



**ayGuide and  
ayConcept  
Stackable Guide  
Procedure**

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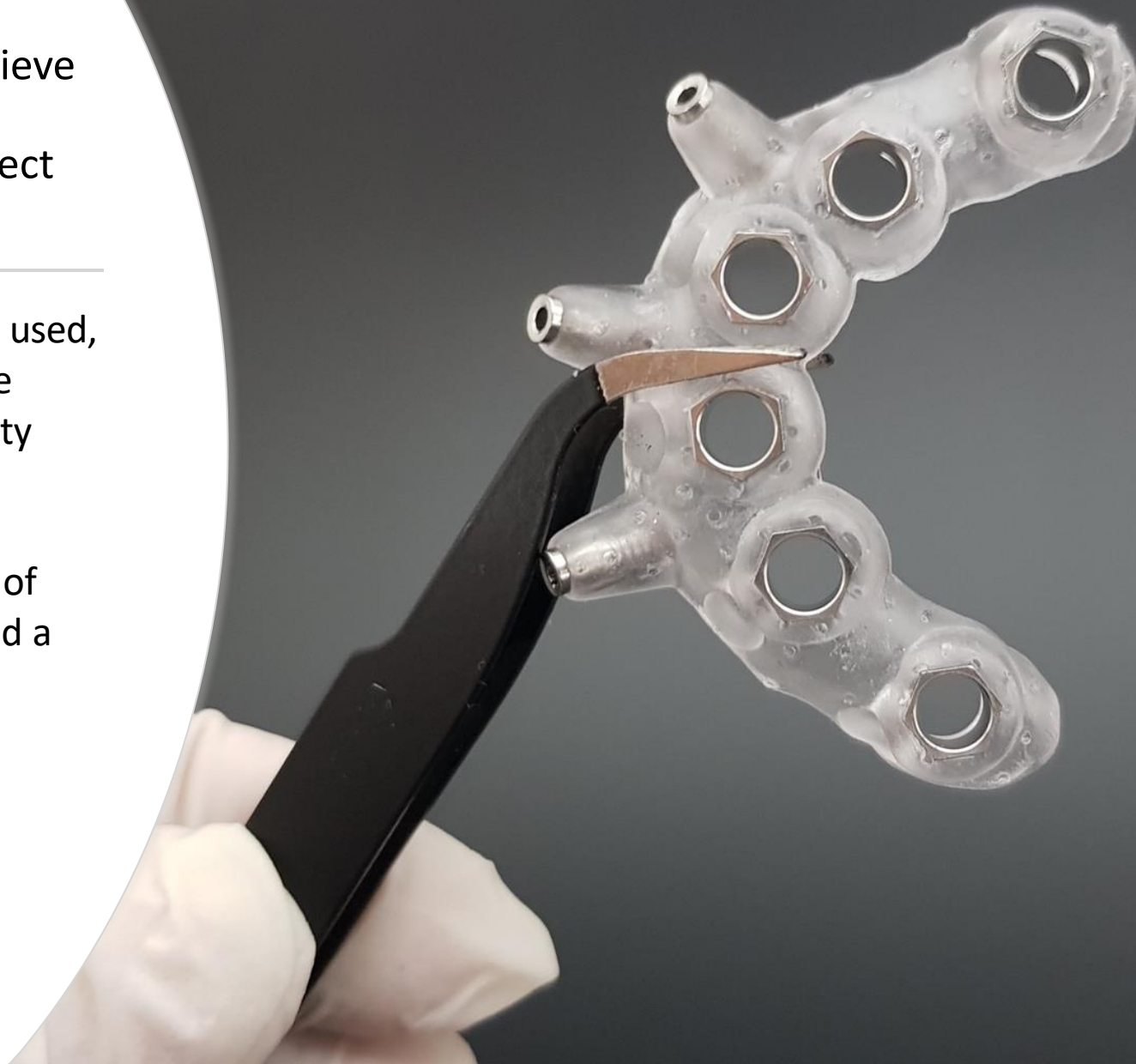


ay tasarım

ayGuide is designed to achieve an **unconcerned** surgical procedure and a near-perfect **prosthetic solution**.

Computer-aided methods are used, which simultaneously increase operational accuracy and safety while facilitating the process.

This effective system consists of combining a surgical guide and a guided surgical set.



# ayGuide Work-Flow

The process consists of five stages

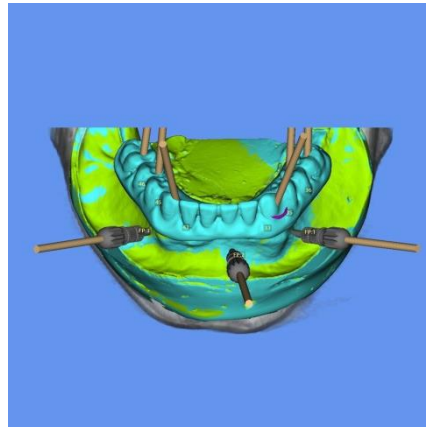
1

Preparation



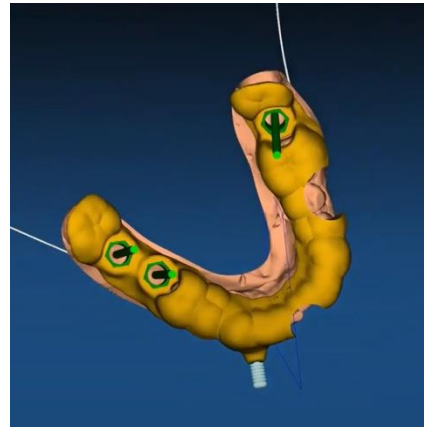
2

Planning



3

Guide Design



4

Production of  
Guide



5

Surgical  
Procedure



# 1. Preparation

The preparation phase is the phase that the data required for a case to be processed are brought together in **accordance with the protocol**.

