

AT THE CONSOLE

Slice thickness	0.625 mm ideal · 1.0 mm maximum	Above 1.5 mm a scan cannot be used for surgical guides or implants.
Reconstruction increment (interval)	≤ slice thickness, contiguous	Overlap improves the result. A larger increment leaves anatomy unsampled.
Reconstruction kernel	Bone / sharp	Plus a soft-tissue series. See the kernel table below for your scanner.
Matrix	512 × 512	Square matrix. Some scanners default to rectangular — set it manually.
Display FOV	Smallest that encloses the full anatomy	250–320 mm for head and neck. Do not clip the region of interest.
kVp	120 (140 for large patients)	Use a lower kV only when boosting iodine contrast for a vascular model.
Gantry tilt	0°	No tilt, no oblique acquisition.
Compression	Uncompressed or lossless only	Lossy compression permanently destroys the data we segment.

BONE KERNEL — SIEMENS

Siemens	B60, B70, B75, B80 (legacy); Br56, Br59, Br69 (ADMIRE)
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LABEL THE SERIES

Set Study Description to **03D THIN AXIAL BONE** on the thin bone series so whoever exports later can find it.

CHECK IT BEFORE YOU SEND IT

osteo3d.com/check-scan

Drop the exported folder onto that page and it tells you whether the study is usable before it leaves the department. Nothing is uploaded — it runs in your browser.

SENDING IT TO US — WHERE MOST UNUSABLE DATA IS CREATED

- 1 Export from the source series — never from a 3D, MPR or reformat view.
- 2 Format: DICOM, one file per slice ("multi-file", or "set of single frame DICOM files"). Not JPEG, BMP, PDF, video, or "save image".
- 3 Compression: uncompressed, none, or lossless. If asked for a ratio, choose 1:1 on X, Y and Z.
- 4 Range: every slice in the series. Do not sub-sample and do not crop the range.
- 5 Do not bundle a viewer application, and do not password-protect or encrypt the archive.
- 6 Zip the folder and upload the zip, or upload the folder directly.
- 7 Include the thin bone-kernel axial series. Include the soft-tissue series alongside it.

KEEP THE RAW DATA

Please retain the raw scan data for at least 14 days. If anything is wrong with the export, a retained raw dataset lets us fix it by re-reconstructing — with no repeat scan and no additional dose to the patient.

EVERY CASE

- ✓ **Thin slices** — Under 1 mm. 0.625 mm is best. Set the reconstruction increment (interval) no larger than the slice thickness.
- ✓ **Bone kernel** — Reconstruct a sharp bone-algorithm series. Send the soft-tissue series too.
- ✓ **Thin axial source series** — Send the thin axial series. A reformat cannot replace it.
- ✓ **The whole folder, uncompressed** — Send the study as exported — every slice, one DICOM file each. No compression, no password.
- ✓ **Zero gantry tilt** — Scan at 0°. No tilt, no oblique acquisition.
- ✓ **Do not edit the metadata** — De-identify if you must. Never change acquisition values.

CANNOT BE USED IN PLACE OF THE AXIALS

- ✗ Screenshots or Secondary Capture images
- ✗ 3D, VRT or volume-render series
- ✗ Coronal or sagittal reformats instead of the axial series
- ✗ The scout or localiser only
- ✗ The soft-tissue series only
- ✗ The thick reporting series only
- ✗ A report PDF, JPEG images, or an AVI cine
- ✗ Lossy / JPEG-compressed DICOM

Nothing needs to be deleted — send the complete study as exported.

No extra radiation. It is generated from raw data you have already acquired and costs the patient no additional radiation.

ON YOUR SYSTEM — SIEMENS (SYNGO / SYNGO.VIA)

Add the thin bone reconstruction as a separate recon job at the console; it is not created automatically. Some models — the SOMATOM GO in particular — default to a non-square matrix and must be set manually to 512 × 512. Export via Patient Browser → Export → DICOM, offline / uncompressed, and do not attach the syngo viewer.