

Clinical Protocol for Accurate Digital Implant Impressions

STEP 1 Pre-Assessment

Precise scan body capture is essential for accurate implant position, depth, angulation, rotation, and occlusion. Errors at this stage directly affect restoration fit.

- Confirm the correct scan body for the implant system and platform.
- Ensure soft tissue is healed, stable, and properly contoured.
- Assess restorative space (occlusal and axial clearance) and path of draw.
- Evaluate parafunctional habits (e.g., bruxism, clenching) to guide material selection and prosthetic design.

Take your time and don't rush this step. Skipping evaluation can lead to restorations that don't fit or function optimally. Proper pre-scan preparation helps prevent remakes and chairside adjustments.

STEP 2 Control Soft Tissue & Clean Adjacent Structures

- Thoroughly clean the implant site and adjacent teeth to remove debris and biofilm.
- Maintain a clean, dry field throughout scanning.
- Eliminate blood and saliva contamination.
- Ensure no tissue overlaps the implant platform or interferes with seating.

Clear visualization of the implant interface and surrounding anatomy is essential for accurate data capture.

STEP 3 Seat & Verify the Scan Body

- Fully seat the scan body. no visible gaps at the platform.
- Confirm correct orientation and rotational stability.
- Torque according to manufacturer guidelines.
- Verify complete seating with a periapical radiograph when there is any doubt.

What is seated is what is scanned and what is scanned is what is fabricated.

STEP 4 Capture Implant Arch, Opposing & Bite Registration

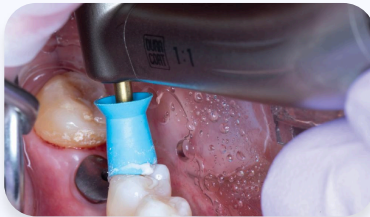
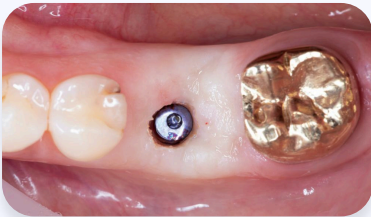
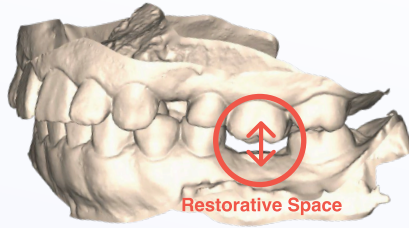
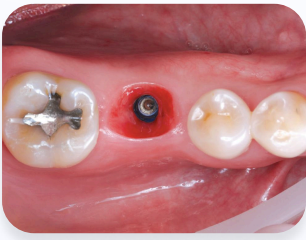
- Begin scanning on adjacent natural dentition to establish stitching stability.
- Capture the implant arch, ensuring the scan body is fully recorded from occlusal, buccal, and lingual angles.
- Verify complete scan body geometry without voids or distortion.
- Scan the full opposing arch to capture accurate occlusal anatomy.
- Remove the scan body before recording the bite.
- Record maximum intercuspation (MIP) without patient shift.
- Confirm proper occlusal alignment before final submission.

Accurate implant arch capture, opposing records, and bite registration are essential for precise articulation and predictable restorative outcomes.

STEP 5 Final Evaluation

- Confirm complete scan body geometry without voids, distortion, or missing data.
- Inspect the surrounding anatomy for full soft tissue and contact capture.
- Verify occlusion and articulation accuracy.
- Rescan immediately if any inaccuracies or incomplete areas are detected.

Thorough final review before submission helps prevent remakes and ensures predictable restorative outcomes.



The image shows a posterior implant scan body with slightly inflamed, immature peri-implant soft tissue and a visible peri-implant collar during the healing phase.