At this stage, we need the following to start planning.

Tomography

- A) Intraoral Scan Data (plaster model if IOS is not available)
- B) Waxup
- C) Antagonist and Closing Wax
- D) Work-order



# 1. Preparation

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## A) Tomography

In the ayGuide workflow, most of the errors that cause the process to take longer or even not start at all are caused by the mistakes made during the tomography capture.

**It is important that the tomography is taken in accordance with the protocol to be explained** so that the process doesn't prolong and your patient is not exposed to extra radiation with tomography repetition.



# 1. Preparation

## A) Tomography

While taking a CT scan;

Tongues, lips and cheeks should be ruled out with cotton rolls or a retractor. If possible, it should be preferred that the retractor is also a cheek retractor.

- The tongue should be curved behind the palate.
- There must be a gap of approximately 1 cm in the teeth. For this, a roll of cotton can be bitten.
- The patient should not move.
- Data should be exported as **DICOM**. It should not be sent as a viewer.
- **Tomography that is not taken according to this protocol is not accepted and the tomography must be repeated.**



# 1. Preparation

## A) Tomography

**Total edentulous jaws;**

The medium body should be tightened into the patient's prosthesis and **the patient should enter the tomography with this prosthesis**. Afterwards, this prosthesis with a medium body inside should be sent to Ay Tasarım without cutting or cleaning the remnants of the medium body.

The inside of this prosthesis gives us information about the patient's mucosa.

If an intraoral scanner is available, scanning the prosthesis in situ will prevent loss of time and prevent the patient from being prosthesis-free. If scanning the entire prosthesis is difficult, it can be scanned separately, with common reference surfaces inside and outside.



# 1. Preparation

## A) Tomography

**Recommended Field of View (FOV) Value: 120 x 120 mm**

It should be ensured that the scan covers the total jaw.

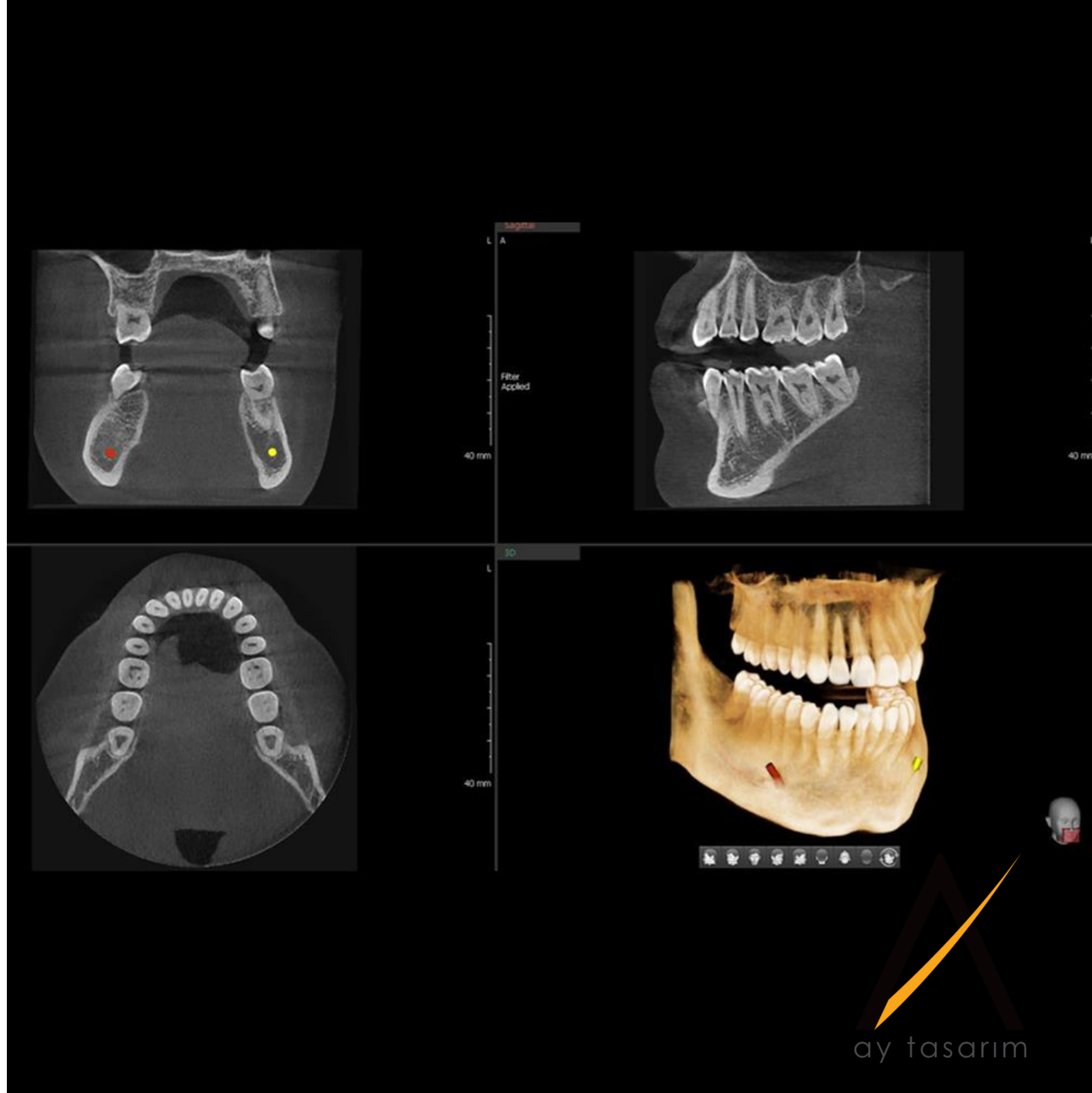
If 120x120 FOV is not possible, 80x80 FOV can be used, although not preferred.

