

RIH – HIGH RESOLUTION CHEST SIEMENS DEFINITION AS+ PROTOCOL

Indications - interstitial lung disease, emphysema, bronchiectasis, asbestosis, restrictive lung disease

Position/Landmark	Head first or feet first-Supine 2cm superior to shoulders			
Topogram Direction	Craniocaudal / Craniocaudal			
Respiratory Phase	Inspiration			
Scan Type	Helical			
Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization	Care kV 120 / Care Dose4D 150 / 0.5 sec .6:1 , 24.00mm 3 / 4			
Detector width x Rows = Beam Collimation	Helical 0.625mm x 64 = 40mm (128 x .6mm)		Axial 1mm x 2 = 2mm	
Average Tube Output	Helical: ctdi – 9 mGy dlp – 336 mGy.cm		Each Axial: ctdi – .8 mGy dlp – 22 mGy.cm	
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	recon algorithm destination .
	1	chest	5mm x 5mm	I40f medium pacs
	2	lungs	5mm x 5mm	I70f very sharp pacs
	3	supine hi res lungs	1.25mm x 20mm	I70f very sharp pacs
	4	coronal chest	5mm x 5mm	I40f medium pacs
	5	thin chest	.75mm x .7mm	I40f medium terarecon
First Axial Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	recon algorithm destination .
	1	supine hi res lungs expiratory	1.25mm x 20mm	I70f very sharp pacs
Second Axial Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	recon algorithm destination .
	1	prone hi res lungs inspiratory	1.25mm x 20mm	I70f very sharp pacs
Scan Start / End Locations DFOV	lung apices costophrenic angles 35cm decrease appropriately			
IV Contrast Volume / Type / Rate				
2D/3D Technique Used	Workstream 4D mpr of 5mm x 5mm coronal chest series, auto-transferred to PACS.			
Comments: There are three scans in this protocol: supine inspiration helical, supine expiration axials, and prone inspiration axials. Every effort must be made to acquire prone images. If the patient cannot hold their breath, please consult a radiologist.				
Images required in PACS	Topograms, 5mm x 5mm axial chest, 5mm x 5mm coronal chest, 5mm x 5mm axial lungs, 1.25mm x 20mm axial supine inspiration hi res lung, 1.25mm x 20mm axial supine expiration hi res lung, 1.25mm x 20mm axial prone inspiration hi res lung, Patient Protocol			