



Patient Specific Templates: Shoulder CT Scan Protocol

This document outlines the optimal CT scan protocol to enable us to produce high-quality patient specific templates for Shoulders. Please note that all scans must be collected no sooner than 6 months prior to surgery.

- 1) Position the patient sitting down, taking into consideration that all axial sections must have the same field of view, whilst maintaining the same reconstruction centre and the same chair height. Secure the shoulder and arm tightly using strapping and/or tape to reduce movement artefact during breathing.
- 2) Scout from shoulder to elbow (including the whole of the humerus) antero-posteriorly and laterally using the parameters listed below or the closest possible depending on available options.

Slice thickness	0.5 mm
Total number of slices	Dependent on limb length
CT-Scan Range	Shoulder to elbow
Slice increment reconstructed	1.0 mm
Matrix	512 x 512
Gantry Tilt	0°
Reconstruction Algorithm	No 3D reconstruction needed
Special Requirements	No filter or image intensification required

- 3) Save the two Scanogram images and the CT data in DICOM format and in the same folder.
- 4) Upload the data to the [SurgiNovi Portal](#) or, alternatively, email it to info@surginovi.co.uk.
- 5) For bilateral cases repeat all the instructions above whilst saving each shoulder to a different folder.



Figure 1: Exemplar Scanogram image
In the antero-posterior position

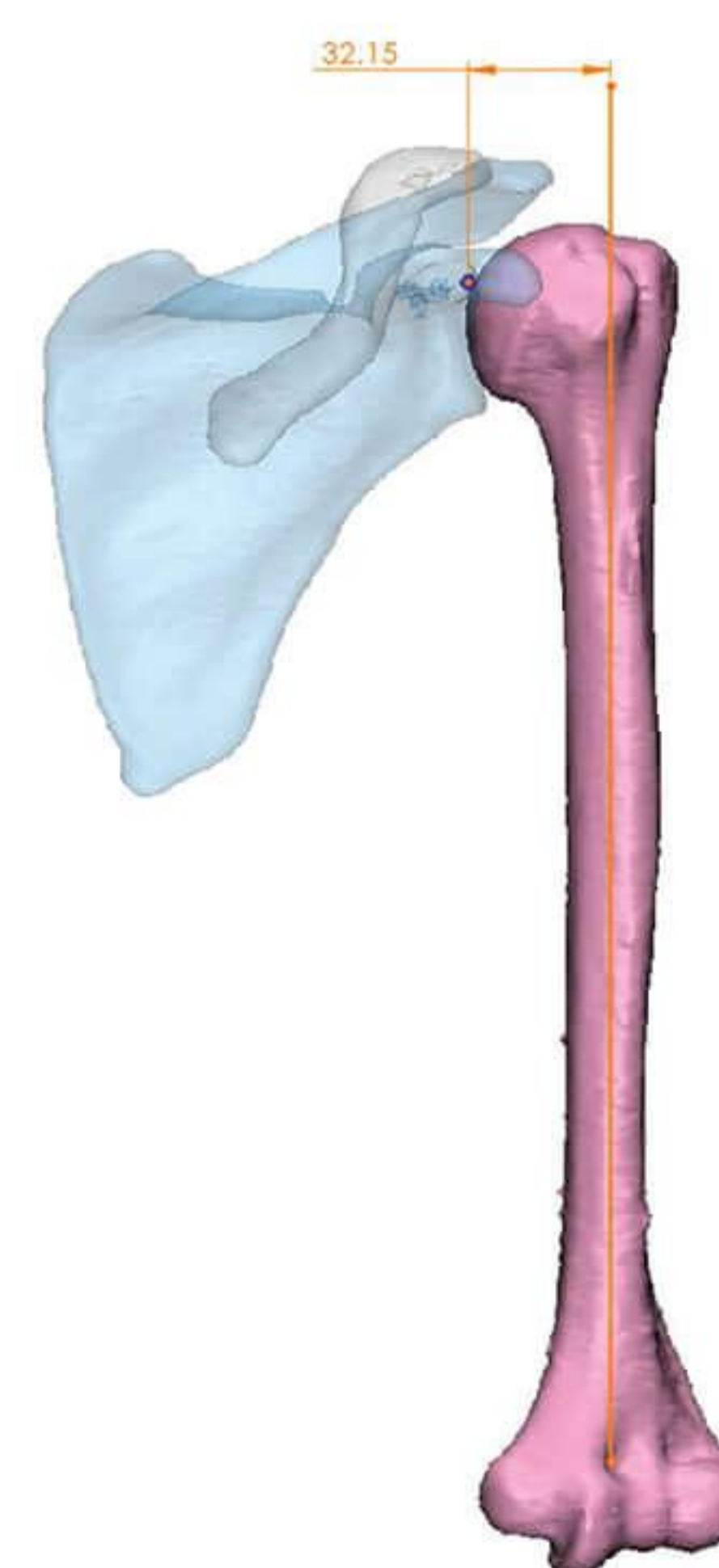


Figure 2: Full CT scan demonstrating the
whole of the shoulder joint and the humerus.