Filming that are partial and stitch 3 times are not accepted.

DICOM data must be obtained as "Multiple Slice DICOM".

**0.3 mm is optimum for the section thickness.**

Too thin sections cause graininess, while too thick sections cause loss of sensitivity.





# 1. Preparation

## A) Tomography

Tongue position during acquisition is important in order to correctly match the patient's intraoral scan data and tomography data.

### Mandible Tomography:

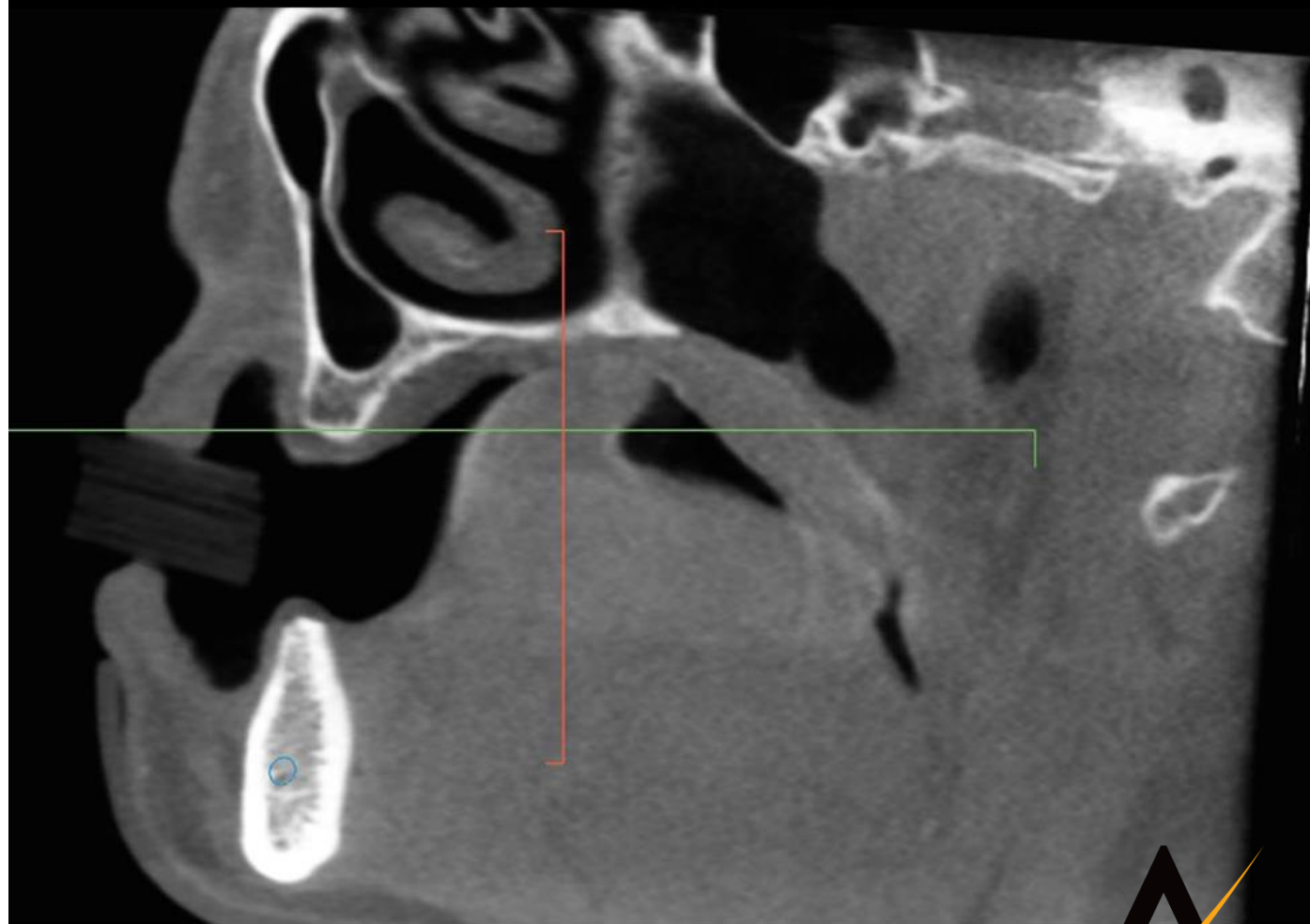
The tip of the tongue should touch the vibration line at the back of the mouth.

