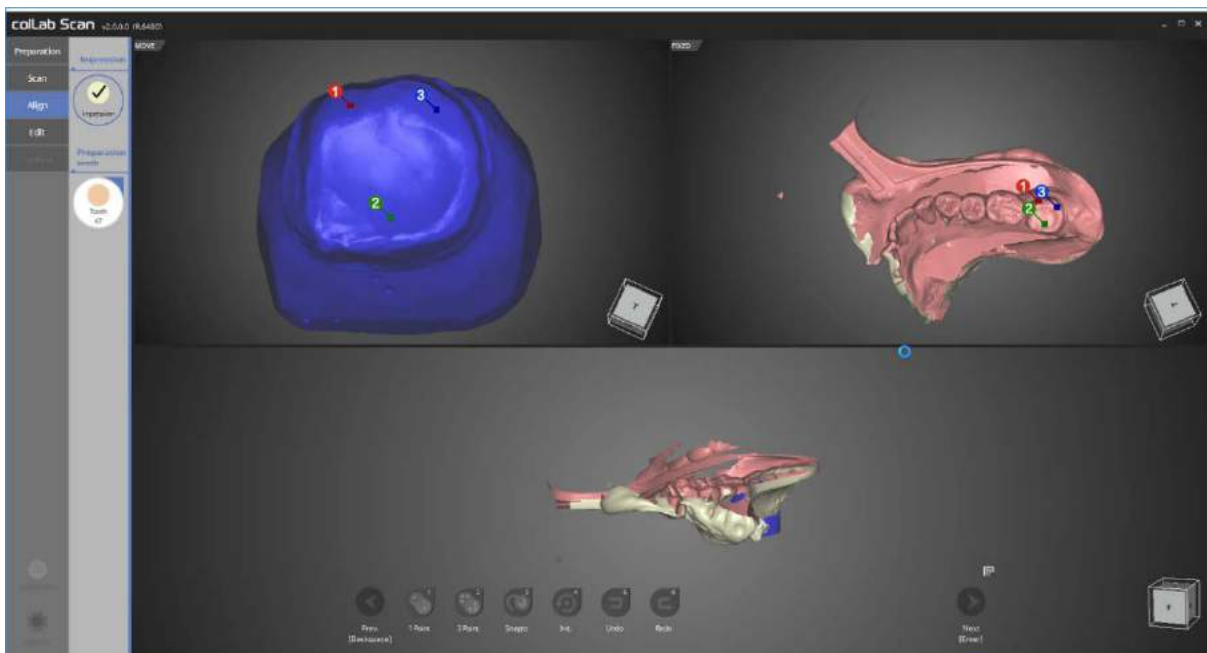


This is bite tray impression alignment stage.

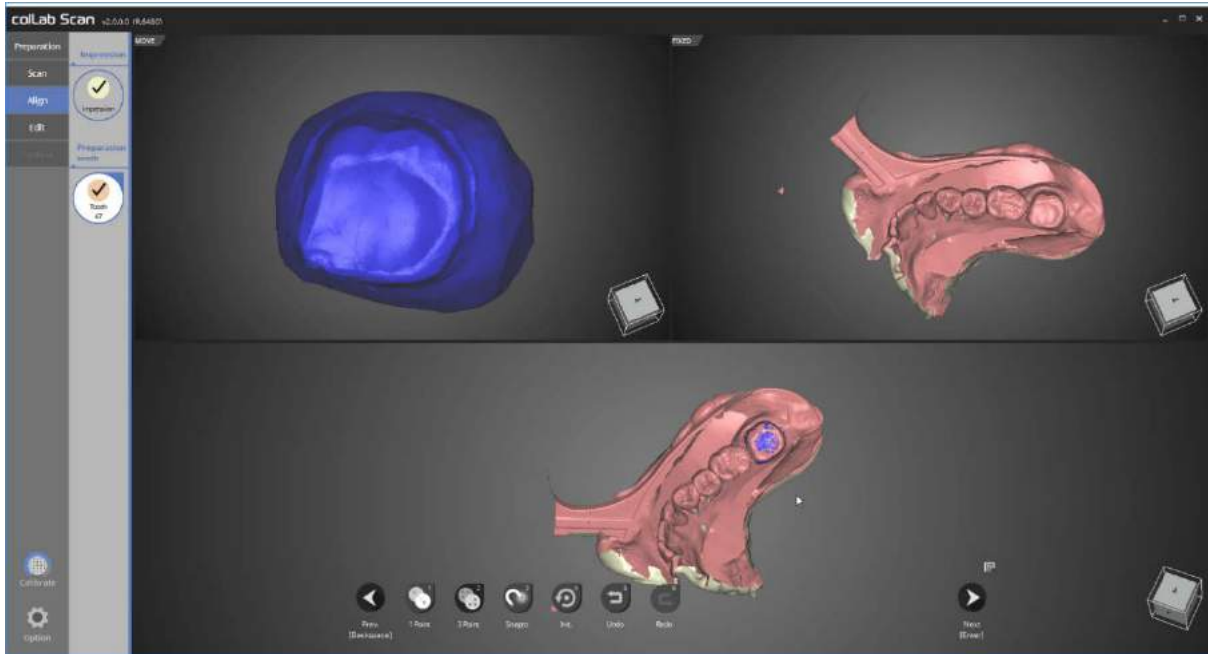
Please check the status of the auto alignment for the upper and lower jaw and proceed to the next preparation tooth alignment step.



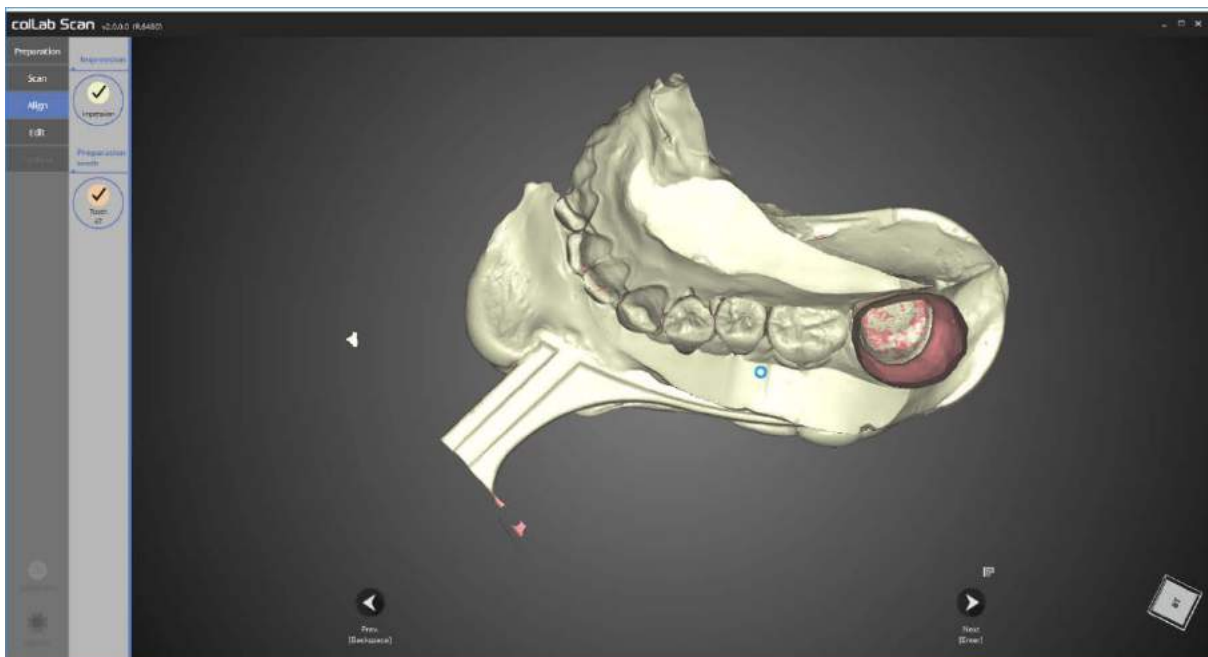
In this step, we will align No. 47 preparation tooth with the impression.



Place 3 points on both tooth and impression to align them.



Alignment of the preparation tooth and the impression is completed successfully.



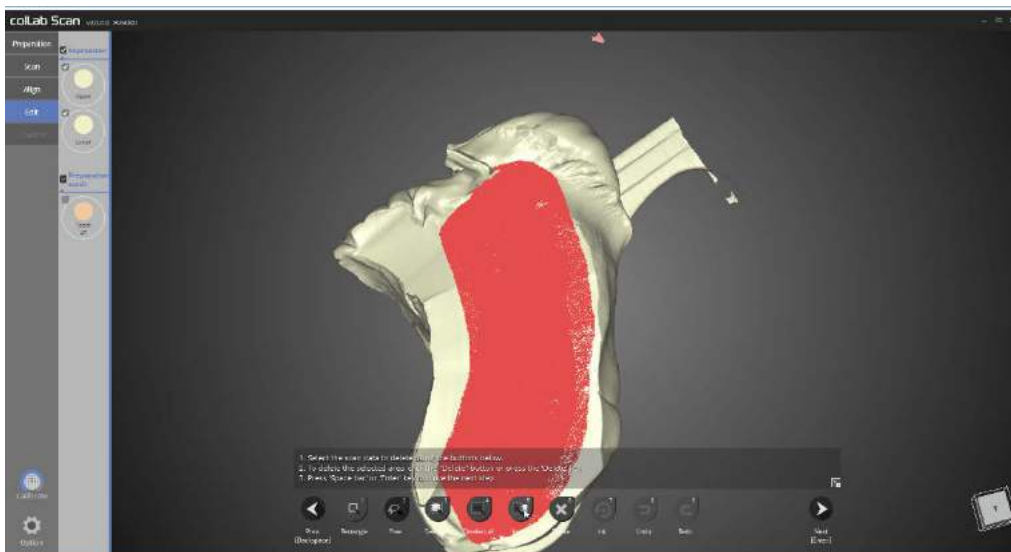
Check the final alignment result.



Now it's time to edit.

Use the icons on the bottom of the screen to edit the scan data.

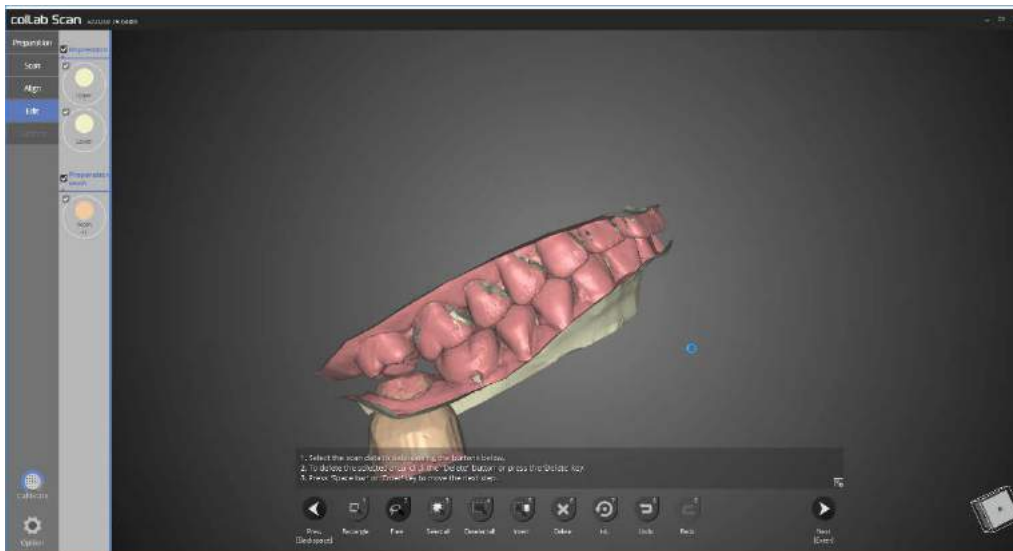
We used the [Free] selection function to select the required parts from the upper jaw scan data.



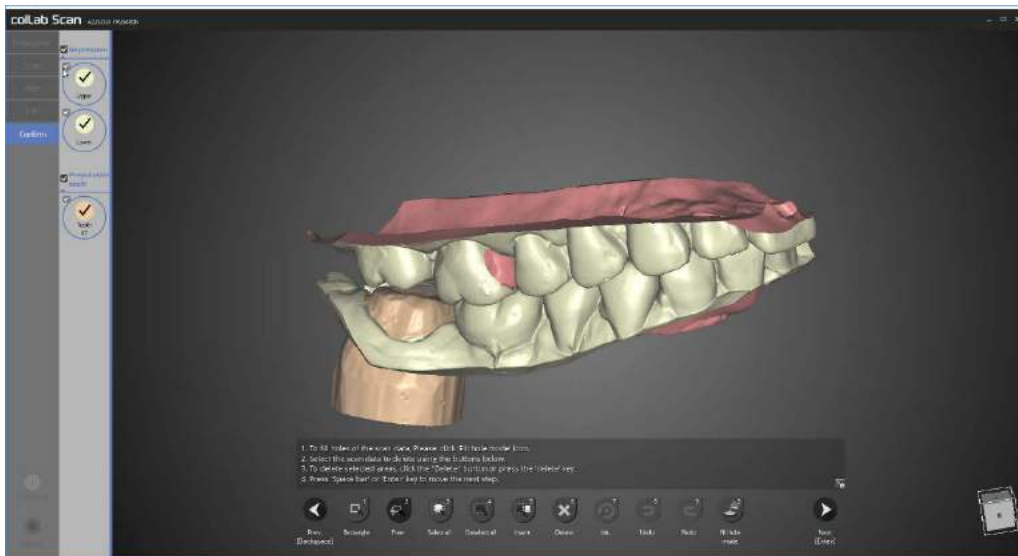
We also used the [Free] selection function to select the required parts from the lower jaw scan data.



We clicked on the [invert] selected area button to select the remaining area.



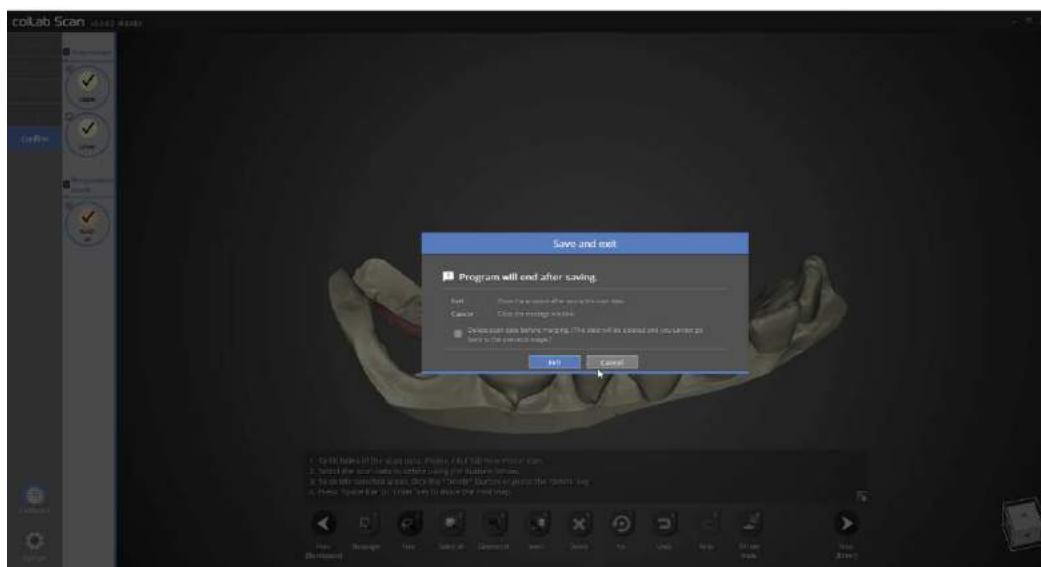
If you click the [delete] function, the area selected will be deleted. Finally, please check the upper and lower jaw, and preparation teeth data together.



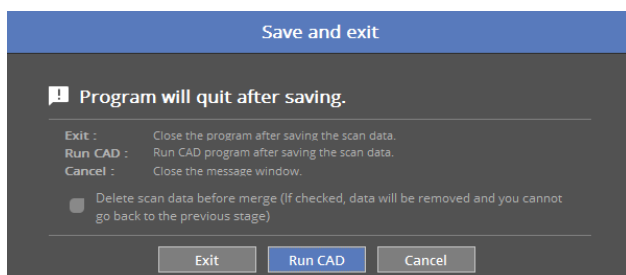
This is the result of merging.



This shows the preparation teeth and impression properly merged.

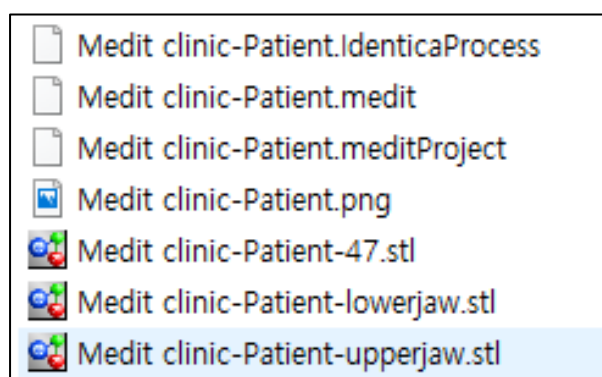


This is a popup window to notify the program exit.  
 Clicking [Exit] will save the scan data and exit the program.



If your device is connected to CAD, you will see the above popup message.

By clicking the [Run CAD], the scan program will be closed and connect automatically to CAD program which will open.

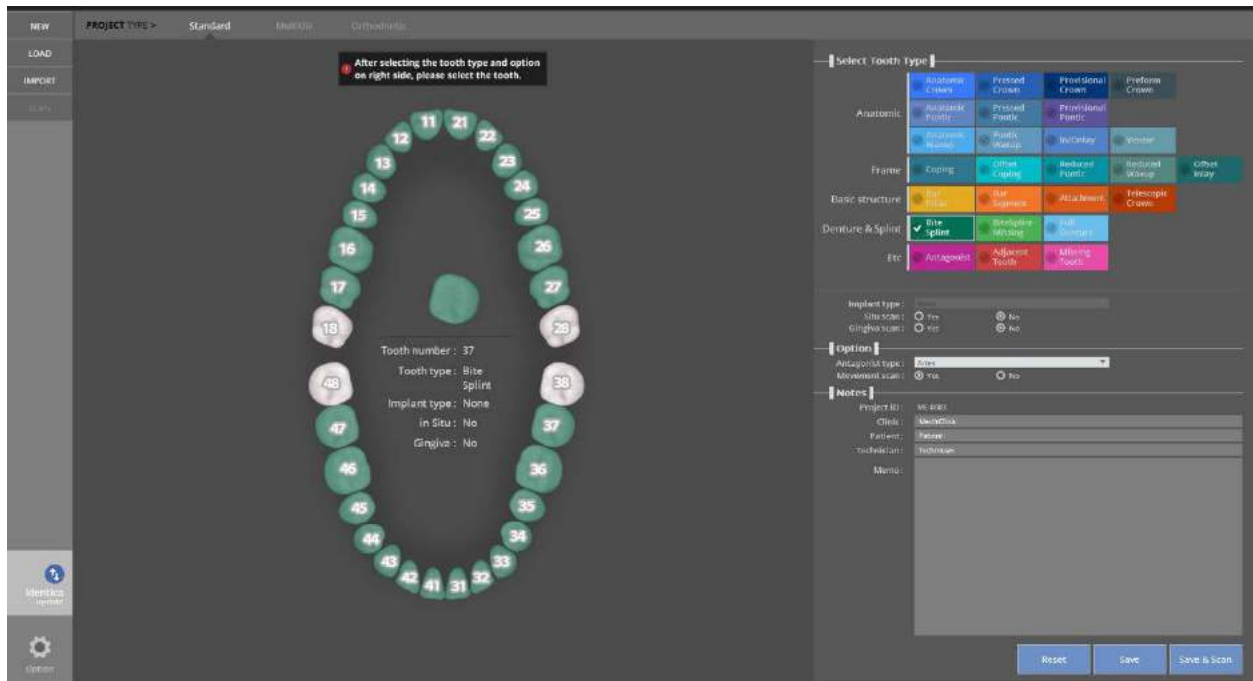


The scan of No.47 crown using bite impression and plaster model is now complete. The data can be reviewed in the settings folder.

# Movement marker

Complete the order form and tooth setting.

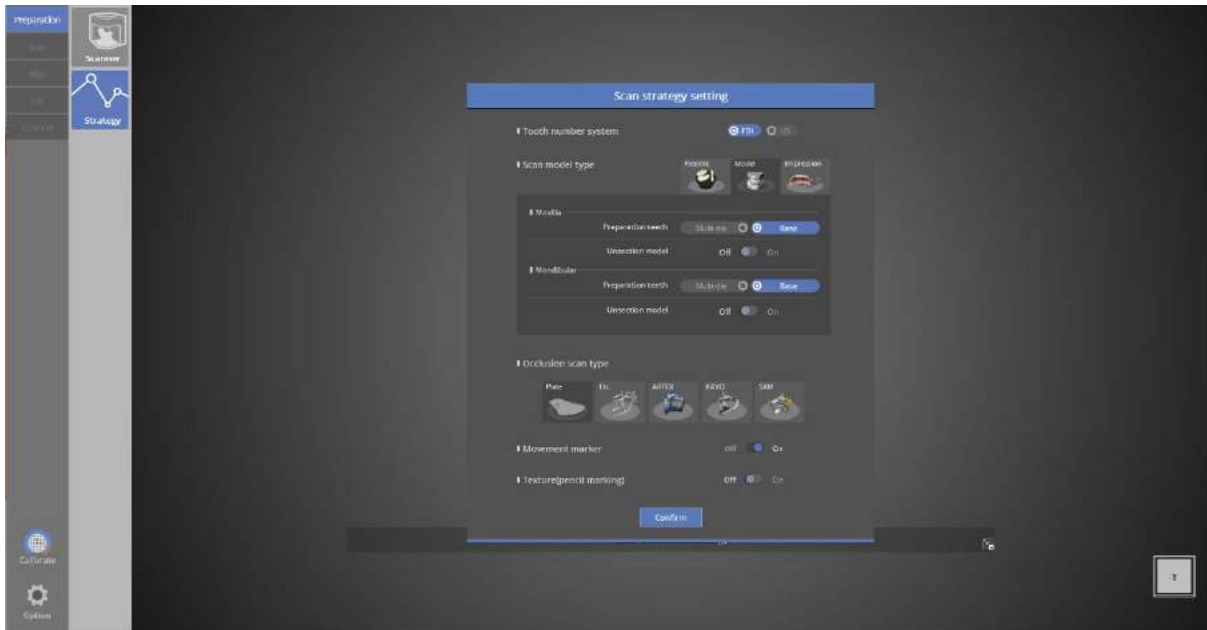
-  Start colLab program.



Set the settings for the model to scan.

Select [Movement Scan] below the articulator type option to activate the movement scan.



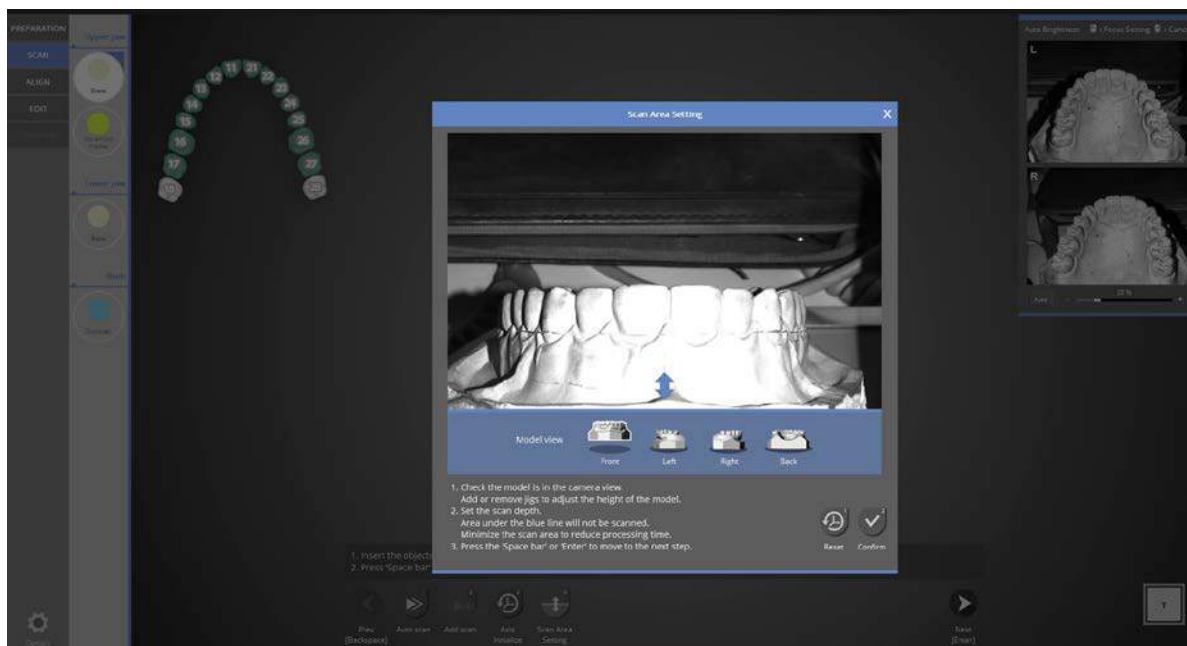


You can also select [Movement Marker] in the scan strategy.



Upper model scan step

Place the upper model in the scanner and click [Next] to proceed with the automatic scan.



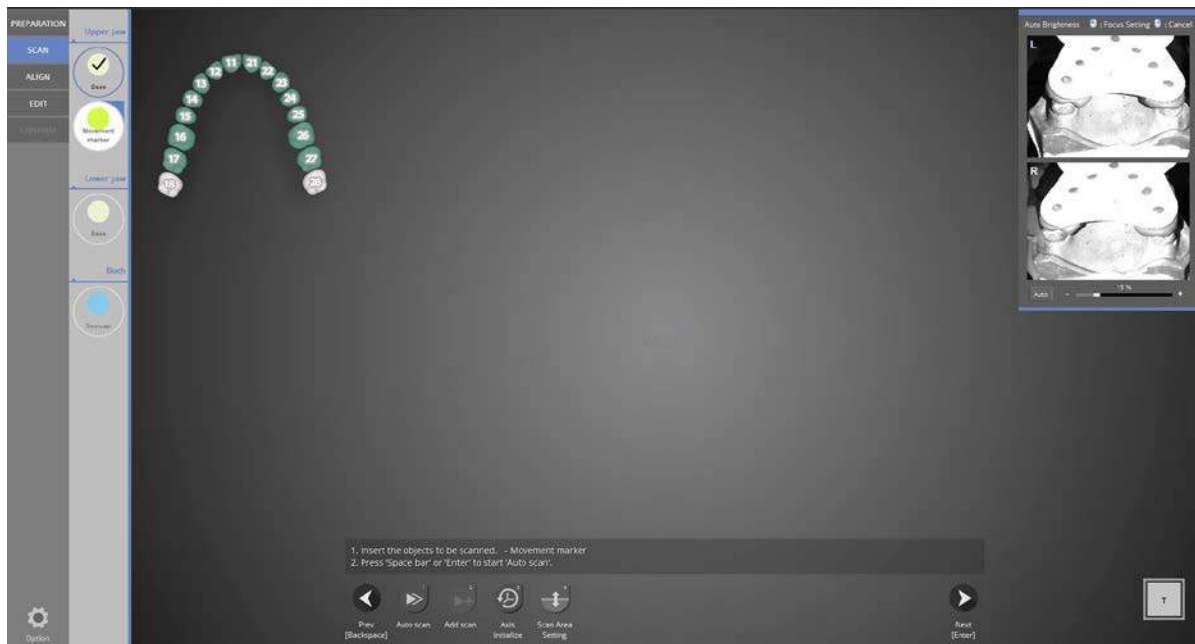
Check if the teeth model appears on the screen.

You can check the scan area from every direction by clicking the direction icon. Adjust the position of the block jig to position the model within the camera view. Adjust scan area by dragging the blue arrow and click the [Confirm] button.



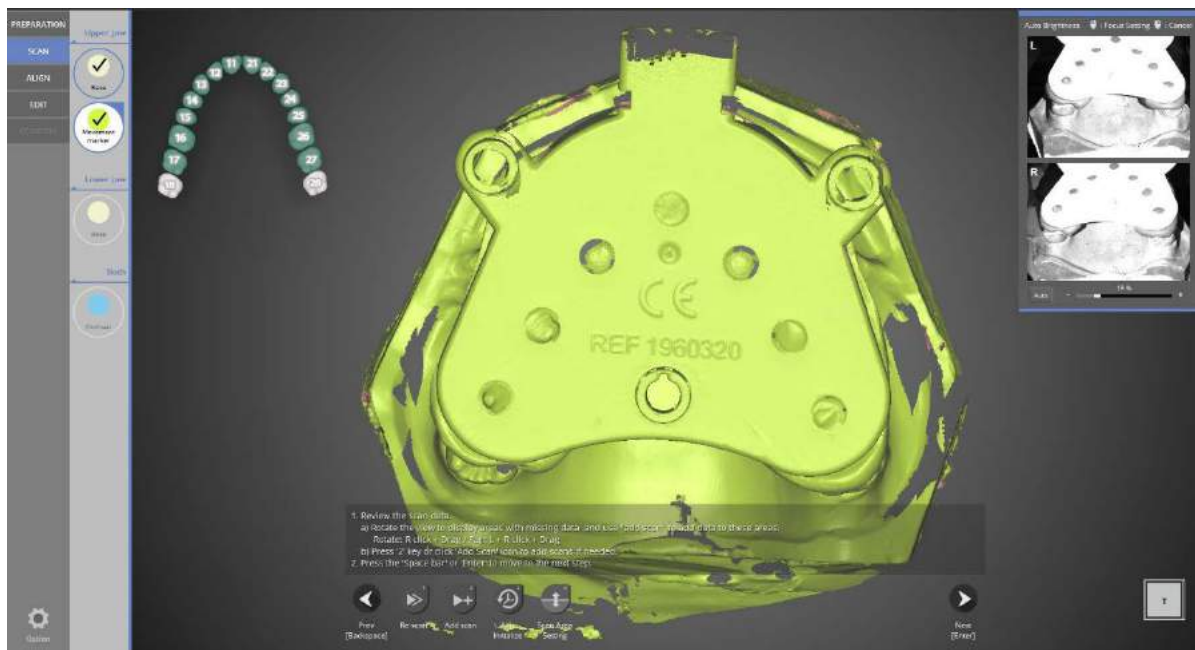
Scan data is created from the automatic scan.

Check the scan data. Proceed with add scan if needed and click the [Next] button on the bottom.



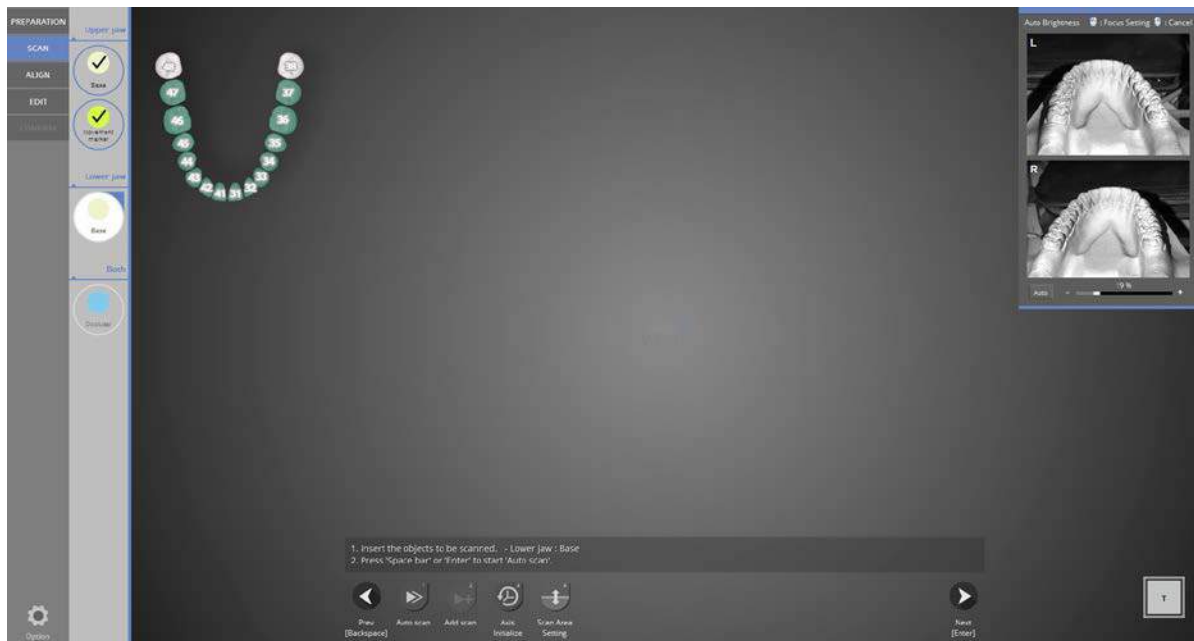
### Movement marker scan step

Place the movement marker above the upper base model and place it on the scanner. Select [Next] to proceed with auto scanning.



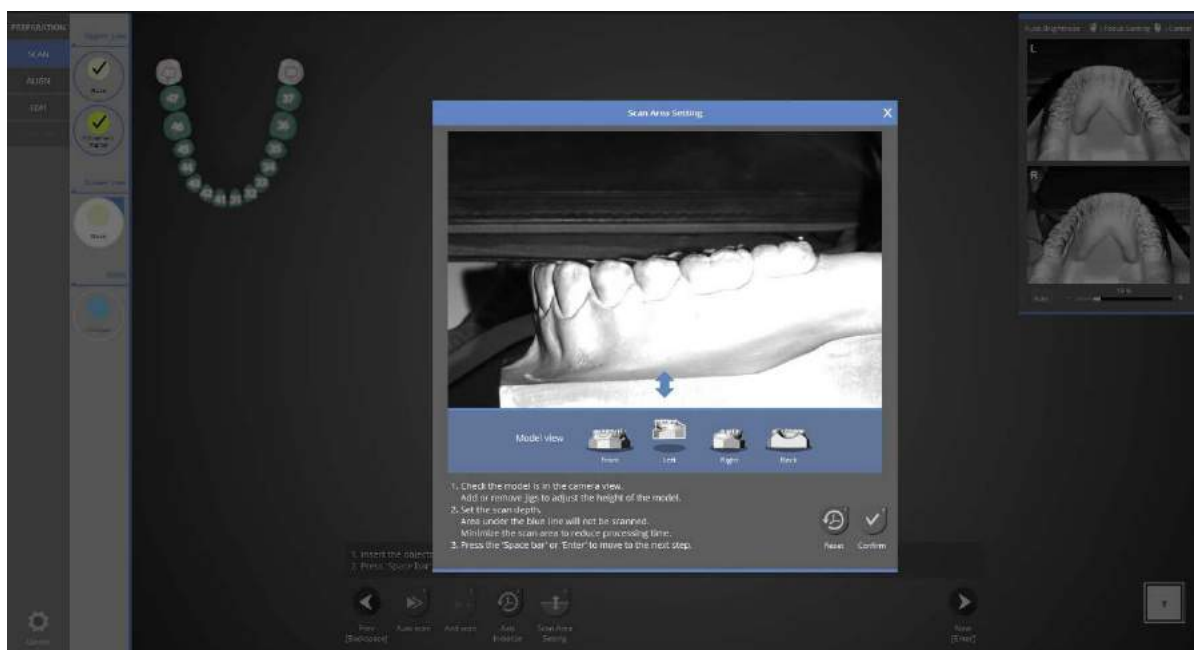
Scan data is created from the automatic scan.

Check scan data. Proceed with add scan if needed and click the [Next] button on the bottom.



### Lower base scanning step

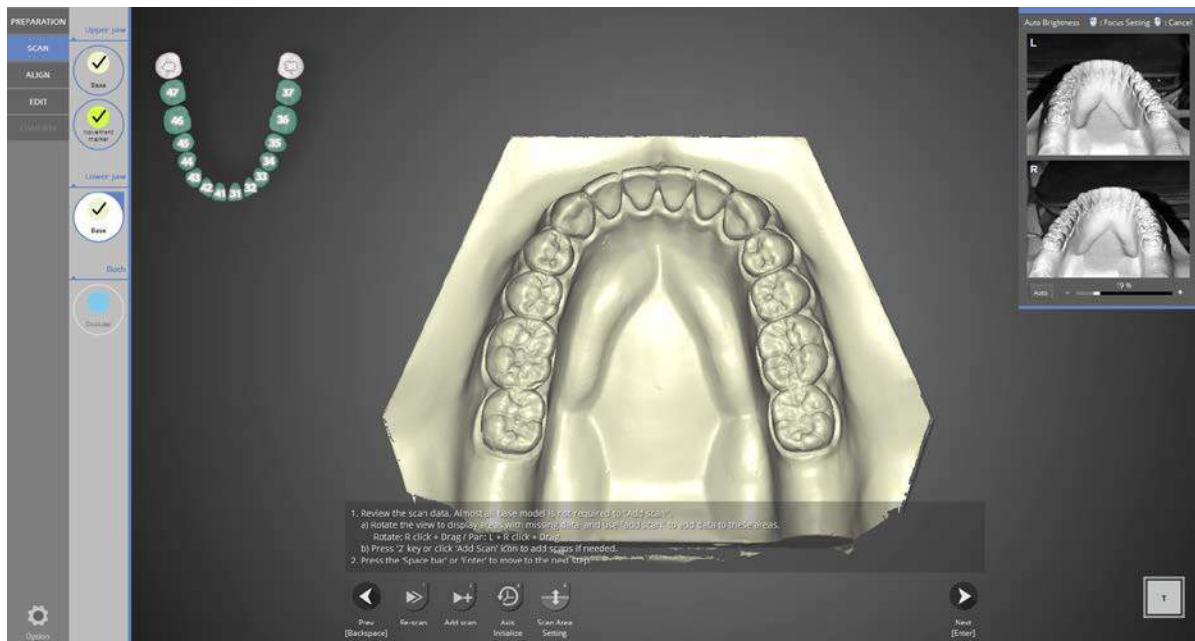
Place the lower base model on the scanner and click [Next] to proceed with auto scanning.



Check if the teeth model appeared on the screen.

You can check the scan area from every direction by clicking the direction icon. Adjust the position of the block jig to position model within camera view.

Adjust scan depth by dragging the blue arrow to the desired height and click the [Confirm] button.

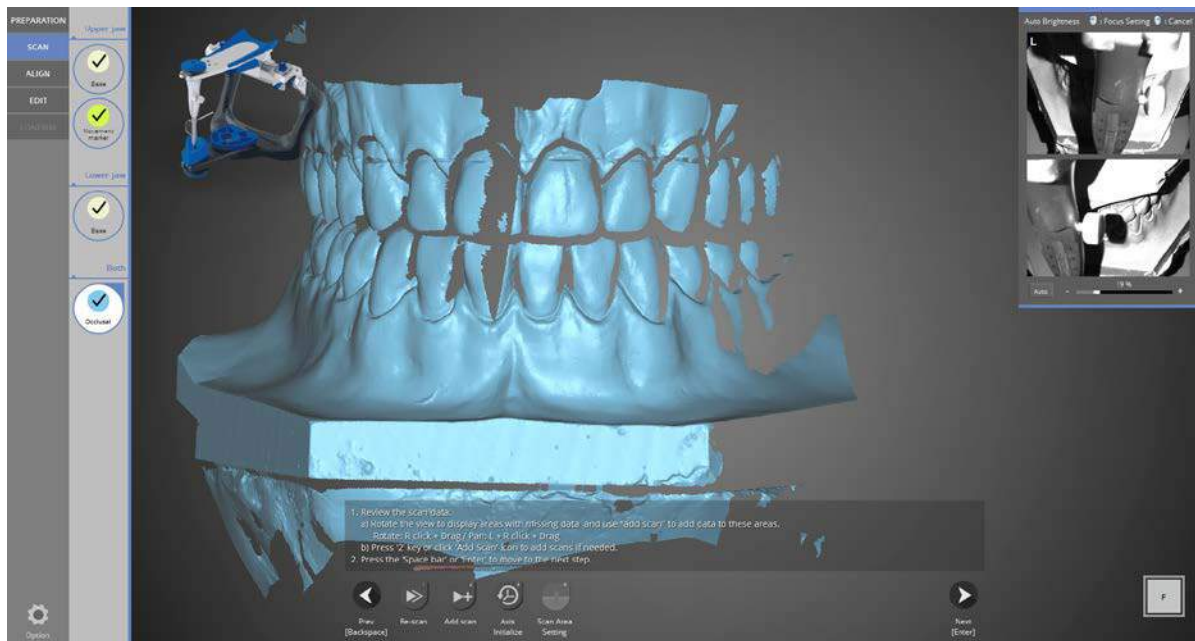


Scan data is created from the automatic scan.

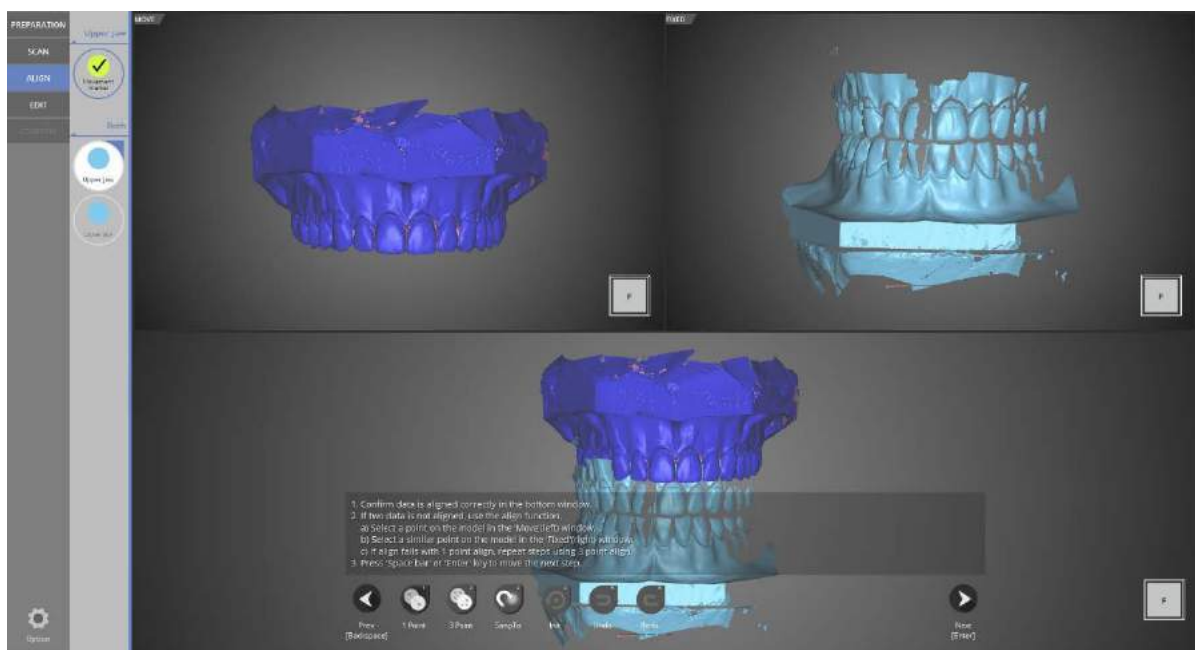
Check scan data. Proceed with add scan if needed and click the [Next] button on the bottom.



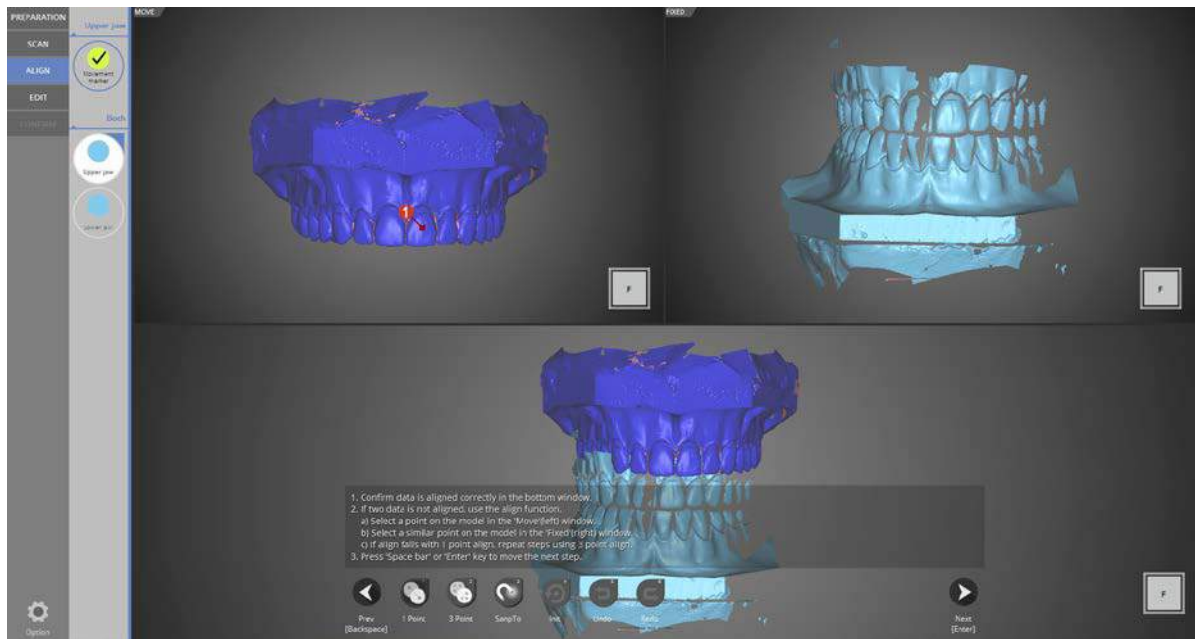
Put the ARTEX articulator on the articulator plate and place it on the scanner after removing all half block jigs.



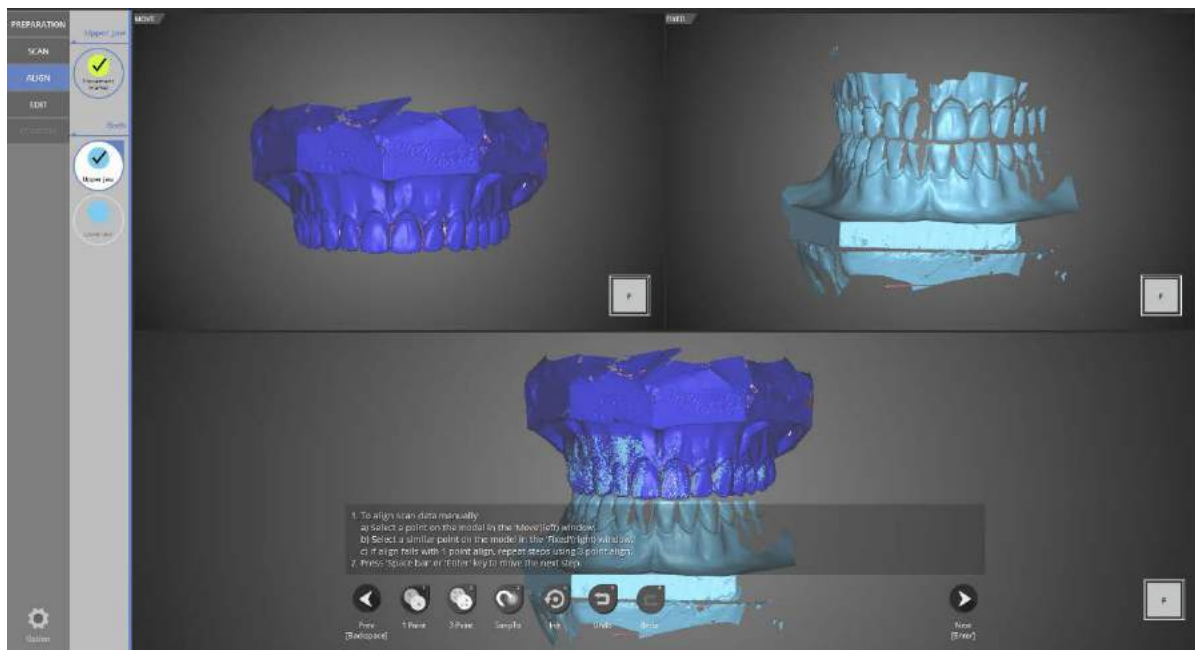
Scanning is complete.



