

mis®

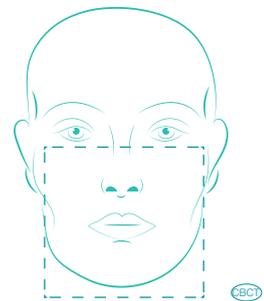
MGUIDE Protocol

For Cone Beam Radiographic Scan

The MGUIDE workflow requires a scan of the patient according to the following protocol:

1.

It is important to know the technical specifications of the Cone Beam machine brand that is being used. The MSOFT Virtual Implant Planning Software requires a Field-of-View (FOV) of at least 120 x 120mm (12 x 12cm). A machine with a lesser FOV is not recommended, as the scan can compromise the accuracy and success of the surgical plan and template. For best results, we recommend using the scanners listed below.



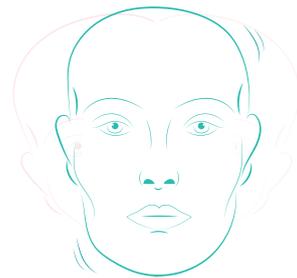
2.

To ensure the patient's tongue is not in the field-of-view of the scanner, have the tongue placed as far back as possible; touching the soft palate. The tongue must be placed in the back of the mouth away from the teeth.



3.

The patient's head must be completely stabilized and the mouth must be slightly open in all scans.



4.

If the patient has any type of denture, the scan must always be performed without the denture.



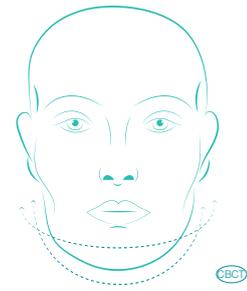
5.

A maxillary scan must include at least half of the maxillary sinus.



6.

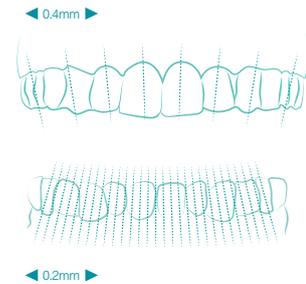
Verify that the scan includes the entire jaw.



7.

The recommended slice thicknesses for the scans are:

- a. Maxilla = 0.3-0.4mm
- b. Mandible = No more than 0.2mm



8.

CBCT machines export the scanner files as DICOM files.



9.

The final folder containing the DICOM files of the patient's scan can be saved and sent to us in the following formats: Burned to a CD, saved to a flash drive, or sent via our large email service. Contact the MCENTER for details.

a. The following information must be included:

- I. Clinician's name
- II. Patient ID
- III. Patient's date of birth
- IV. U if upper jaw, L if lower jaw



Recommended Cone Beam Scanners

- i-CAT
- J MORITA 3D Accuitomo 170
- KAVO KaVo 3D eXam
- KODAK K9500
- NEWTOM VGi
- PLANMECA Promax 3D MAX
- SIRONA Galileos Comfort
- SIRONA Galileos Compact
- SOREDEX Scanora 3D
- VATECH Master 3DS
- VATECH PaX-Reve3DS
- VATECH PaX-Zenith3D

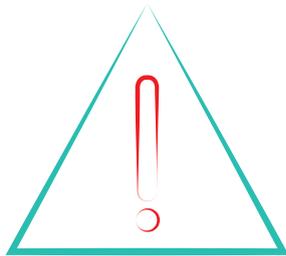
CBCT



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MGUIDE Protocol

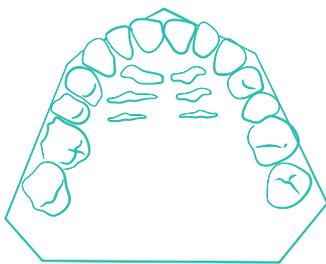
For Models and Wax-Ups



Teeth, tooth fillings, and brackets are deformed in Cone Beam CT Scans. Therefore, a stable tooth-supported MGUIDE template cannot be built based on CBCT images alone. The MCENTER requires a model of the current oral anatomy and a waxed-up model of the final prosthetic solution in order to produce high-resolution optical scans for use in the MSOFT Virtual Implant Planning Software.

The MGUIDE workflow requires a model and a wax-up of the patient according to the following protocol:

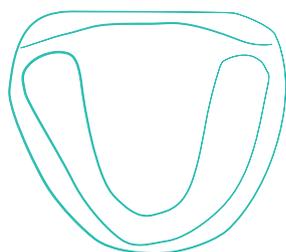
High Quality Model and Wax-Up



The quality of the impression and plaster cast will influence the fit of the tooth-supported MGUIDE surgical template. Make sure to use an accurate and stable impression material (e.g. poly-ether, silicone). Alginate is not recommended, but if it must be used it should be Kromopan 100, due to its high accuracy and long-term dimensional stability.

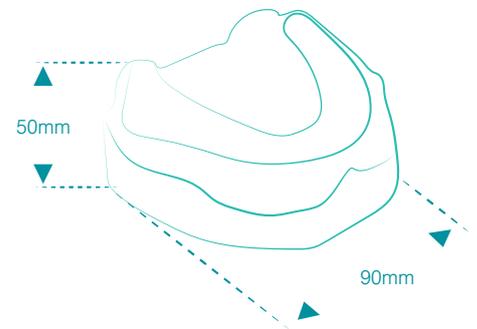
Note: The entity (outside Lab or other) that will be fabricating the Waxed-Up model will need an impression of the Antagonist to accurately design the final prosthetic solution.

- Use only an up-to-date plaster cast (within a week), as teeth position may change over time.
- The model should be intact. Repaired models, models with parts broken off from teeth or mucosa, models with air bubbles in teeth or mucosa, as well as models with laboratory cuts, cannot be used.
- The maxillary cast should contain the complete palate, as well as tuberosities (retro molar pads for the mandible), for good stability. Always include as much soft tissue information as possible.
- Wax-Up must be as accurate as the final prosthetic appliance.



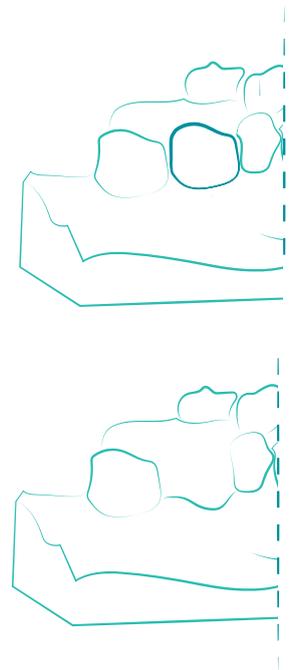
Dimensions

Use a plaster cast of the entire jaw. The model should be big enough, with no implants planned outside the cast. At the same time, the maximum dimensions of the plaster cast should not be more than 50mm height and 90mm width, to facilitate the optical scanning process. A sturdy base is also recommended to ensure no damage occurs during shipment.



Extraction

The MGUIDE system makes it possible to design and produce a surgical template prior to tooth extraction. This allows immediate and accurate placement of an implant into an extraction socket. Make sure to remove any teeth that will be extracted during surgery from the plaster cast before sending it to the MCENTER.



Shipment

- Mark the Clinician's name and Patient ID on the models.
- Make sure that the models are well packed and protected for shipment.
- Do not include impressions, articulators, occludators or the antagonist jaw model.