### Maxilla Tomography:

The tongue should be at the base of the mouth.

### Mandible and Maxilla Tomography Together:

The tip of the tongue should touch the vibration line at the back of the mouth.



# 1. Preparation

## A) Tomography

### **Tooth Contact:**

While the tomography is being taken, the patient's mouth should be slightly open and the teeth should not touch each other.

The contact of the teeth prevents overlapping with the intraoral scan data. The occlusal surfaces of the teeth are important during the registration process.

A syringe or roll of cotton can be placed between the teeth during the scan.

### **Head Position:**

During the tomography, the patient's head should be firmly fixed and should be told not to swallow. In this way, motion artifacts are prevented.



# 1. Preparation

## A) Tomography

### Cheek and Lip Écarté:

The cheeks of the patient should be ruled out with cotton rolls.

Cotton rolls should be positioned between the buccal side of the teeth and the cheek.

Retractor may also be preferred for this procedure.



# 1. Preparation

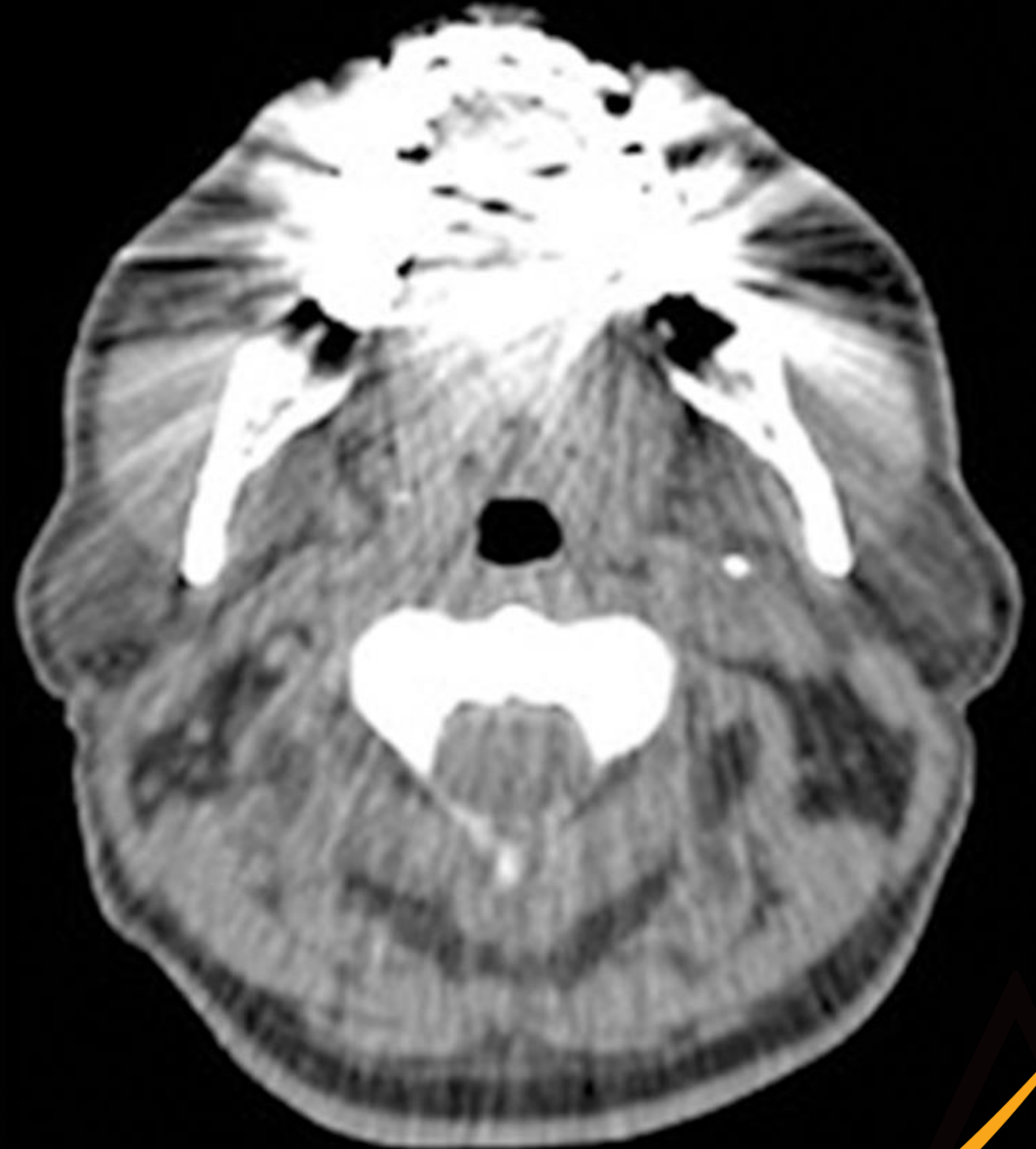
## A) Tomography

### Dentures:

If the patient has a removable metal base crown or bridge, it is strongly recommended that they be removed before scanning.