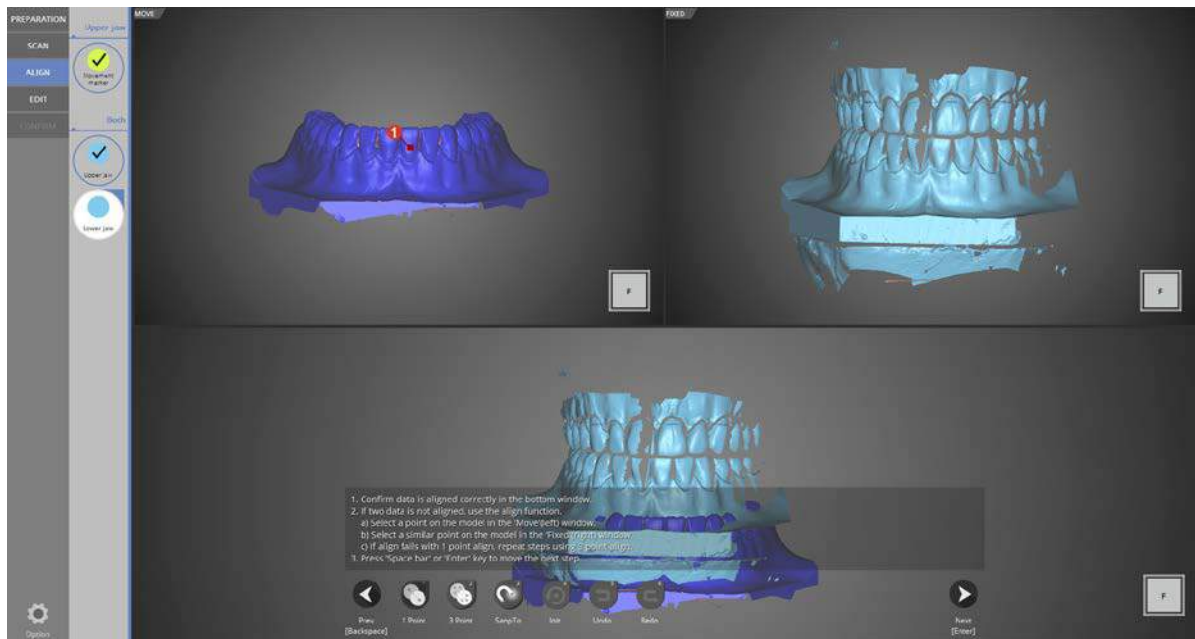
Occlusal relationship alignment stage.



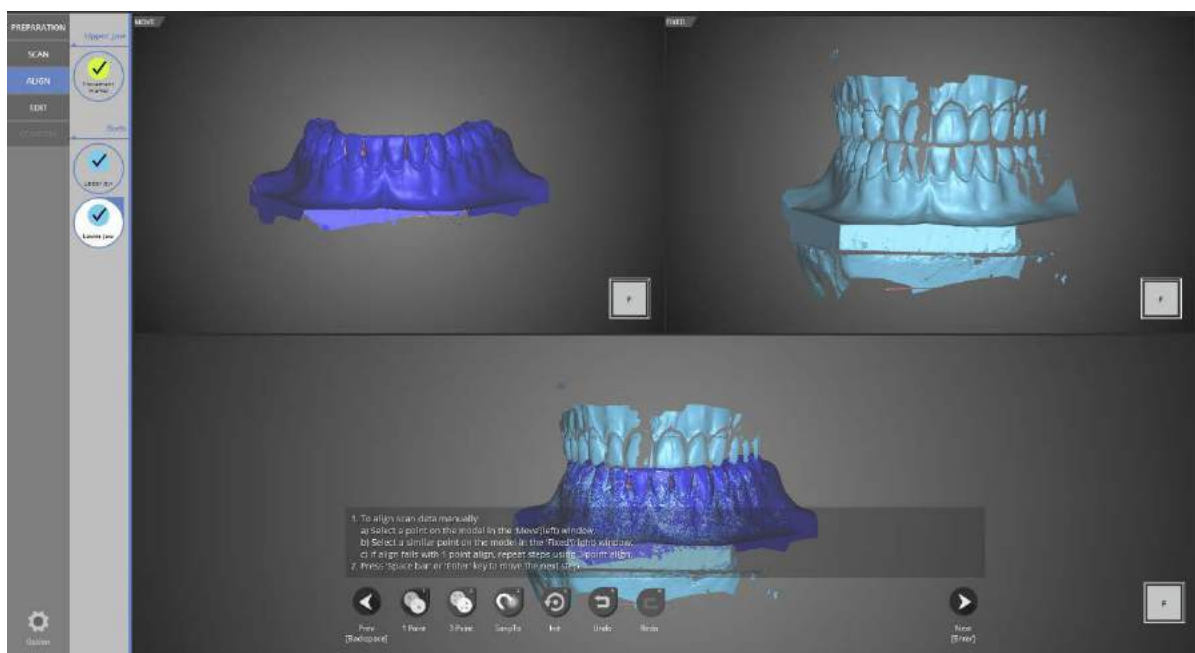
Align the scan data using the [1 point] alignment function. Click a similar spot in the upper left and upper right.



Upper jaw occlusal relationship alignment is complete.

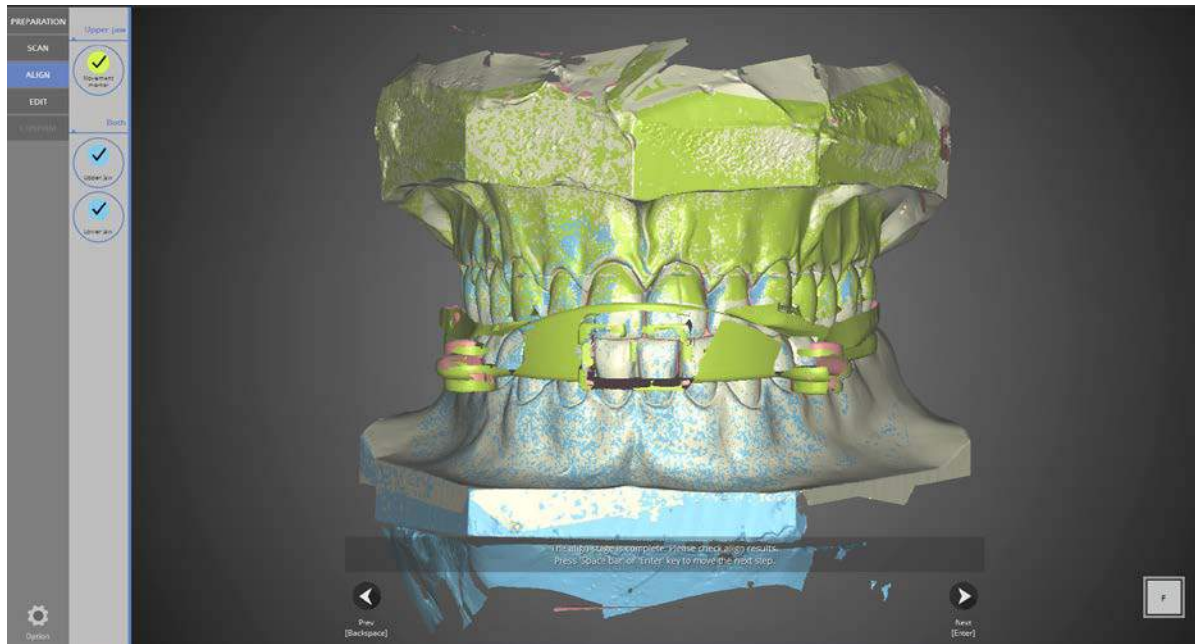


Lower jaw occlusal relationship alignment stage. Align the data using the [1 point] alignment function.

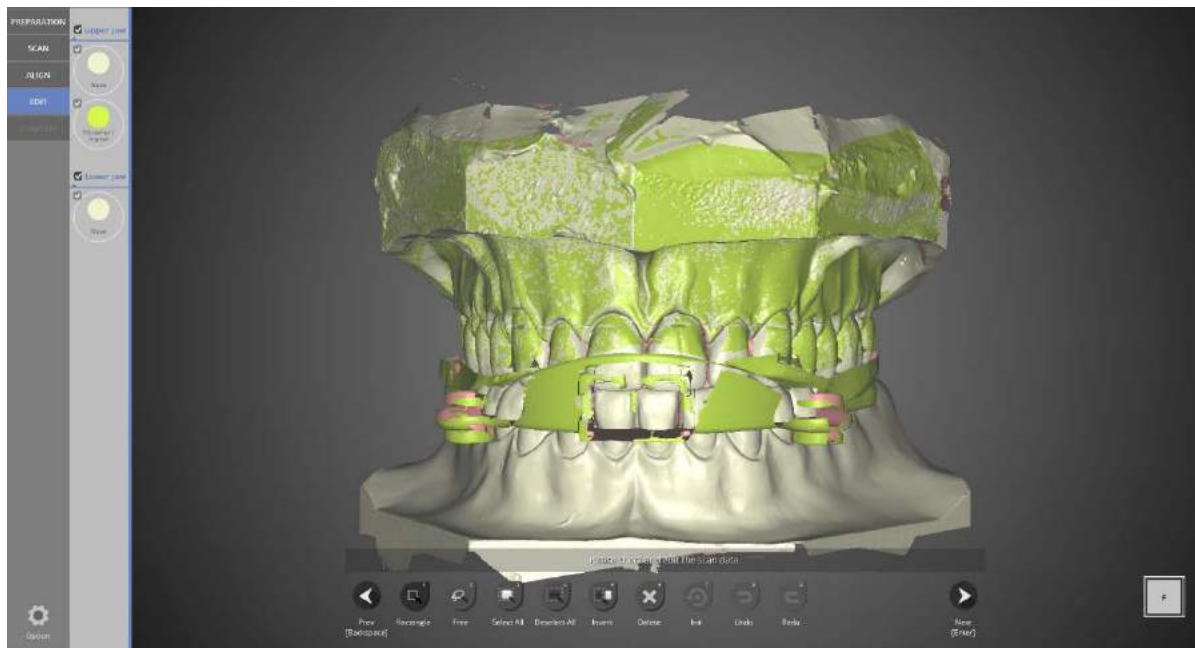


Lower jaw occlusal relationship alignment is complete.



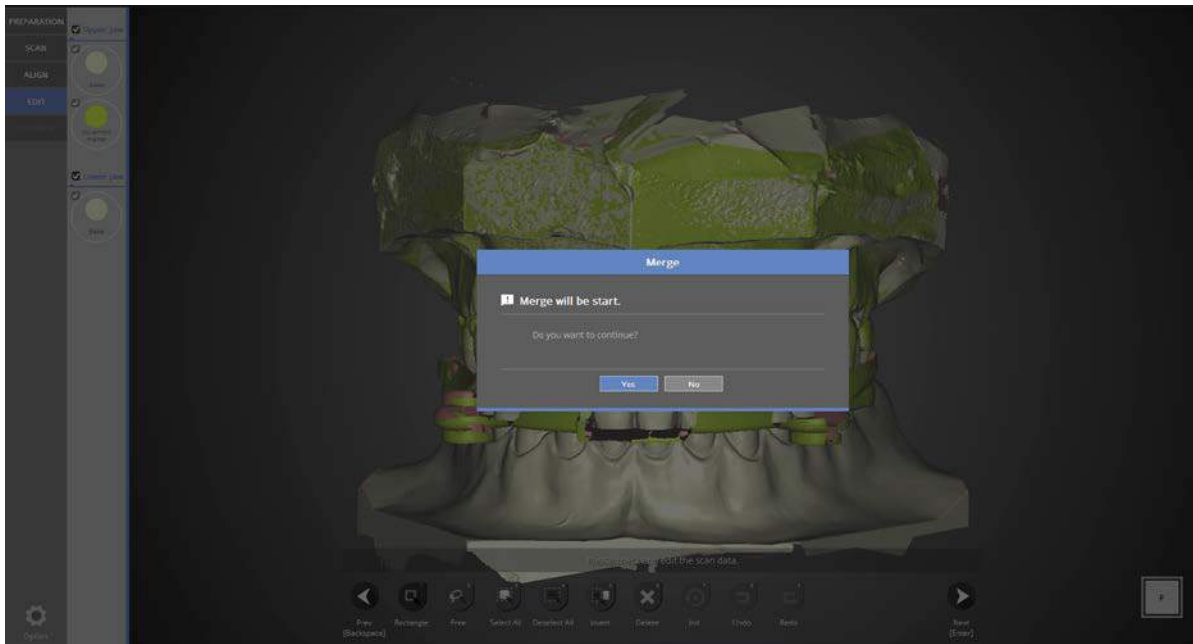


All occlusal relationship alignments have been completed. Proceed to the next step after checking the data for errors.

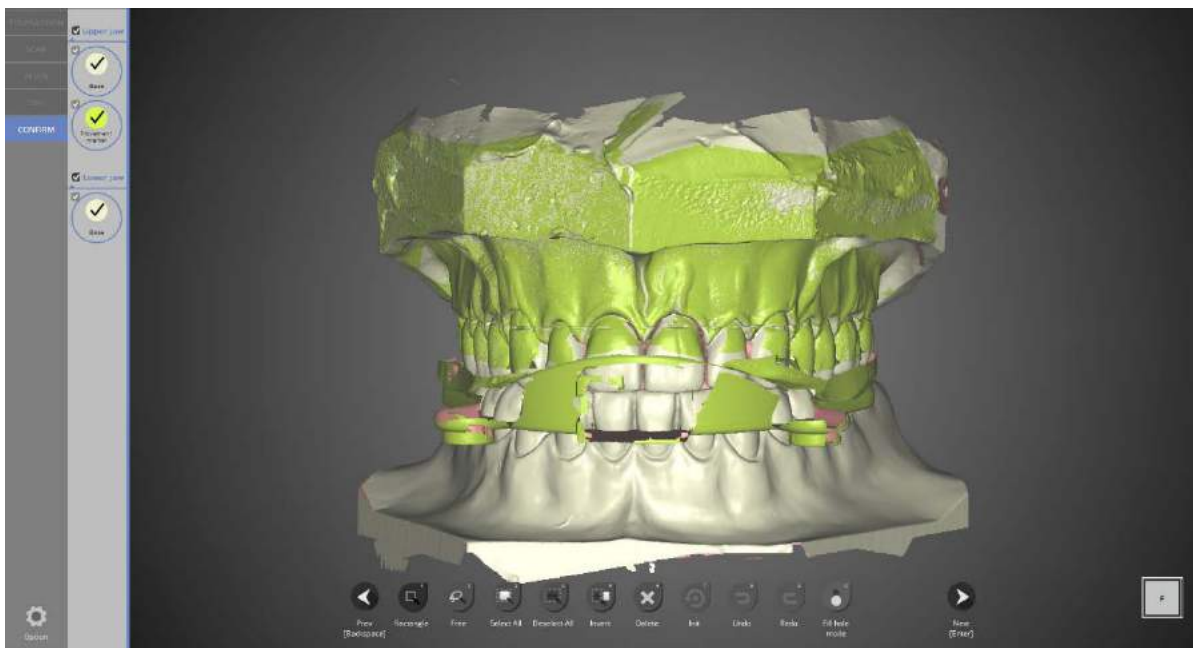


Editing stage.

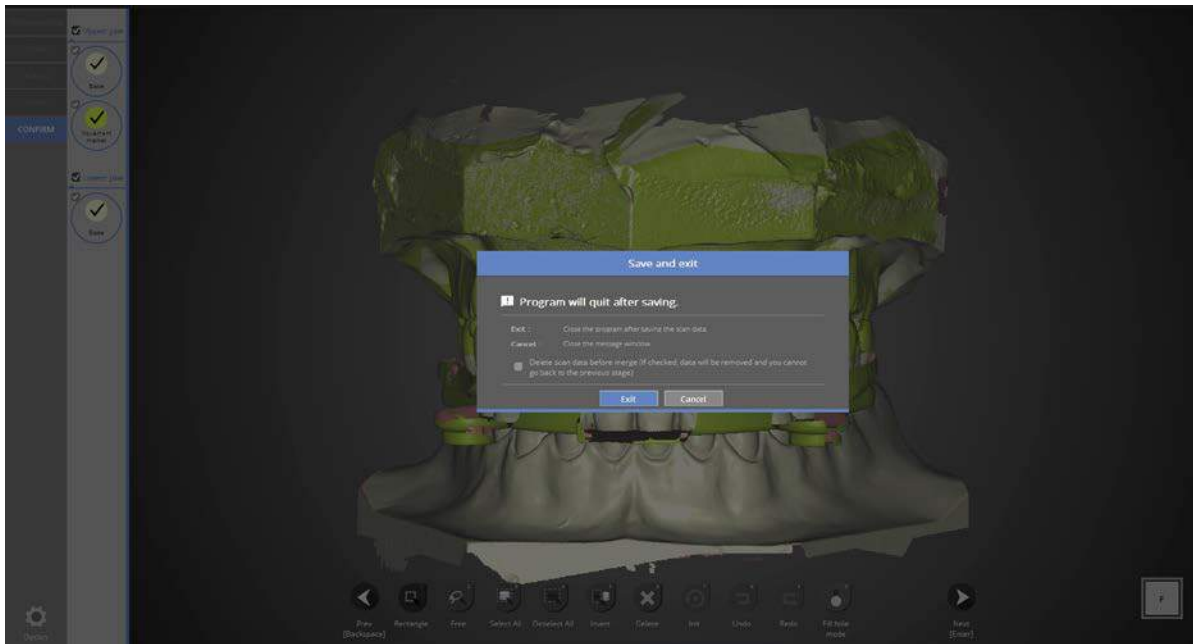
Select the parts of the data to delete and click [Delete].



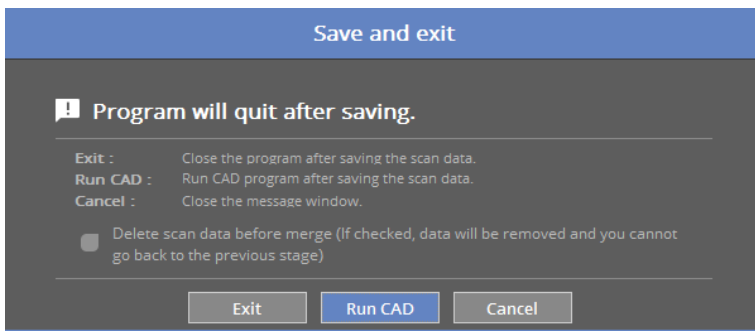
Proceed to the next step to merge the data.



Data merging has been completed.

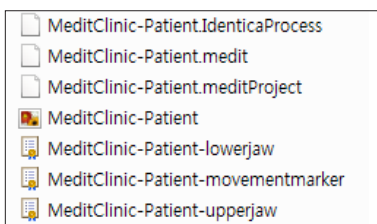


Click [Exit] to save the data and end the program.



If you are connected to CAD, you will see the message indicated above.

If [Run CAD] is clicked, scan program ends and CAD program will start automatically.

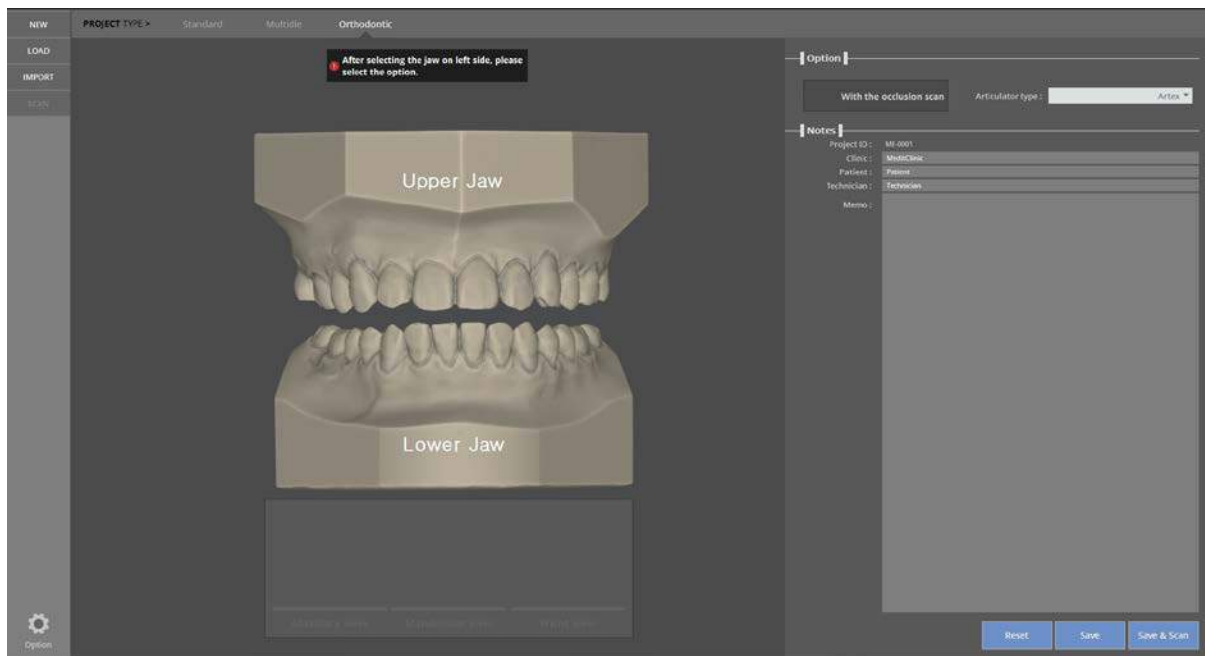


Scanning work of movement marker case is complete. You can check the data in the setting folder.

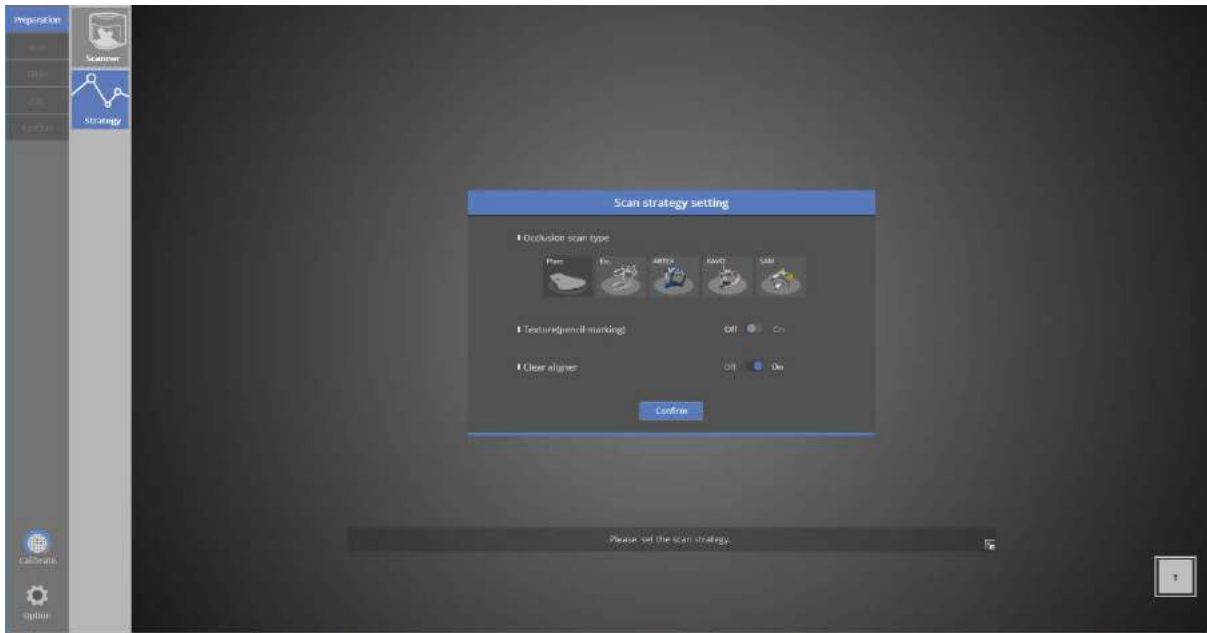
# Orthodontics

Complete the order form and tooth setting.

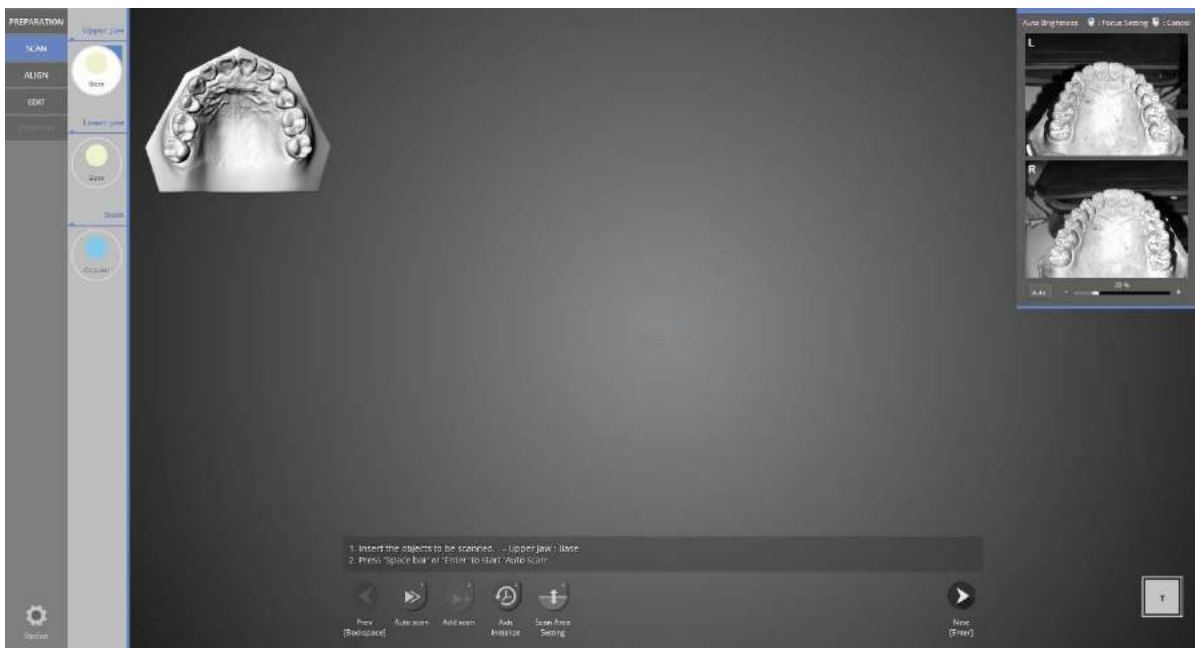
- ✔ Start the collLab program.



Select the model to scan. Select the occlusal scan option if needed and check the type of articulators. Click [Save & Scan] to move to the [Scan strategy setting] section under [Preparation]

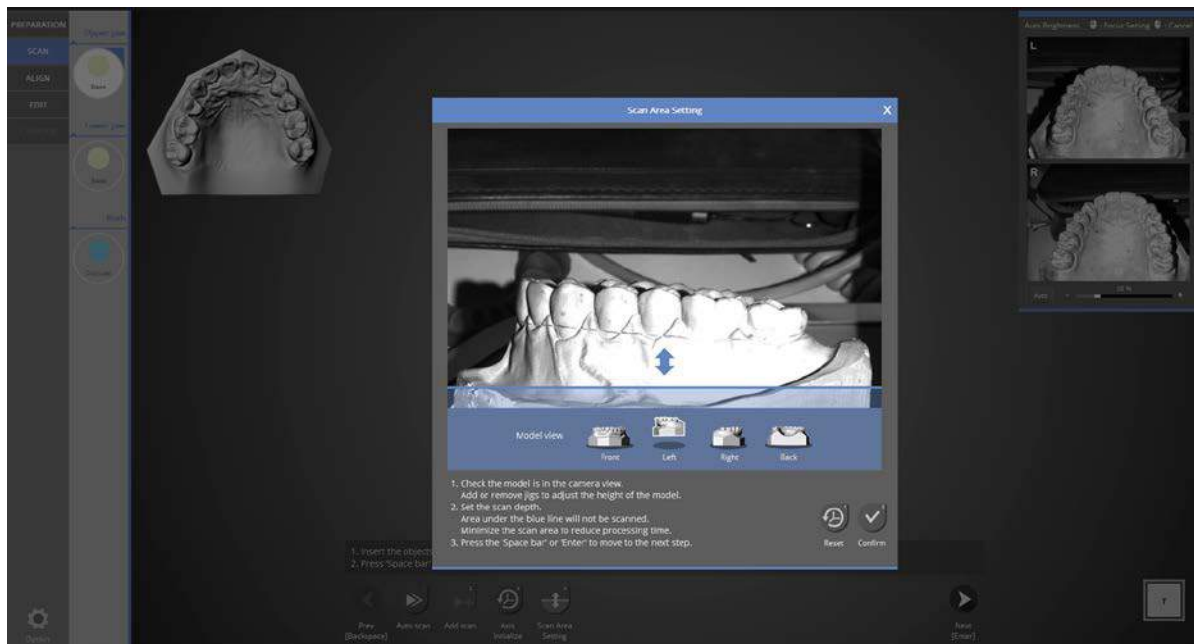


You can select whether to use the clear aligner in the scan strategy. Every hole in the scan data will be filled if this strategy is clicked.



Upper model scan stage.

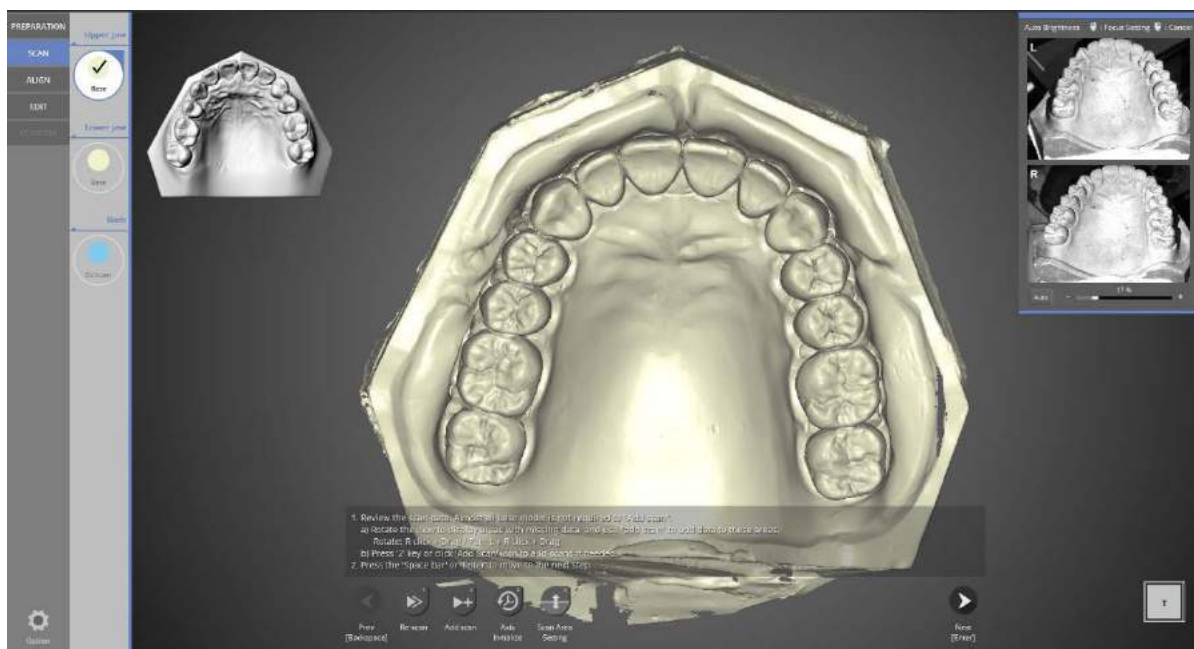
Place the upper model into the scanner and click [Next] to start auto scanning.



Check if the teeth model appeared on the screen.

You can check the scan area from every direction by clicking the direction icon. Adjust the position of the block jig to position the model within the camera view.

Adjust scan depth by dragging the blue arrow to the desired height and by clicking the [Confirm] button.



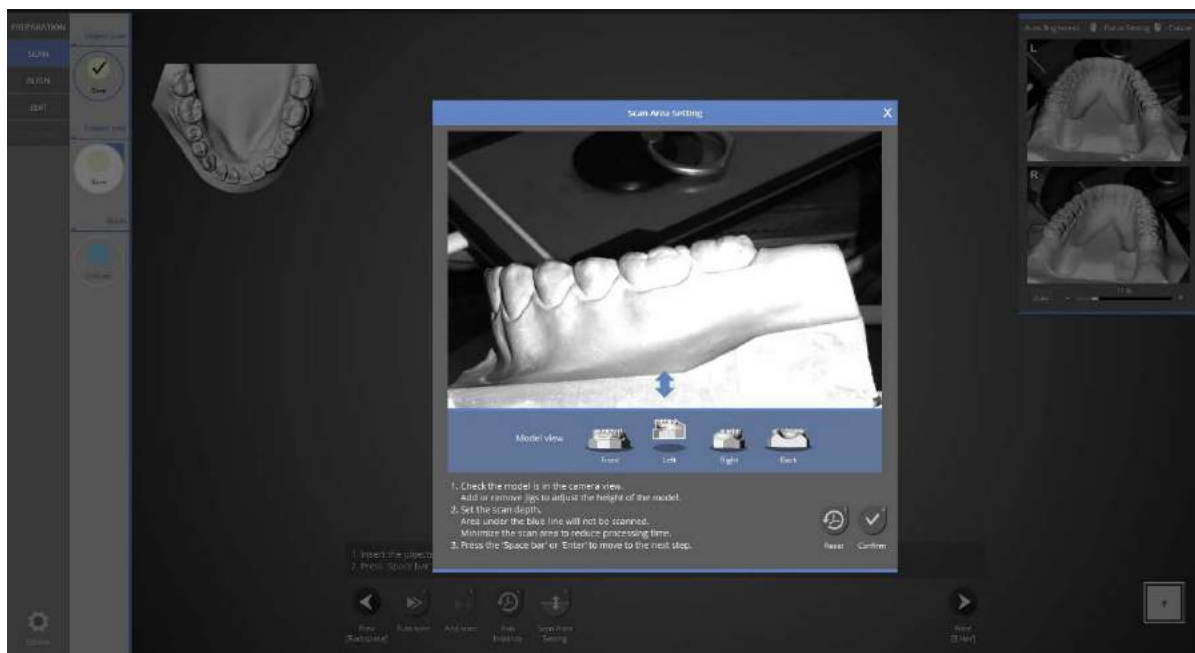
Scan data is created from the automatic scan.

Check scan data. Proceed with [Add scan] if needed and click the [Next] button on the bottom.



The lower base scanning stage.

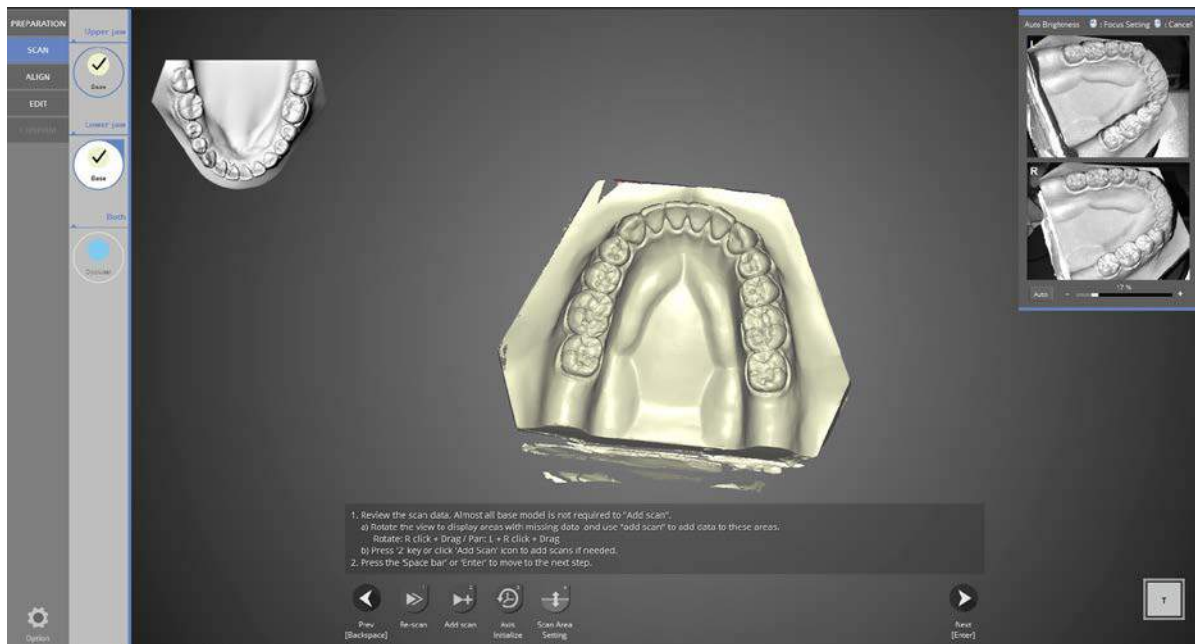
Place the lower base model onto the scanner and press [Next] to proceed to the next step.



Check if the teeth model appears on the screen.

You can check the scan area from every direction by clicking the direction icon. Adjust the position of the block jig to position model within camera view.

Adjust scan depth by dragging the blue arrow to the desired height and by clicking the [Confirm] button.



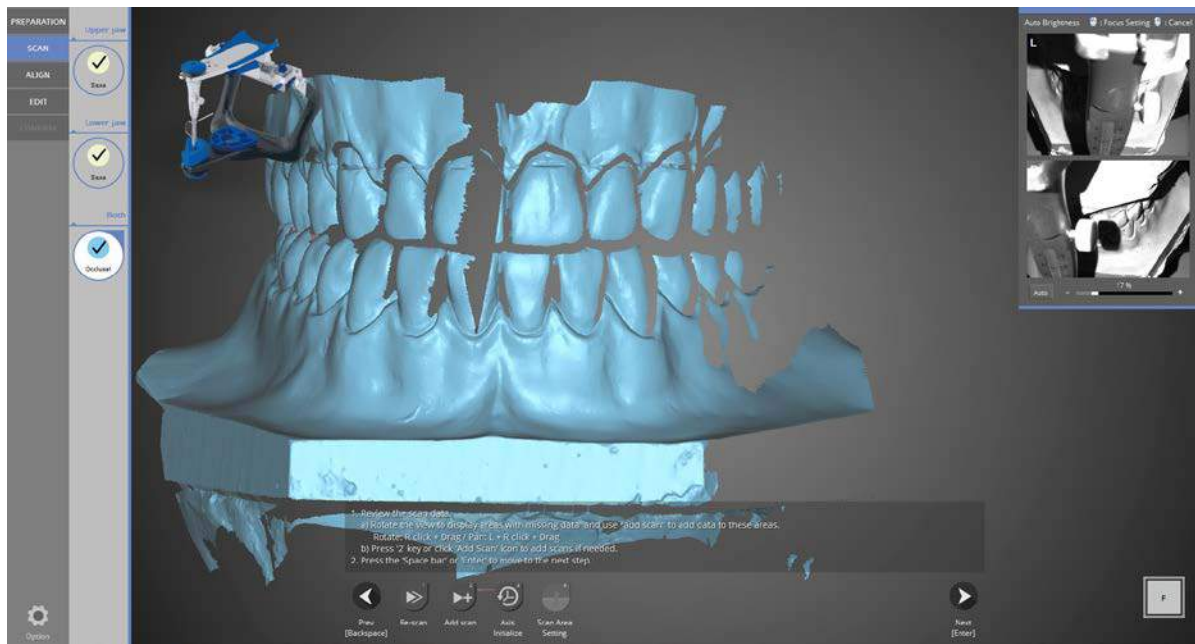
Scan data is created from the automatic scan.

Check the scan data. Proceed with add scan if needed, and click the [Next] button on the bottom.

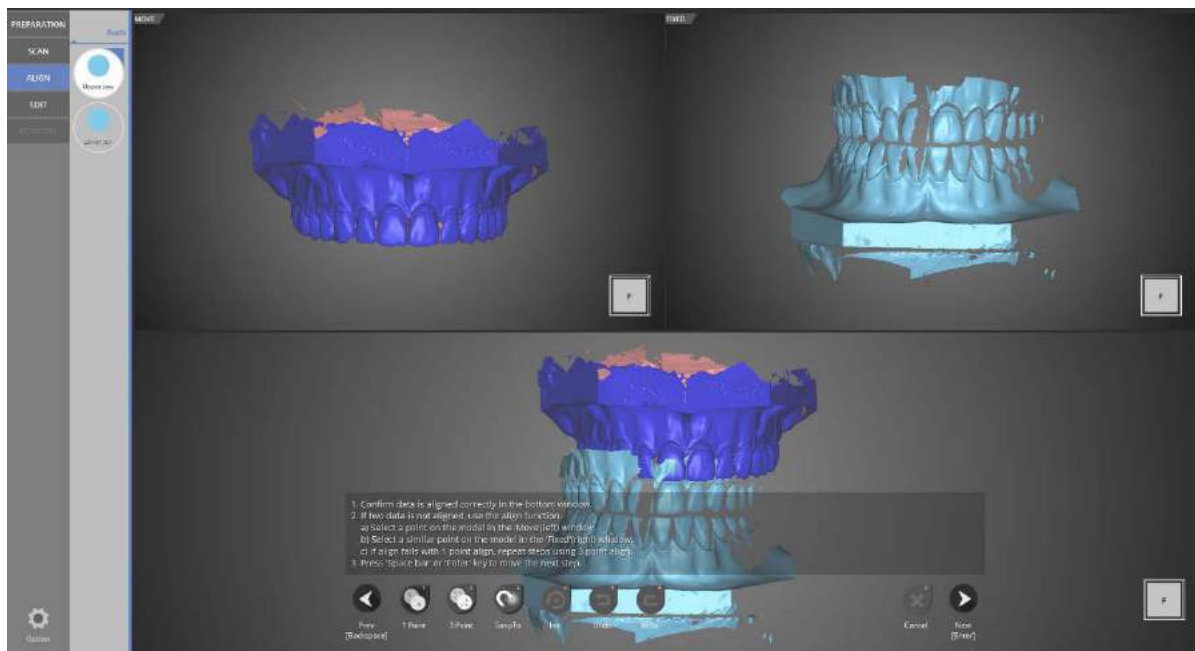


Place the articulator (ARTEX) you selected in the above scan strategy onto the articulator plate, and insert that into the scanner after removing the all half block jigs.

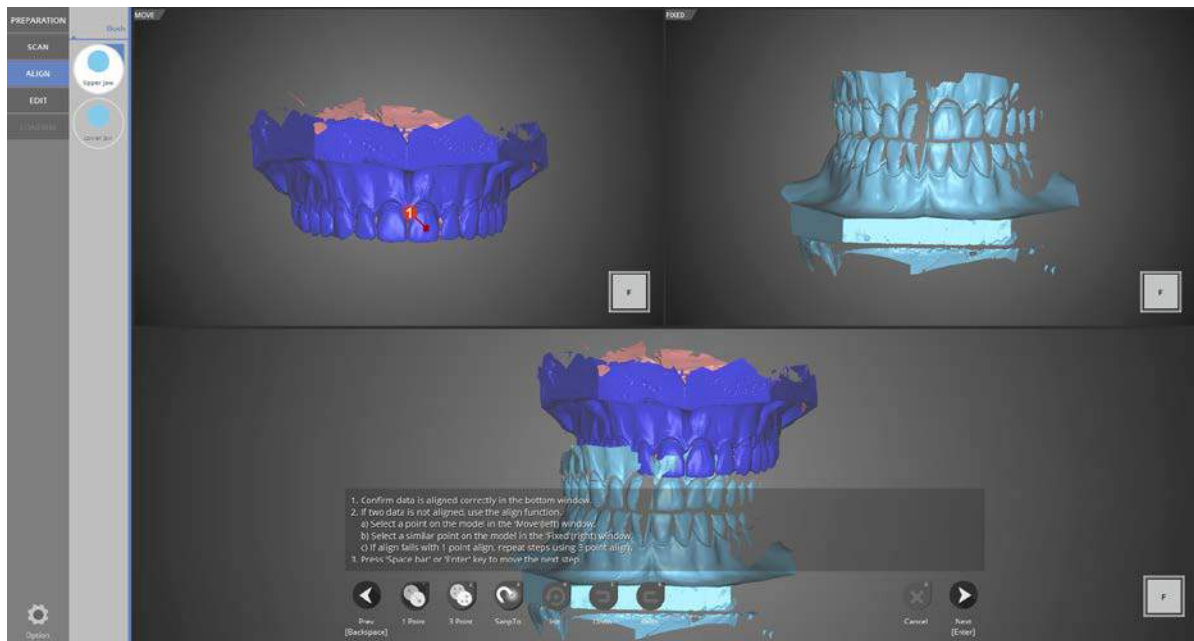




All scanning is complete. Move to the merging stage.

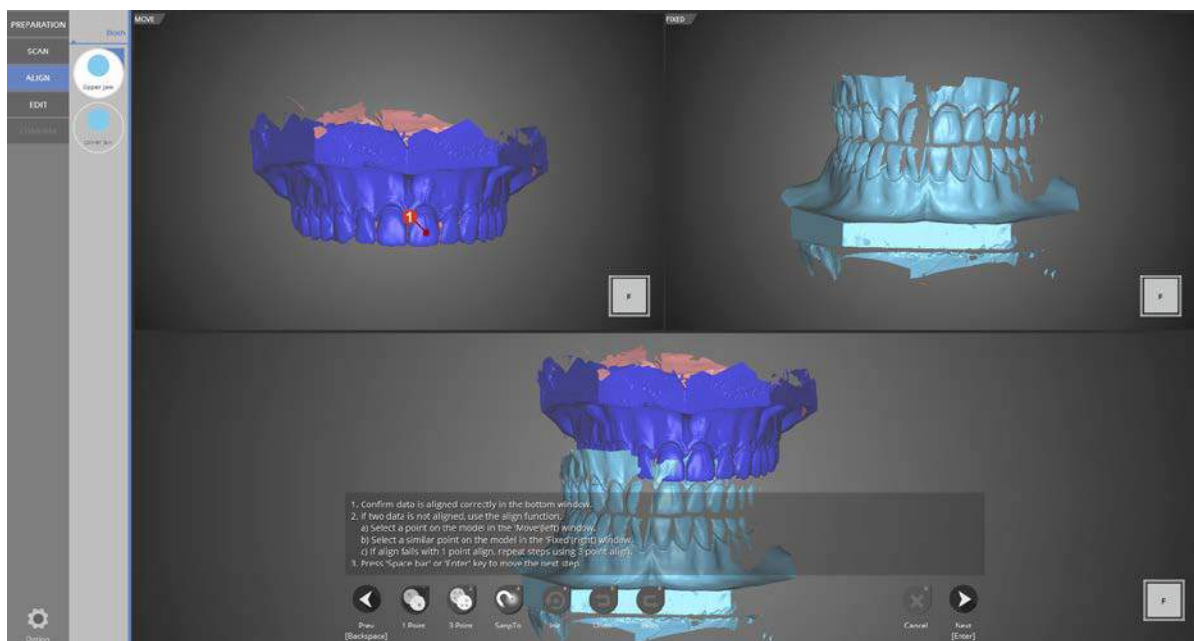


Occlusal relationship alignment stage.

