

**RIH – PEDI FACE / ORBITS / SINUS
SIEMENS DEFINITION AS20 PROTOCOL**

Application: fracture, tumor, cellulitis, sinusitis

| Position/Landmark | Supine head first or feet first 1cm superior to skull vertex | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--------------------|-----------------|--------------------|-----------|-------------------|---|------------------------|-----------|-------------|-----|---|-----------------|-----------|-----------------|-----|---|-------------------|-----------|-----------------|-----|---|-----------|--------------|-----------------|-----------|
| Topogram Direction | Craniocaudal / Craniocaudal | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Phase | Any | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scan Type | Helical | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization | Care kV 120 / Care Dose4D 50 / 1.0 sec .8:1 , 10.00mm 2 / non contrast 5 contrast 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Detector width x Rows = Beam Collimation | 0.625mm x 20 = 12.5mm | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average Tube Output | ctdi – 6.3 mGy dlp – 125 mGy.cm | | | | | | | | | | | | | | | | | | | | | | | | | |
| Helical Set Slice Thickness/ Spacing Algorithm Recon Destination | <table border="1"> <thead> <tr> <th>recon</th> <th>body part</th> <th>thickness/ spacing</th> <th>algorithm</th> <th>recon destination</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>axial face soft tissue</td> <td>3mm x 3mm</td> <td>I40s medium</td> <td>pac</td> </tr> <tr> <td>2</td> <td>axial face bone</td> <td>3mm x 3mm</td> <td>I70h very sharp</td> <td>pac</td> </tr> <tr> <td>3</td> <td>coronal face bone</td> <td>3mm x 3mm</td> <td>I70h very sharp</td> <td>pac</td> </tr> <tr> <td>4</td> <td>thin face</td> <td>.75mm x .7mm</td> <td>I70h very sharp</td> <td>terarecon</td> </tr> </tbody> </table> | recon | body part | thickness/ spacing | algorithm | recon destination | 1 | axial face soft tissue | 3mm x 3mm | I40s medium | pac | 2 | axial face bone | 3mm x 3mm | I70h very sharp | pac | 3 | coronal face bone | 3mm x 3mm | I70h very sharp | pac | 4 | thin face | .75mm x .7mm | I70h very sharp | terarecon |
| recon | body part | thickness/ spacing | algorithm | recon destination | | | | | | | | | | | | | | | | | | | | | | |
| 1 | axial face soft tissue | 3mm x 3mm | I40s medium | pac | | | | | | | | | | | | | | | | | | | | | | |
| 2 | axial face bone | 3mm x 3mm | I70h very sharp | pac | | | | | | | | | | | | | | | | | | | | | | |
| 3 | coronal face bone | 3mm x 3mm | I70h very sharp | pac | | | | | | | | | | | | | | | | | | | | | | |
| 4 | thin face | .75mm x .7mm | I70h very sharp | terarecon | | | | | | | | | | | | | | | | | | | | | | |
| Scan Start / End Locations DFOV | <p>Sinus: 1cm inferior from the maxilla Face: 1cm inferior from the chin 1 cm superior to the frontal sinuses</p> <p>25cm decrease appropriately</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| IV Contrast Volume / Type / Rate | <p>Contrast volume is 1cc per pound of body weight Omnipaque300 / 2cc per second</p> <p>or hand injection if necessary</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scan Delay | 50 seconds | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2D/3D Technique Used | Workstream 4d mpr 3mm x 3mm coronal face , auto transferred to PACS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Comments: This protocol is the routine for all face, sinus, and orbit studies. Recon 2 is a thin bone algorithm for reformats. Coronal reformats, 3mm x 3mm, average mode are routine for this protocol. Use a symmetrical sagittal image as the reformat reference image. The coronal plane is perpendicular to the hard palate. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do not alter the pitch setting of this protocol. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Images required in PACS | Topograms , 3mm x 3mm sharp axial face/sinus, 3mm x 3mm standard axial face/sinus, 3mm x 3mm sharp coronal face/sinus, Patient Protocol | | | | | | | | | | | | | | | | | | | | | | | | | |