Metal structures cause image artifacts during tomography scanning.

**If crowns and bridges were removed prior to CT, the patient's plaster model or intraoral scan should also be taken with the crowns and bridges removed. In other words, tomography and mouth measurement should reflect the same model.**

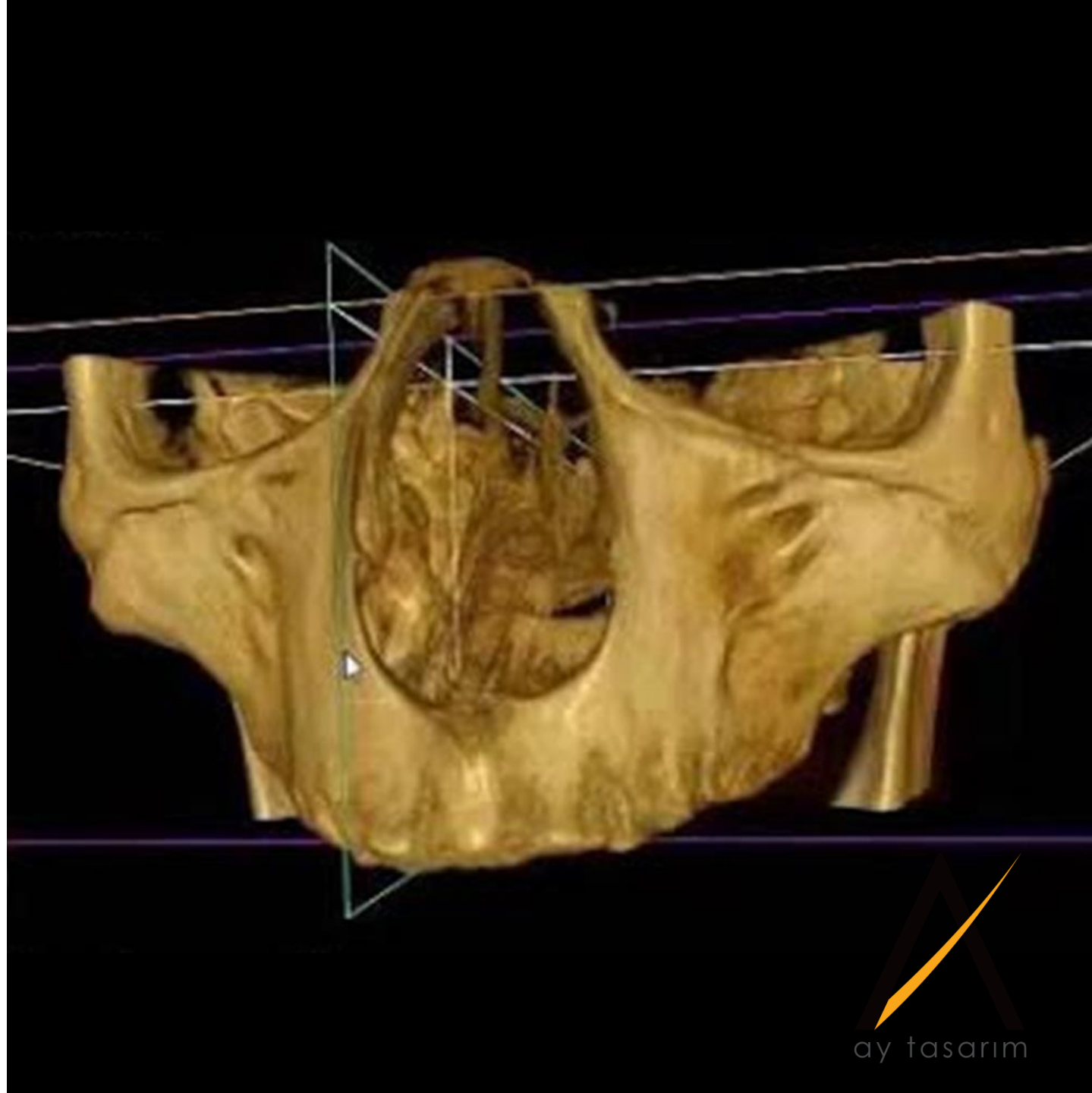


# 1. Preparation

## A) Tomography

### Maxilla Scan:

The maxillary scan should include **at least half** of the maxillary sinus.



# 1. Preparation

























## A) Tomography

### DICOM Registry:

DICOM images must be saved as multiple DICOM.

Some tomography machines have options to save the study as an single DICOM. This option should **not be used**. Instead, the multiple DICOM option should be checked.

**DICOM sections should be taken, not Viewer CD.**

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 33jeac9edd203001023.dcm	30.11.2021 18:28	GIMP 2.10.18



# 1. Preparation

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## B) Intraoral Scan Data

### Measure with Intraoral Scanner:

With the Intraoral Scanner, you can instantly send us your patient's intraoral measurement digitally. We recommend the use of an intraoral scanner in appropriate cases, compared to traditional methods.