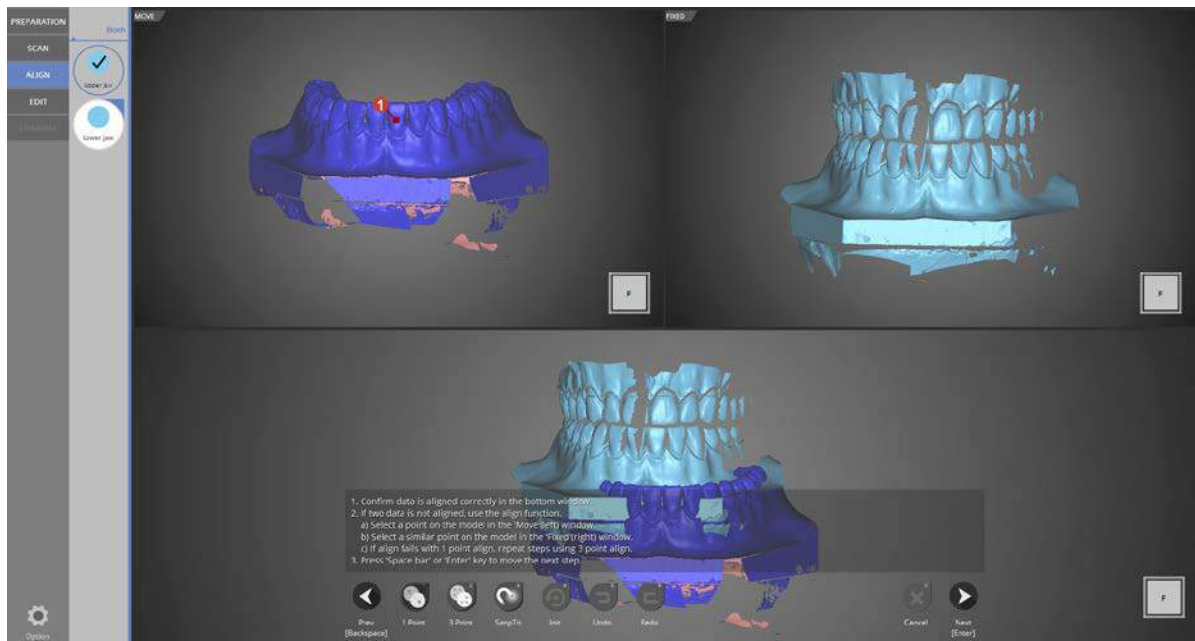


Align the data using the [1 point] alignment function.

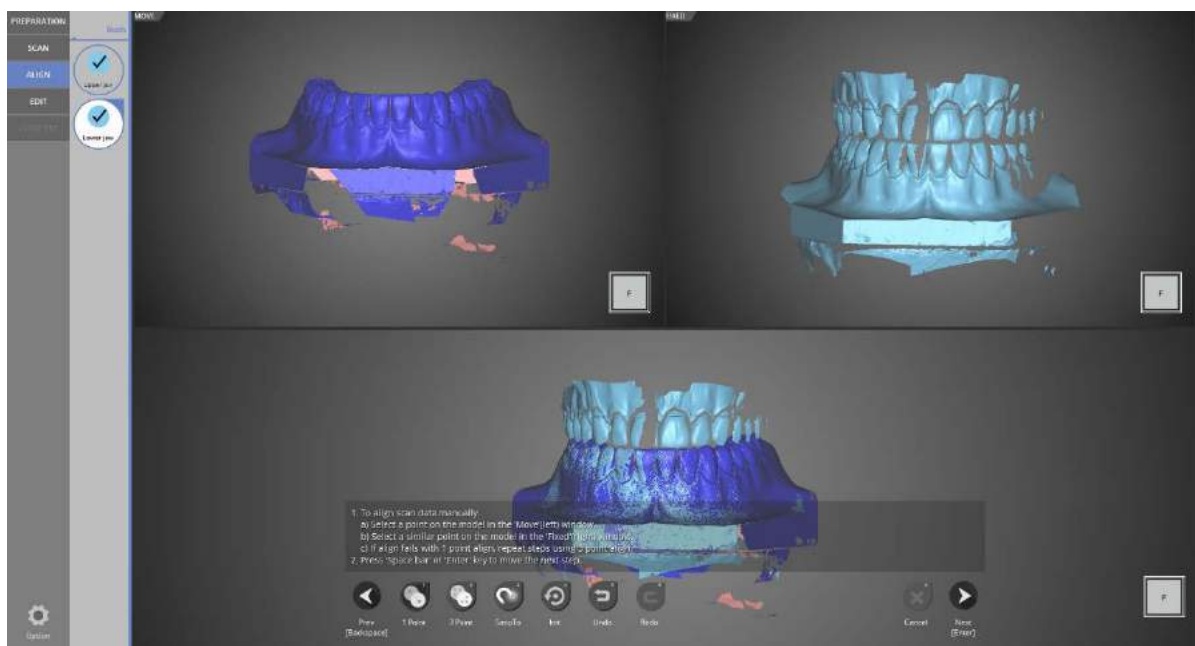
Click one point in the top left data image and select the similar point in the top right image.



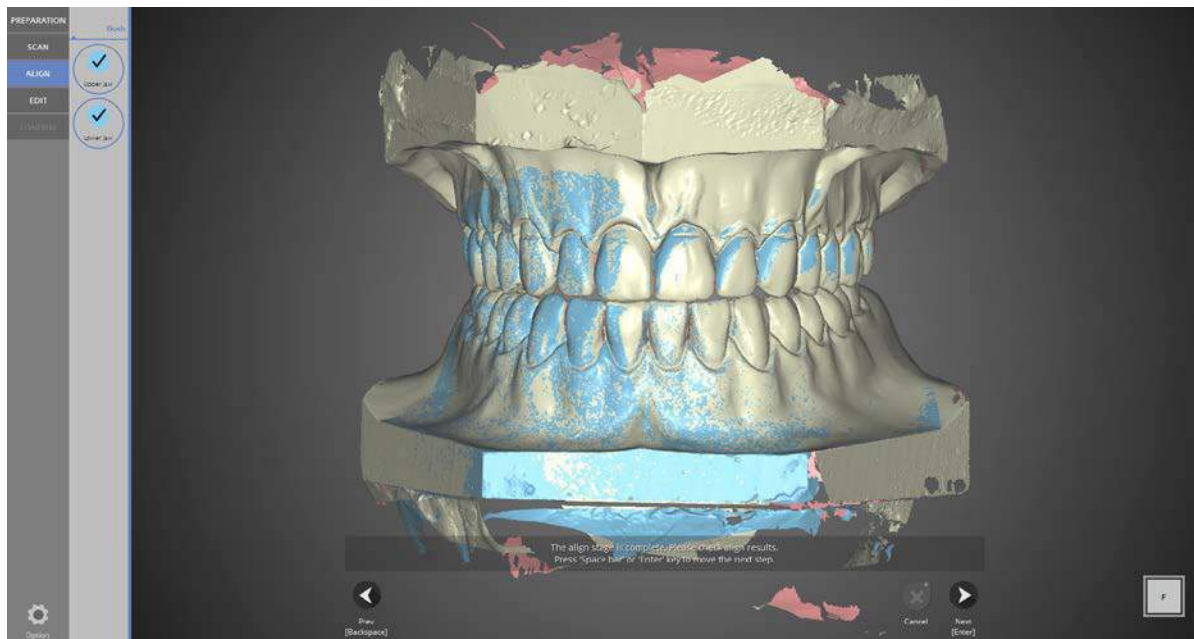
The upper occlusal relationship alignment is complete.



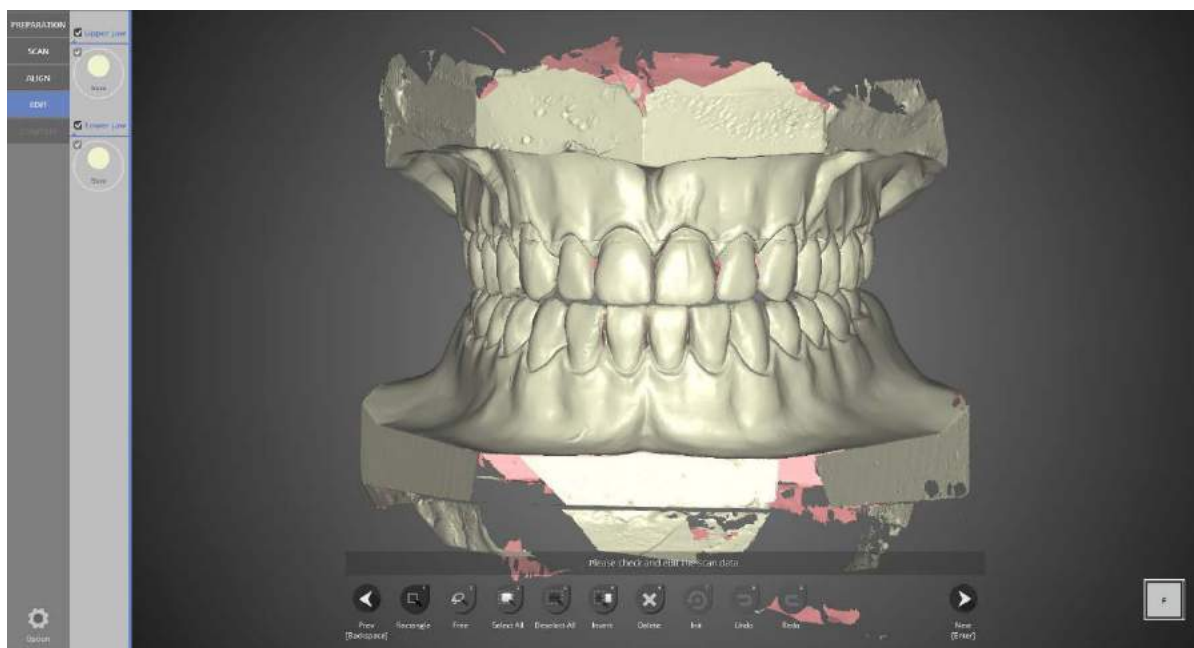
The lower occlusal relationship alignment stage.  
Just as with the upper model, align the data using the [1 point] alignment.



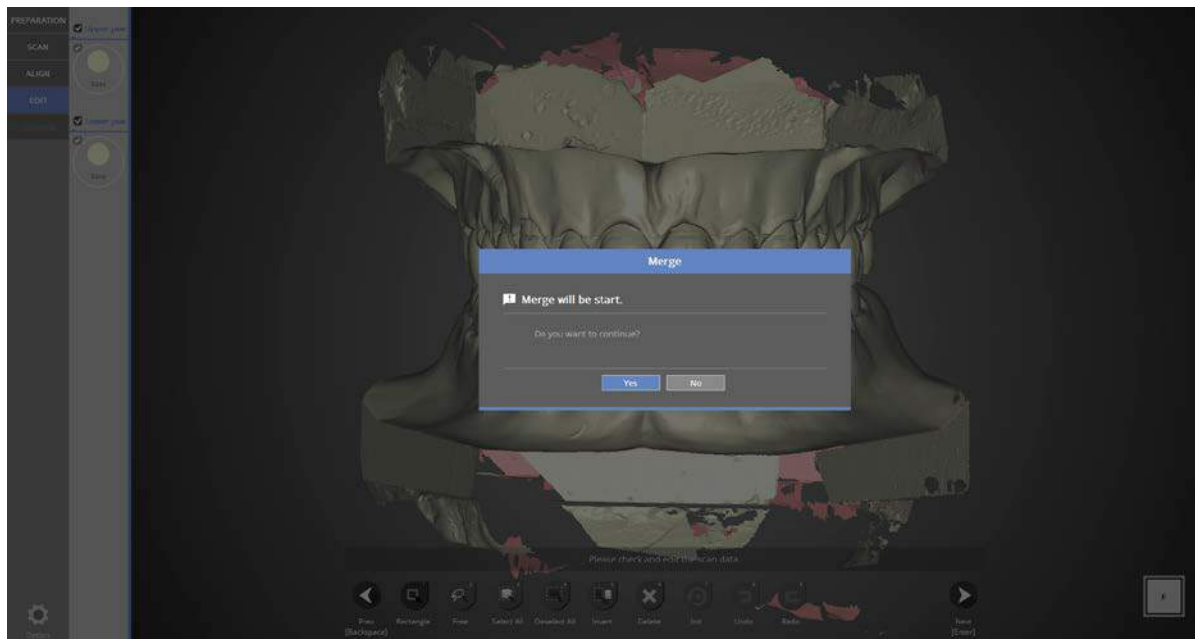
The lower occlusal relationship alignment is complete.



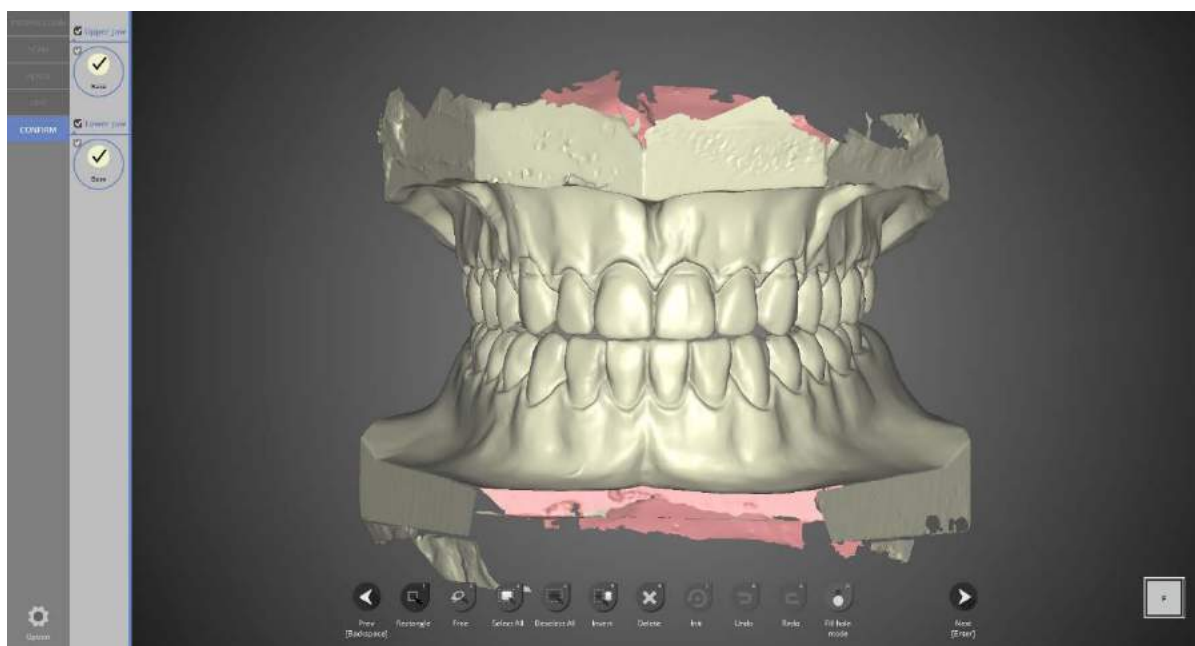
All occlusal relationship alignments are complete.  
 Proceed to the next step after checking the data for errors.



**Edit stage**  
 Select the parts to be edited and delete them.  
 You can still edit the data even after the data merging process is complete.



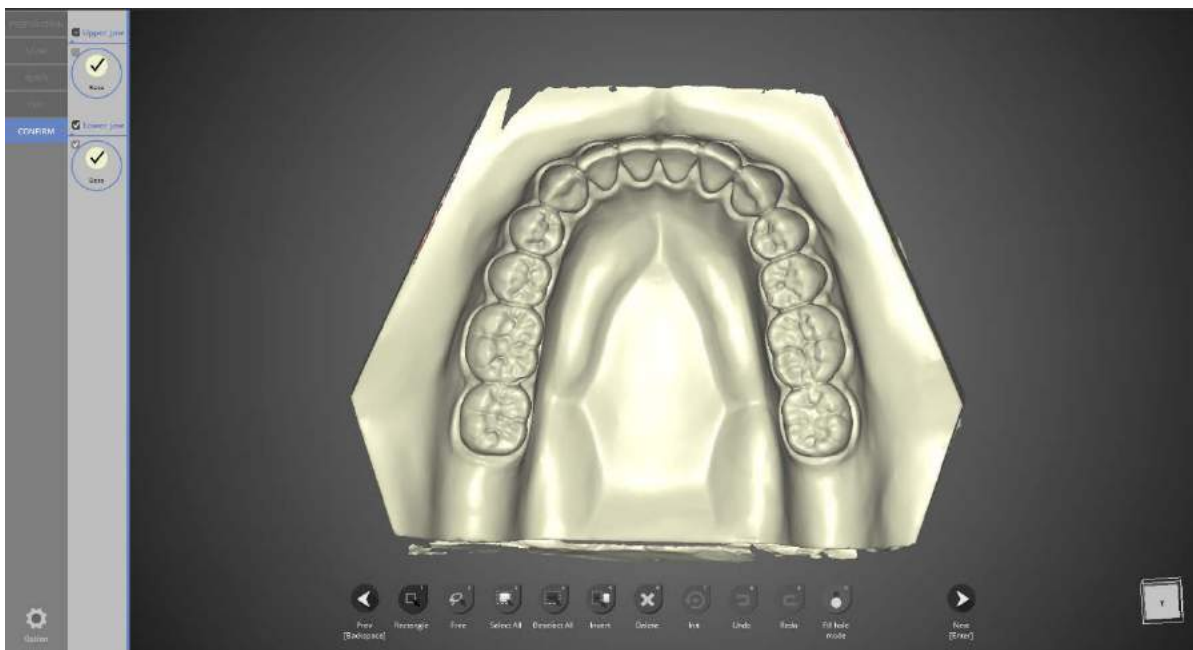
Proceed to the next step to merge the data.



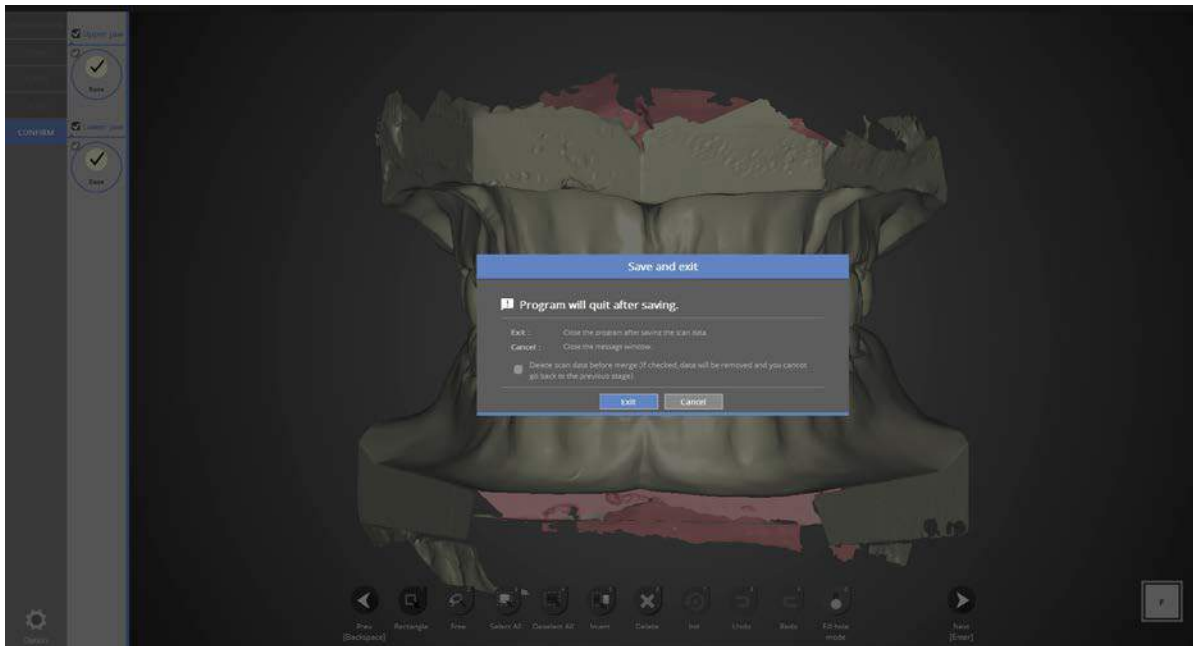
Data merging is complete.



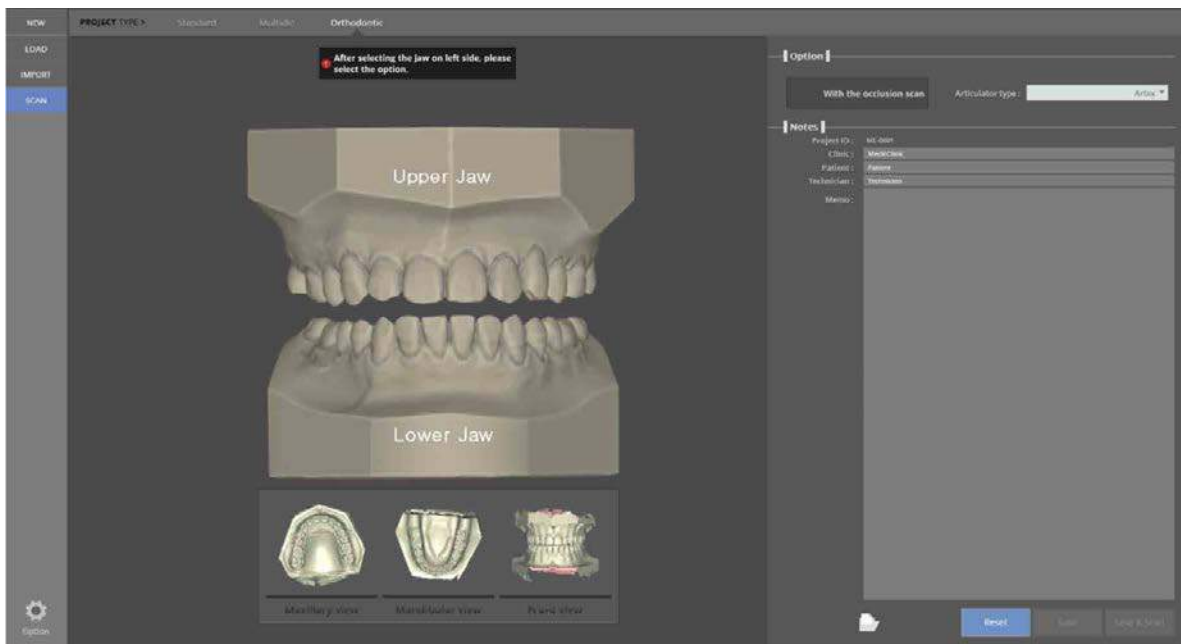
Confirm that every hole in the upper jaw data is filled.



Confirm that every hole in the lower jaw data is filled.



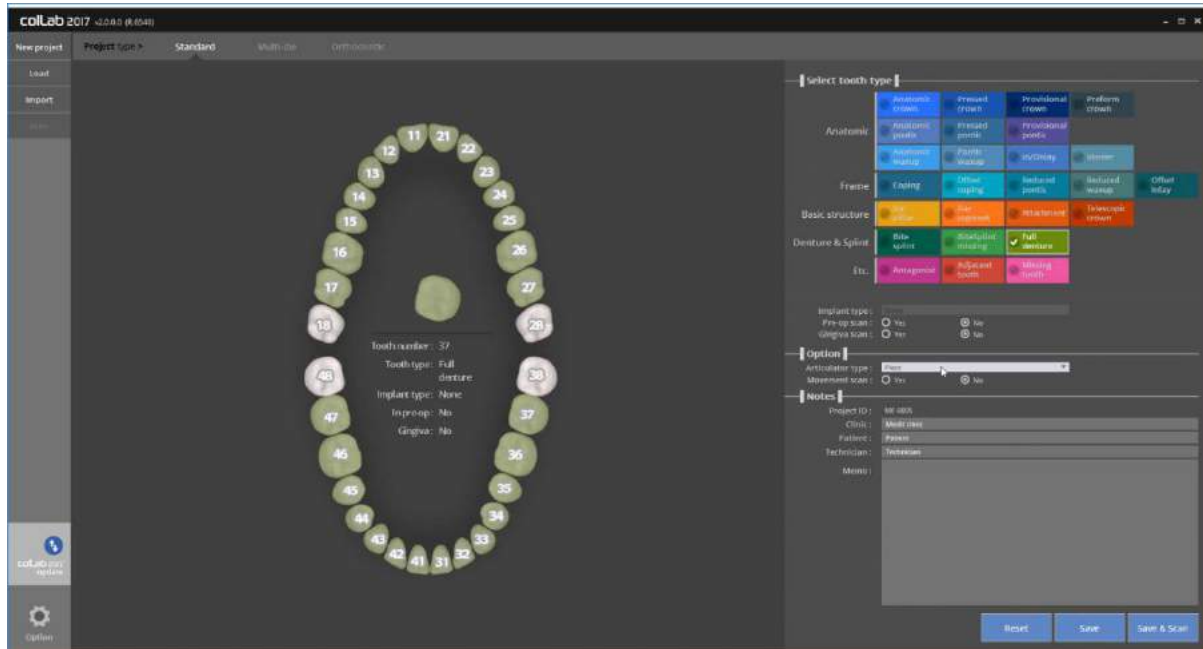
Click [Exit] to save the scanned data and exit the program.



Upper and lower jaw scanning is complete.  
The below images are scan data images for review.

## Full denture model

1. Filling in the order form
  - Run colLab program



- Please input the setting of model you wish to scan

The example case to be shown on this manual is upper/lower jaw full denture case.

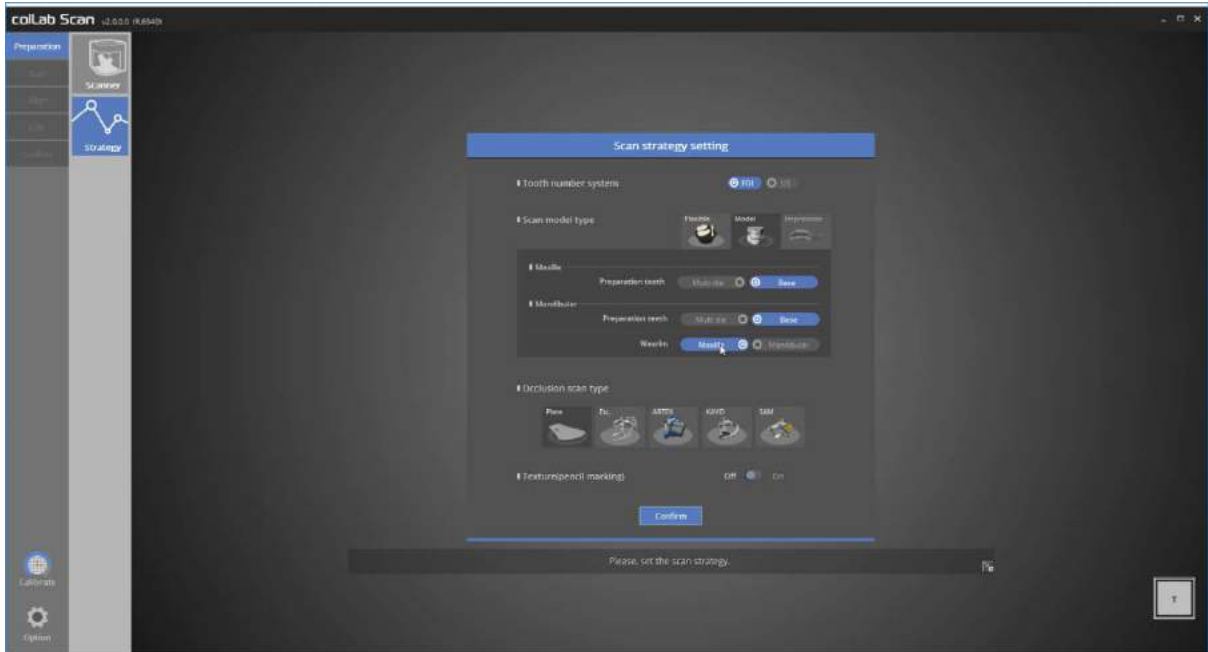
Set the full denture on upper and lower jaw and select the articulator option

Click the [Save & Scan] button to start scanning.

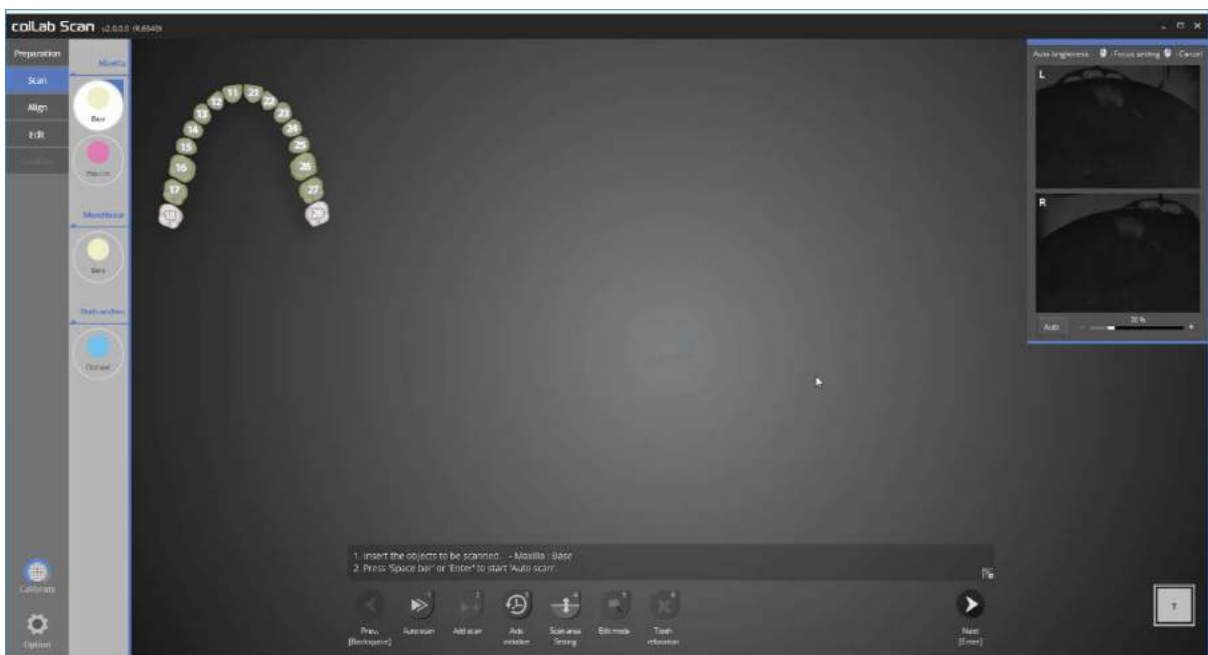
[Full denture] : 17 ~ 27 / 37 ~ 47

Articulator type: Plate



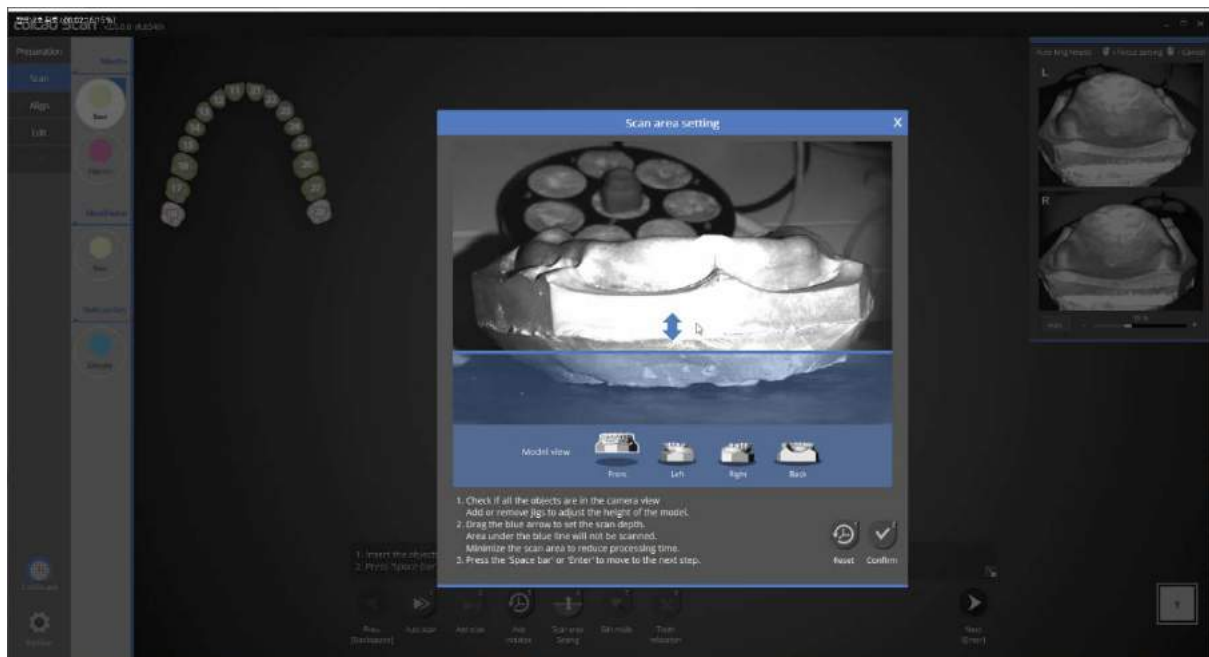


Choose which model will be used to scan the waxrim in the scan strategy setting window  
The demonstration will proceed with the upper jaw.



Above is the upper jaw model scan stage.

Please place the upper jaw model inside the scanner and click [next] to proceed with the auto scan.

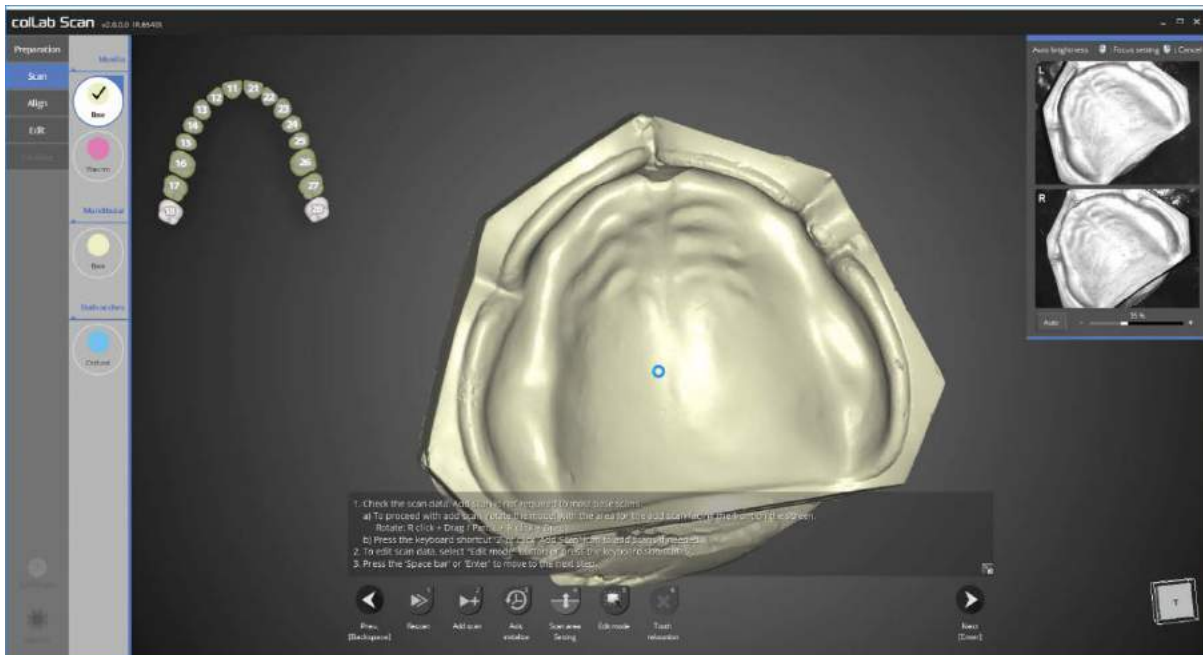


Make sure that the model is in the scanning area.

Please click the direction icons to rotate the model direction allowing the scan area to be verified from all direction.

If the model is not included in the scanning area, adjust the half block jig to position the model in the scanning area.

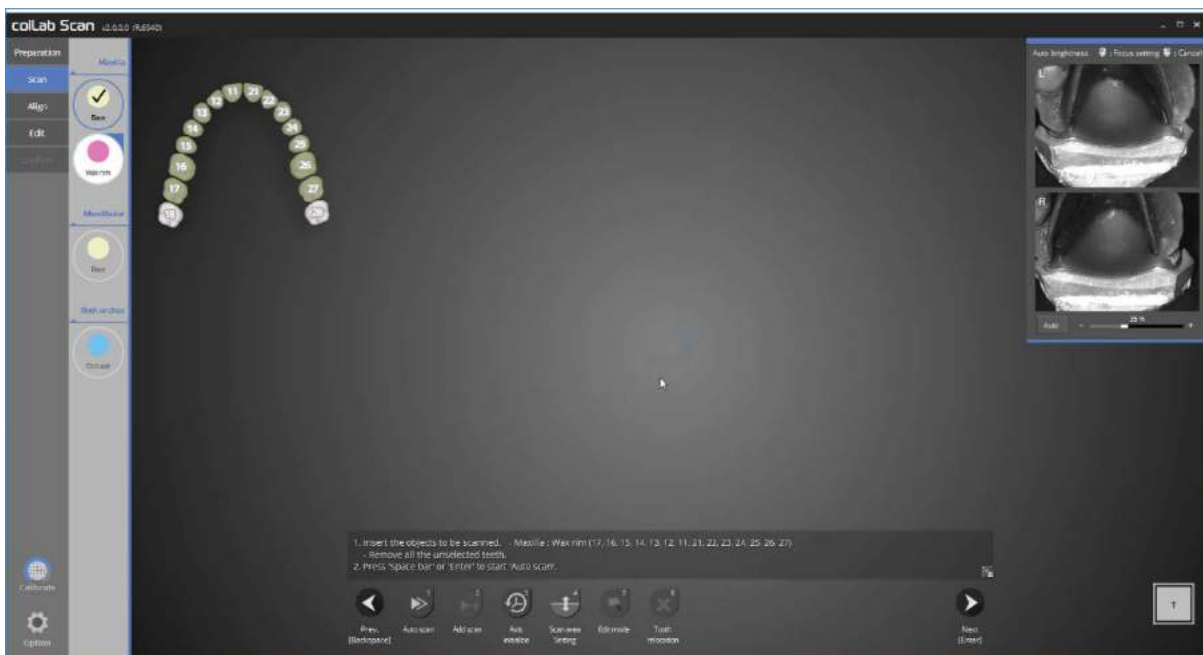
Drag the blue arrow to adjust the scanning area, and click the 'confirm' button [↵, Spacebar]



Scan data has been obtained by running the auto scan.

Please check the scan data, and run further add scan if required

Please press [Next] button on the bottom of the screen.




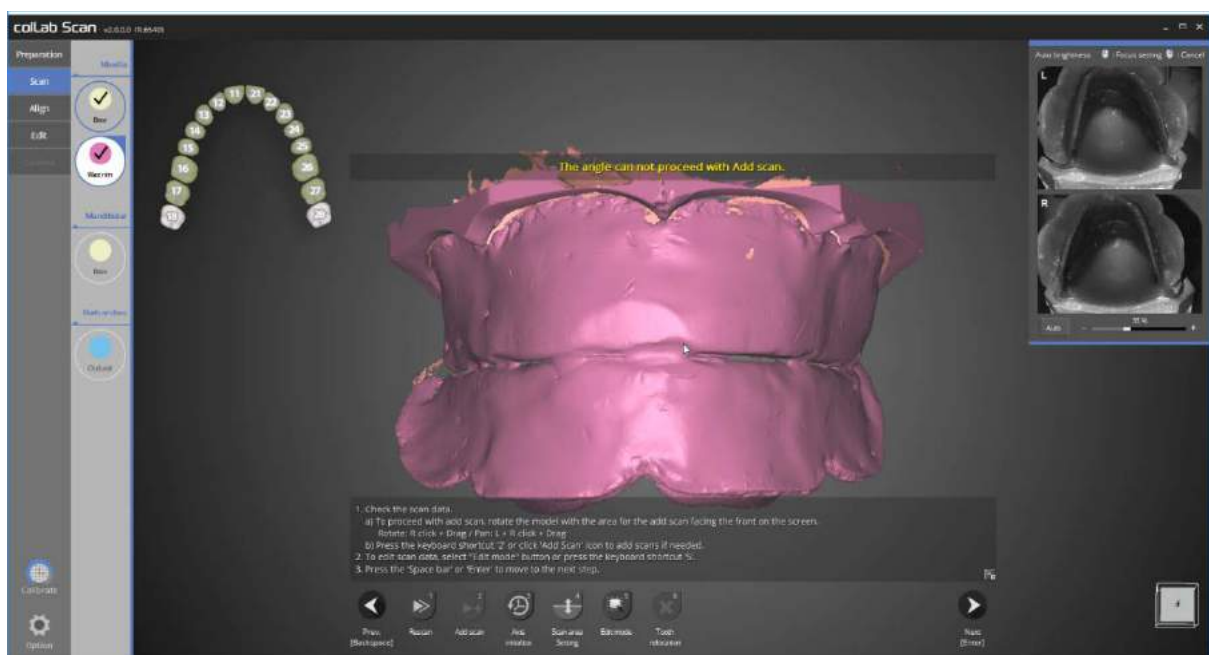
This is the waxrim scanning stage. As we have set the scan strategy to scan with upper jaw, Please place the upper jaw model and waxrim inside the scanner and click [Next] to proceed with the auto scan.



Make sure that the waxrim model is in the scanning area.

Please click the direction icons to rotate the model direction allowing scan area to be verified from all direction. If the model is not included in the scanning area, adjust the half block jig to position the model in the scanning area.

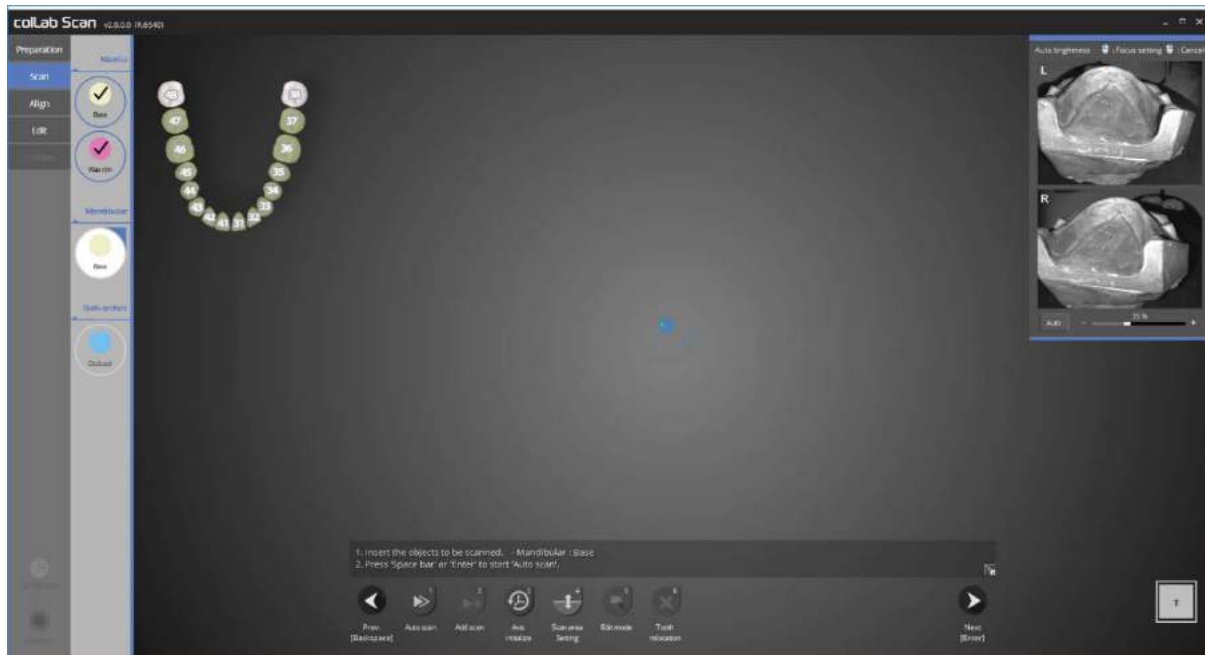
Drag the blue arrow to adjust the scanning area, and click [Confirm] button [  , **Spacebar** ]



Scan data has been obtained by running the auto scan.

Please check the scan data, and run further add scan if required

Please press [Next] button on the bottom of the screen.



This is the lower jaw's base scan stage.

Please fix the lower jaw base model to the scanner and press [Next] to proceed with the auto scan.

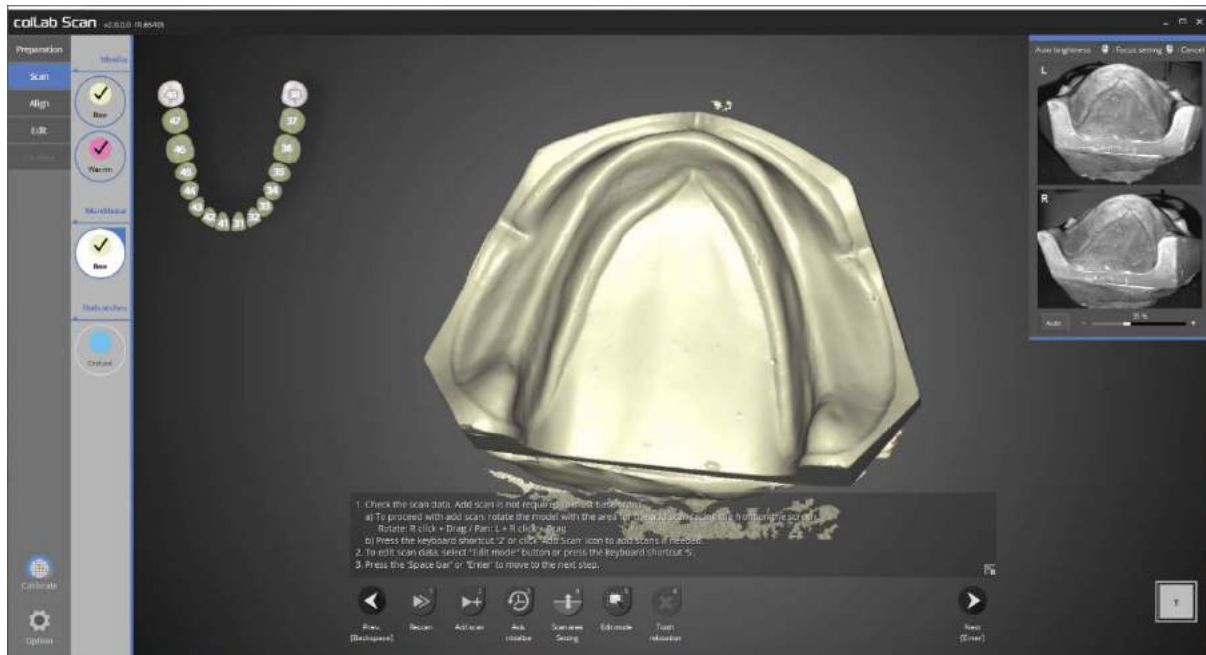


Make sure that the waxrim model is in the scanning area.

