

CT Scanning Protocol for Three-Dimensional Anatomical Bone Models

Patient-specific 3-D modeling is only as accurate as the CT data used to create the model. Below is the protocol to ensure clean and accurate CT data collection for the purpose of 3-D model generation.

Scanning Parameters Helical

Area	FOV	Pitch	Slice Thickness	mAs*	Time
Mandible/Maxilla	20 cm	1:1	1 mm	120-280	N/A
Full Skull	20 cm	1:1	1 mm	120-280	N/A

**Maximize the mAs without overheating the tube*

Pre-scan Checklist

Remove non-fixed metal dentures or prosthesis and any jewelry

Position the patient supine

Stabilize the patient with sponges, tape or other means that will not cause injury to the patient or affect the quality of the CT scan**

*** It is very important the patient does not move or swallow during the scanning process*

(continued on back)

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Scanning Procedure

Inform the patient that he or she should not move or swallow until the scan is complete.

Inform the patient when the actual scanning process starts.

Use the standard algorithm.

Gantry tilt must be set to "0".

Use an appropriate FOV so the image fills the entire screen, but be sure that the desired anatomy is visible.

Label the CD or disk with the following:

- Scanner type
- Date of Scan
- Patient Identification
- Physician Name
- Facility Name
- CT Technologist Name
- Technologist Phone Number

Send the Order Request Form and the uncompressed DICOM data to:

ProtoMED, Inc.

1329 West 121st Avenue
Westminster, CO 80234

For questions regarding the CT scanning protocol,
contact ProtoMED, Inc. at (303)466-5610.

