

CT scanning guidelines

(for 3D biomodels, surgery planning and custom implants)

The quality of the image CT data is the most important factor for the production of high quality 3D biomodels, surgery planning and custom implants. Good quality and high resolution 3D image CT data are therefore essential for 3Dim Laboratory.

In order to derive the maximum information about the tissues geometry and the structural details, CT scans are performed according to the following guidelines:

Slices thickness	at least 1,0 mm or better
Slices spacing	same as slices thickness
Slices matrix	at least 512 ²
Gantry tilt	0° (zero)
Field of View (FOV)	to include entire region of interest
Number of slices	to include entire region of interest
Image reconstruction method (reconstruction window)	“BONE” for bones tissues “SOFT TISSUES” for other tissues
Save final CT slice data in DICOM format (file for each slice).	
If patient moves during scanning process (moving artifacts), the scan have to be repeated.	
Try to remove metal parts from the area of interest to prevent or minimize metal artifacts.	