Please click the direction icons to rotate the model direction allowing scan area to be verified from all direction.

If the model is not included in the scanning area, adjust the half block jig to position the model in the scanning area.

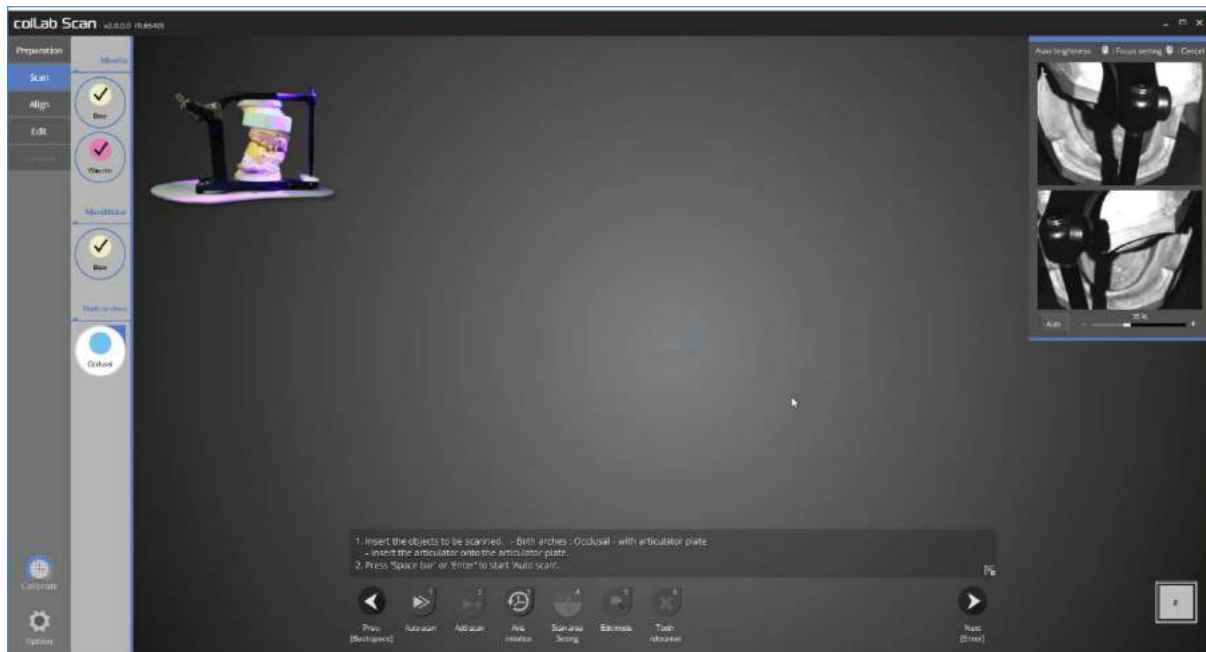
Drag the blue arrow to adjust the scanning area, and click the [Confirm] button [↵, Spacebar]



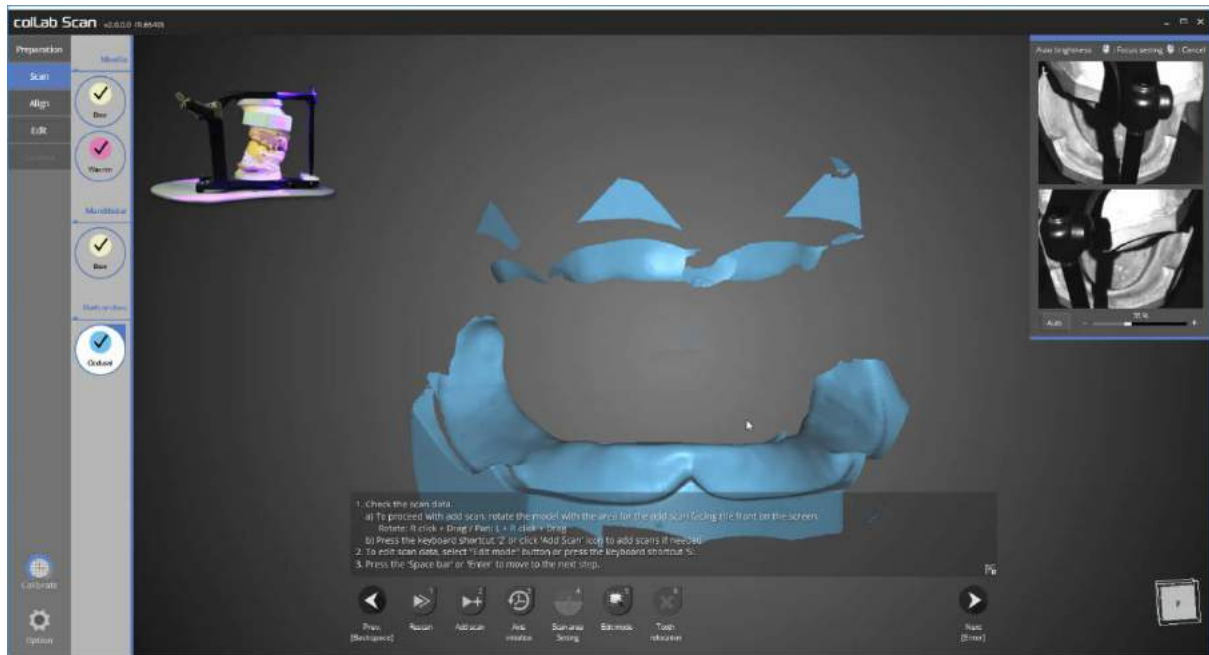
Scan data has been obtained by running the auto scan.

Please check the scan data, and run further add scan if required

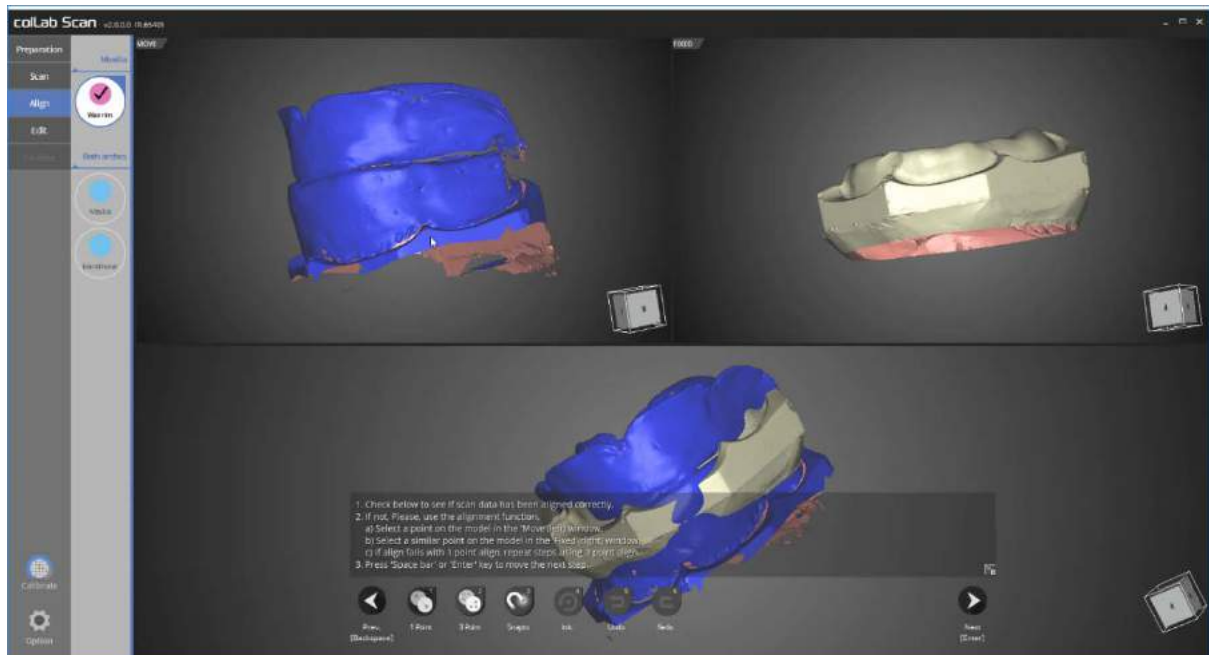
Please press [Next] button on the bottom of the screen.



Please remove all half block jig from the scanner and place the articulator, previously chosen in the scan strategy, on the articulator plate.



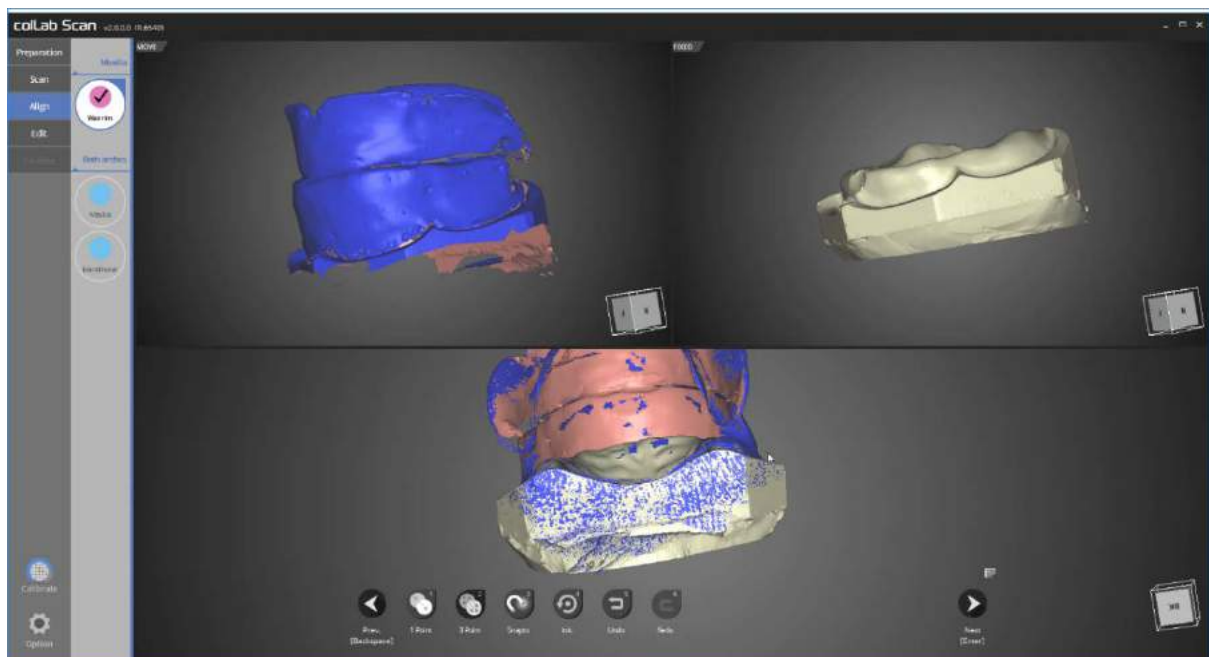
All scans have been completed please proceed to [Align] stage to continue.



This is waxrim alignment step.

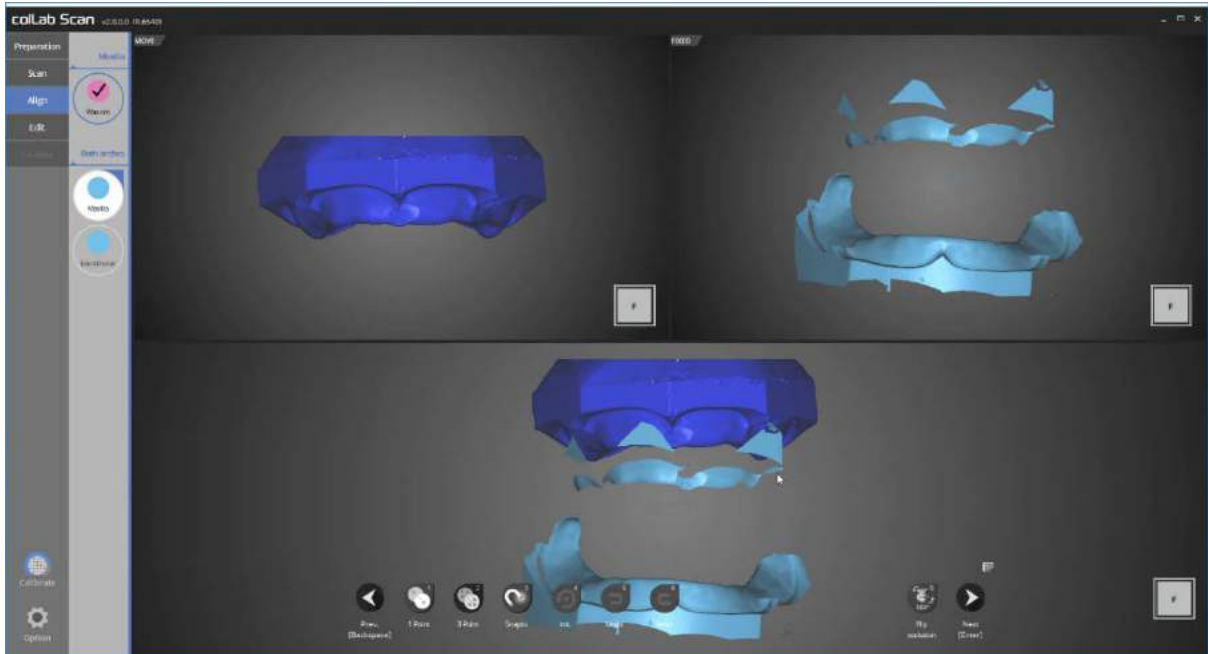
Since the waxrim and plaster has little overlapping areas, [3 point] function is used to align the data.

Place 3 points each on the upper left and upper right area which needs aligning.

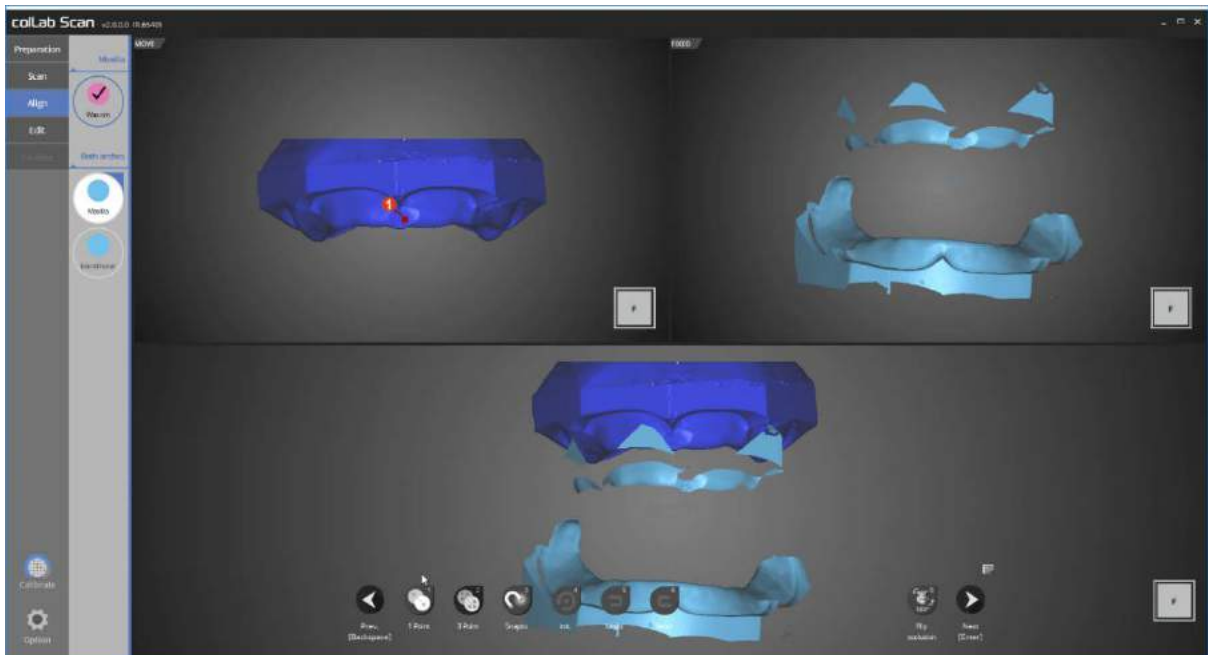


Now the alignment of upper jaw and waxrim is complete.



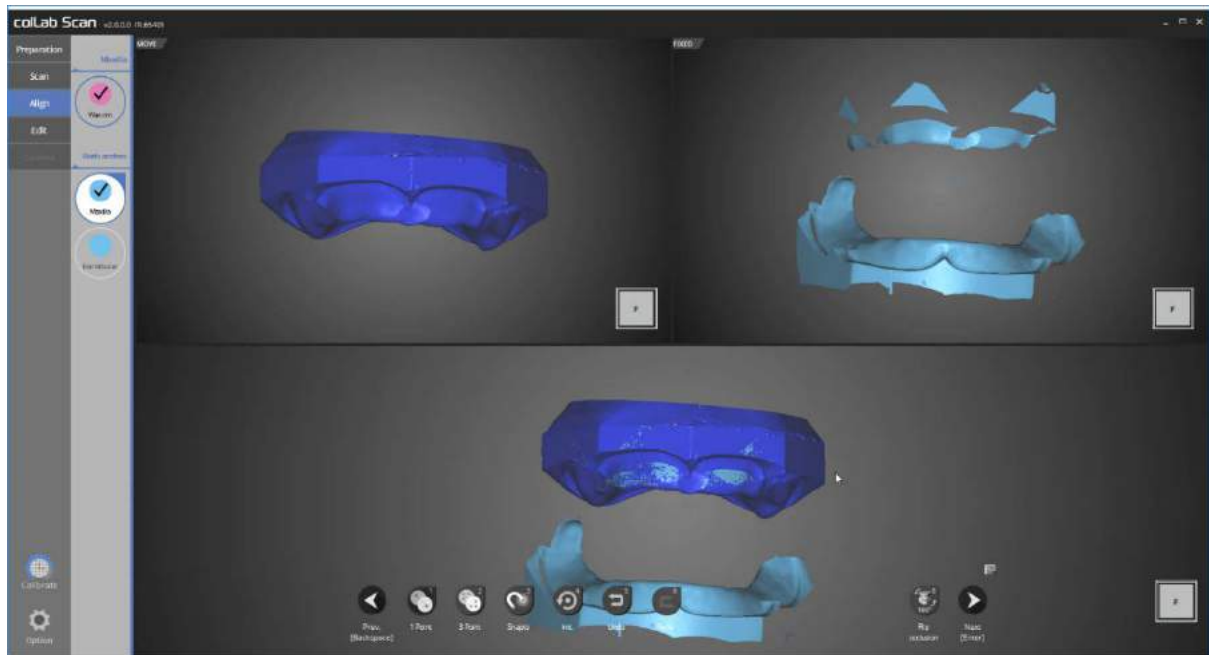


We will now go on to occlusion alignment stage

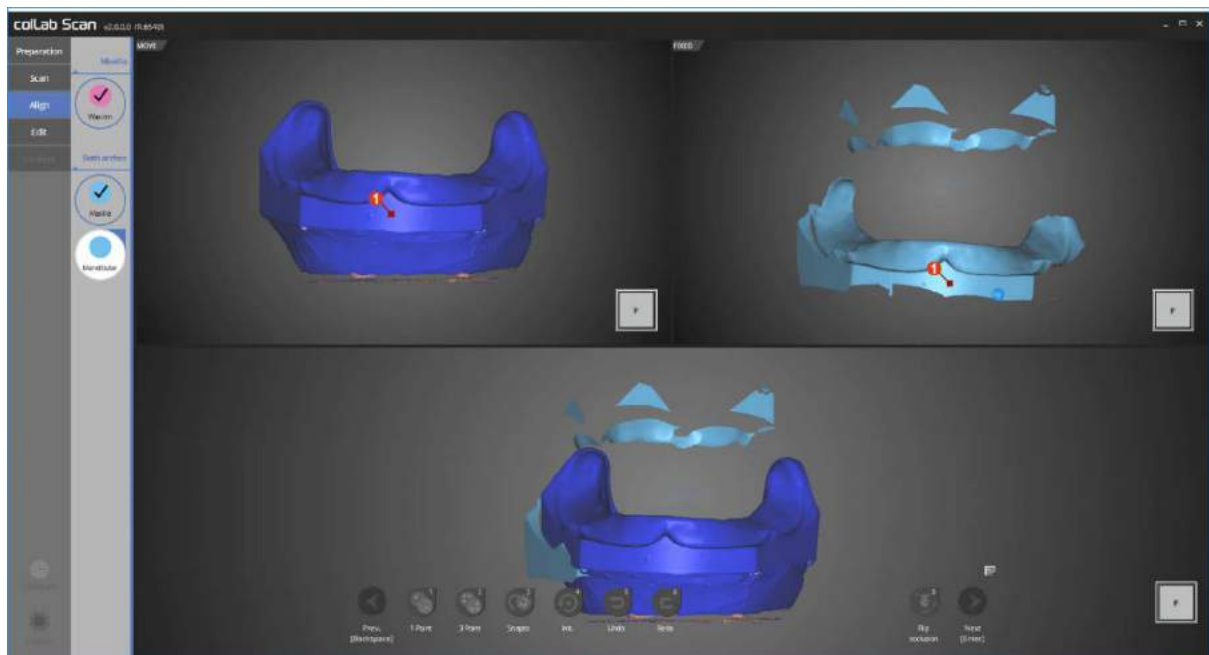


Use [1 Point] alignment function to align the data.

Place a point each on the upper left and upper right area which need to be aligned.

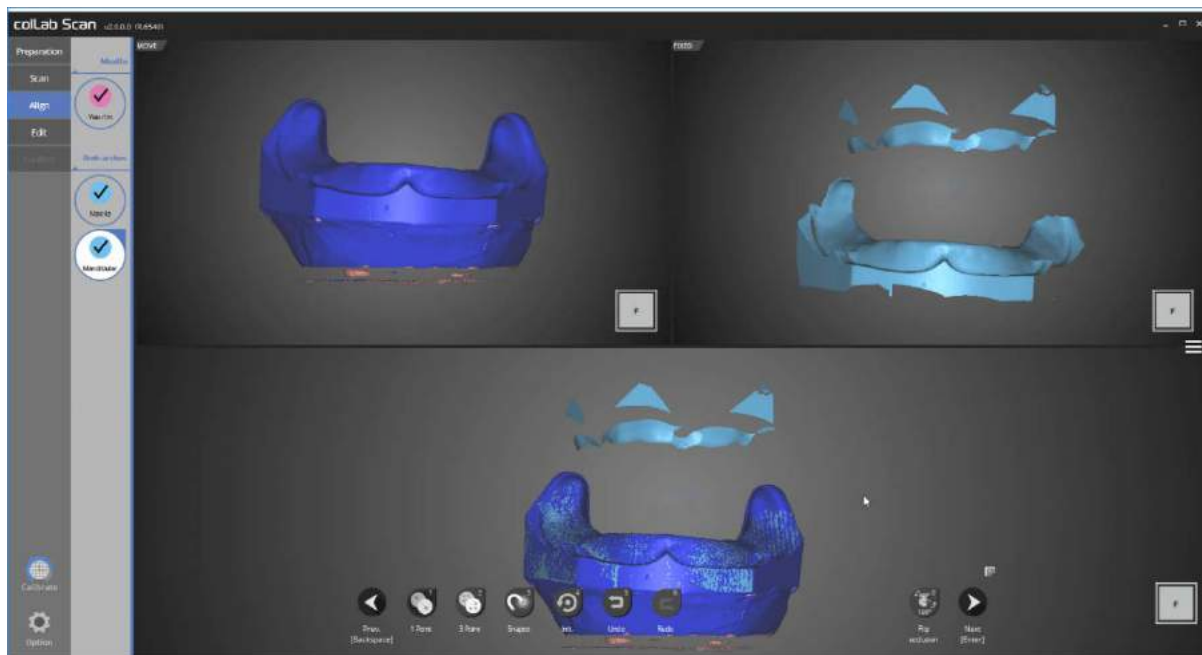


Now the upper jaw occlusion alignment is complete.

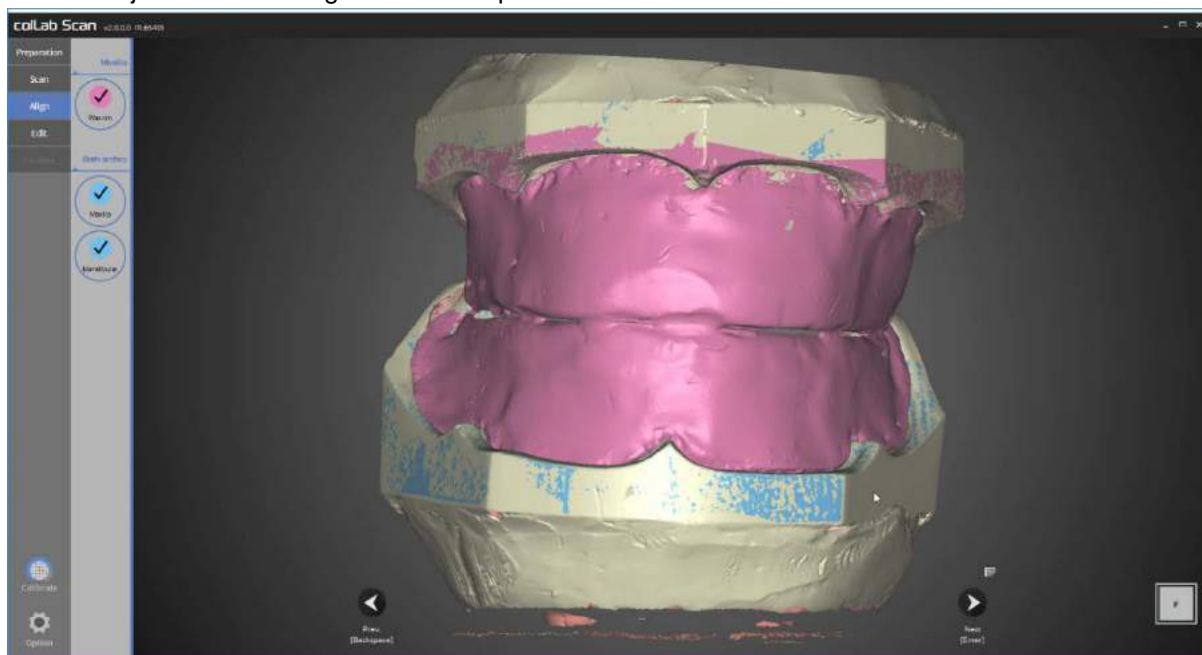


This is the lower occlusion alignment step

As we did with the upper jaw, use [1 Point] alignment function to align the data.

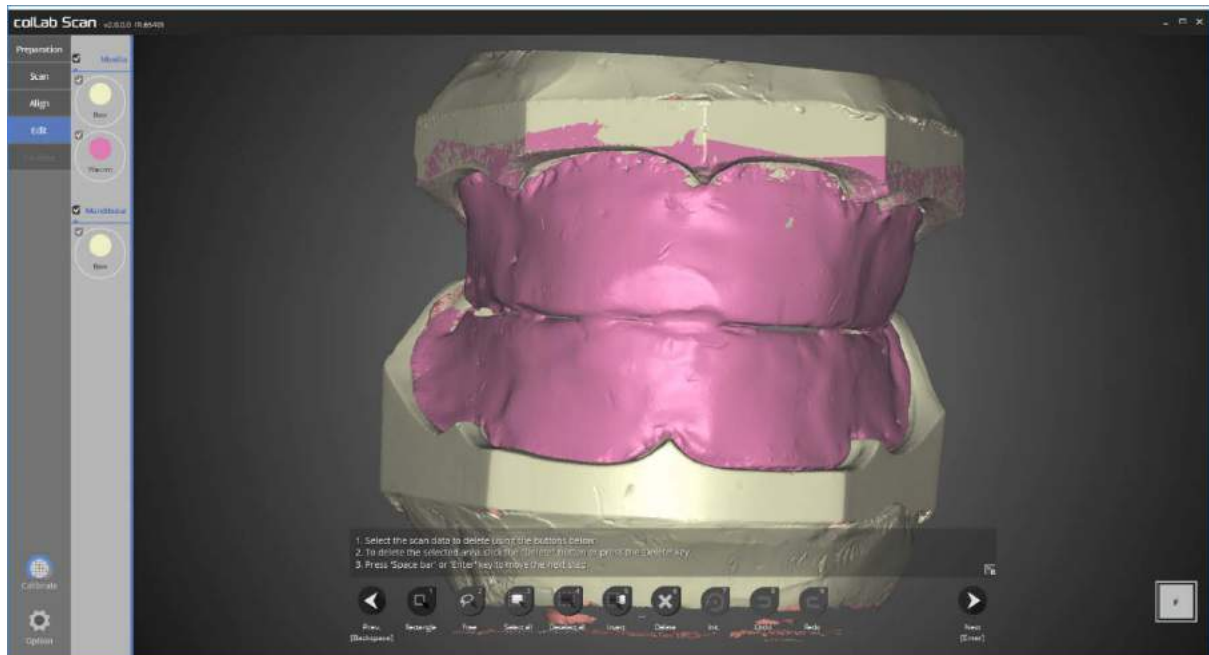


The lower jaw occlusion alignment is complete.



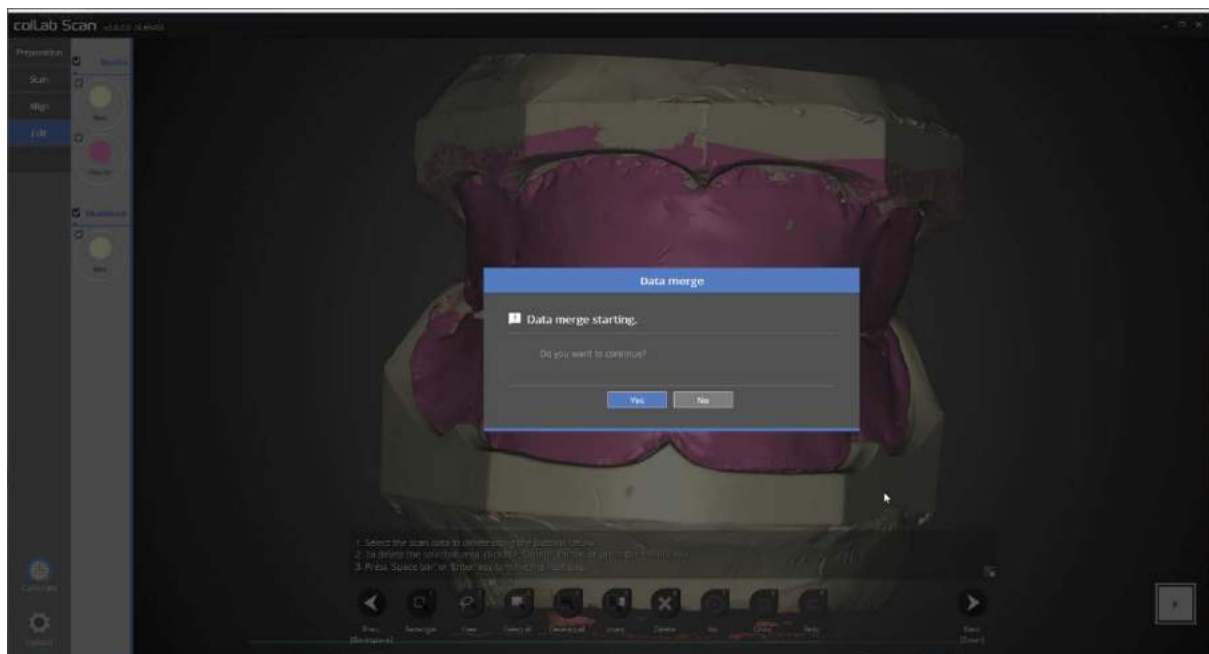
All occlusion alignment have been completed.

Make sure that all the data are correct and proceed to the next stage.

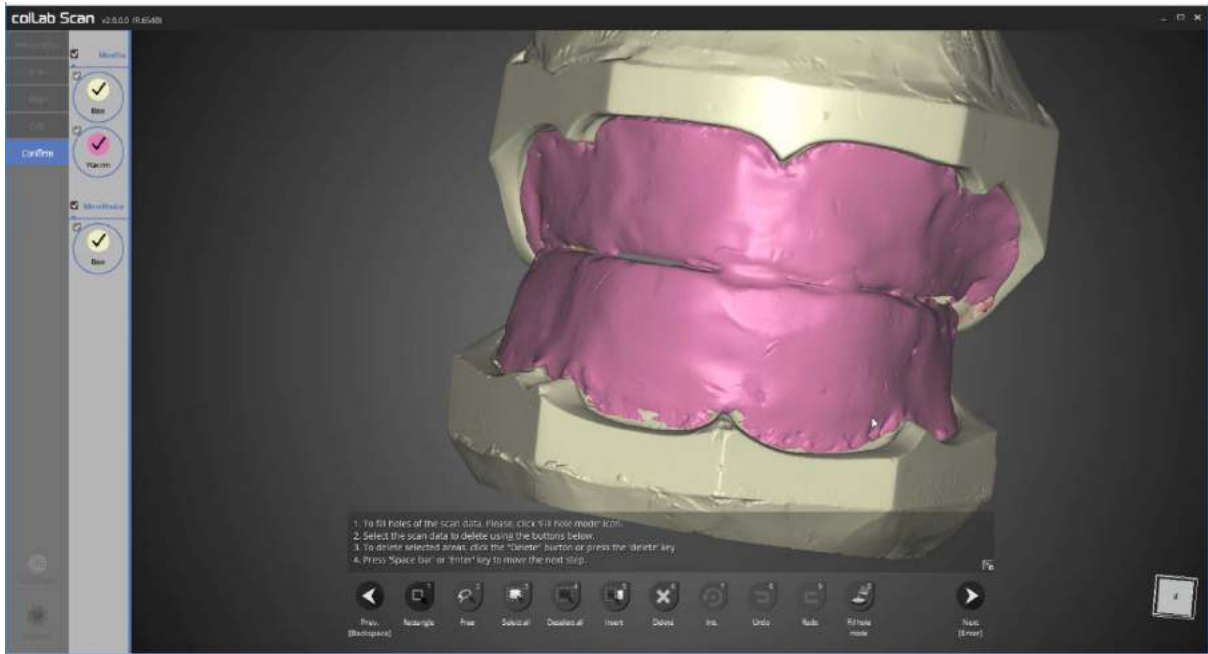


This is the editing stage.

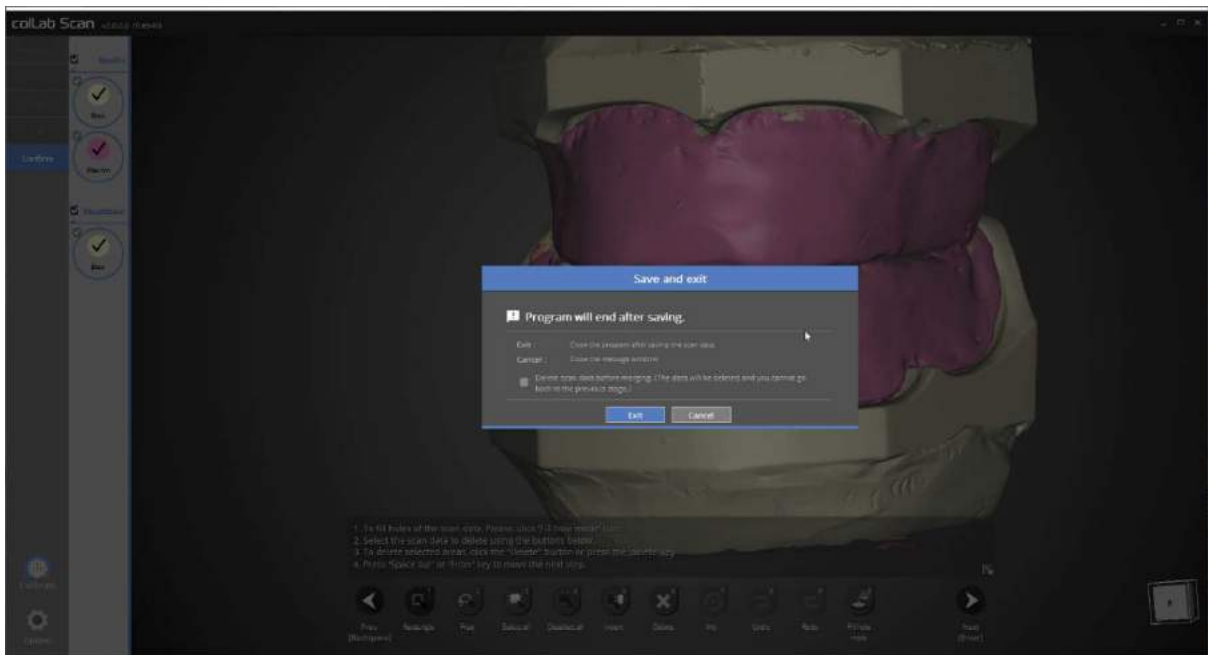
Select the data you wish to edit and delete the unwanted parts.



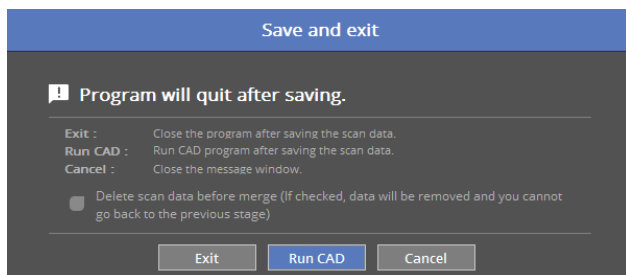
Next, we will go on to the data merging stage.



The merging of the data is complete.

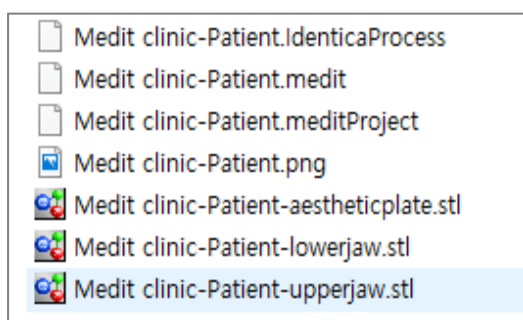


Click next to save the data and close the program.



If your device is connected to CAD, you will see the above popup message.

By clicking the [Run CAD], the scan program will be closed and the linked CAD program will open.



The full denture scan of the upper jaw and lower jaw is now complete.

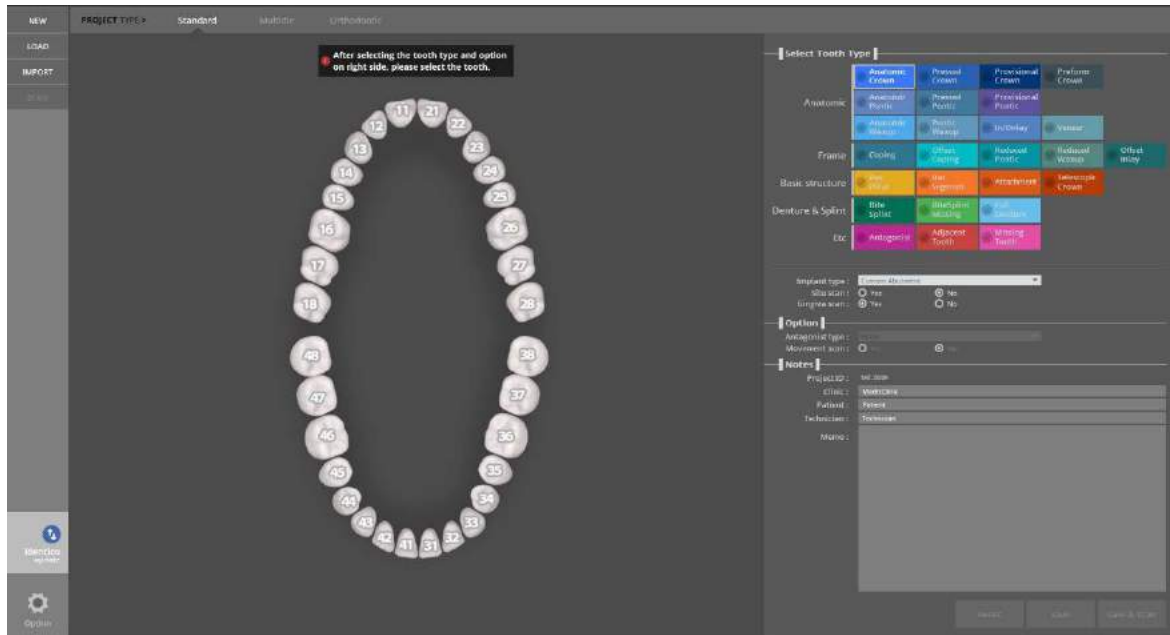
The data can be reviewed in the settings folder.

# Implant Scanbody

## ‘Separate’ feature in model scan

Complete the order form and tooth setting.

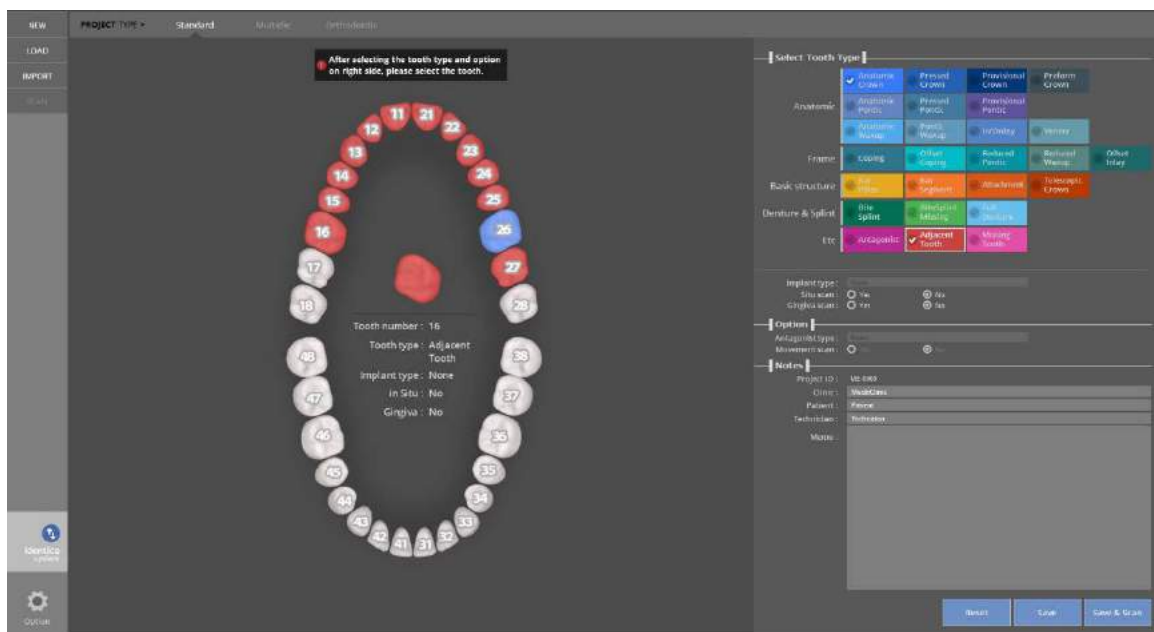
- ✓ Start the collLab program.



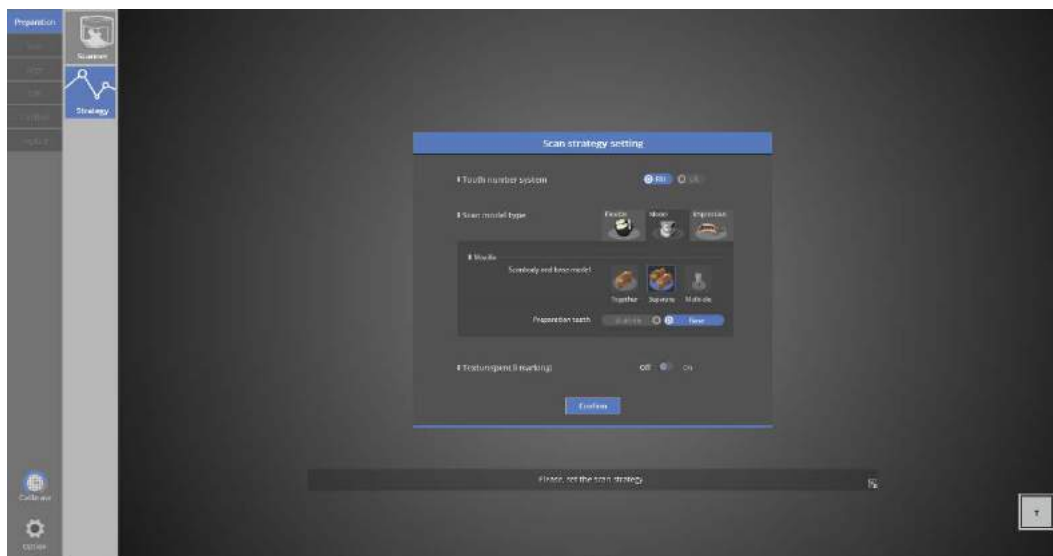
Set the settings for the model to scan.

Choose the option in the [Implant Type] for the implant setting.

Select the final restoration to be made, and select implant restoration under [Implant Type].



Select the setting for the rest of the teeth, click [Save& Scan] to start scanning.

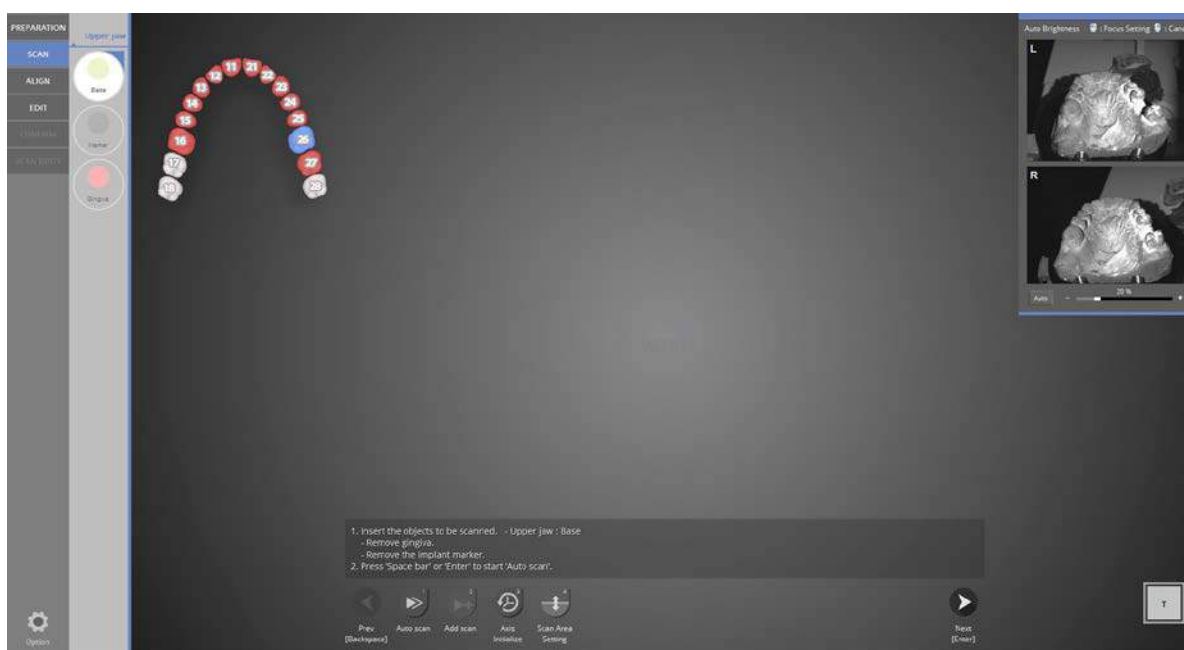


### ☰ Scan strategy setting

On the left hand side menu, check that the [Implant] entry has been created, and press the [Confirm] button to begin the program.