In total edentulous cases or partial cases with a long arch of edentulism, it may be advisable to use traditional impression methods.

In digital dentistry, with the advancing technologies, it is observed that the quality of impressions increases with Intraoral Scanners and they are preferred more and more day by day.



# 1. Preparation

## B) Intraoral Scan Data

### Plaster Model:

If you do not have an intraoral scanner, the procedure can also be performed with a plaster model.

It is important to use suitable materials to prevent the plaster model from expanding or shrinking and to deliver it to Ay Tasarım quickly and safely.

Plaster models and waxups that reach Ay Tasarım will be scanned in a 3D scanner, digitized and matched with the tomography data.

In this way, while the locations and angles of the teeth are taken into account in the planning of the implants, a more precise guide will be produced.





# 1. Preparation

## B) Intraoral Scan Data

If necessary, Custom Tray should be made.

The mucosa should come out completely.

In toothed cases, Intraoral Scanner should be preferred.

The antagonist and closing must also be taken.

In order to prevent the plaster from drying out and losing its size during shipping, its contact with air should be cut off as much as possible and it should be packed protected against breakage.

The plaster model should be removed from the spoon and silicone and only the model should be sent. It should not be sent in a spoon or silicone.



# 1. Preparation

## C) Waxup

After the plaster model of the patient is taken, a prosthesis showing the ideal tooth alignment should be prepared instead of the missing teeth and sent to Ay Tasarım with the plaster model.



# 1. Preparation

## C) Waxup

In total edentulous cases:

**Silicone-based** medium body should be tightened into the patient's existing prosthesis and the patient should enter the tomography with this prosthesis. If the patient does not have a prosthesis, a temporary prosthesis should be prepared. After tomography, the inside and outside of this prosthesis should be scanned and scan data should be sent. If there is no intraoral scanner, the prosthesis itself should be sent to Ay Tasarım with the plaster model without cutting or cleaning the medium body residues.



# 1. Preparation

## D) Closing Wax

If the impression was taken with an intraoral scanner, its occlusion should also be taken. If a plaster model is being sent, the model to be scanned by Ay Tasarım should be sent with its antagonist and biting wax in order to get the ideal closure.



# 1. Preparation

## E) Work-order

To start planning;

You can send all the data prepared in accordance with the protocol to us by creating a new case after registering on the HIPAA compliant portal. ([www.allonguide.com](http://www.allonguide.com)) During the case upload, you must specify the details of your case and information about the procedures in the explanations section. This information affects planning.

- Which implant of which brand will be used?
- Where are the implants planned to be placed?
- Are there any teth to be extracted?
- Is thereany loose gingivaor mobility in teeeth?

ALLONGUIDE  
Guide for All

Remember Me (Having Trouble?)

Login

Don't have an account? Register now.

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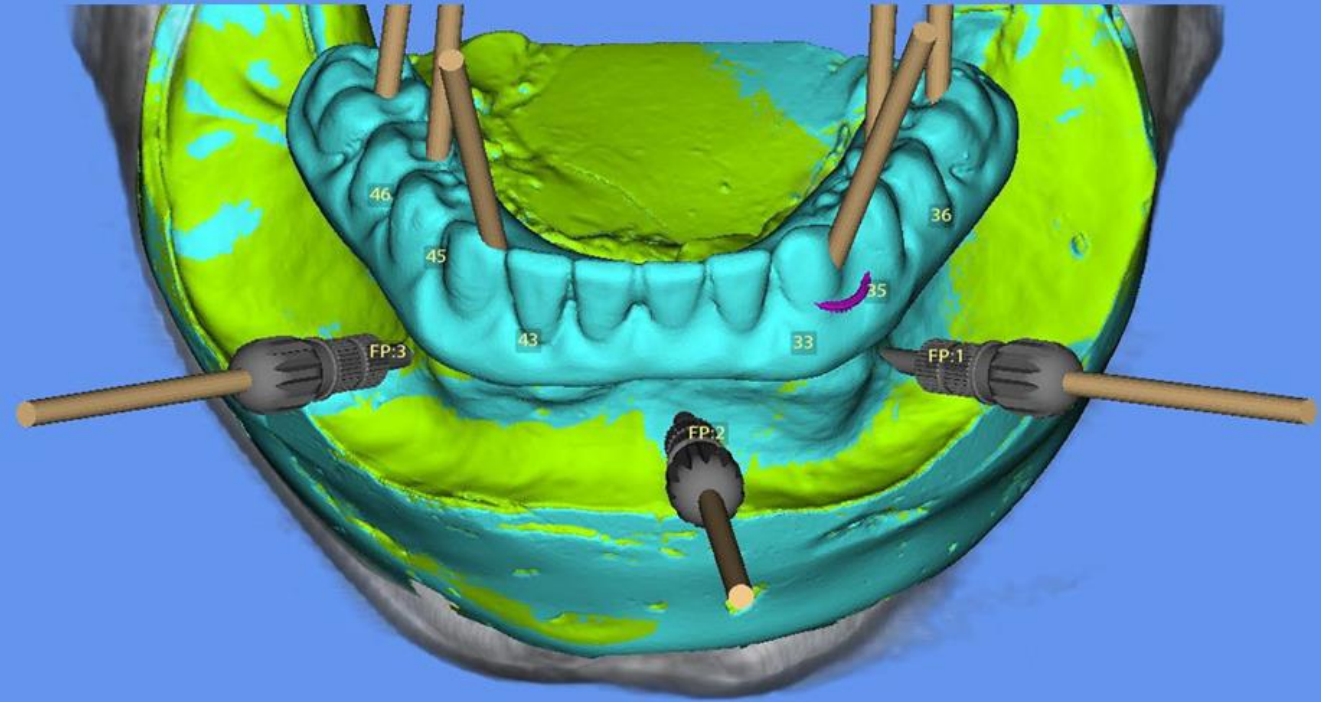
[Privacy Policy](#)



## 2. Planning

FDA-approved RealGuide software is used in the planning phase.

