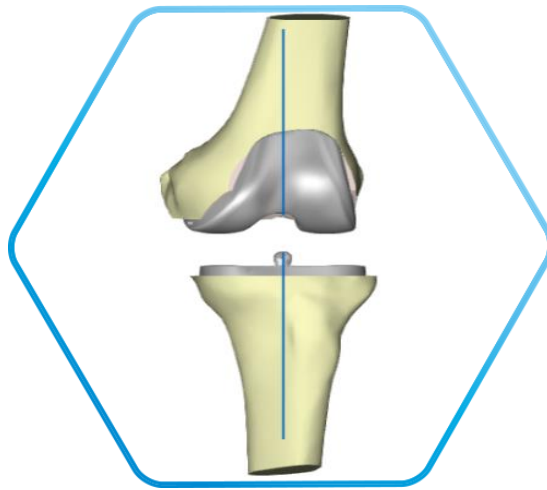


Scanner

imaging protocol

oneFIT Knee Planner



oneFIT
— anEOS imaging solution

oneFIT knee Planner is a medical device, manufactured by EOS imaging, CE marked.

Link: <https://onefit-online.com>

SCANNER acquisition for oneFIT Knee Planner

This document contains the parameters and conditions to follow to obtain the desired quality of CT scan images. These images are used to design a 3D model reconstruction of the knee joint and realize Patient Specific Instrumentation for the total knee replacement surgery.

1 General overview

In each case observe the following instructions

- Save the protocol with the name "OneFit Medical"
- **Do not reinitialize the coordinate system between each scans**
- The (x,y) coordinates must match from one slice to another
- Each sequence is saved separately: knee, ankle and hip
- The pixel size is stable
- **No movement allowed from the patient between or during scans**
- Do not move the table during the acquisition
- In case of contralateral implant, exclude the contralateral knee from the acquisition by bending the leg
- **Perform a scout of the entire leg**



2 Regions of interest

We are looking for 3 anatomical areas:

2.1 Femoral Head

- Anatomical landmark: None
- Maximum slice thickness: **2.5mm**
- Scanning area: entire femoral head

2.2 Knee

- Anatomical landmark: patella apex and tibial tuberosity
- Maximum slice thickness: **1mm**
- Scanning area: 12cm on each side of the joint line

2.3 Ankle

- Anatomical landmark: malleoli
- Maximum slice thickness: **2.5mm**
- Scanning area: 5cm above distal tibia until the most distal tibial point

2.4 Regarding the other parameters:

- **Use a field of View (FOV): 200mm (maximum 260mm if necessary)**
- Reconstruction matrix: 512*512
- Interlaced or contiguous slices
- Reconstruction algorithm: Standard or Soft tissue
- Use filter is possible :

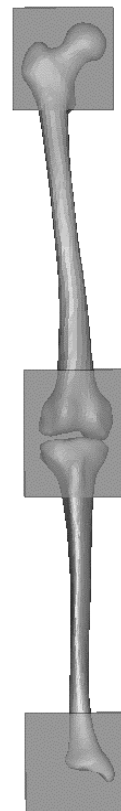


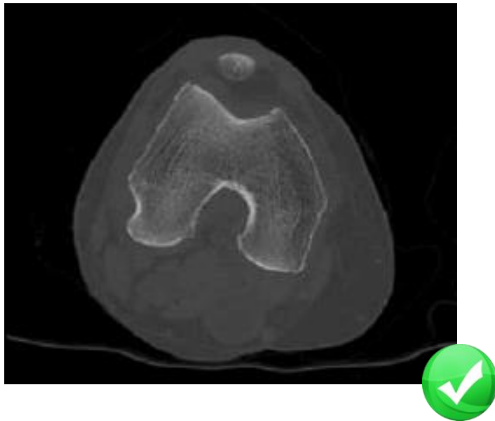
Table 3: Recommended filters for 3D reconstruction.

Manufacturers	GE	Philips	Siemens	Toshiba
Filters	Standard	B	Br 38s/3	FC 07 FC 08

Use a soft filter rather than a bone filter.

3 Example of scanner images

Picture below displays the required image quality with perfectly clear contrast. Edges between bones and surrounding soft tissues are easily visualized.



4 Transmission and contact

DICOM images must be sent to EOS imaging in compressed format (.zip) by uploading to our secure website: **www.onefit-online.com**.

Sending on CD to the address at the bottom of the page is also possible.

For any questions or additional information, you can contact us at the following address:

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