Choose the scan method in the scan strategy.

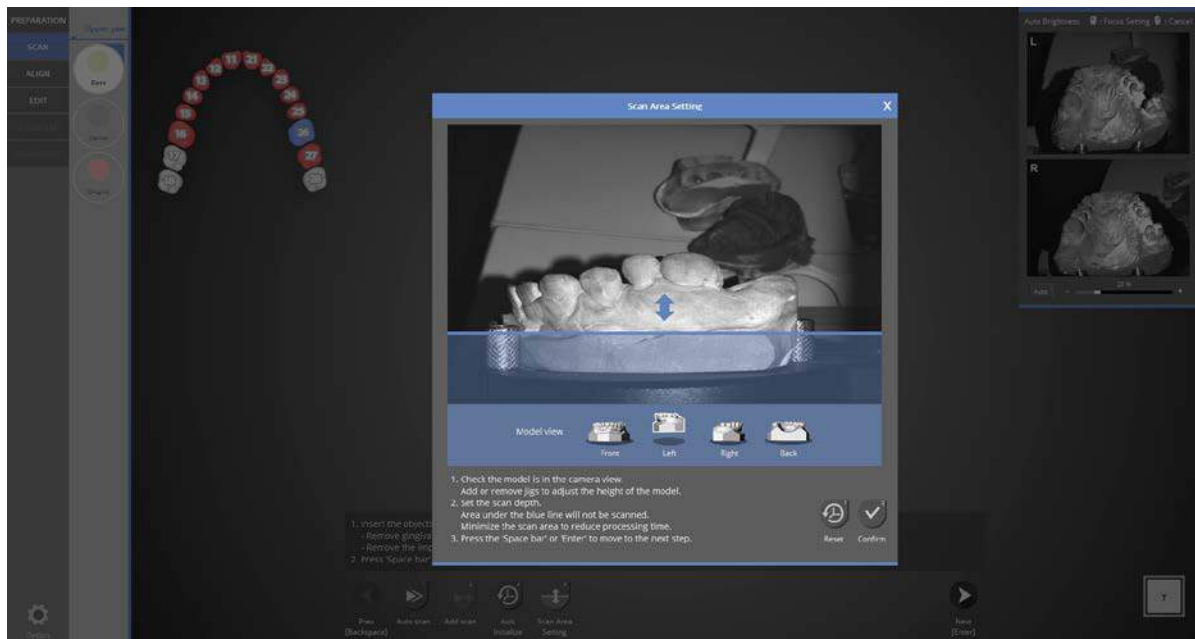
We will scan this case using [Saparate].



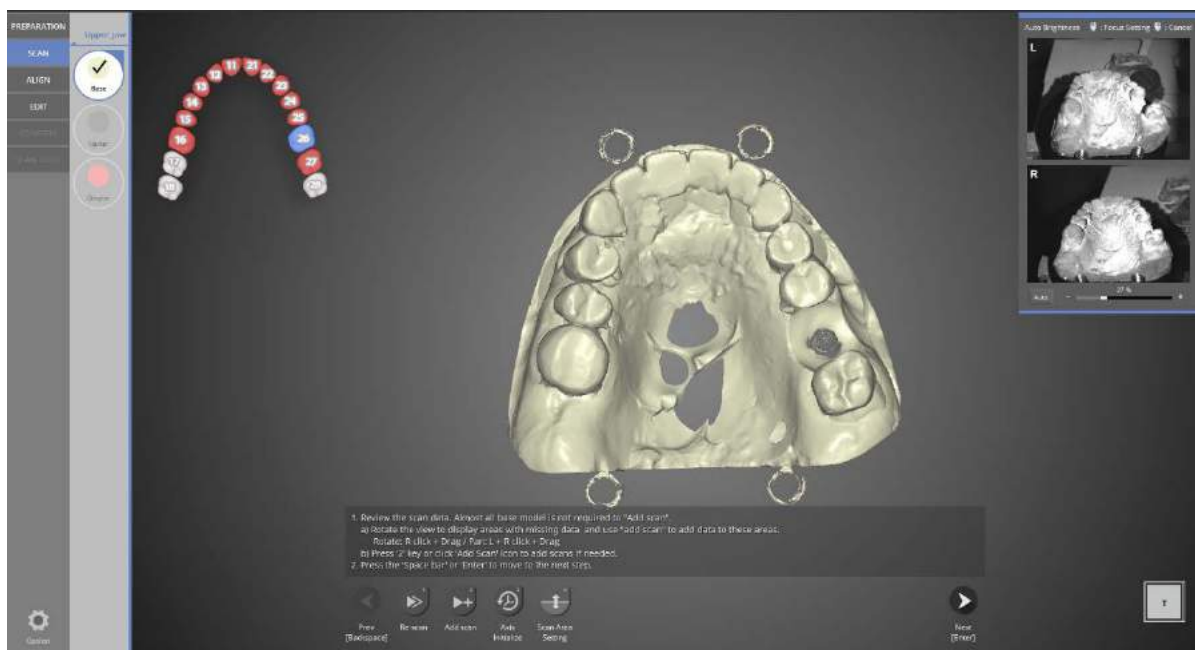
### ☰ SCAN

Place the upper base model without the scanbody and gingiva onto the scanner as indicated and click [Next] to start auto scanning.

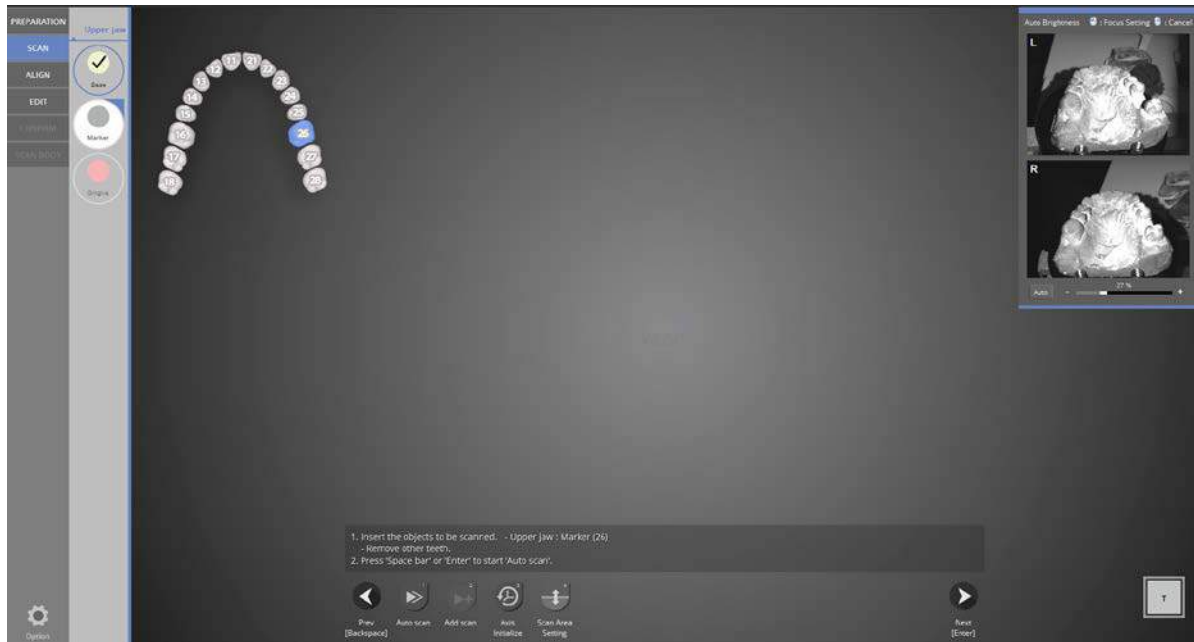




Adjust the scan depth by dragging the blue arrow to the desired height. Click [Confirm] to proceed to scanning.



Upper base auto scanning is complete. Proceed with add scan if needed and move to the next step. Base models usually do not need additional scans.



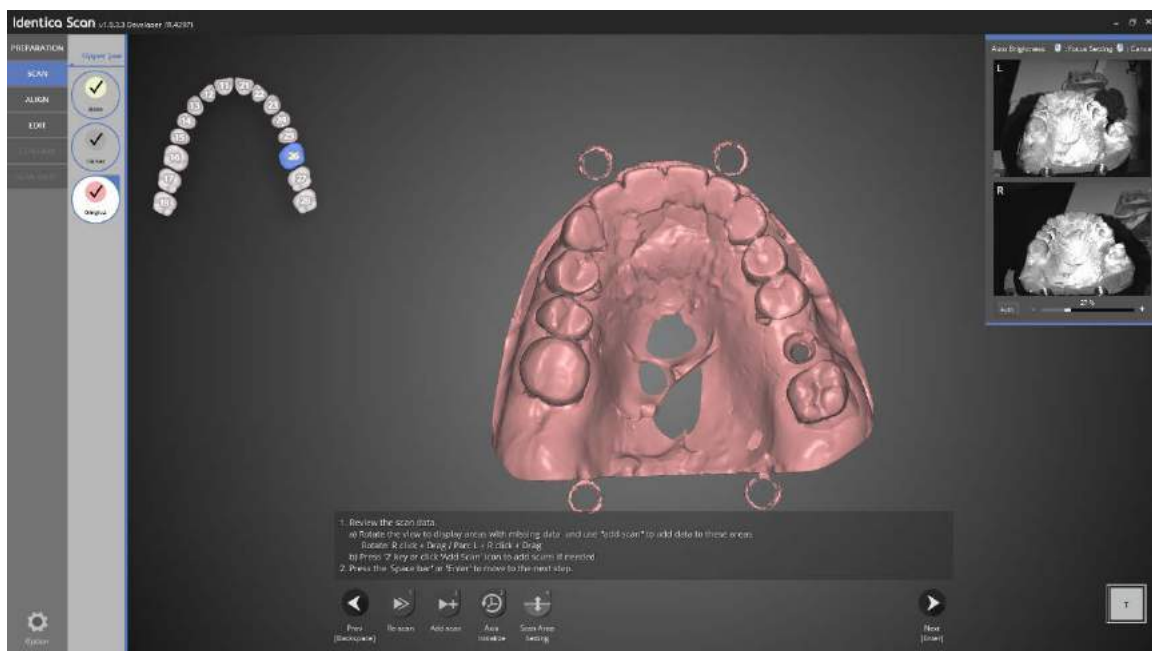
Scanbody scanning step. Combine the upper base and #26 scanbody and place it onto the scanner. Begin auto scanning.



#26 scanbody scanning is complete. Proceed with add scan if needed and move to the next step. The featured shape of scanbody should be completely scanned.

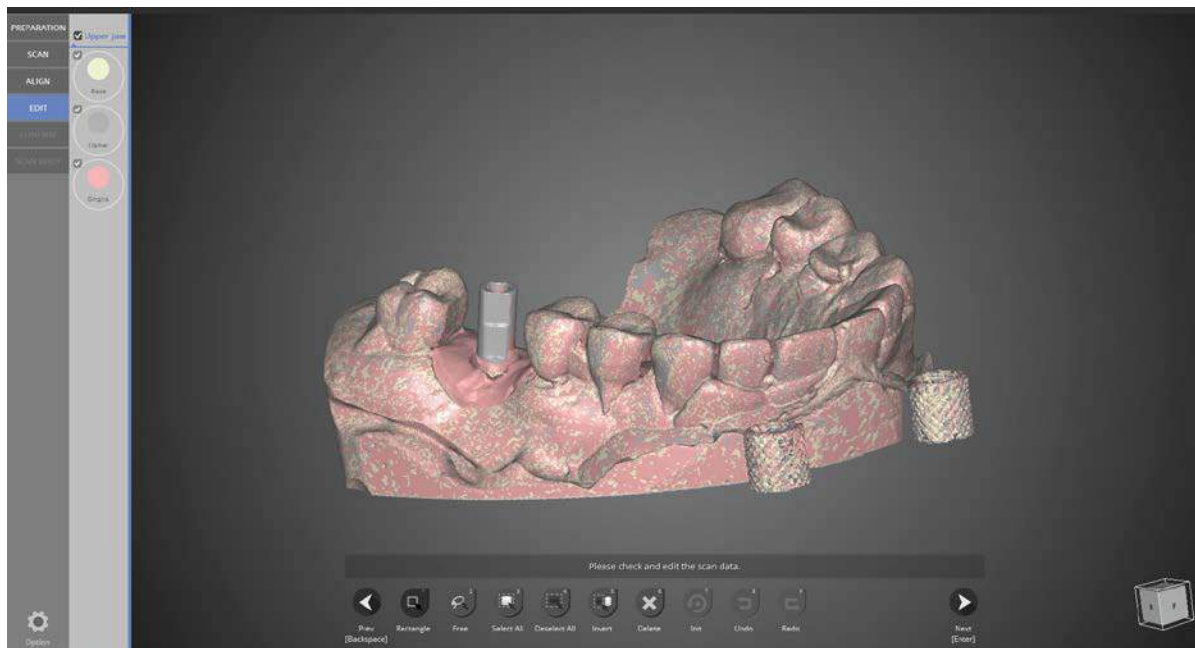


Gingiva scanning step. Combine the upper base with the gingiva and place it on the scanner. Click [Next] to proceed with auto scanning.



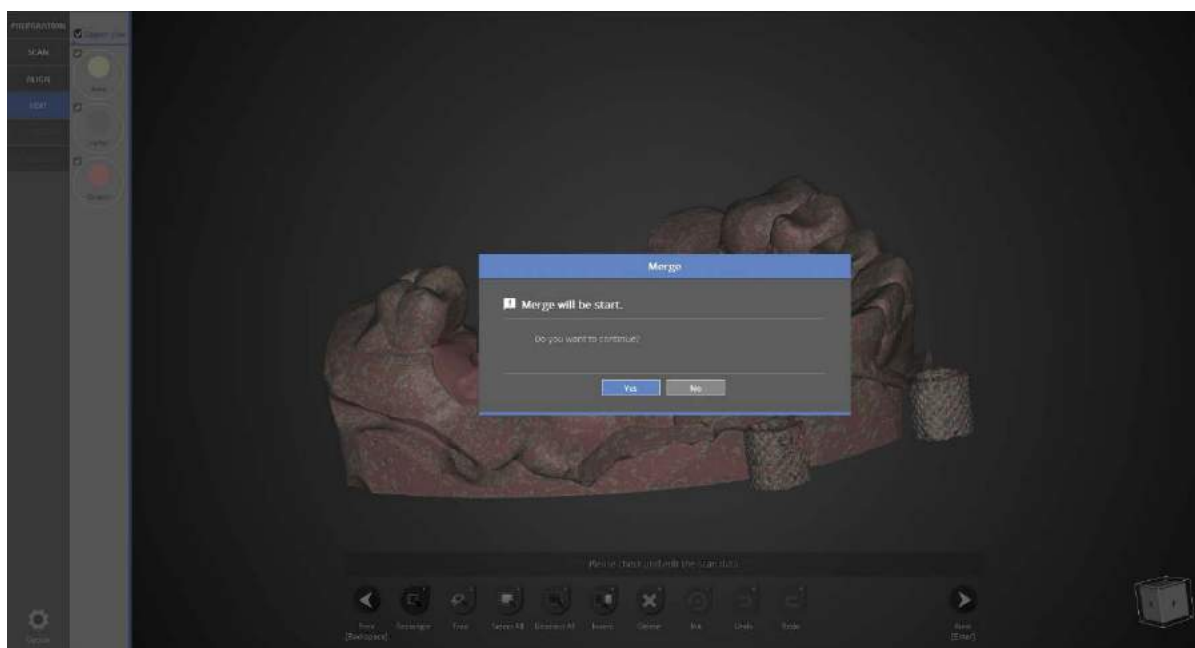
Gingiva scanning is complete.

Proceed with add-scan if needed and then move to the next step.

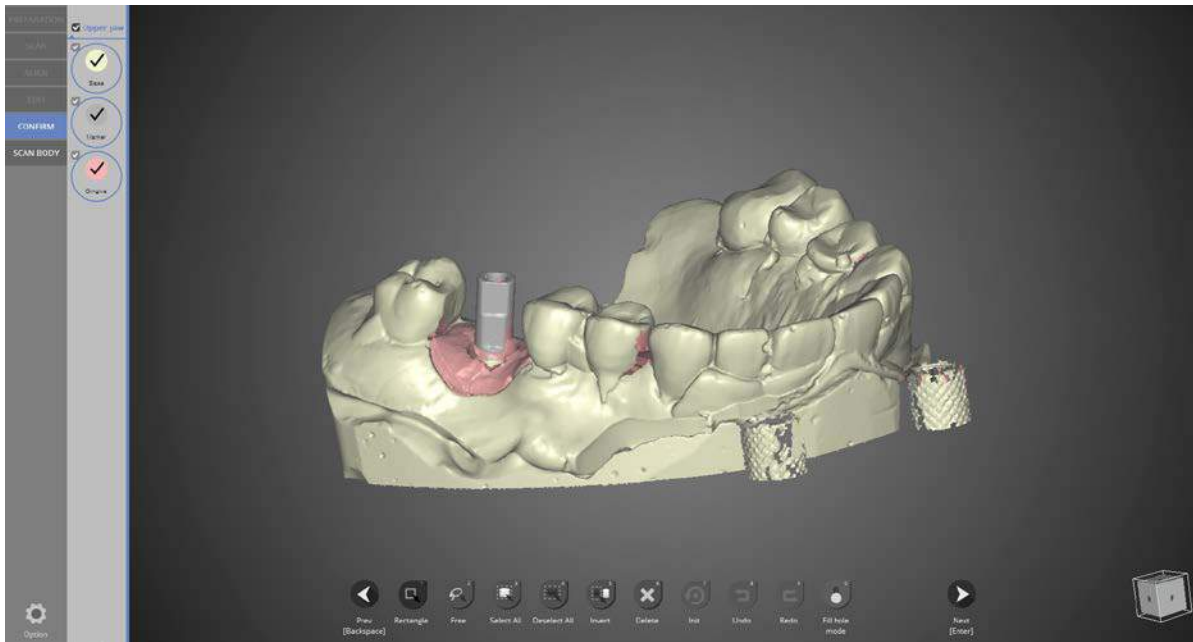


The alignment for all data is complete.

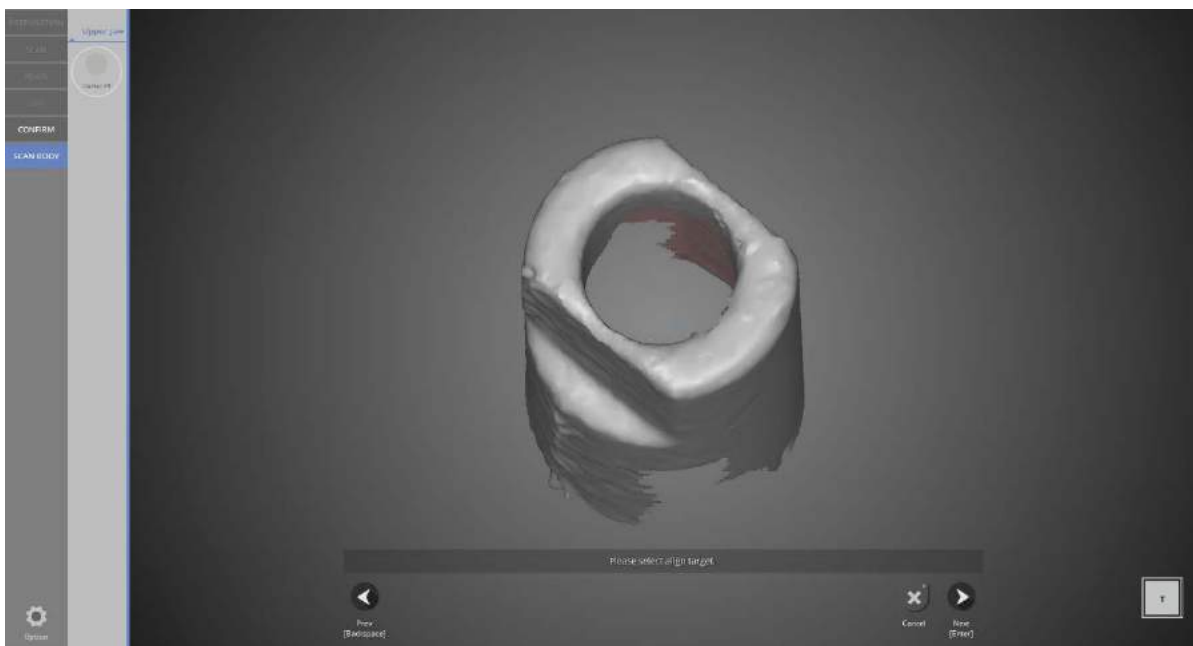
If the data is not aligned properly, click [Alignment] on the left to re-align the data.



Data merging step. Click [Yes] to start merging if the data has no errors.



Duplicated data has been removed and data merging is complete. Click [Next] to use [Scanbody] function.



Scanbody alignment stage. Click [Next] to align the data.  
If you do not want to use this function, click [Cancel] to go back to the previous stage and save the data.



#26 scanbody alignment step.

Library data is in the upper left, scan data is in the upper right, and the window showing both data is below. In the scanbody alignment menu on the left, the menu options include favorite / category / index / add function. The favorite menu includes the most used library for the category so you can use the library quickly and conveniently.



You can choose the scanbody library provided by the program from the category function. It consists of the company and library type.

Click the library you want to use and click [Next]. Click the star on the right to register this library under the favorite category.



[Index Tab]

Type the library name to search. Choose one and click [Next] to proceed to the next step.

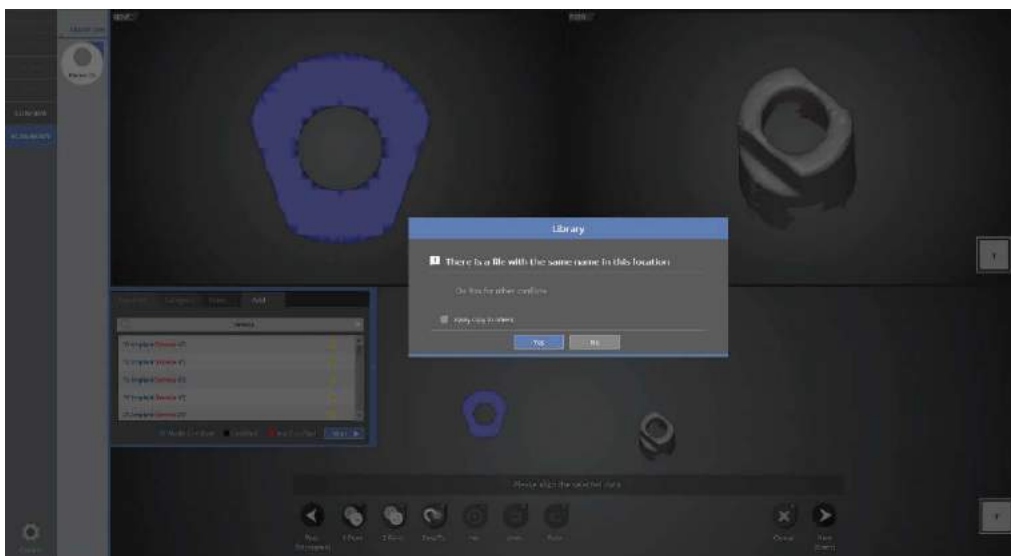


[Add Tab]

Use this function to add libraries.

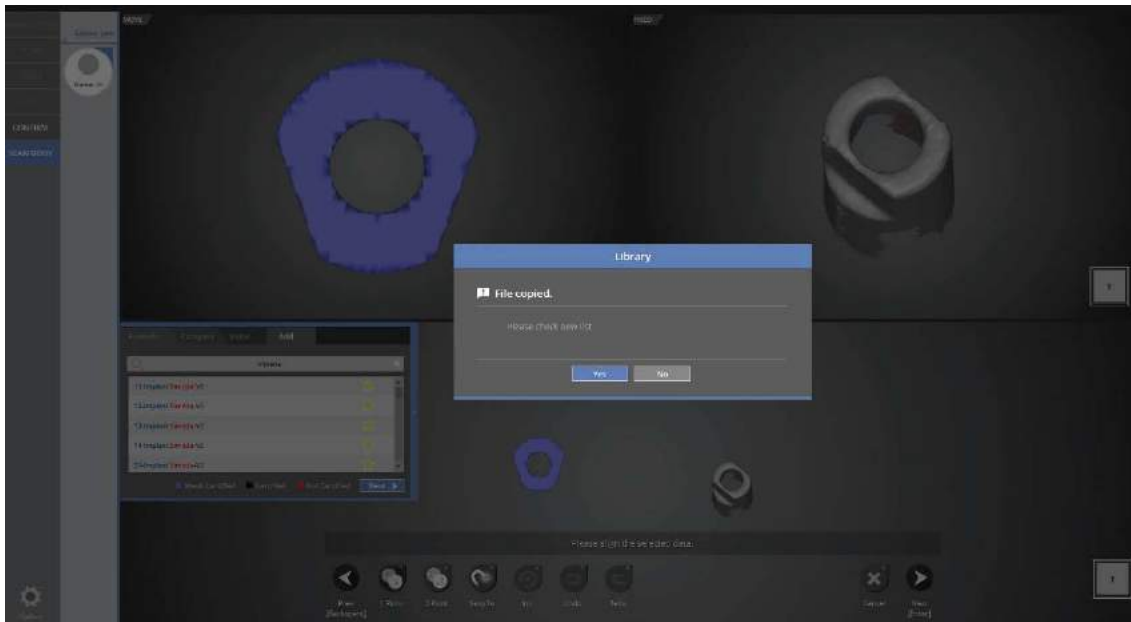


Select the library folders (multiple select available) to add and click [Choose] to add them.

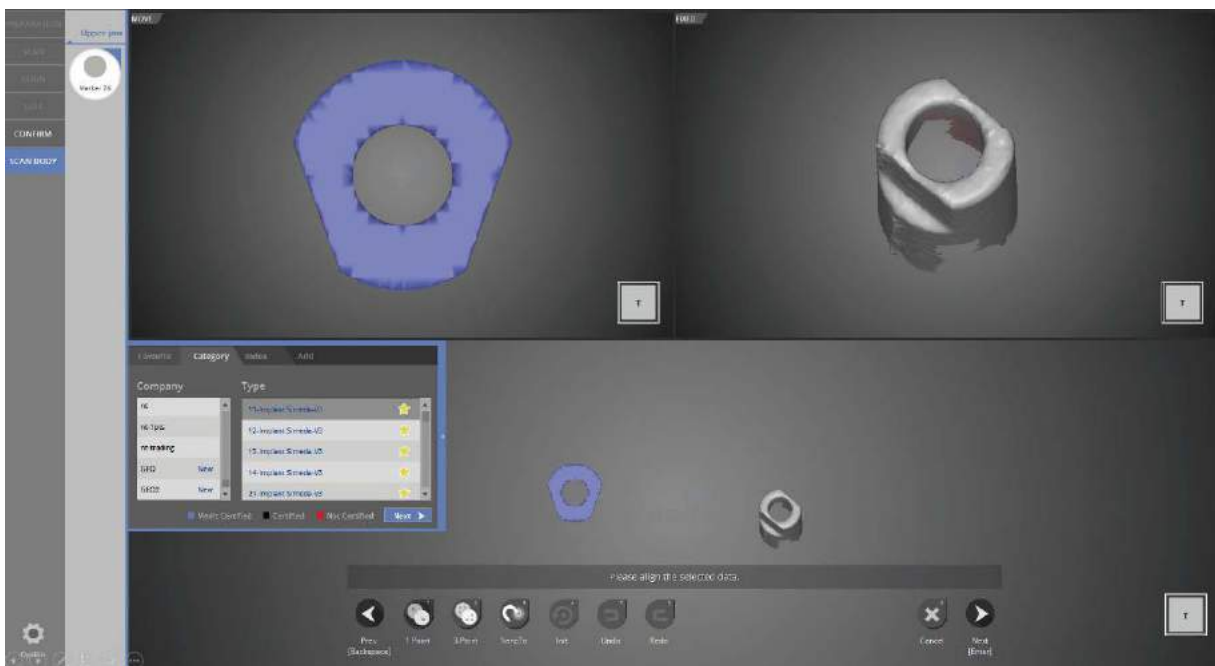


The message above appears if the files already exist in the library.

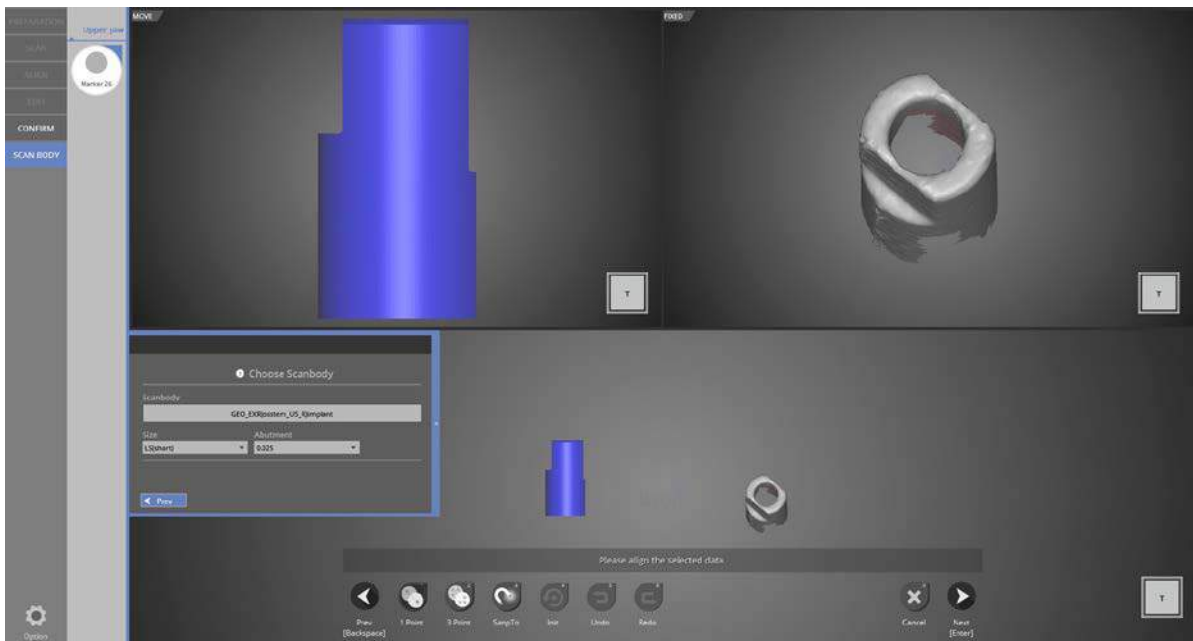




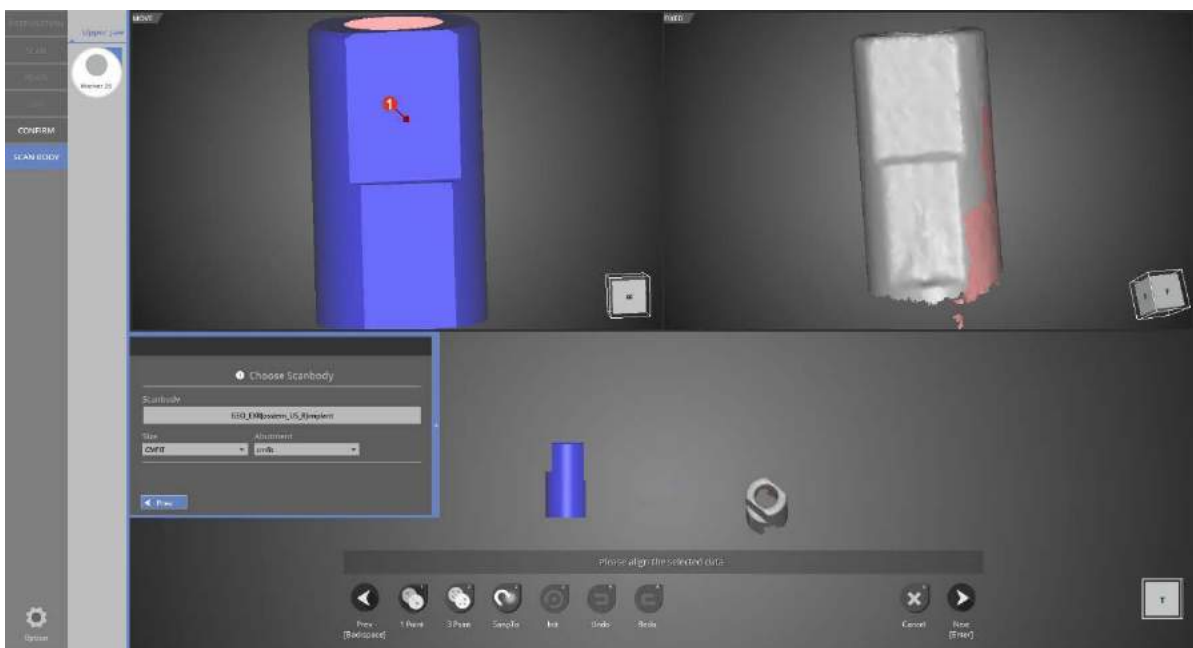
The message above appears when the addition of the scanbody library is complete.



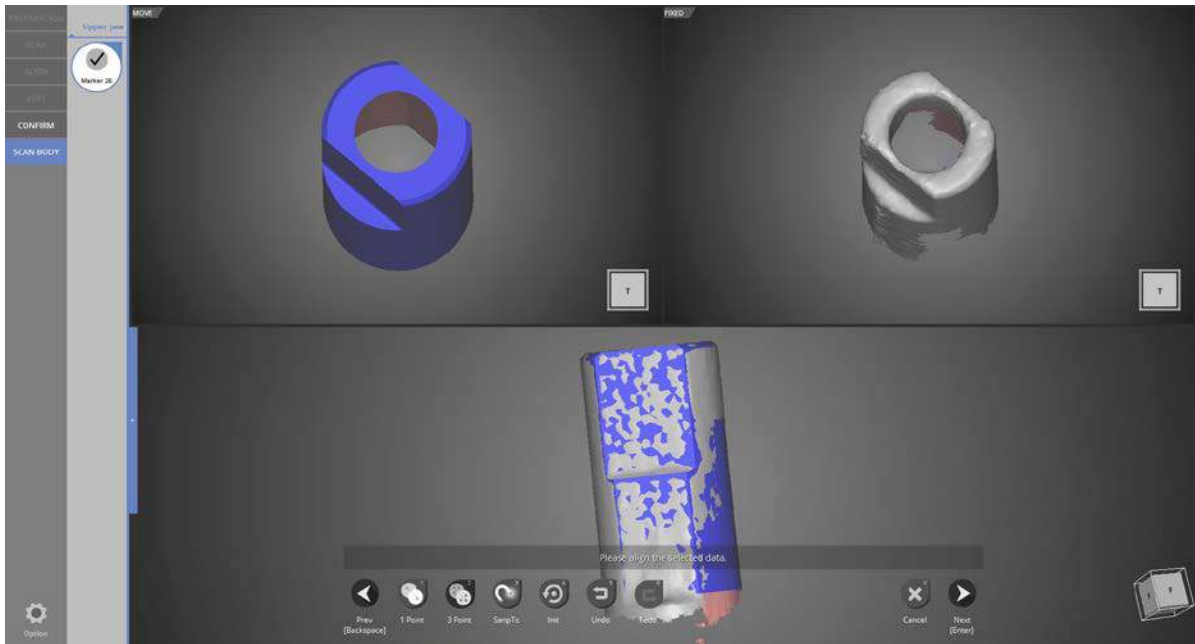
Choose the library to scan and click [Next] to proceed to the next step.



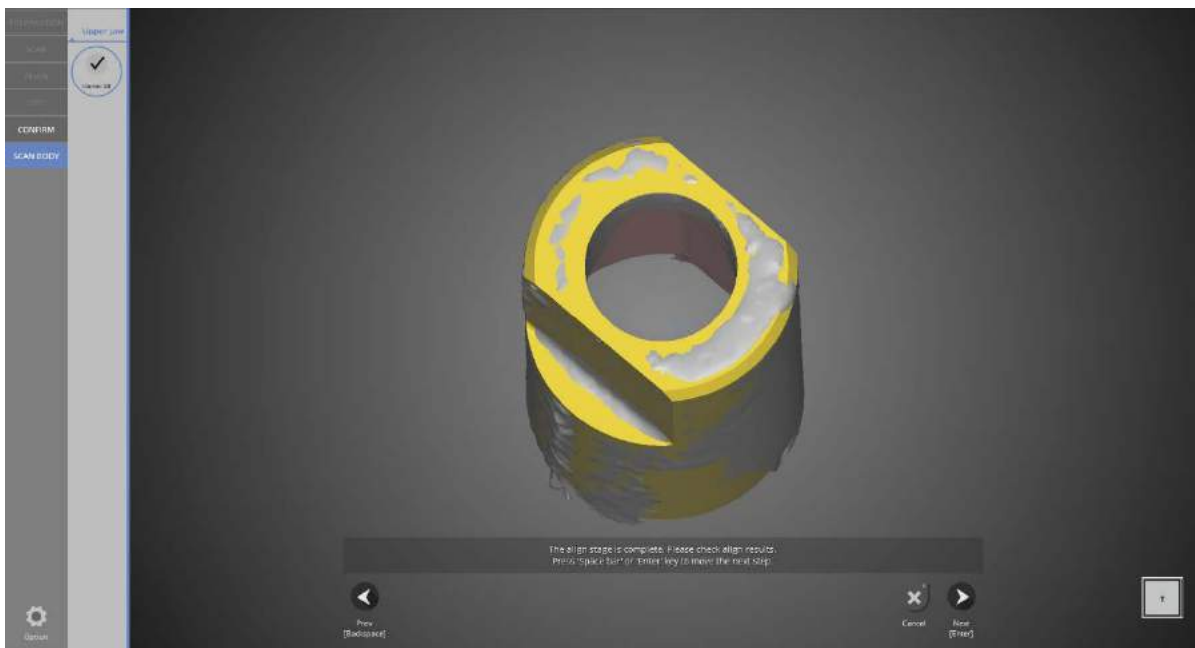
Choose the type and size of implant at this stage.



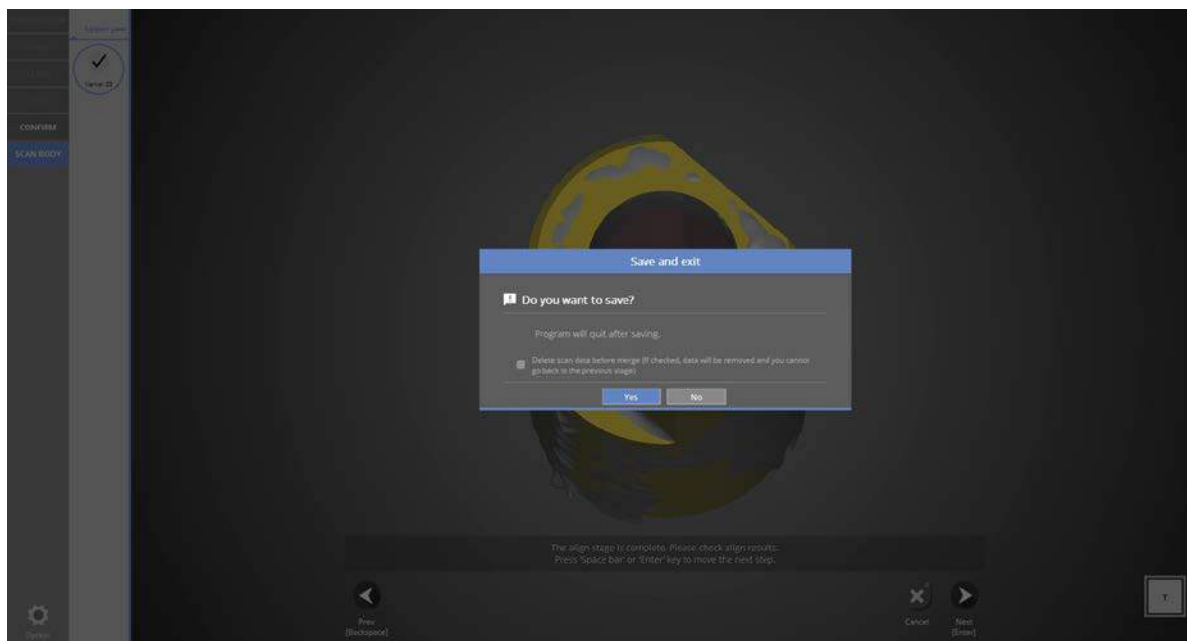
Click [1 point] in the upper left, and then click the similar spot in the right for the alignment of the scanbody library and scan data.



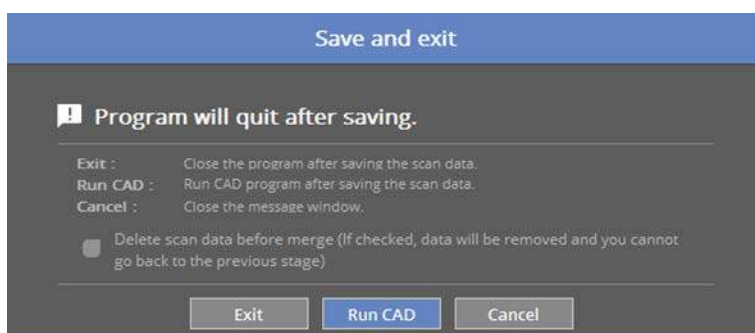
Alignment is complete. If data is not well aligned using [1 Point] alignment, use [3 Point] alignment.



All steps are complete. Click [Next] to end the program.

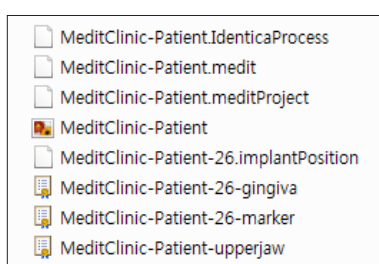


This window is to inform you that the program will close. Click [Yes] to save the data and end the program.



If you are connected to CAD, you will see the above message.

If [Run CAD] is clicked, the scan program ends and CAD program will start automatically.



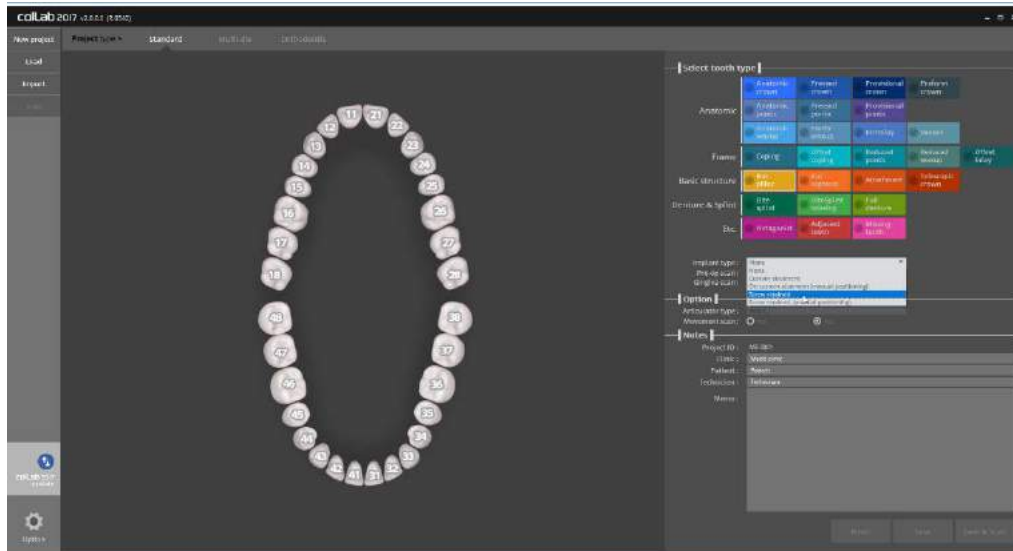
This is the completed data.

You can find the [Implant Position] file containing the implant aligned data.

## ► ‘Together’ feature in model scan

Filling in the Order form and teeth set up

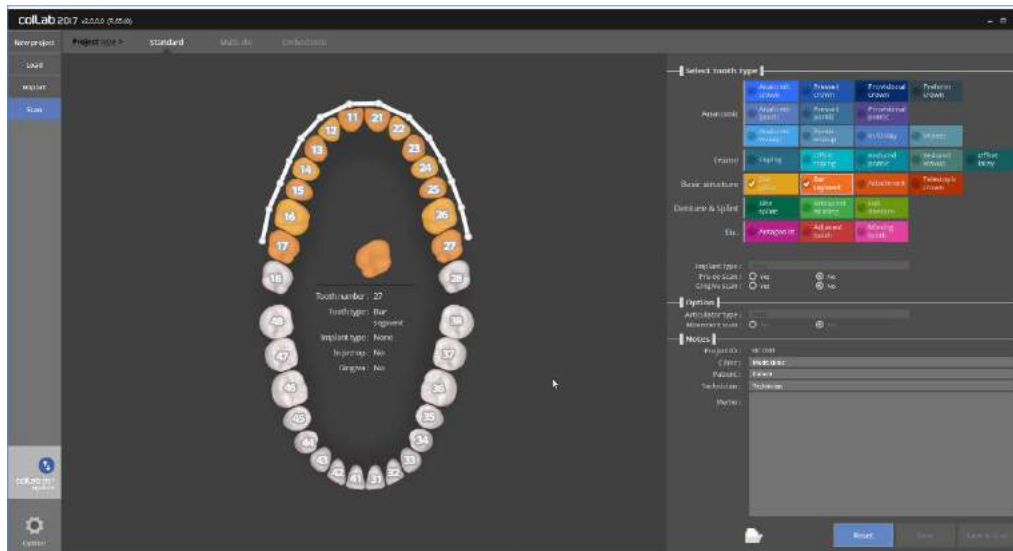
- Run collab program



Please input the setting of model you wish to scan

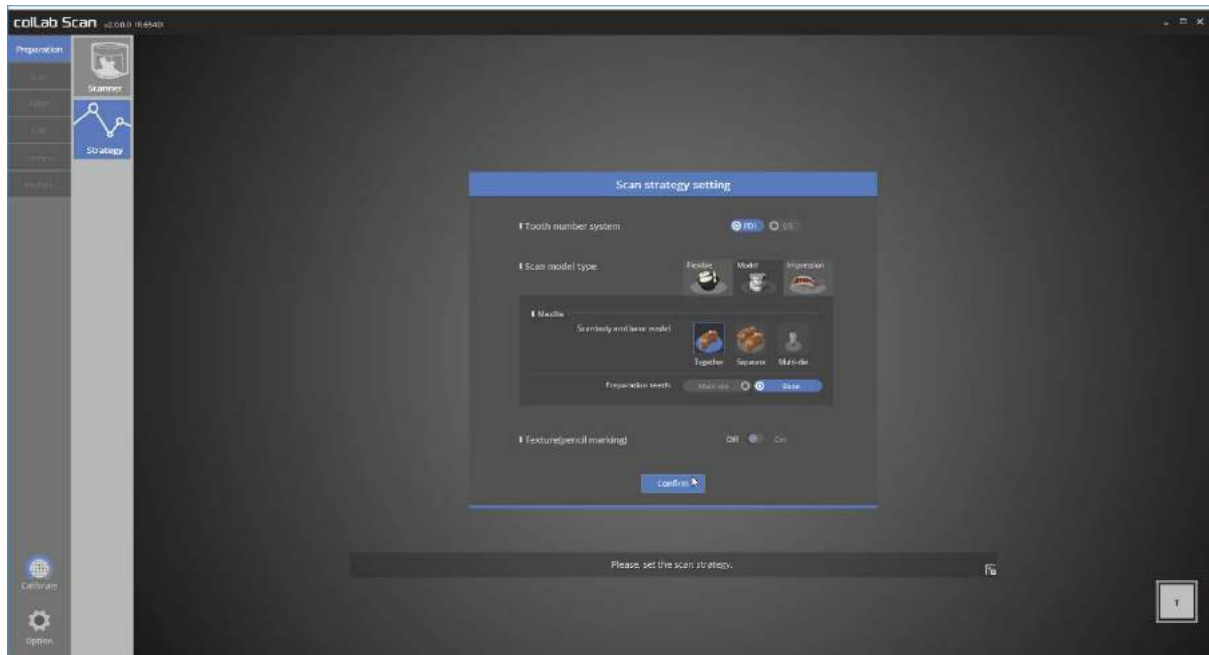
You can find “Implant type” section under Tooth type for implant related settings

Firstly, please select the final prosthesis you plan to use, then choose a suitable option in “Implant type”.