In the RealGuide software, firstly the jaw model, waxup and tomography data are registered. Then, a draft planning is made in line with the information you have given us about the case (work order).



## 2. Planning

After the draft planning, Google Meets connection is established with the physician and the final planning is decided together.

### In Planing Stage:

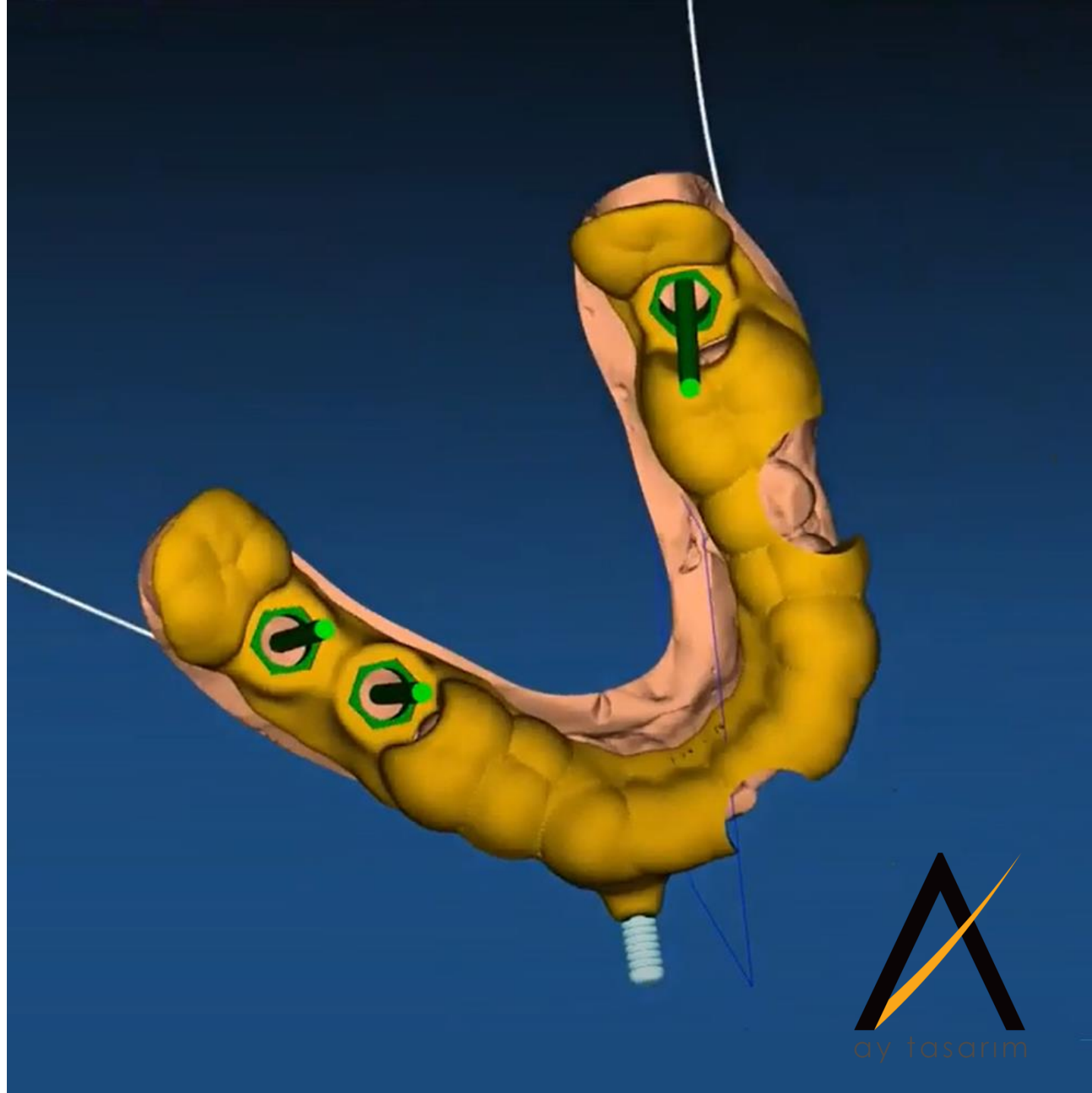
- 2 and 3 dimensional evaluation of the case is made.
- Prosthesis priority implant planning is done.
- Implant locations, dimensions and depths are planned.
- It is ensured that vital anatomical structures are taken into considered.

