



## 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 MGUIDE Virtual Implant Planning Software requires a Field of View (FOV) of at least 120 x 80 mm (12 x 8 cm). A machine with a lesser FOV is not recommended, as the scan can compromise the accuracy and success of the surgical plan and template. You can find a list of some recommended machines below.
2. When scanning the patient, be sure that he or she does not place their tongue against their palate. If this happens, our software cannot tell the difference between the gingiva and the tongue.
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 - 0.4 mm
  - b. Mandible = No more than 0.2 mm
8. CBCT machines export the files of the scan as DICOM files. It is extremely important to make sure that the machine used does not export the files using "stitching" software. "Stitching" software cannot be relied upon in virtual implant planning and guided implantology procedures.
9. Lastly, the final folder containing the DICOM files of the patient's scan should be either burned to a CD, put onto a flash drive, or emailed using a large attachment online service.
  - a. Vital information that should 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