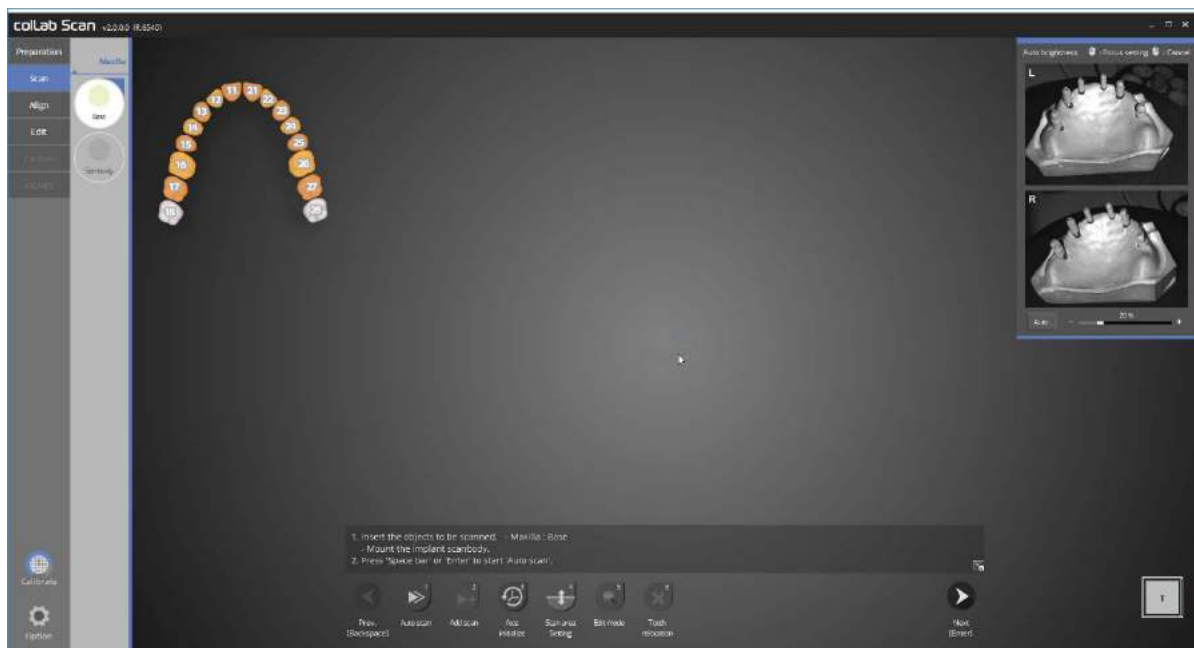


Then, finish the setting for the remaining teeth,

Click [Save & Scan] to start scanning.



Please make sure [implant] tab is generated on the menu on the upper left corner.  
 Select scanning method to be used in scan strategy setting.  
 We will use [Together] function to proceed this case.



Please follow the instruction and place the gingiva and scanbody together with upper jaw base model in the scanner, then click next to proceed to auto scan.



This stage will allow you to set the scan height prior to conducting the auto scan. Please adjust the setting to fit the required height and click [Confirm].



The auto scan of upper jaw base and scanbody is complete. Please proceed with scanning if additional scanning is required, then move on to the next step.



In this stage, we will edit the data to leave only the scanbody.  
Scanbody is not scanned separately.



Select only the scanbody, then click [invert] and [delete] to leave only the scanbody data.

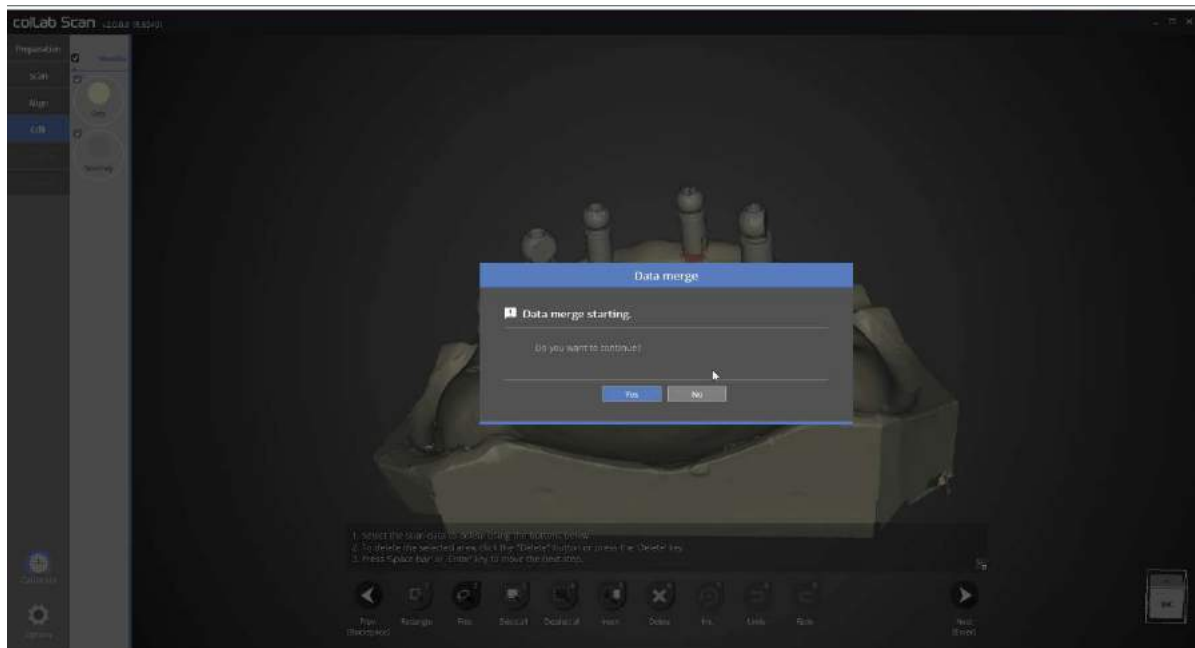




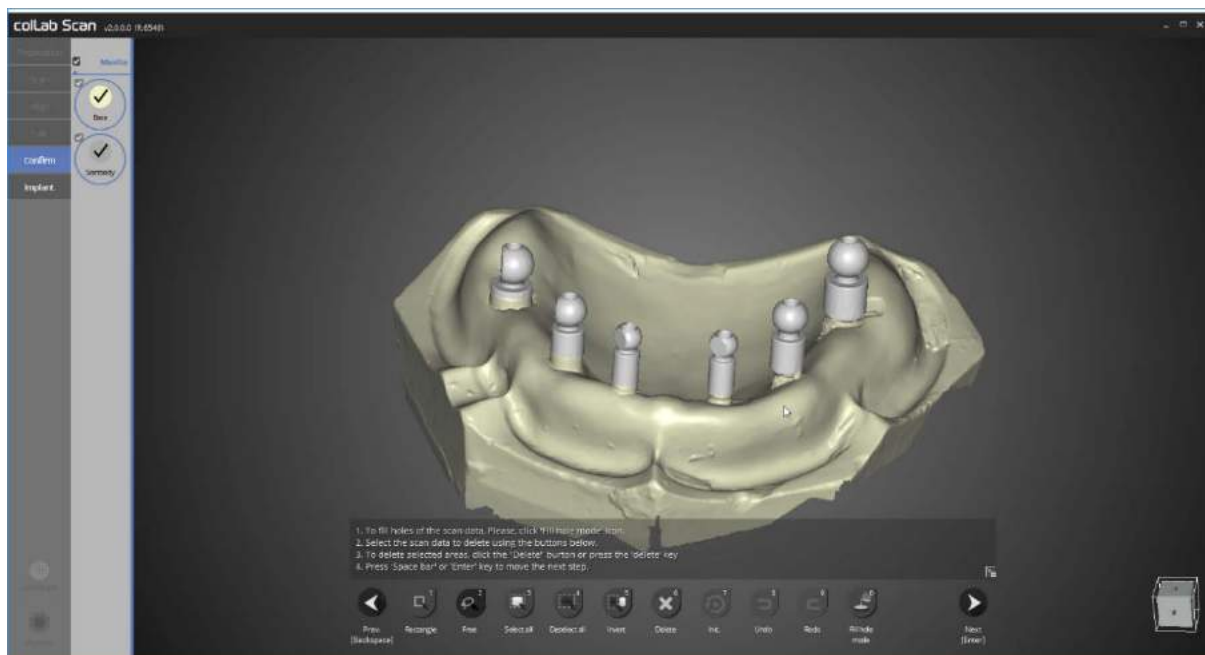
By editing, you can see that only scanbody is left.



As we copied the scan data, the alignment process is not needed.



This is the data merge step. Click [Yes] to start data merging if no errors are found.



Duplicate data has been deleted, and data merge is now complete.

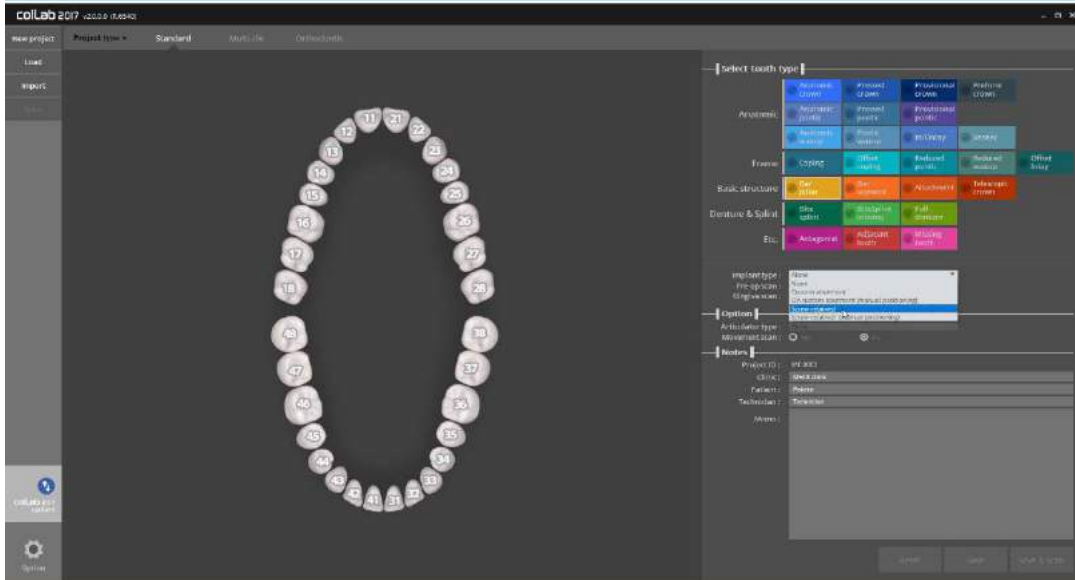
Next, please proceed to the alignment of scanbody or exit the program.

Please refer to the scan of implant scanbody section for scanbody alignment method.

## ► 'Shortage' feature in flexible multi-die

Filling in the Order form and teeth set up

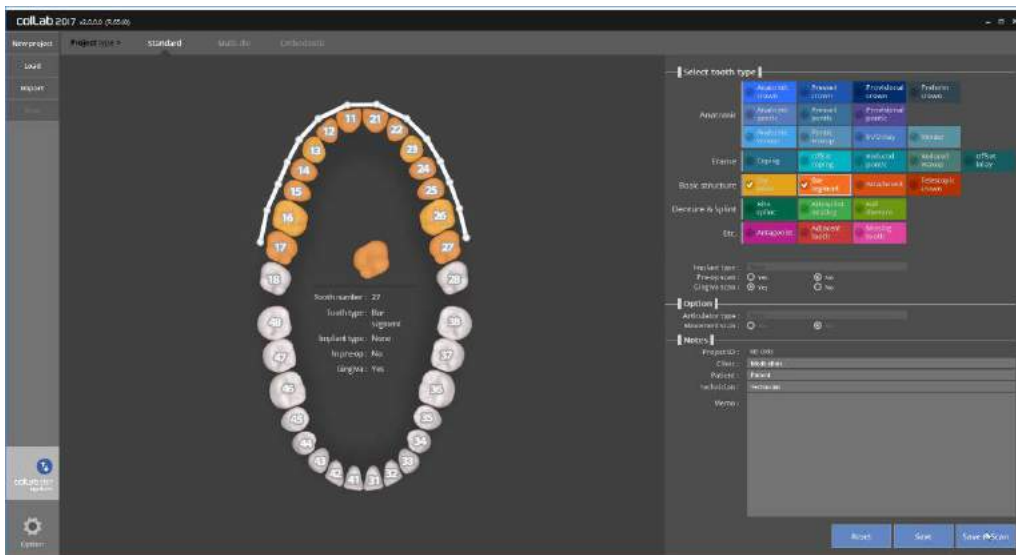
- Run collab program



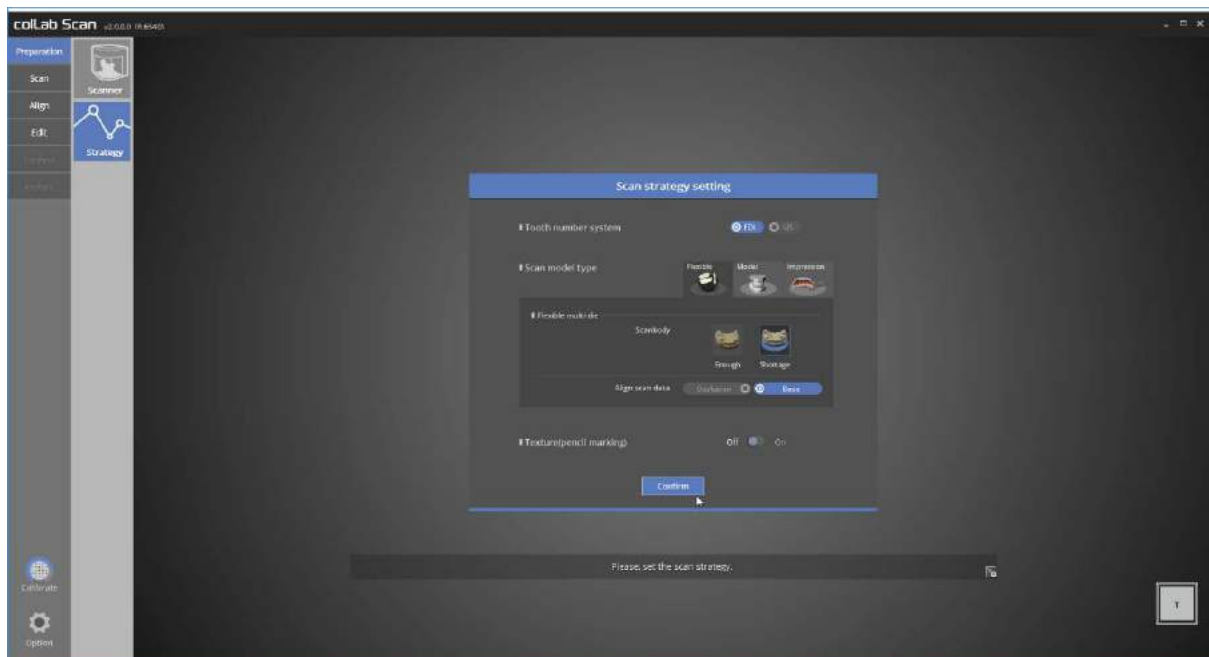
Please input the setting of model you wish to scan

You can find "Implant type" section under Tooth type for implant related settings

Firstly, please select the final prosthesis you plan to use, then choose a suitable option in "Implant type".



Then, finish the setting for the remaining teeth, click [Save & Scan] to start scanning.



Please make sure [implant] tab is generated on the menu on the upper left corner.

Select scanning method to be used in Scan strategy setting.

We will use [Shortage] function in the flexible multi-die to proceed this case.

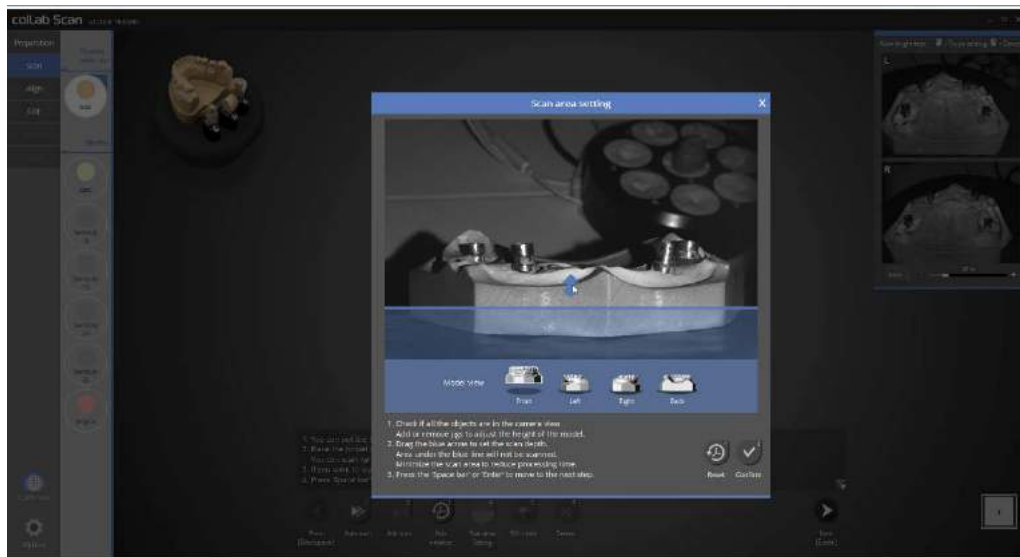
'Shortage' function is used when the user does not have enough scanbody and only uses one or two for scanning.



There is no limitation for scanning order or scanning model for flexible multi-die.

This time, we will scan the base first.

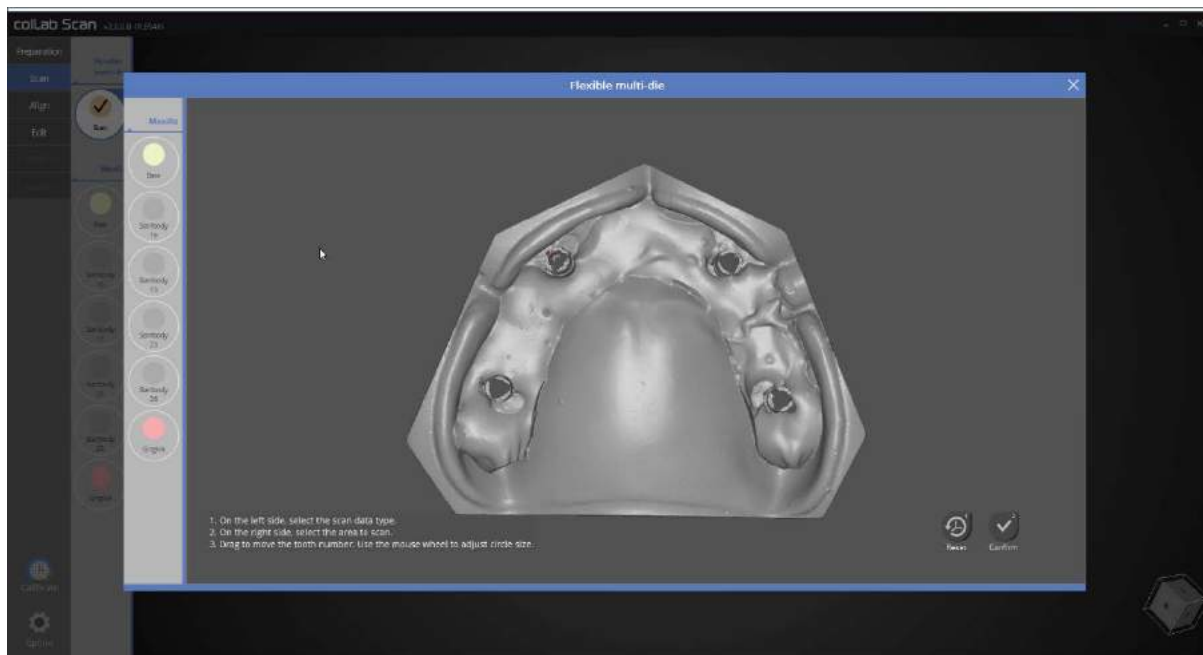
As the program instruction states, we will proceed with scanning without combining the base with scanbody.



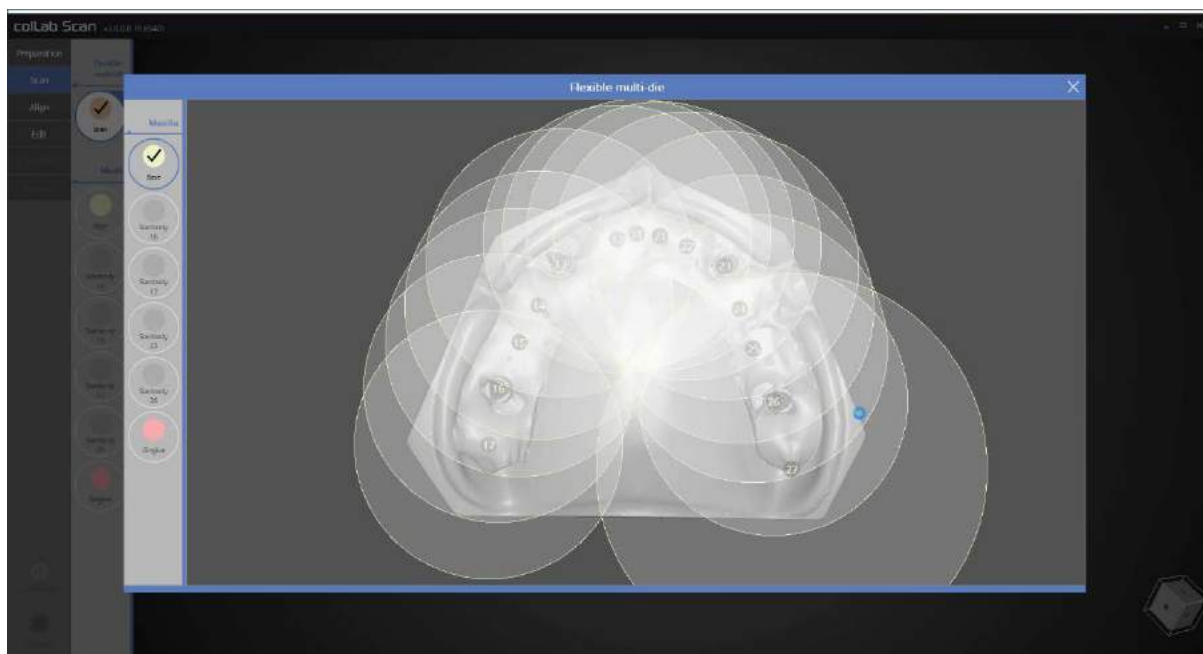
This stage will allow you to set the scan height prior to conducting the auto scan. Please adjust the setting to fit the required height and click [Confirm].



Auto scan of upper jaw base is complete. Please proceed with scanning if additional scanning is required, then move on to the next step.



This is scan data defining stage, which is an exclusive function for flexible multi-die.

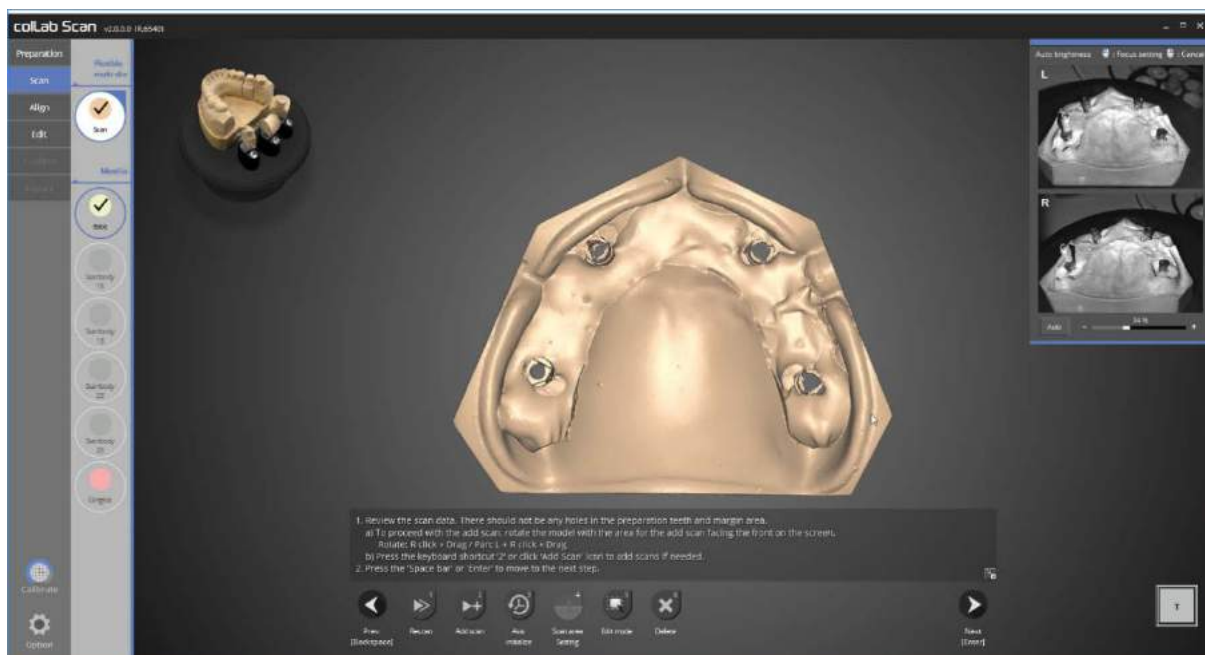


We will now define the upper jaw base data which we scanned data.

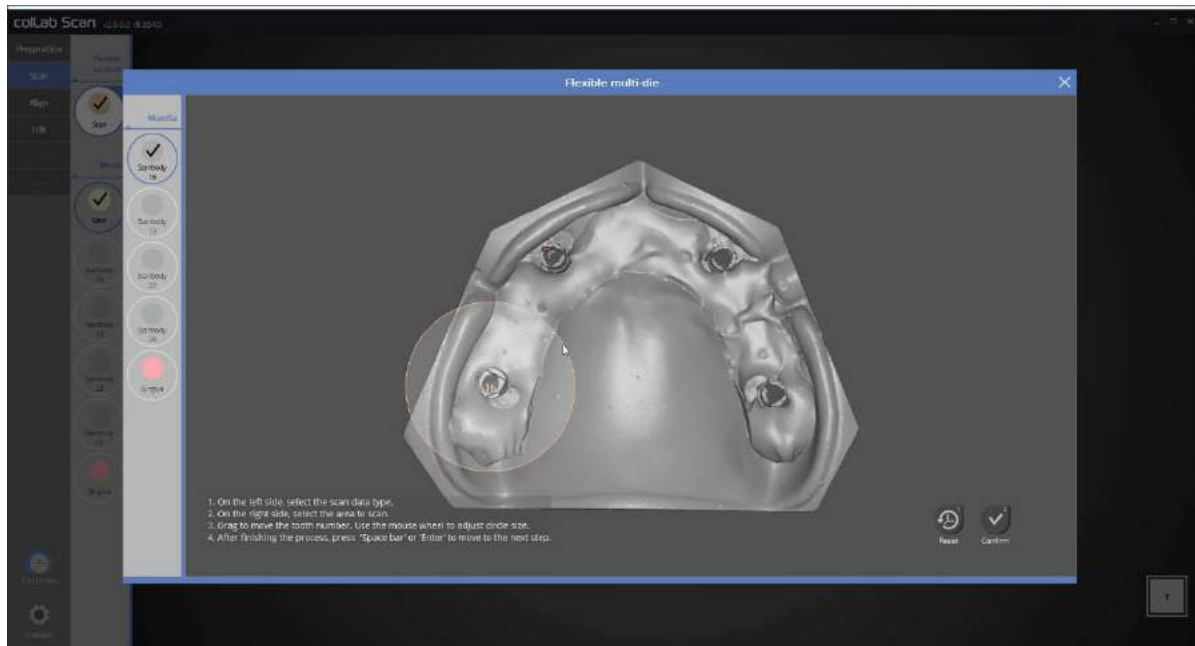
Please select base from Maxilla option on the left, and mark the teeth position with a circle in order of the scan data. The size of the circle can be adjusted by scrolling the wheel of the mouse. The program will only use the data included in the circle, hence if you wish to preserve all the scan data, you can do so by enlarging the circles as shown in the picture above.



Please place a scanbody you have with tooth No. 16 in the appropriate position, adjust the scan data height and proceed with the auto scan.



The scan of No. 16 scanbody and the base is complete.



We will now define the scan data. Please define the No. 16 scanbody data as illustrated in the picture above.

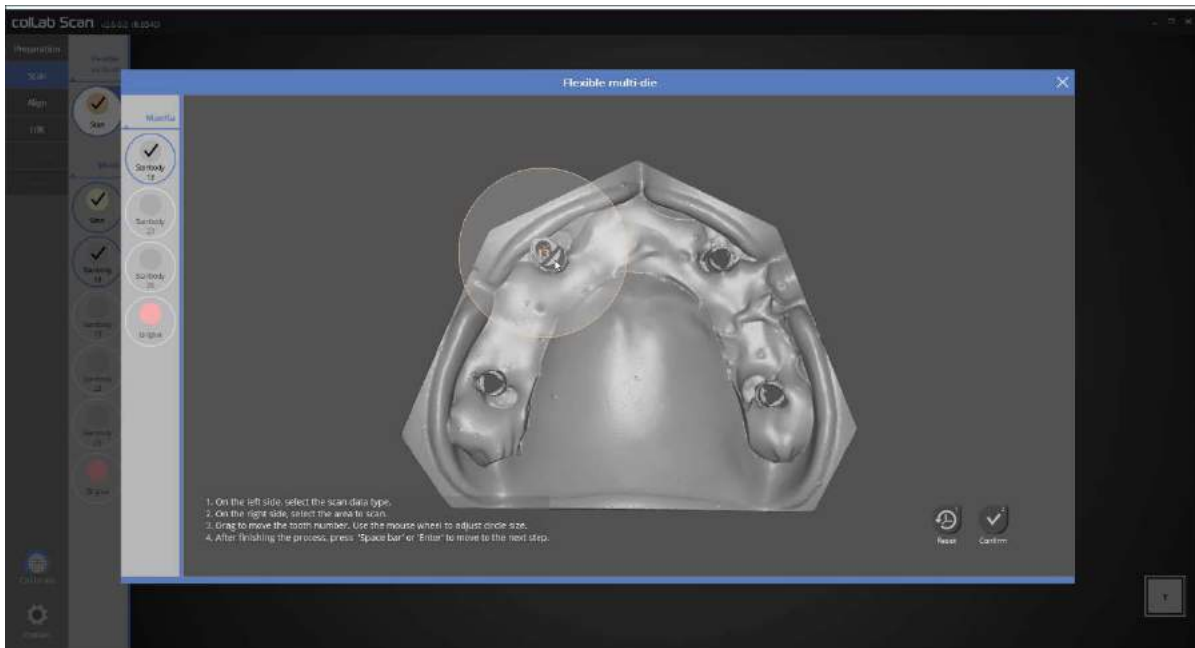


Please place a scanbody you have on tooth No. 13 position, adjust the scan height area and proceed with the auto scan.





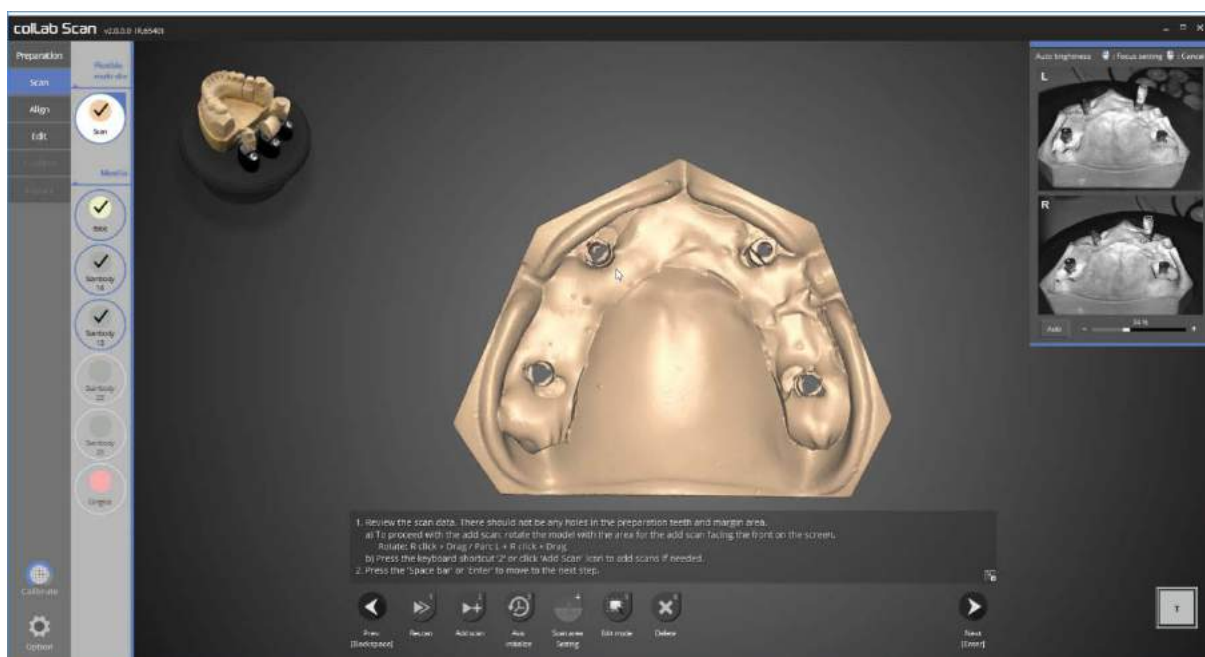
The scan of No. 13 scanbody and the base is complete.



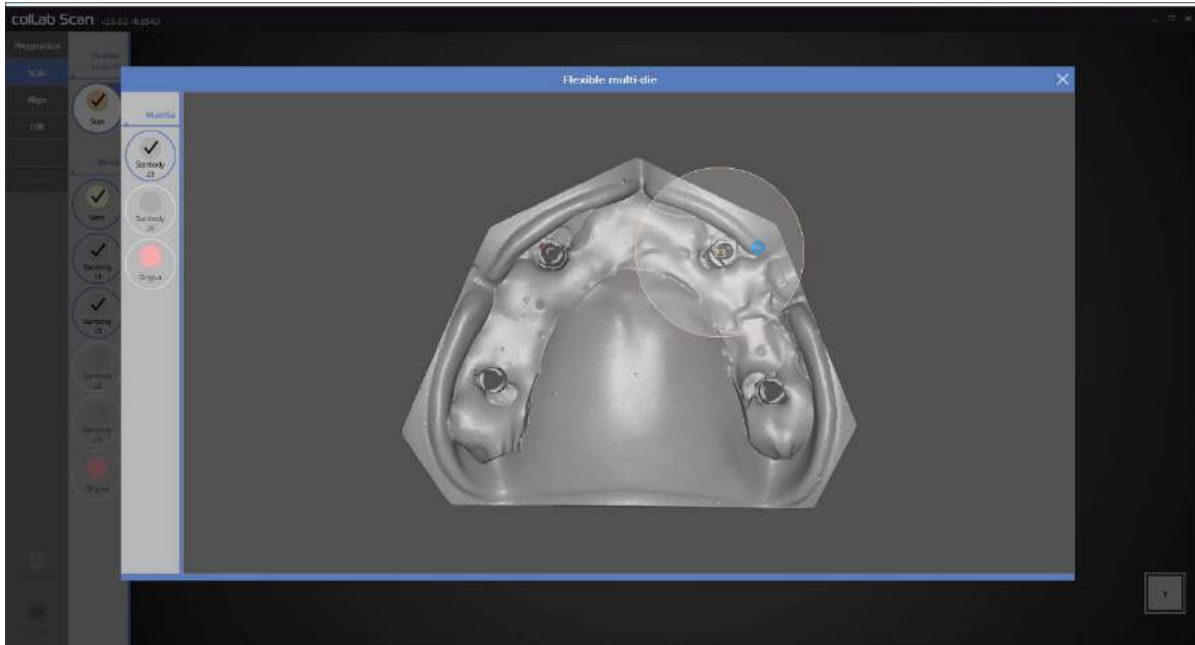
This is a stage to define scan data. Please define the No. 13 scanbody data as illustrated in the picture above.



Please place a scanbody with tooth No. 23 position, adjust the scan height area and proceed with the auto scan.



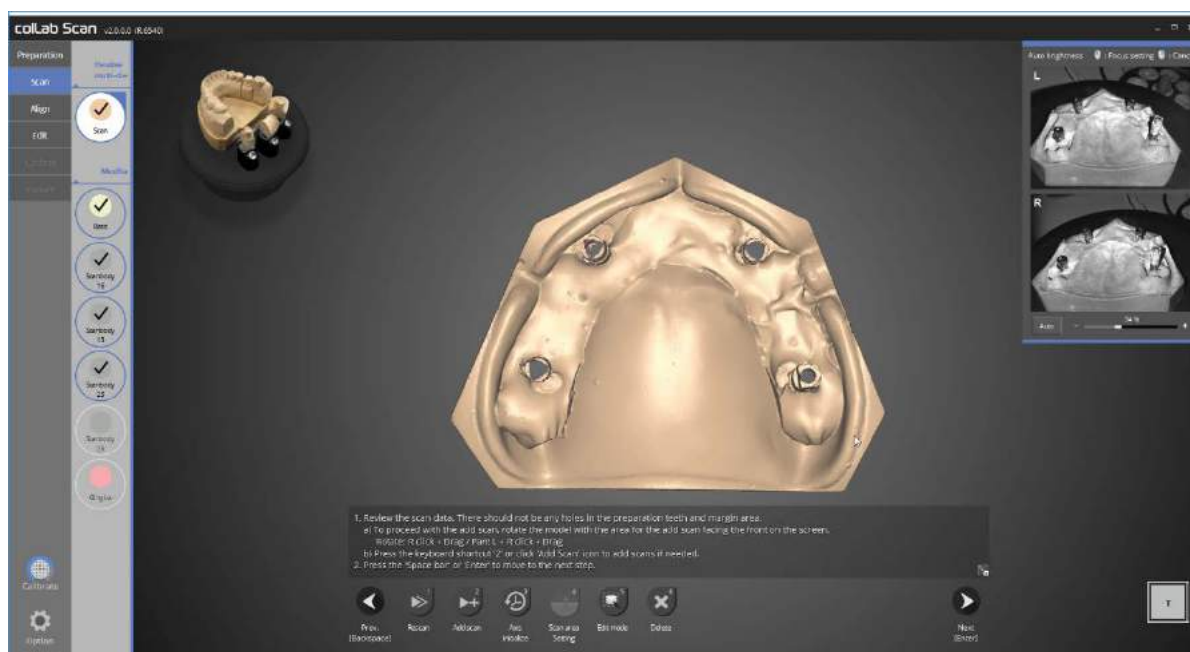
The scan of No. 23 scanbody and the base is complete.



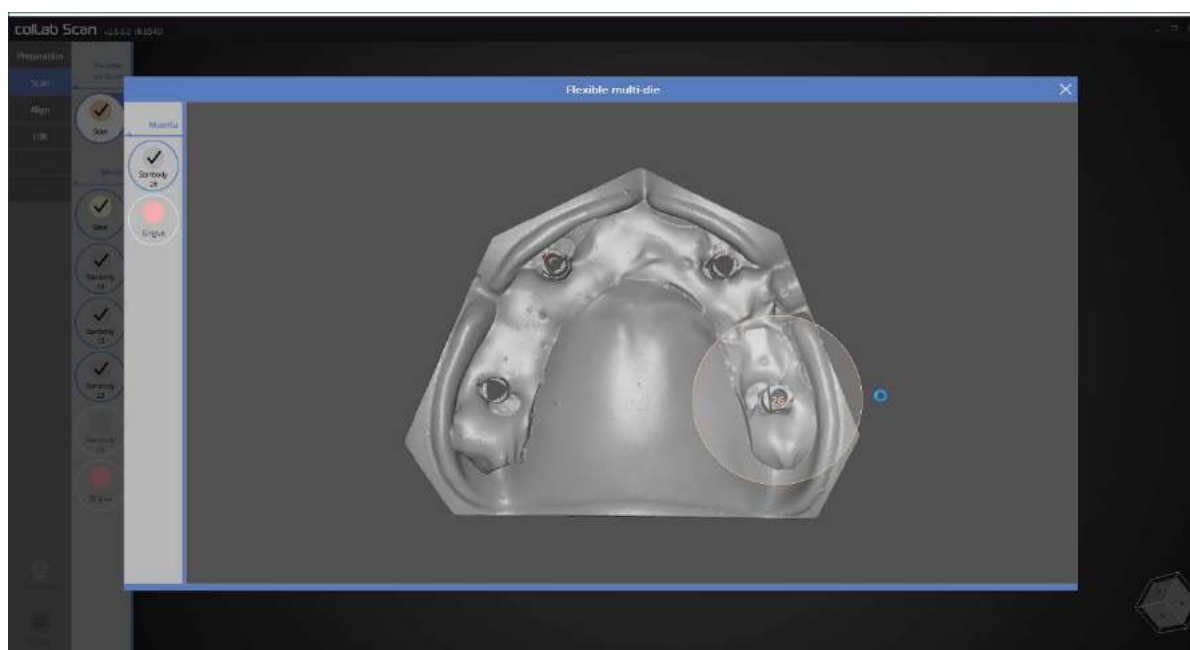
This is a stage to locate scan data. Please select the No. 23 scanbody data as illustrated in the picture above.



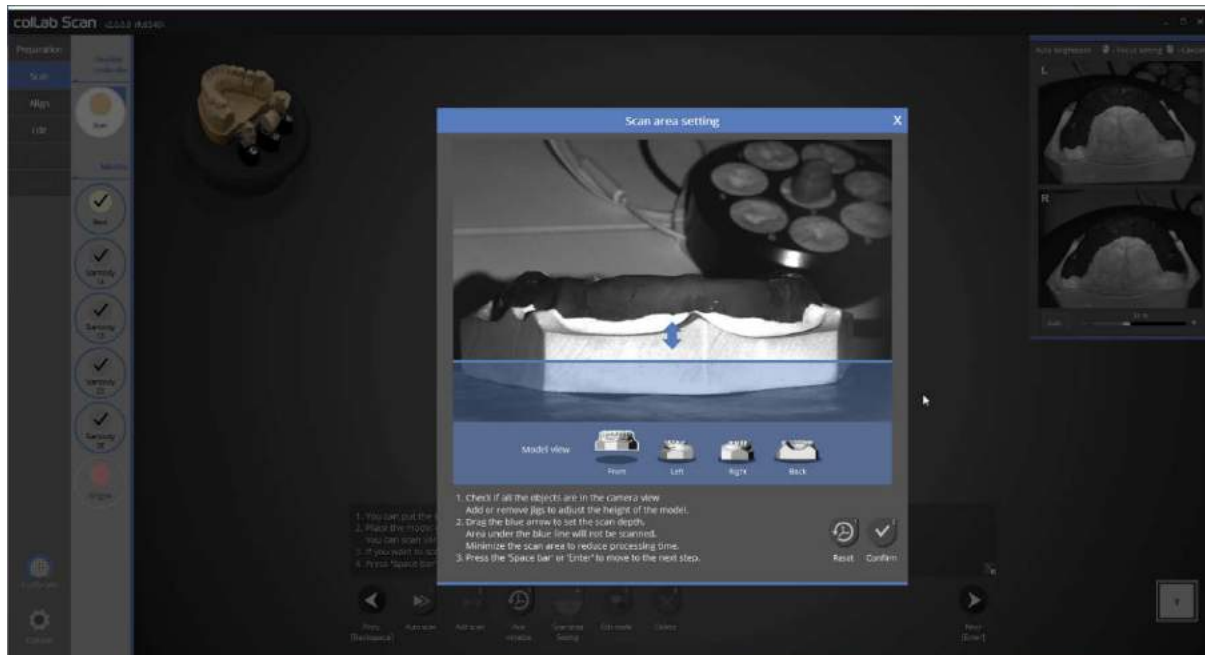
Please place a scanbody you have with teeth No. 26 in the appropriate position, adjust the scan data height and proceed with the auto scan.



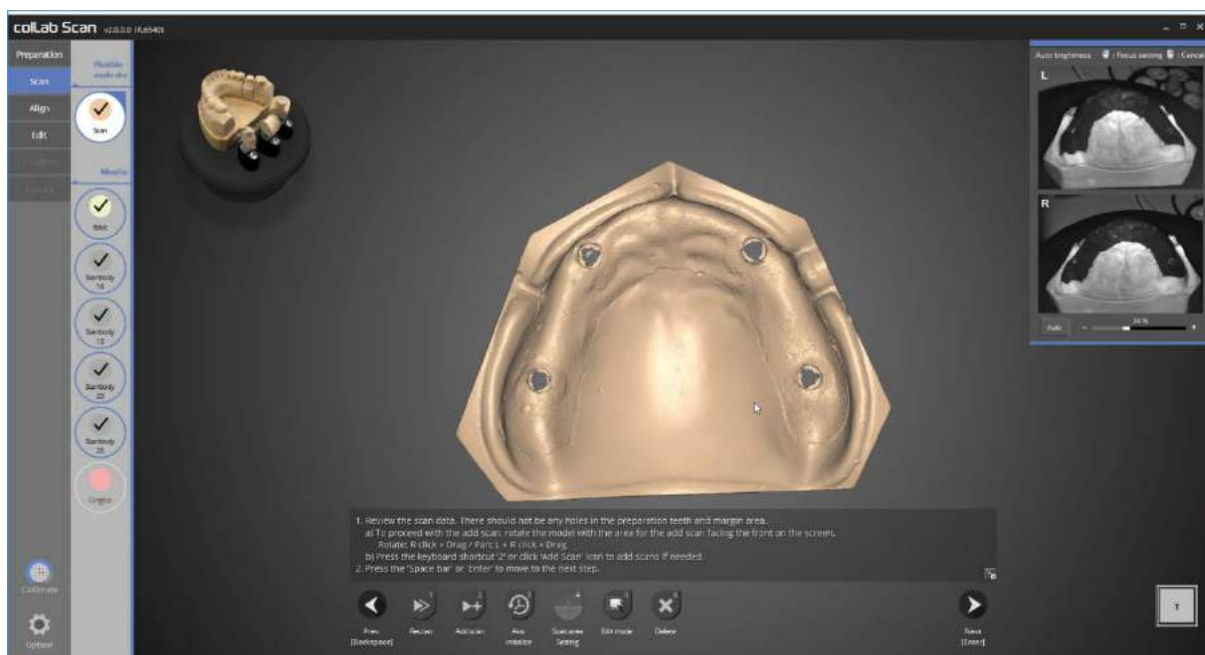
The scan of No. 26 scanbody and the base is complete.