**Google Meets meeting will be recorded on Ay Tasarım servers.**



### 3. Guide Design

Each guide is designed by a specially trained specialist with FDA-approved software in accordance with the patient's anatomy and individually.

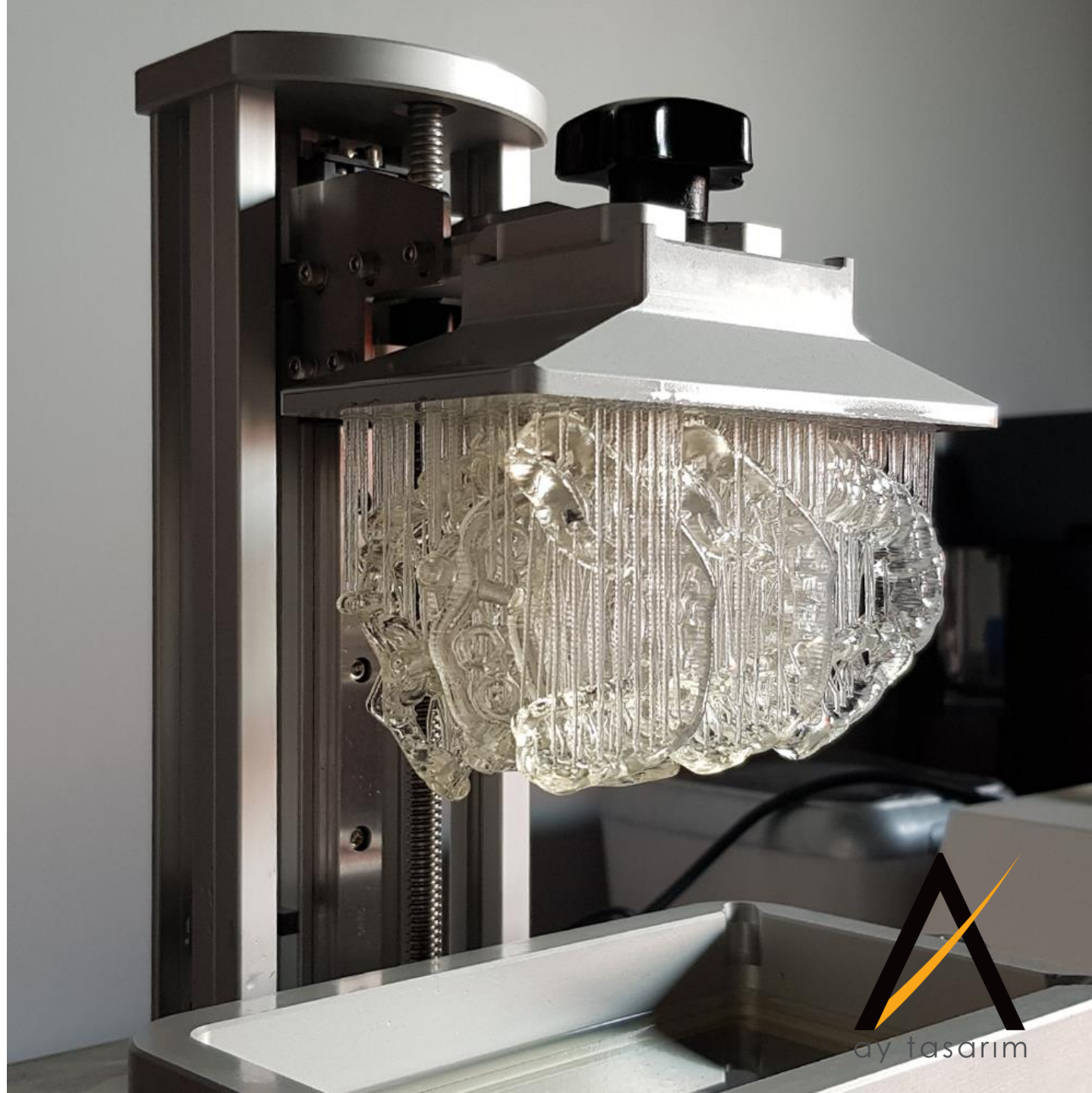




## 4. Production of Guide

After the design is approved by the dentist, the personalized implant guide is produced with maximum precision in advanced technology 3D printers using biocompatible and FDA-approved photopolymer resins.

Only the highest quality biocompatible materials and equipment are used during the production phase. The quality of the guide is also checked and approved after production.



## 5. Surgical Procedure

After the production is complete, the plaster model (or its duplicate) and the **universal** ayGuide surgical set are sent to the physician along with the implant guide.

AyGuide surgical set is used during surgery.

In Set:

- Keyless milling sequence,
- Soft tissue punch,
- Bone milling and correction drill,
- Fixing pins

And there are other tools necessary for monitoring a complete guided surgical process.



Biting wax can be prepared for the guide in the articulator in order to ensure that the produced guide is fully seated, especially in edentulous jaws.



## Operasyon Videosu

[www.youtube.com/watch?v=ipUuyQNSdy8&t=297s](http://www.youtube.com/watch?v=ipUuyQNSdy8&t=297s)

## Veri gönderme ve iş emri verme

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



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



[www.youtube.com/AyTasarım](http://www.youtube.com/AyTasarım)



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