

IMAGING PROTOCOL

for patient-specific facial onlays

CT / CBCT acquisition only — no dental data required

ACCURACY · SYMMETRY · CONTOUR

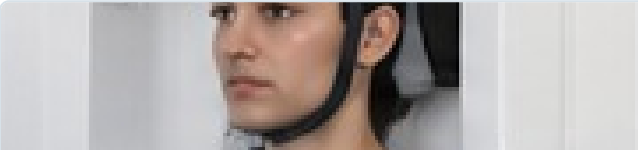


An onlay is designed to seat on the bone surface in one defined position. The fit depends directly on the quality of the CT / CBCT — surface accuracy is everything.

1 CT / CBCT ACQUISITION

GENERAL PRINCIPLES

- Capture the full target region (mandible · angle · chin · malar · orbital rim)
- Include the contralateral side — for symmetry and mirroring
- Natural Head Position — stable and reproducible
- Patient still — avoid any motion during the scan
- Metal-artefact-reduction protocol enabled



Stable head position — full region in the field of view

RECOMMENDED

Capture the region of interest and the opposite side in the same scan, so the design can mirror the healthy anatomy.

IMPORTANT — METAL ARTEFACT REDUCTION

Enable the metal-artefact-reduction protocol — it reduces streaks and shadows from metallic materials (fillings, implants, plates) over the bone surface we design on.



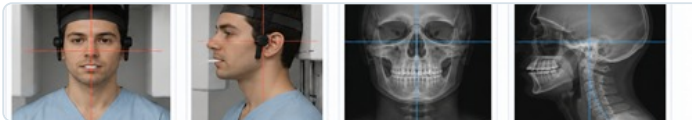
FOR OPTIMAL RESULTS

- Follow the positioning and scan parameters
- Capture the full region and the opposite side
- Share the target site with the planning team

2 RECOMMENDED CT / CBCT PARAMETERS

PARAMETER	CT (SPIRAL)	CBCT (CONE-BEAM)
FOV (field of view)	Target region + opposite side	Target region + opposite side
Matrix	≥ 512 × 512	≥ 512 × 512
Slice thickness (Z)	0.5–1.0 mm (reconstruction)	0.3–0.6 mm
In-plane reconstruction (X,Y)	0.5–0.7 mm	0.3–0.4 mm
Orientation	Axial, preferably	Axial, preferably
Contrast agent	NO	NO
Scan time	Per device protocol	20–40 sec
Table feed (CT spiral)	< 3 mm / rotation	—
Metal-artefact-reduction protocol	ENABLED	ENABLED

2.1 — SCAN VERIFICATION (SCOUT)



Full region covered Both sides included No motion Stable position

Tell us the site: mandible, gonial angle, chin, malar region or supraorbital rim. Capture that region and the opposite side at full resolution so the contour can be mirrored.

3 DATA YOU PROVIDE

NO DENTAL DATA REQUIRED

Onlay implants seat on the bone surface, away from the teeth and the bite. **Intraoral scans, plaster models and occlusal (CR) records are not needed** for onlay planning.



The patient-matched onlay is designed directly on your CT bone surface

3.1 — WHAT TO PROVIDE

PROVIDE

- One CT or CBCT covering the target region **and the opposite side**
- Metal-artefact-reduction enabled
- The complete, uncompressed DICOM data set
- The target site noted (which region to augment)

WHEN DENTAL DATA IS NEEDED

Only if the onlay sits on the alveolus / next to the teeth, or is combined with orthognathic surgery — then we also request an intraoral scan and the occlusion in CR.

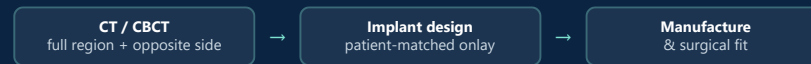
3.2 — FILE FORMATS: CT / CBCT

Imaging data	.dcm · .DICOM (uncompressed)
Reconstructions / surface	.dcm · .DICOM
Volume export (optional)	DICOMDIR (.dcm series)

GENERAL RECOMMENDATIONS

- Always provide the complete data set (all DICOM files)
- Avoid lossy compression on export
- Include patient and orientation information
- Tell us the target region and the desired projection

SIMPLIFIED WORKFLOW



KEY MESSAGE

Onlay accuracy depends on one essential:
A clean, complete CT / CBCT of the region and the opposite side. No dental data is required.