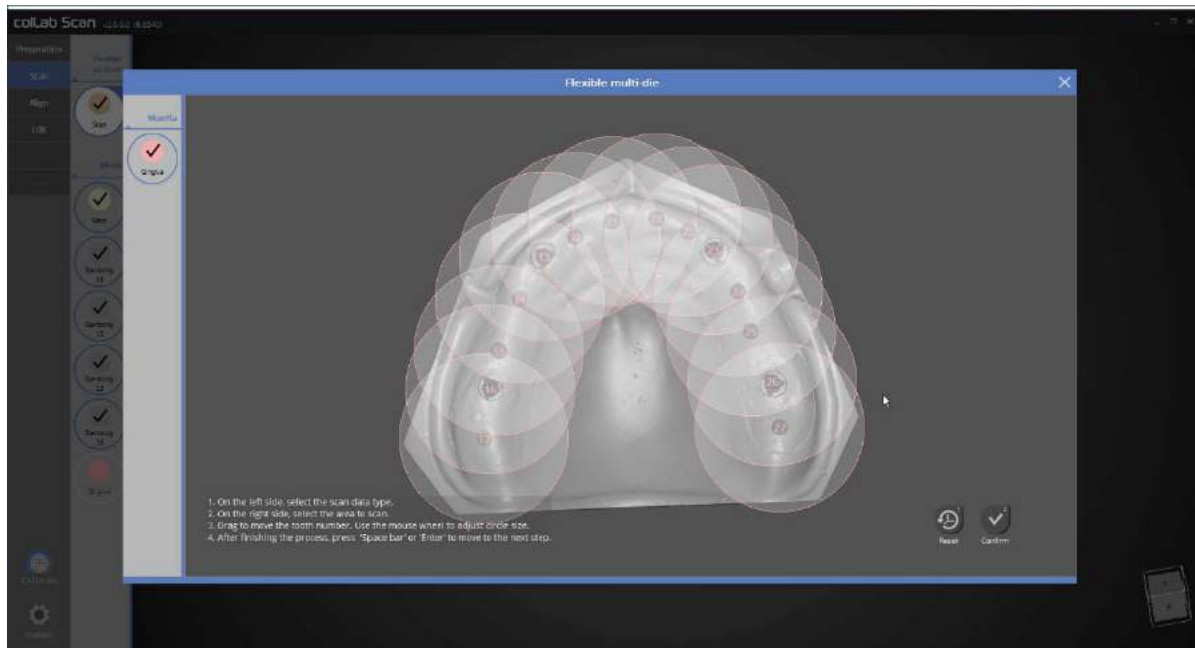
This is a stage to define scan data. Please define the No. 26 scanbody data as illustrated in the picture above.



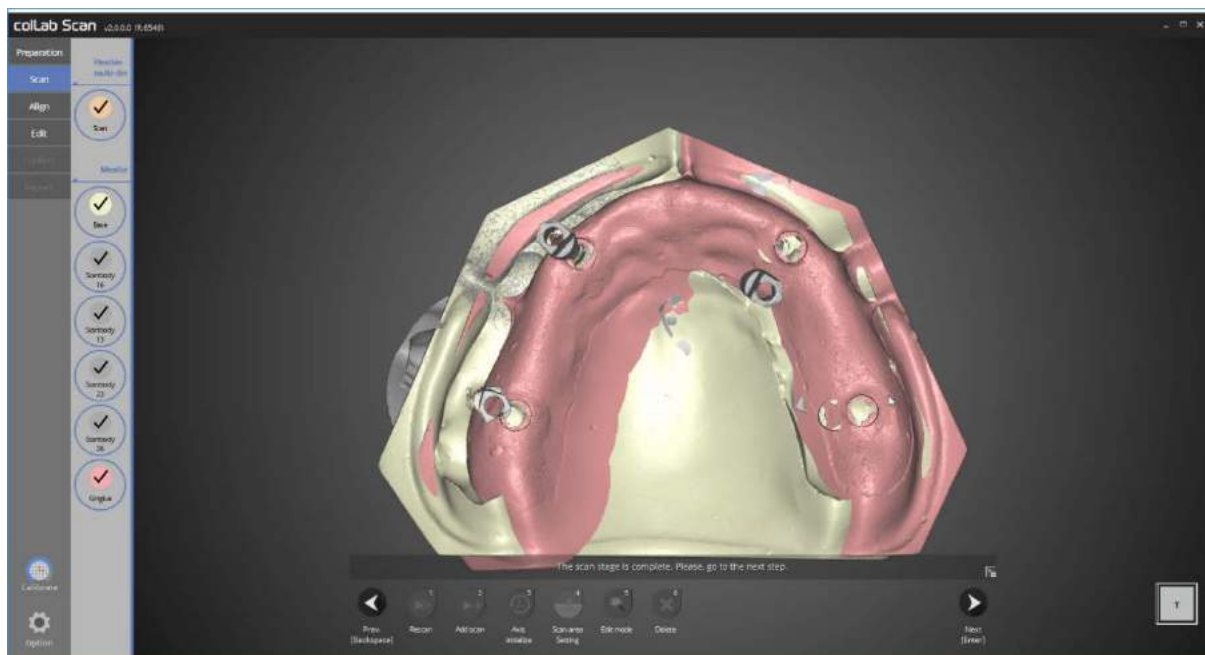
Now, the only remaining part to be scanned is gingiva. Please place the base model with the gingiva, adjust the scan height and proceed to auto scan.



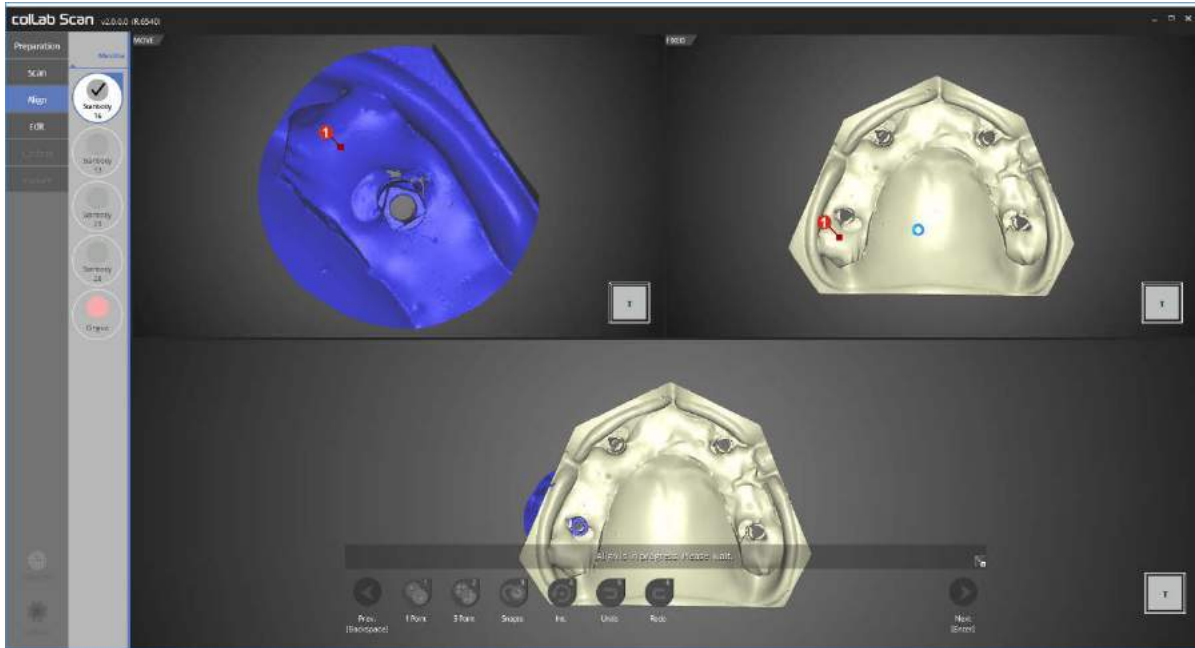
Gingiva scan is now complete.



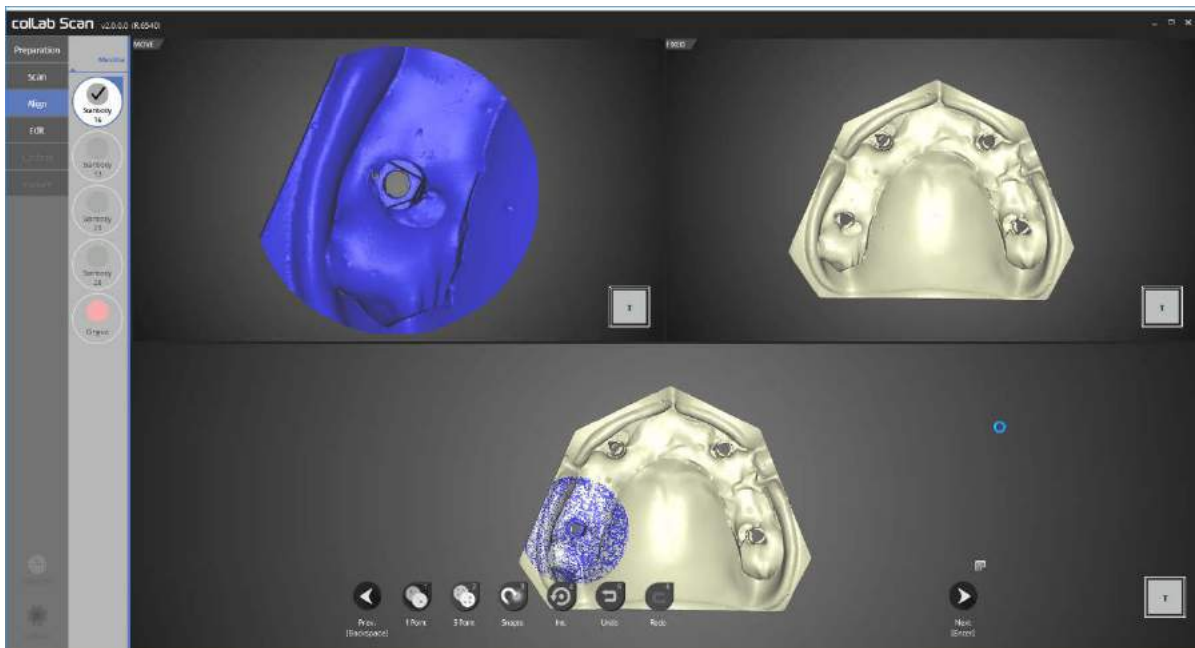
This is a stage to locate scan data. Please select gingiva data as illustrated in the picture above.



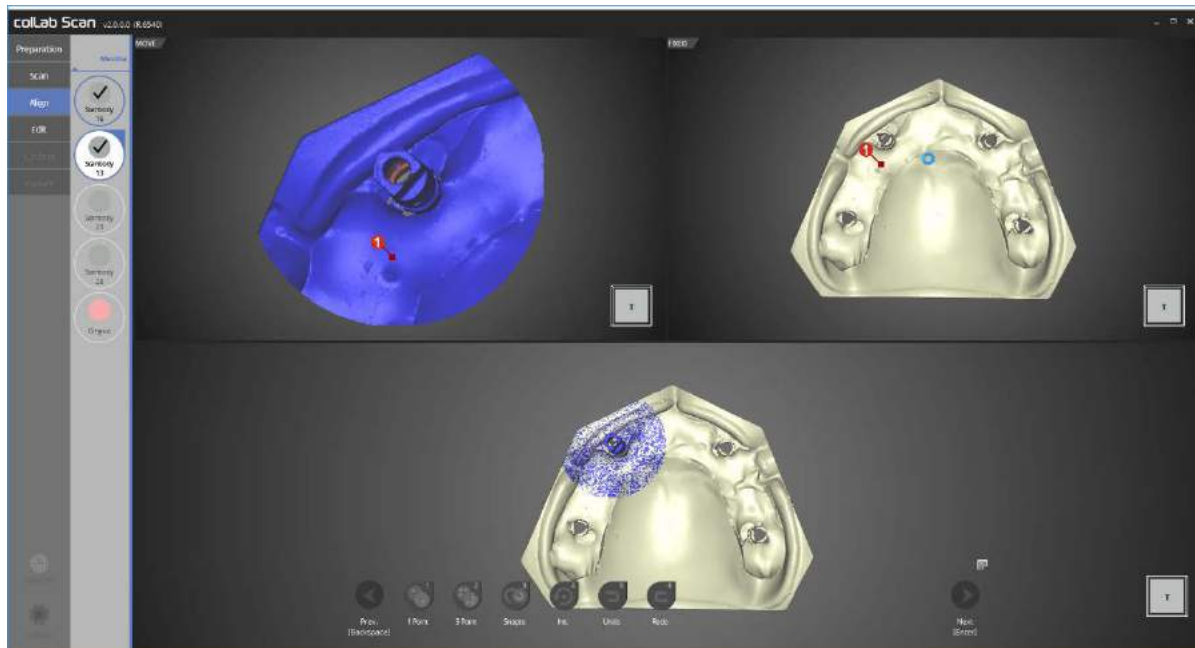
All necessary scan process is done.



In this stage, we will align the No. 16 scanbody and base.  
Please use [1 point] alignment function to place 1 point each on the scanbody and base which needs aligning.

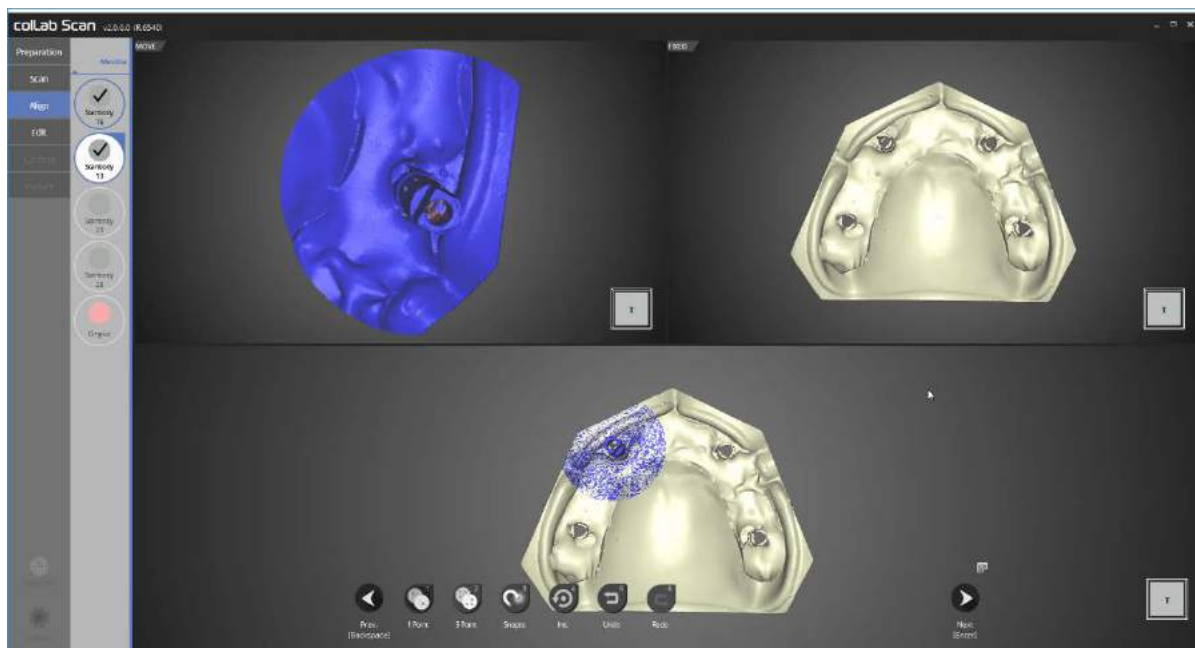


Alignment of No. 16 scanbody and the base is complete.  
You can see that it is aligned properly by viewing the data on the bottom.



In this step, we will align the No. 13 scanbody and base.

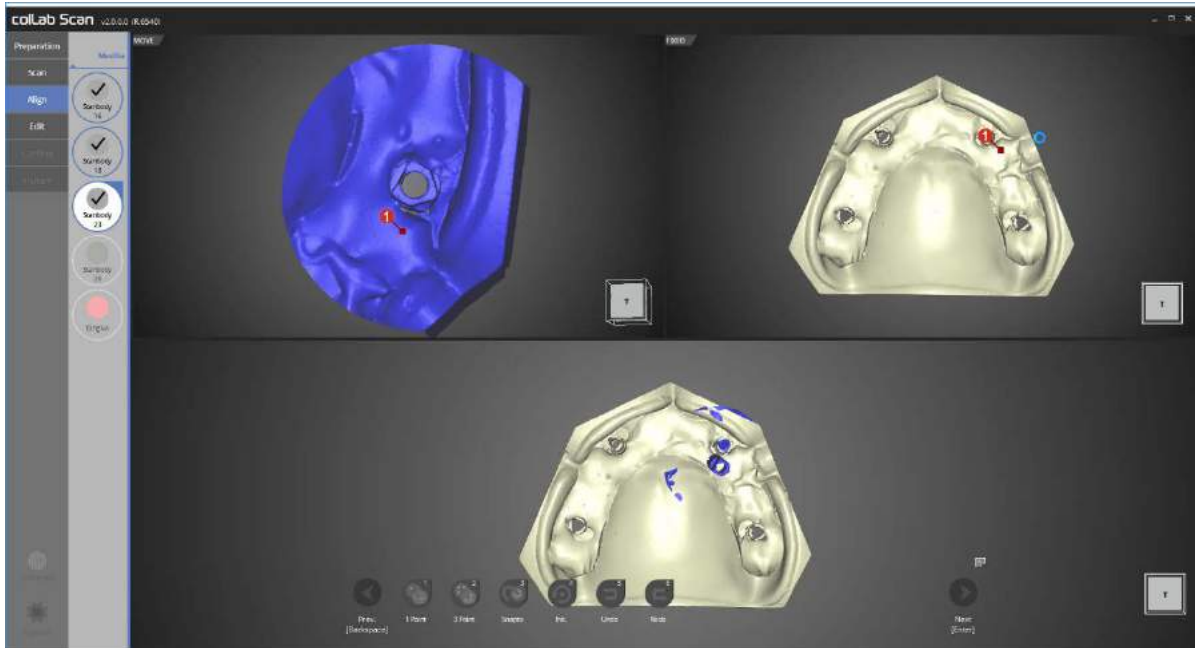
Please use 1 point alignment function to place 1 point each on the scanbody and base which needs aligning.



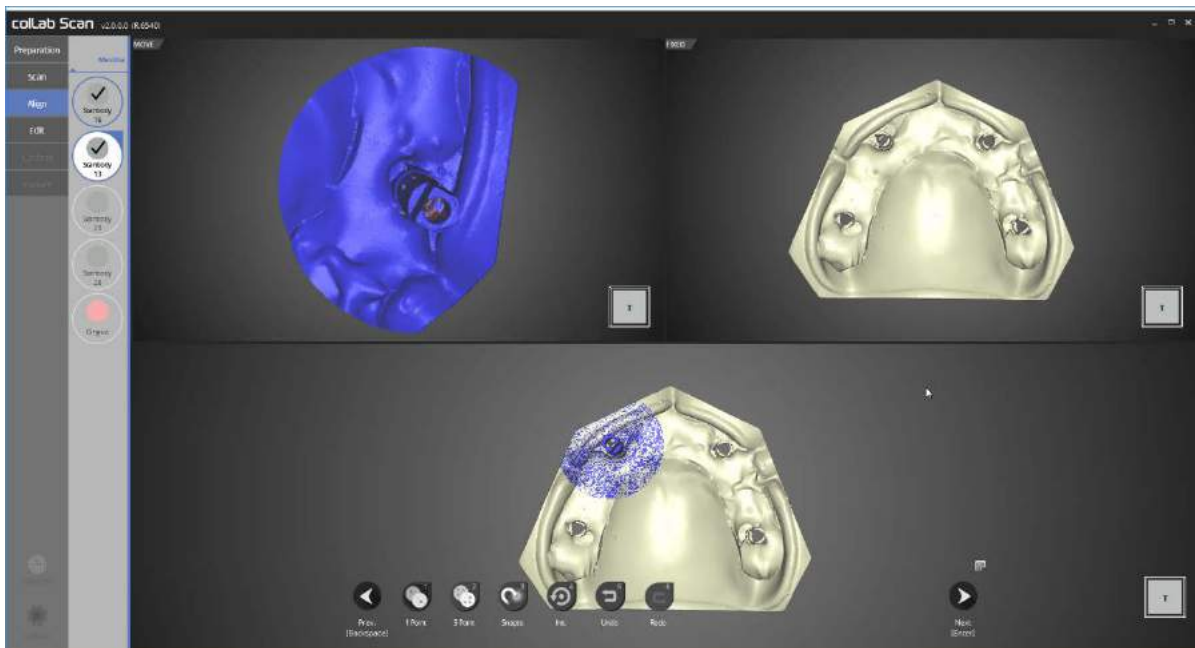
Alignment of No. 13 scanbody and the base is complete.

You can see that it is aligned properly by viewing the data on the bottom.

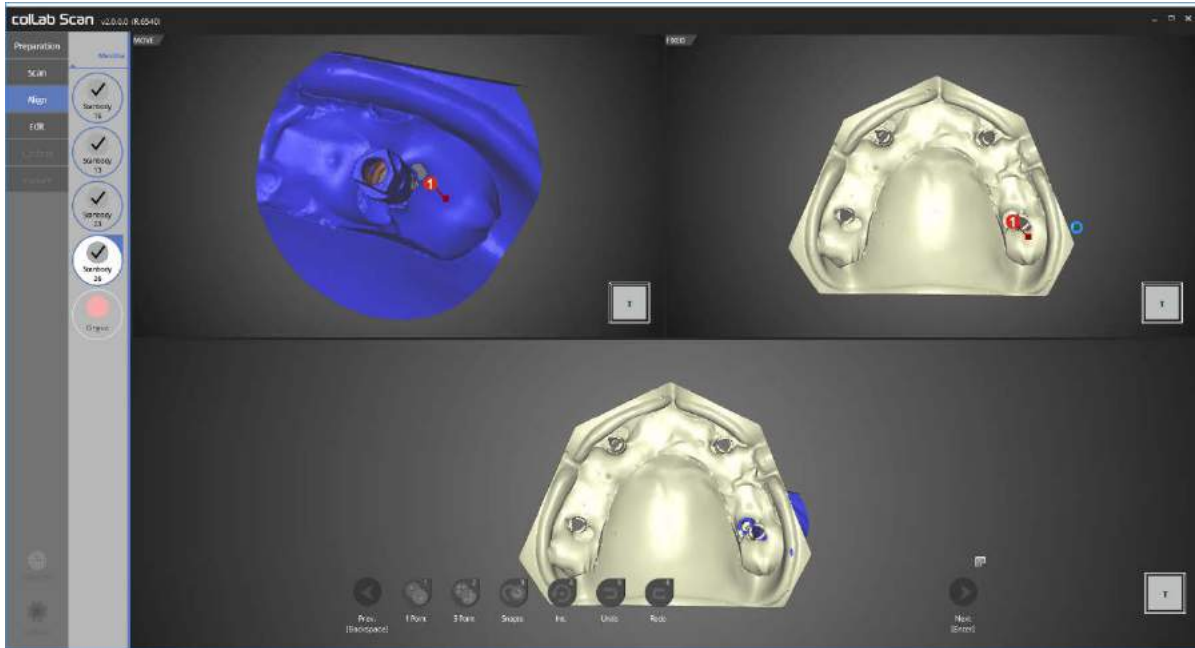




In this step, we will align the No. 23 scanbody and base.  
Please use [1 point] alignment function to place 1 point each on the scanbody and base which needs aligning.

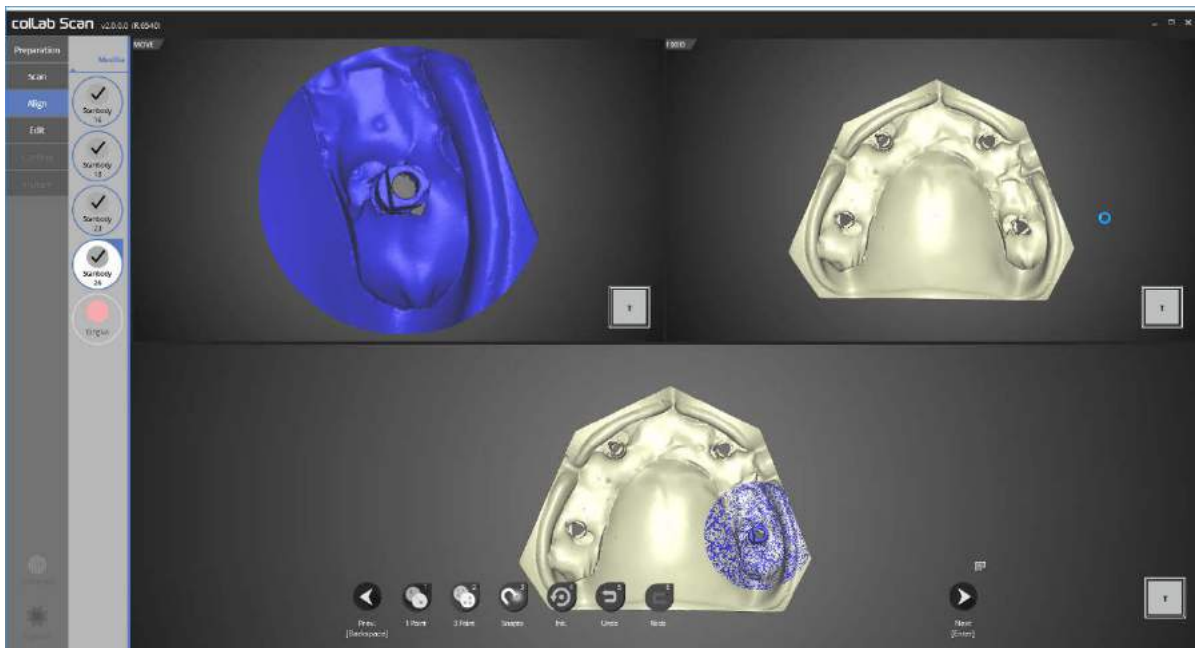


Alignment of No. 23 scanbody and the base is complete.  
You can see that it is aligned properly by viewing the data on the bottom.



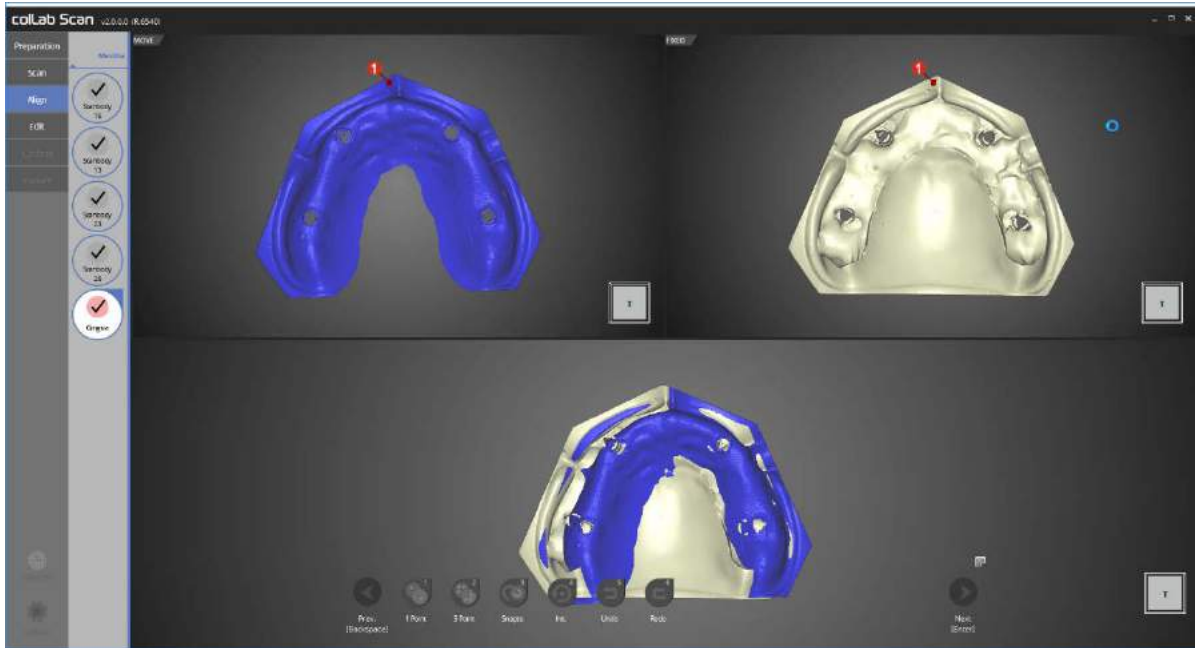
In this step, we will align the No. 26 scanbody and base.

Please use [1 point] alignment function to place 1 point each on the scanbody and base which needs aligning.



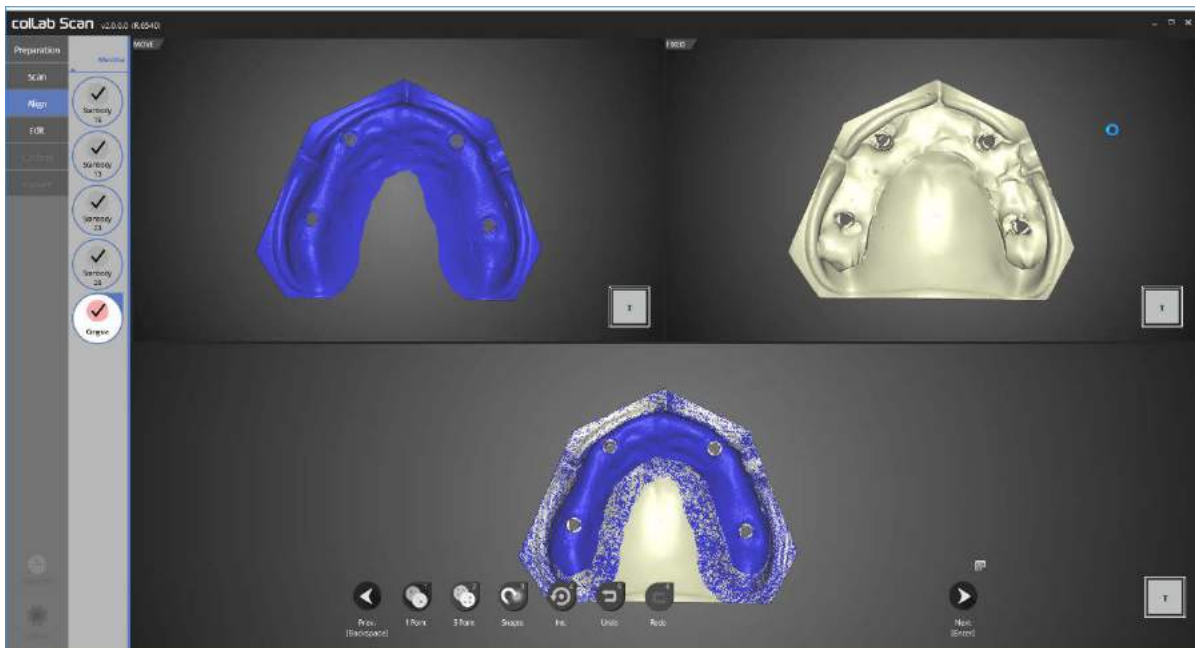
Alignment of No. 26 scanbody and the base is complete.

You can see that it is aligned properly by viewing the data on the bottom.



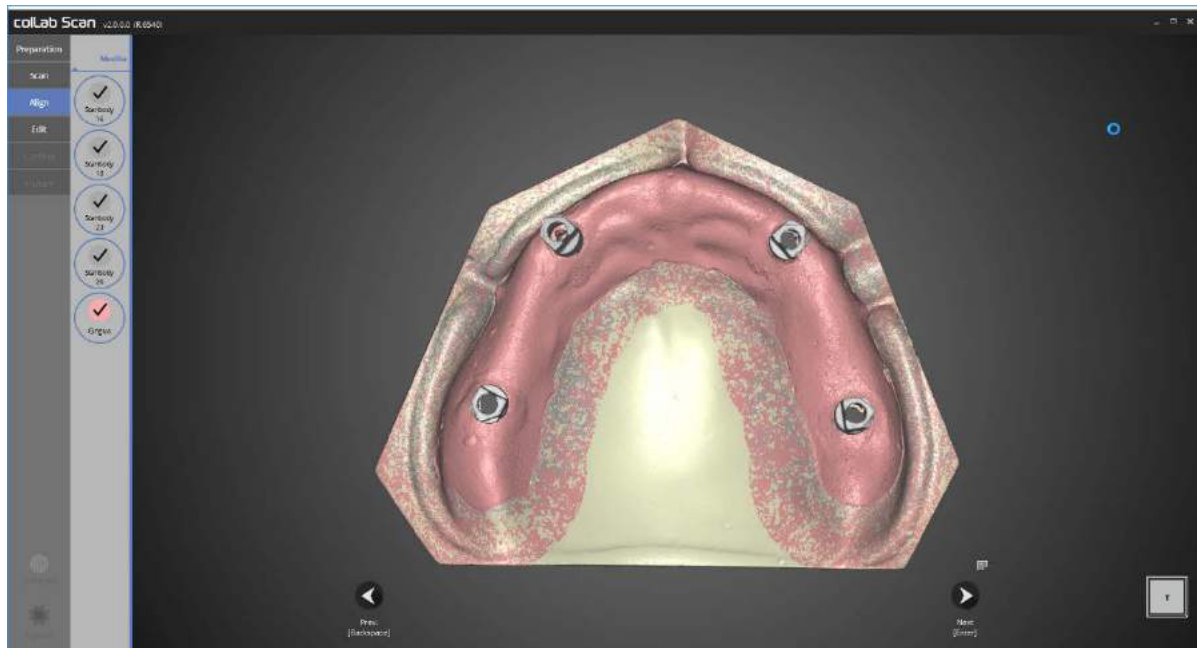
In this step, we will align the gingiva and base.

Please use [1 point] alignment function to place 1 point each on the gingiva and base which needs aligning.

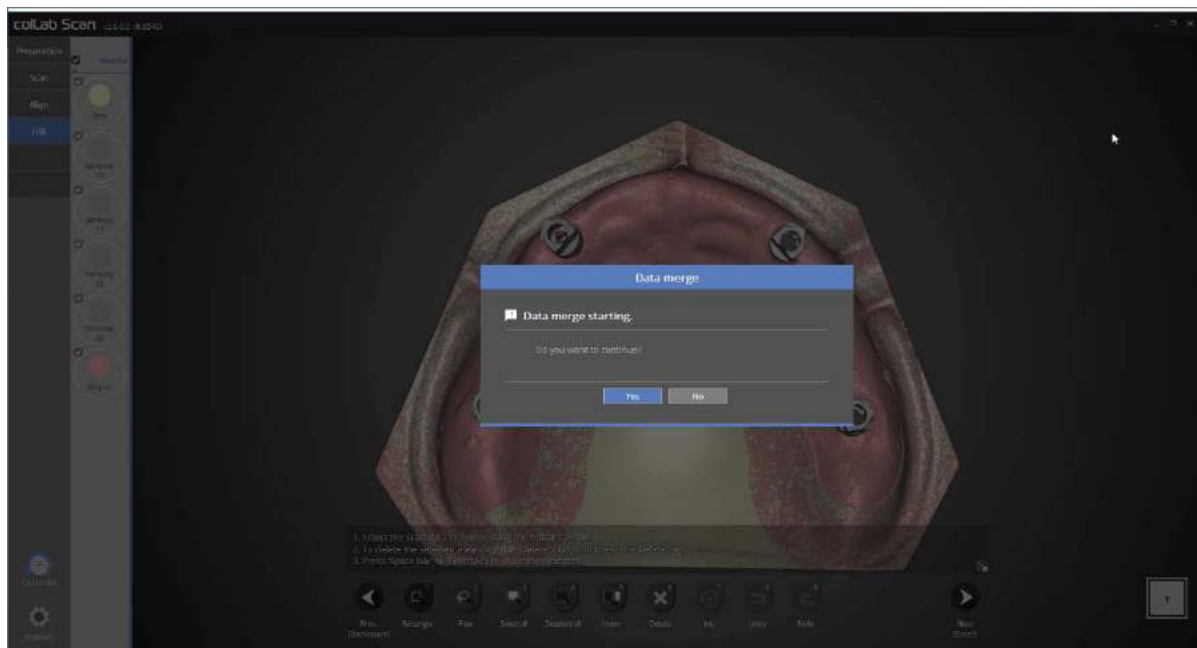


Alignment of gingiva and base is complete.

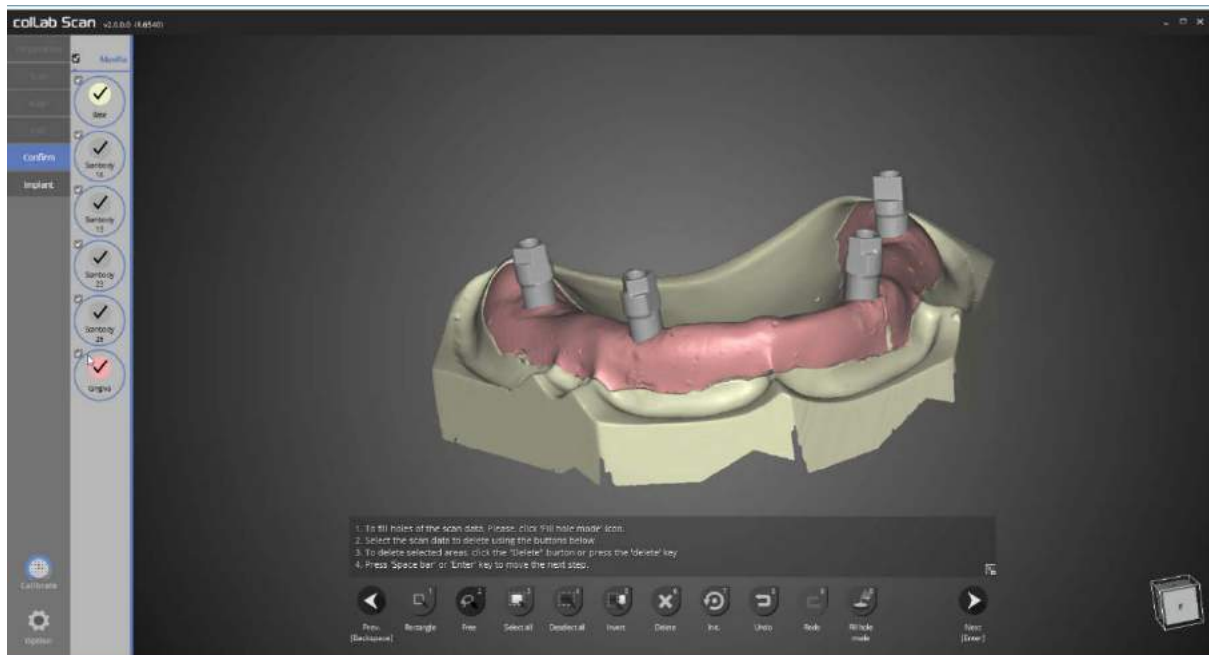
You can see that it is aligned properly by viewing the data on the bottom.



Alignment of all data is now complete.  
Please double check for any incorrect alignment in the data.



Once you confirm that all data is correct, please go through the editing process and then proceed to data merging.



Duplicate data has been deleted, and data merge is now complete.

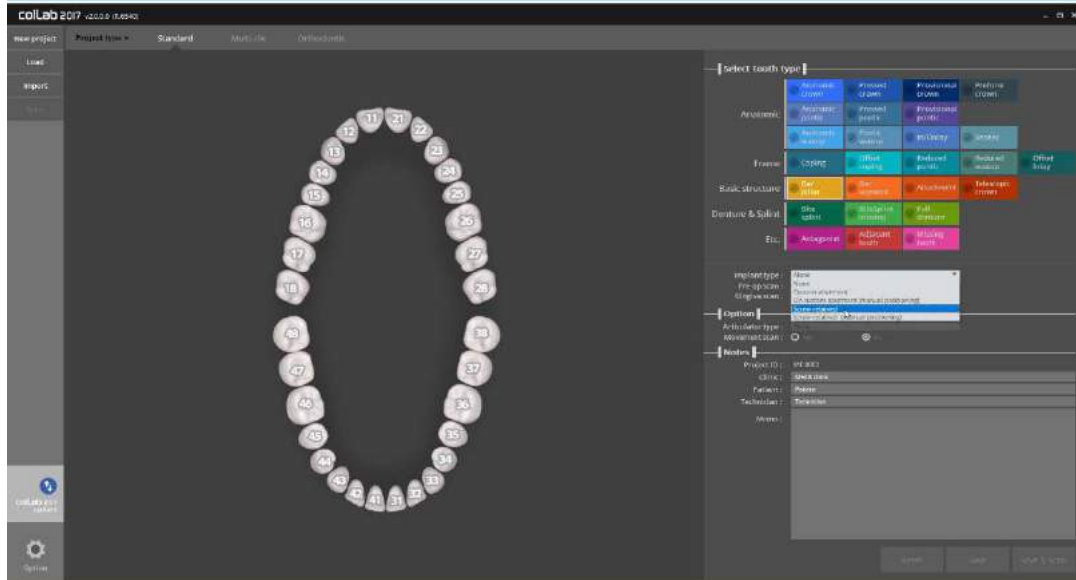
Next, please proceed to the alignment of scanbody or exit the program.

Please refer to the scan of implant scanbody section for scanbody alignment method.

## ► ‘Enough’ feature in flexible multi-die

Filling in the Order form and teeth set up

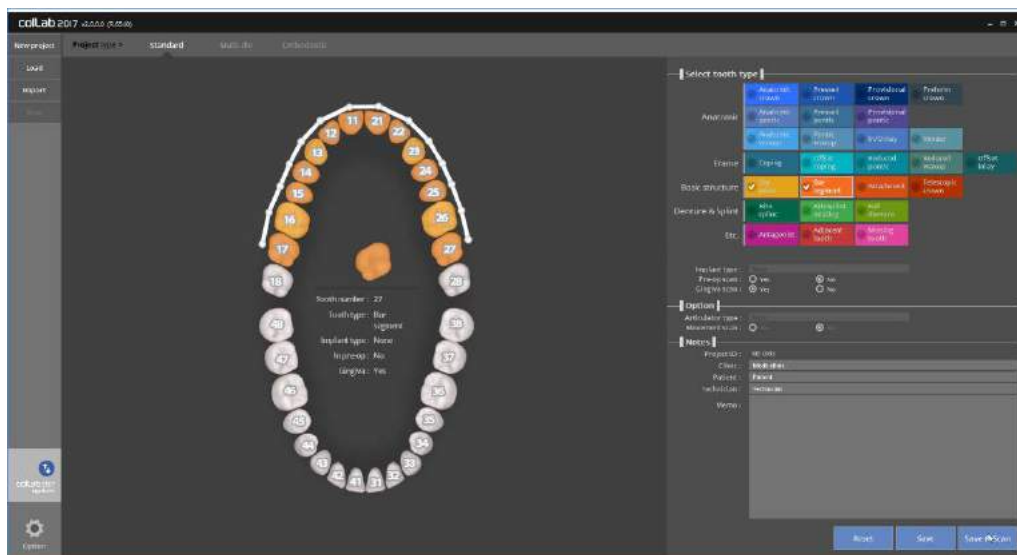
- Run collab program



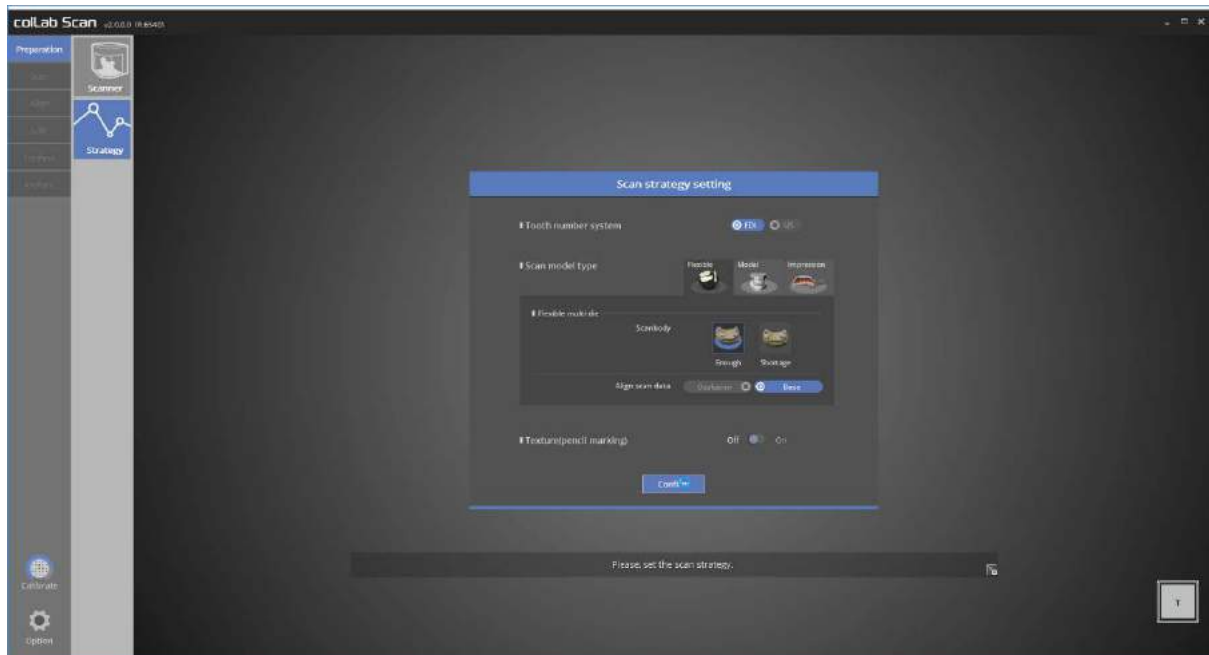
Please input the setting of model you wish to scan

You can find “Implant type” section under Tooth type for implant related settings

Firstly, please select the final prosthesis you plan to use, then choose a suitable option in “Implant type”.



Then, finish the setting for the remaining teeth, click [Save & Scan] to start scanning.

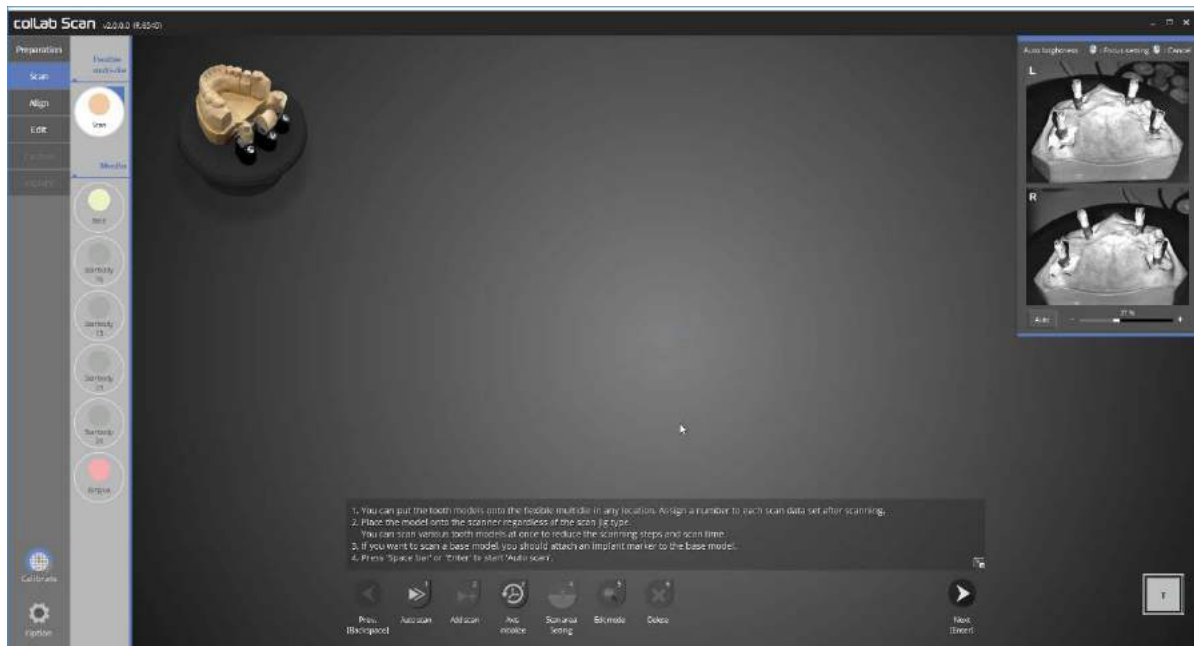


Please make sure [implant] tab is generated on the menu on the upper left corner.

Select scanning method to be used in Scan strategy setting.

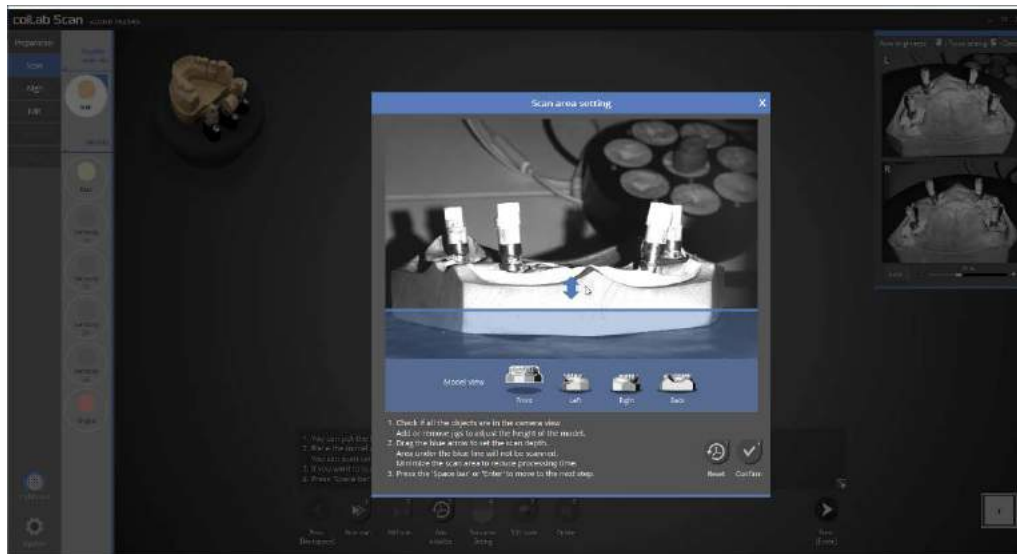
We will use [enough] function in the flexible multi-die to proceed this case.

'enough' function is used when user has enough scanbody

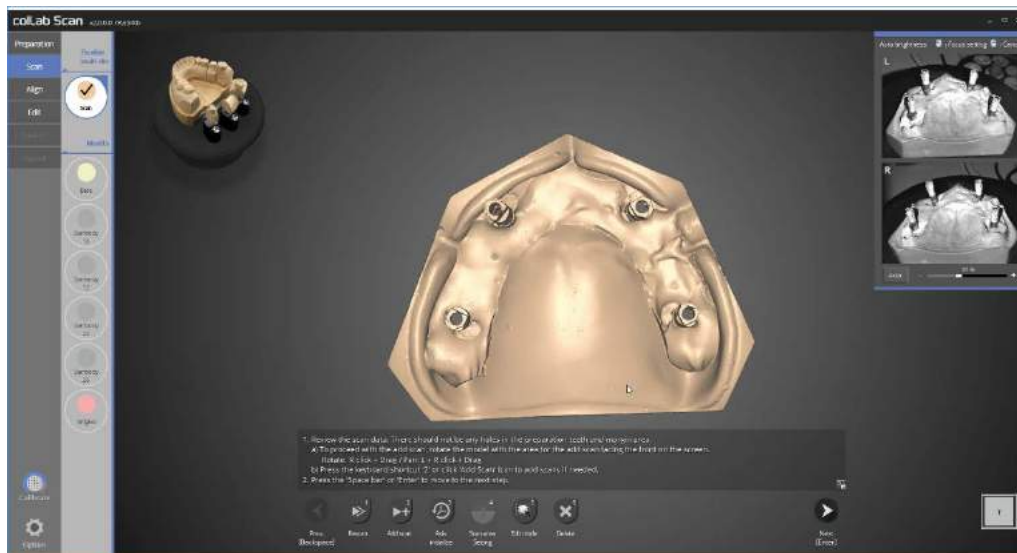


There is no limitation for scanning order or scanning model for Flexible multi-die.

In this case, we will place the base and scanbody together and conduct the scan. In the 'enough' option, scanbody and base must be installed properly.

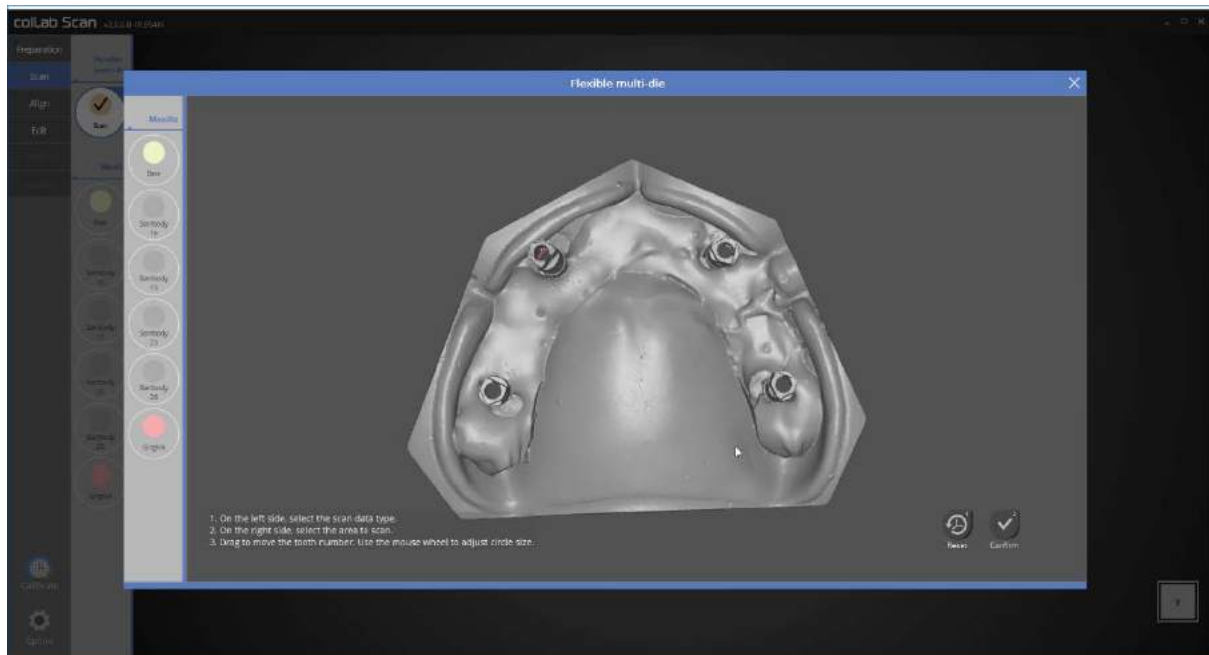


This stage will allow you to set the scan height prior to conducting the auto scan. Please adjust the setting to fit the required height and click [confirm].

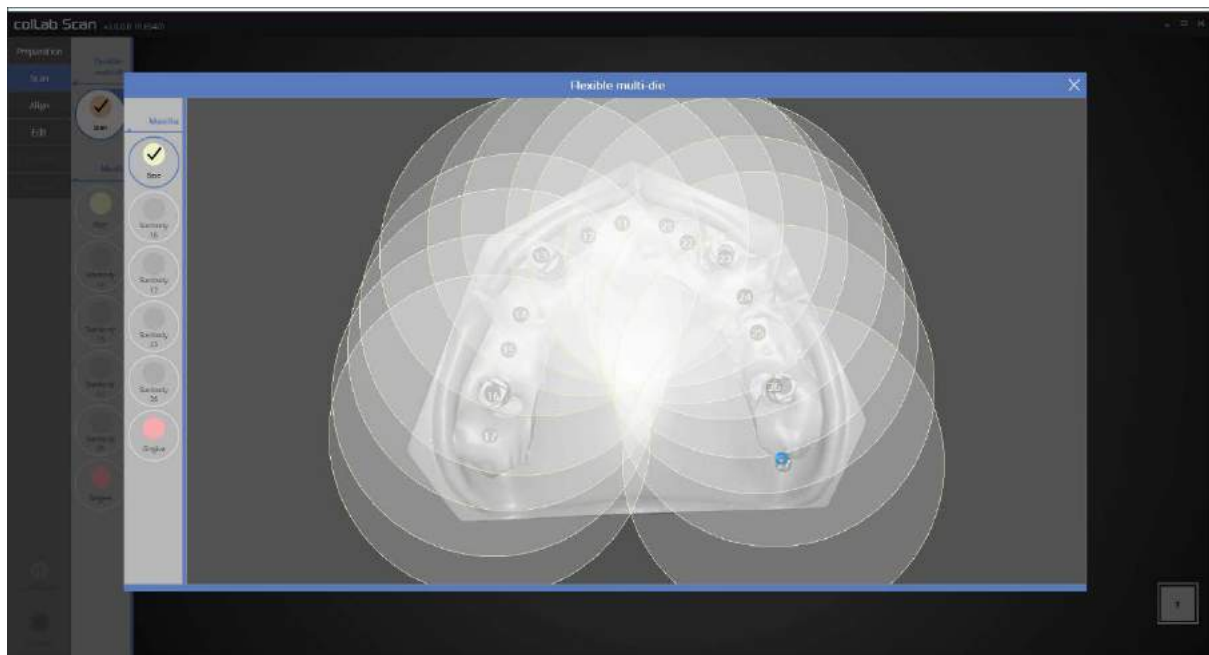


Auto scan of upper jaw base and scanbody is complete. Please proceed with scanning if additional scanning is required, then move on to the next step.





This is scan data defining step, which is an exclusive function for flexible multi-die.

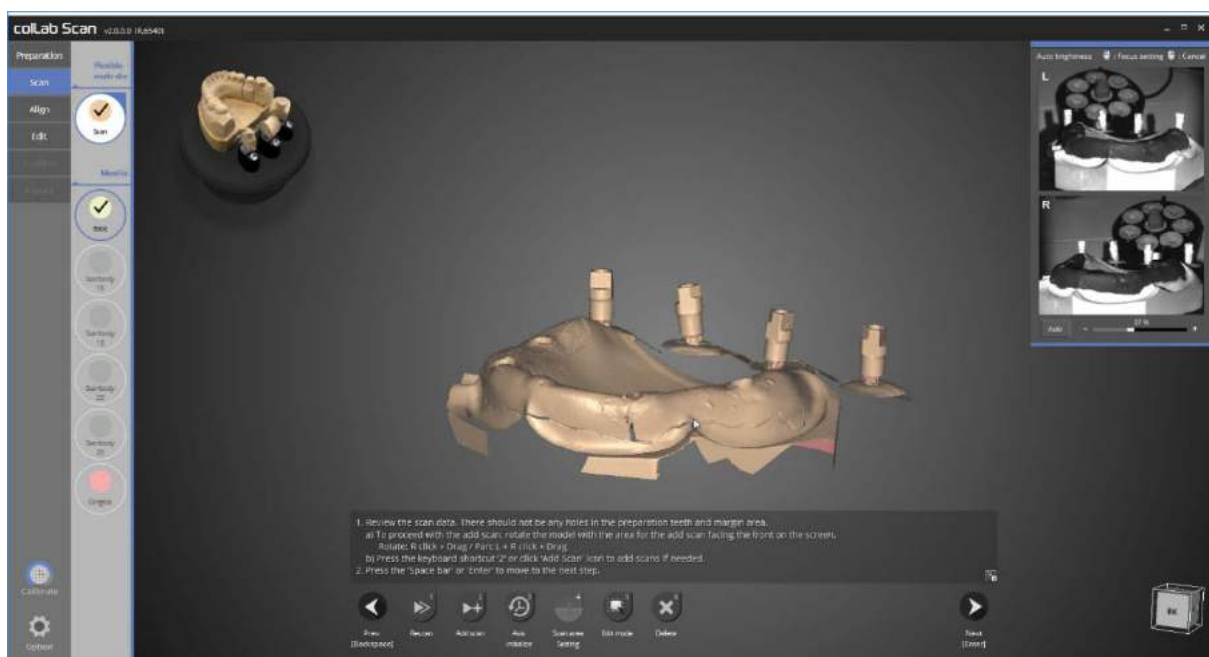


We will now define the upper jaw base data which we scanned earlier.

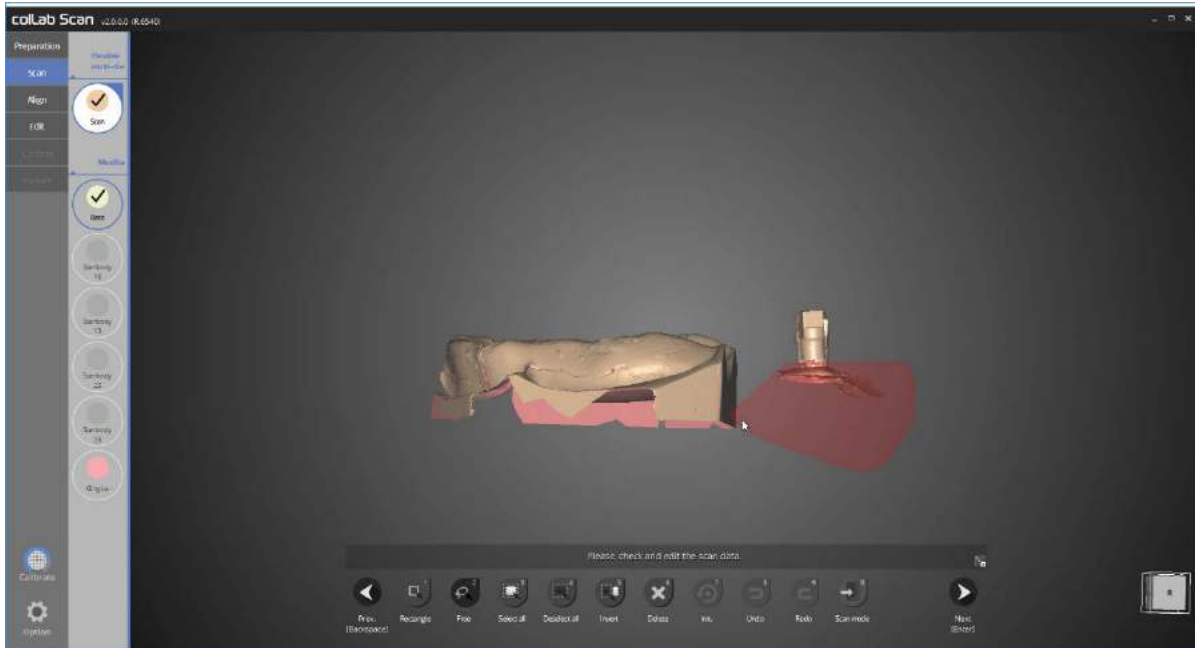
Please select base from Maxilla option on the left, and mark the teeth position with a circle in order of the scan data. The size of the circle can be adjusted by scrolling the wheel of the mouse. The program will only use the data included in the circle, hence if you wish to preserve all the scan data, you can do so by enlarging the circles as shown in the picture above.



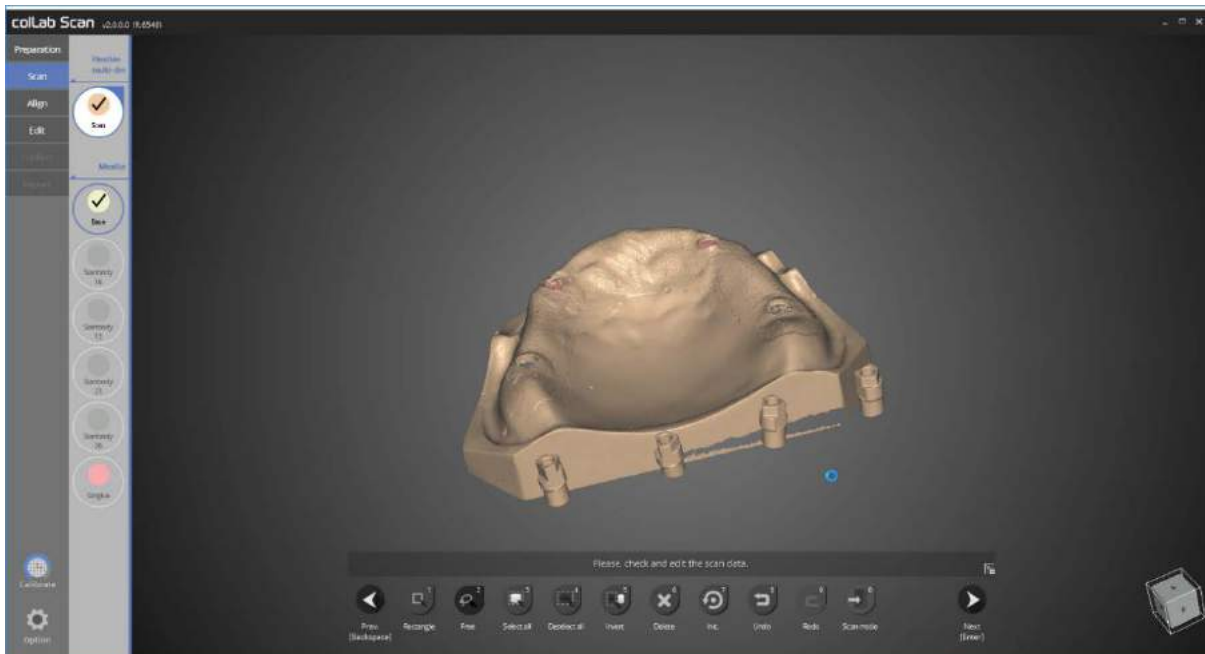
There is no limitation for scanning order or scanning model for Flexible multi-die.  
This time we will simultaneously scan gingiva on base model, and each scanbody together.



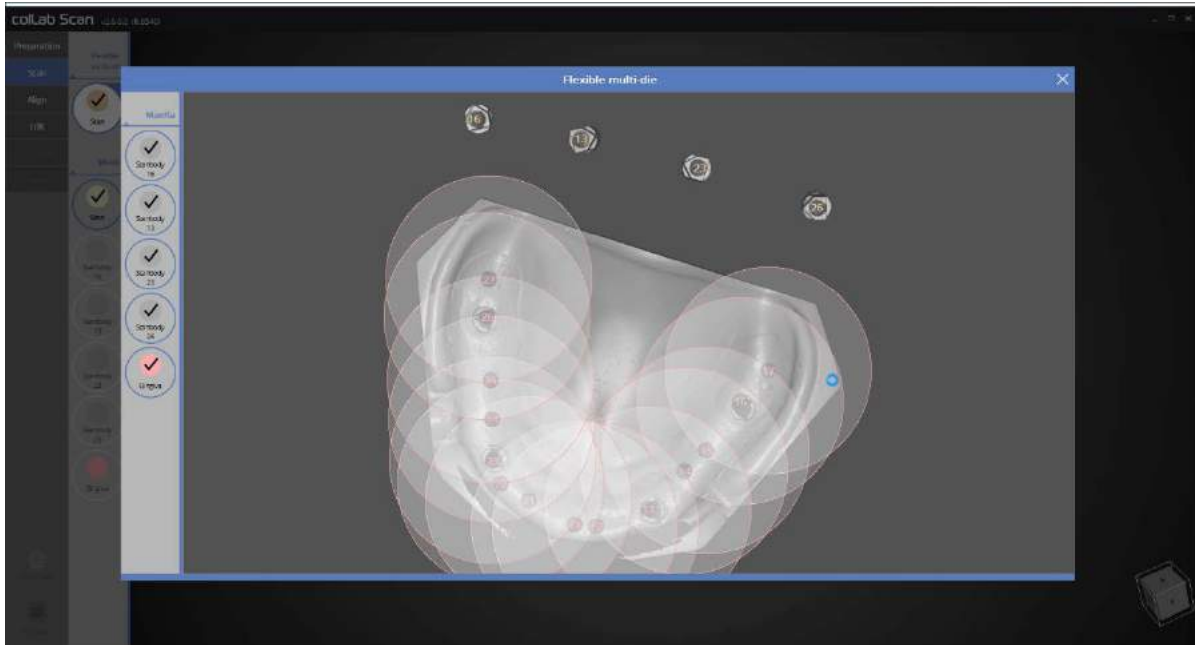
The scan of gingiva and scanbody is complete.



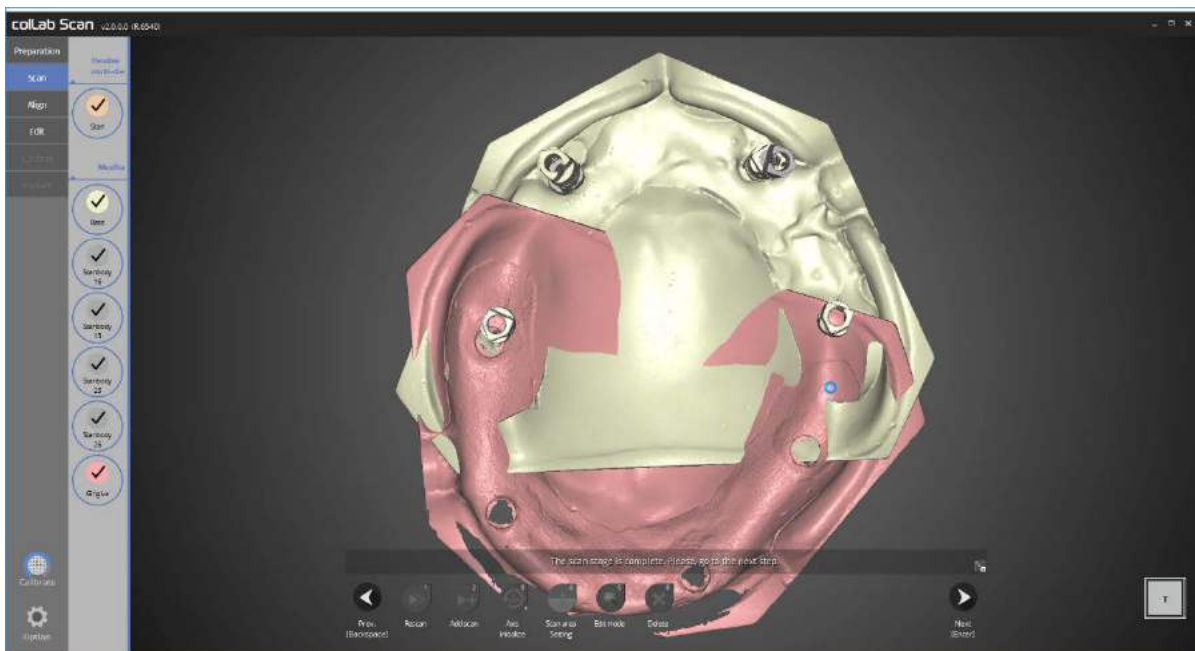
Data editing is also possible at scan step. Click [Edit mode] and select the parts to delete the scan data.



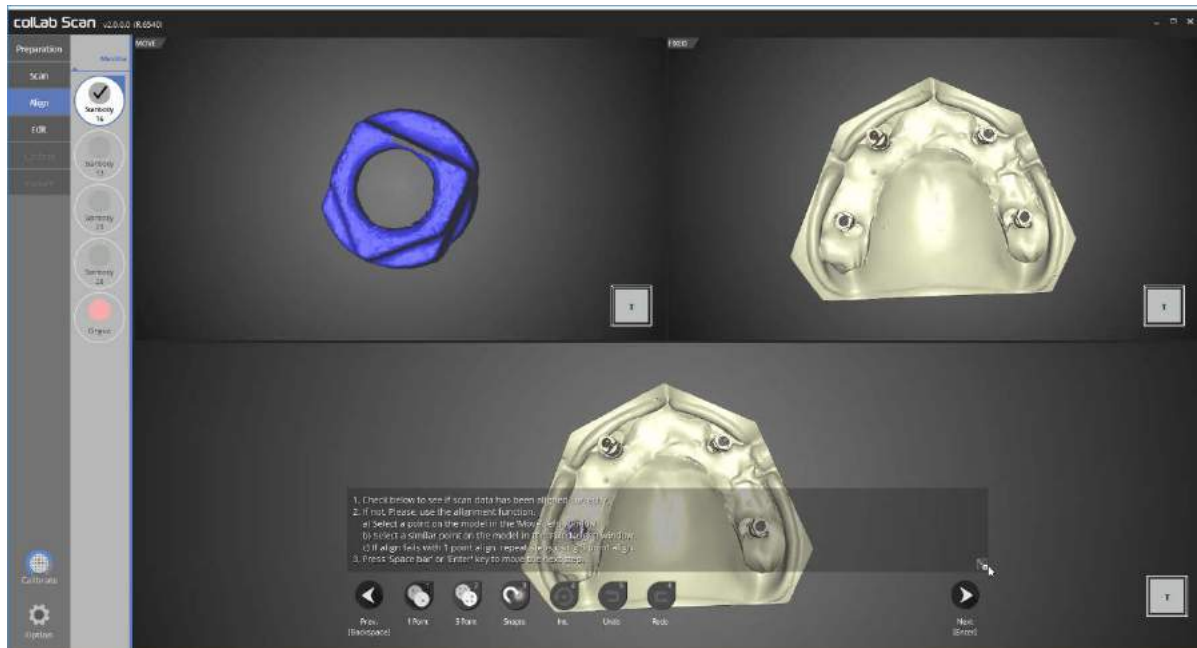
Delete the unwanted parts and proceed to next step.



This step defines the scan data. Please define all scanbody and gingiva data as illustrated in the above picture.



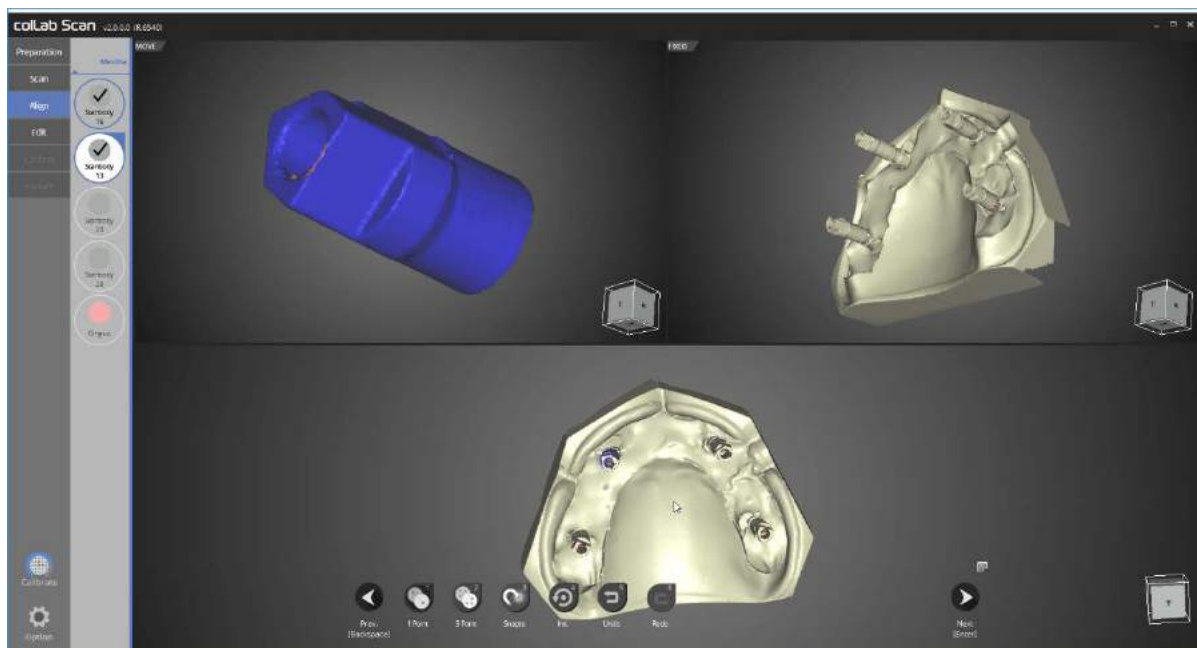
All necessary scan process is done.



Please check the status of auto alignment for No. 16 scanbody and base.

If alignment is not done correctly, please use [1 point] alignment function to place 1 point each on the scanbody and base which needs aligning.

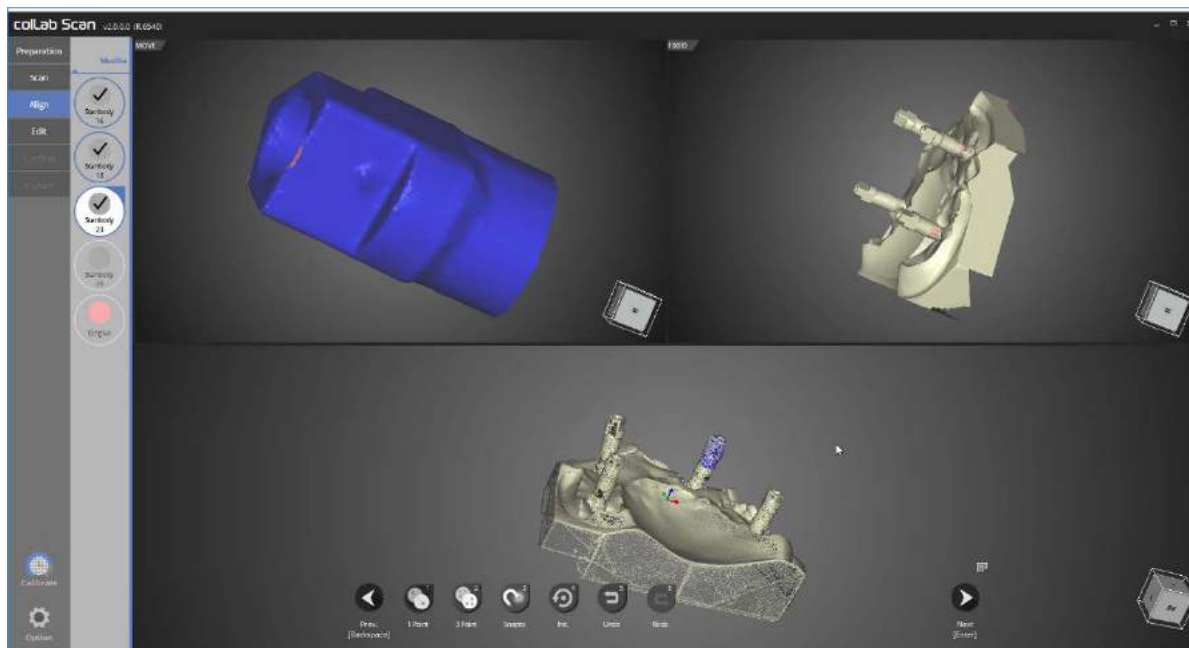
No. 16 scanbody and the base have been aligned automatically.



Please check the status of auto alignment for No. 13 scanbody and base.

If alignment is not done correctly, please use [1 point] alignment function to place 1 point each on the scanbody and base which needs aligning.

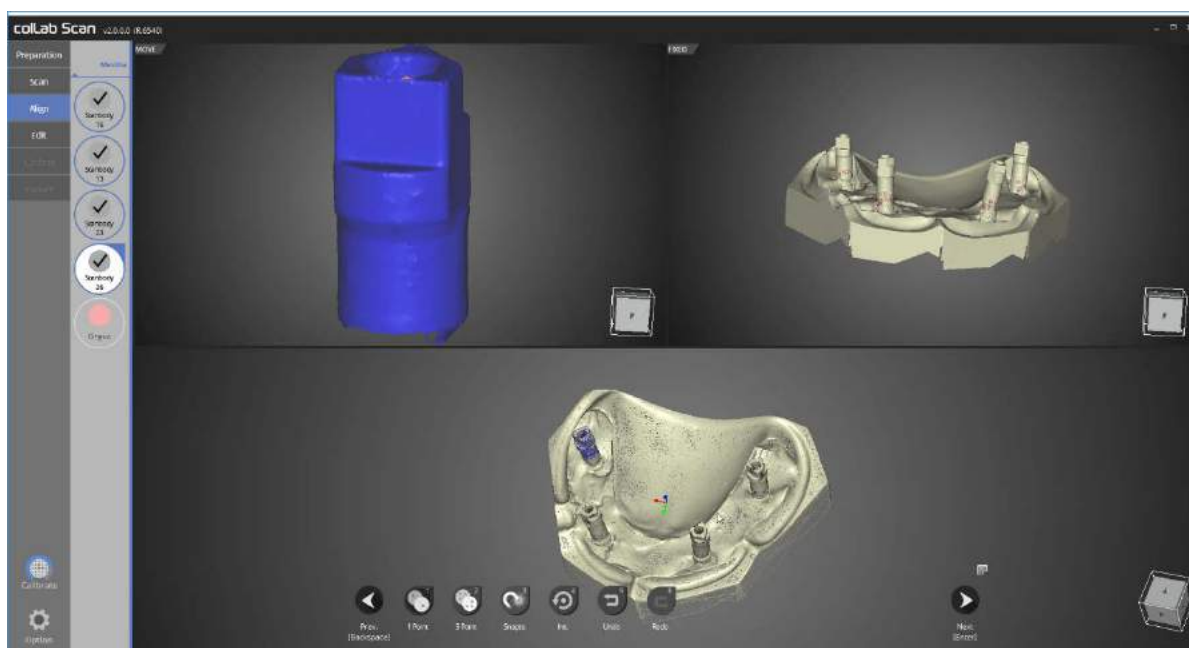
No. 13 scanbody and the base have been aligned automatically.



Please check the status of auto alignment for No. 23 scanbody and base.

If alignment is not done correctly, please use [1 point] alignment function to place 1 point each on the scanbody and base which needs aligning.

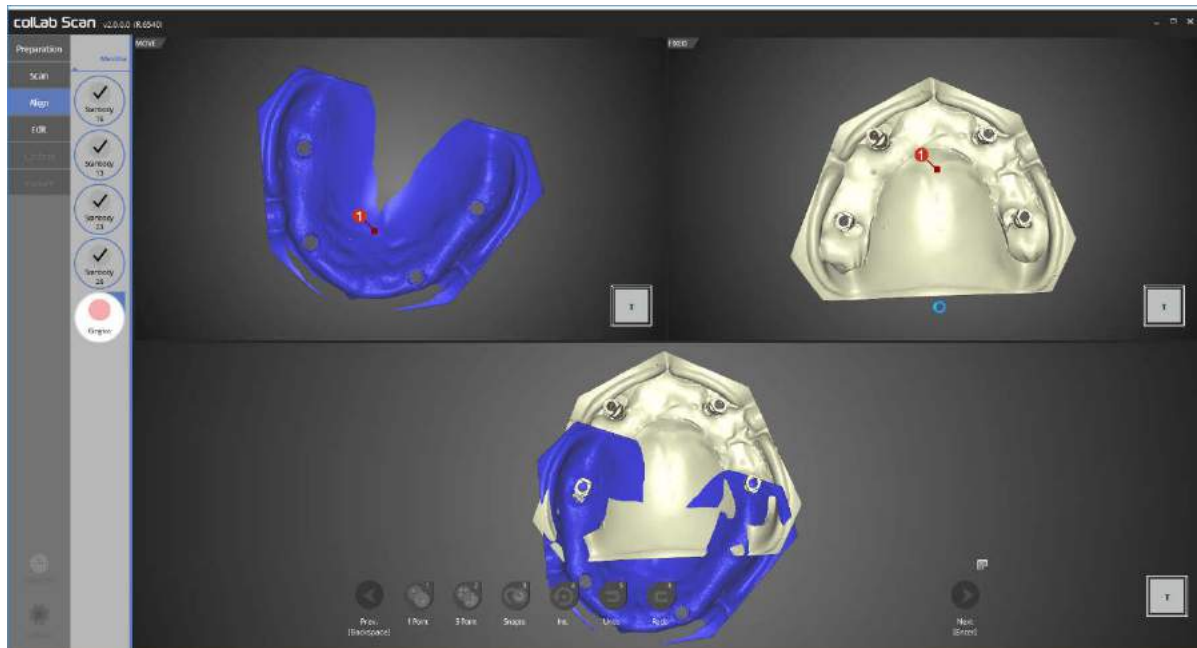
No. 23 scanbody and the base have been aligned automatically.



Please check the status of auto alignment for No. 26 scanbody and base.

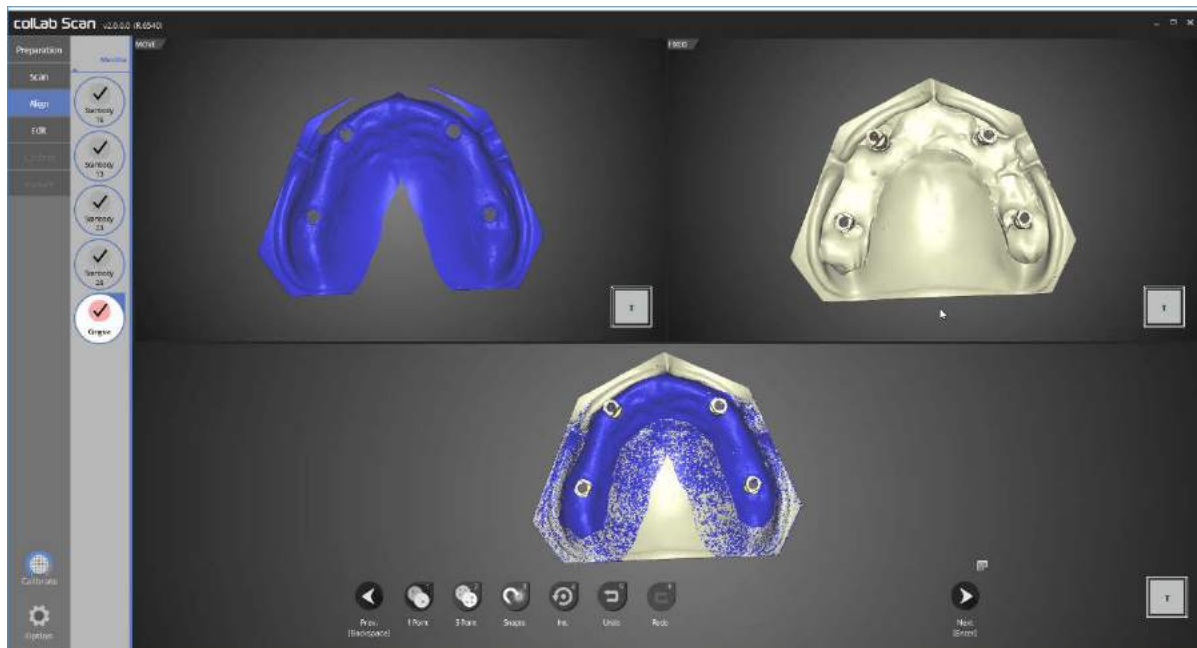
If alignment is not done correctly, please use [1 point] alignment function to place 1 point each on the scanbody and base which needs aligning.

No. 26 scanbody and the base have been aligned automatically.



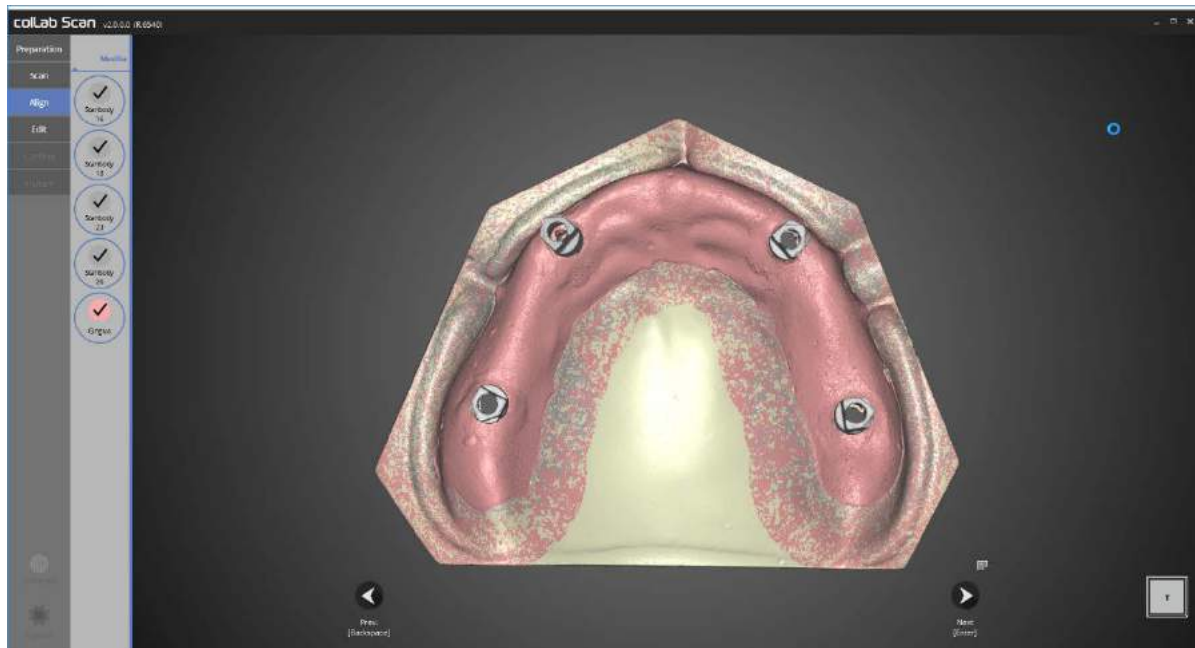
In this step, we will align the gingiva and base.

Please use [1 point] alignment function to place 1 point each on the gingiva and base which needs aligning.

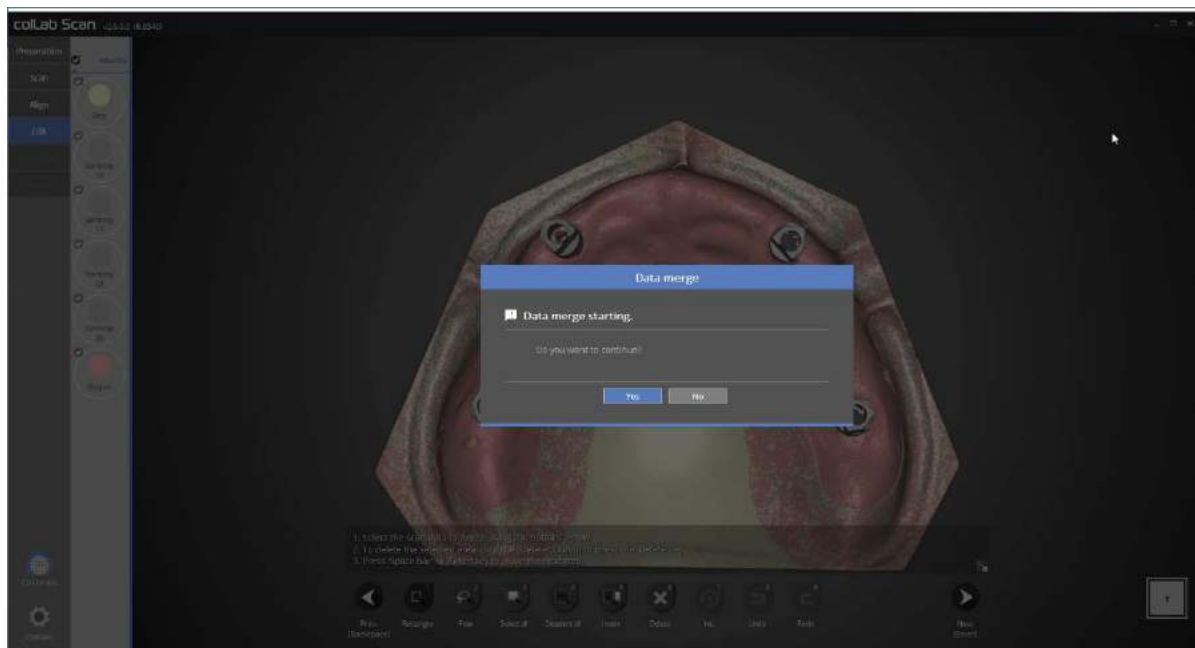


Alignment of gingiva and base is complete.

You can see that it is aligned properly by viewing the data on the bottom.

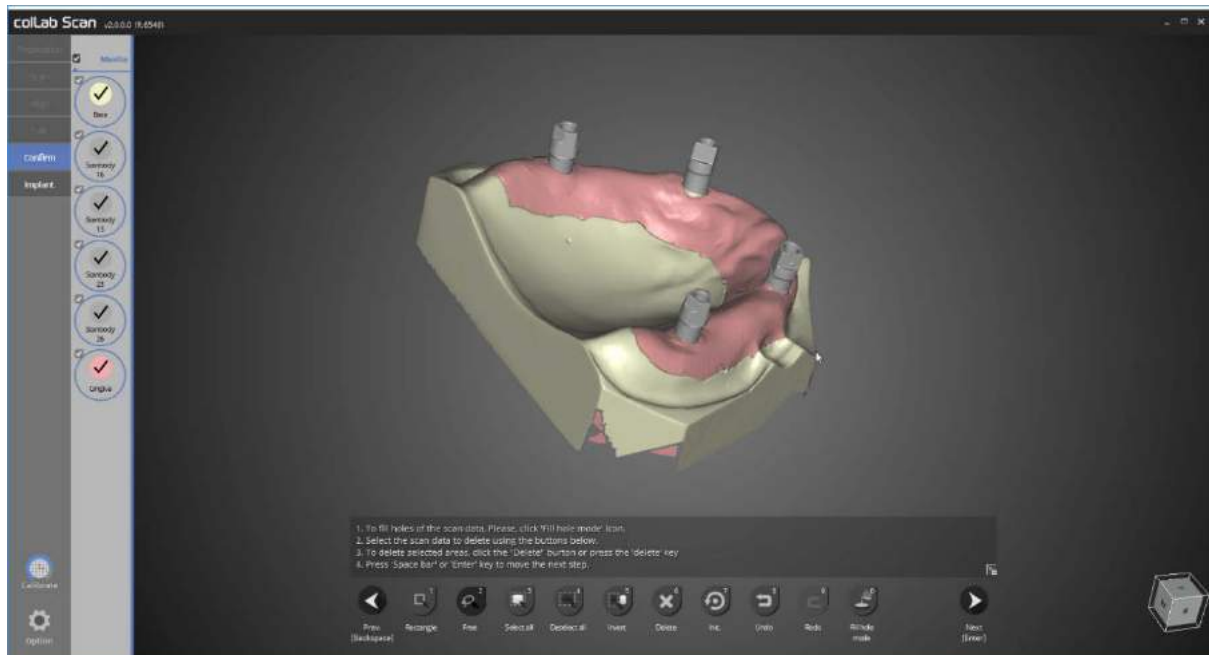


Alignment of all data is now complete.  
Please double check for any incorrect alignment in the data.



Once you confirm that all data is correct, please go through the editing process and then proceed to data merging.





Duplicate data has been deleted, and data merge is now complete.

Next, please proceed to the alignment of scanbody or exit the program.

Please refer to the scan of implant scanbody section for scanbody alignment method.





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