

PHOTOGRAMMETRY (INTRAORAL) CLINICAL WORKFLOW

SURGICAL

SHINING 3D
DENTAL



BruxZir[®]
esthetic
FULL-ARCH IMPLANT PROSTHESIS



GETTING TO KNOW INTRAORAL PHOTOGRAMMETRY

Abbreviated as IPG, Intraoral Photogrammetry integrates photogrammetry with intraoral scanning.

IPG is an advanced digital technology that captures highly accurate 3D representations of the oral cavity, especially for complex procedures like implant placement and full-arch restorations. The technology and naming convention have been developed by Shining 3D.

Shining 3D IPG with the Aoralscan intraoral scanner uses both horizontal scan bodies termed High Accuracy Coded Scan Body (HACS) and scan caps (Cap Scanbody).



SHINING 3D CAP SCANBODY

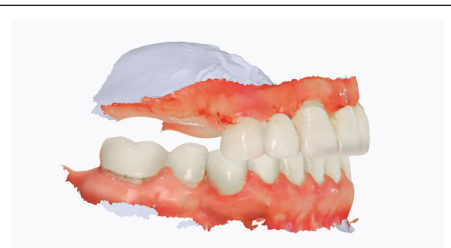


SHINING 3D HIGH ACCURACY CODED SCAN BODY (HACS)



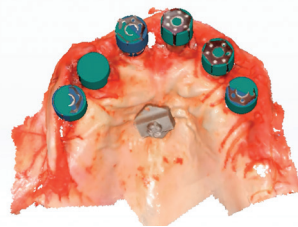
SCANS NEEDED AT EACH WORKFLOW STAGE

Scans are needed throughout the restorative process.



STAGE 0: PRESURGICAL

- CBCT
 - Dual scan (Fully or partially edentulous cases)
- Intraoral scan (upper/lower)
- Intraoral scan (bite: desired VDO)
- Facial photos or scans



STAGE 1: SURGICAL

Prior to Teeth Extraction

- Intraoral scan of working arch with fiducial marker in place (e.g. ARCHTRACER™/teeth/etc.)
- Intraoral scan (opposing arch)
- Intraoral scan (bite: desired VDO)

After Implant Placement

- Photogrammetry scan of Shining 3D scan bodies (HACS)
- Tissue scan with fiducial marker (e.g. ARCHTRACER) and Shining 3D Cap Scanbody



STAGE 2: RESTORATIVE

- Facial photos or scans
- Intraoral scan (seated prosthesis)
- Intraoral scan (opposing arch)
- Intraoral scan (bite: desired VDO)
- Shining 3D Workflow:
 - Tissue scan with MUAs
 - Photogrammetry scan with Shining 3D scan bodies
 - Intraoral scan with Shining 3D scan bodies (match scan)

STAGE 0: PRESURGICAL PHASE

The following records are essential for treatment planning full-arch restorations. These records enable the initial design of a prosthesis to align with day-of-surgery scans to fabricate an immediate prosthesis.

Presurgical Records Needed

- CBCT scans
(Dual scan for fully or partially edentulous cases)
- Intraoral scan (upper/lower)
- Intraoral scan (bite: desired VDO)
- Facial photos or scans



Begin case in *My Account*. Indicate day of surgery, type of prosthesis (FP1, FP2, FP3), and upload scans. Glidewell will prepare initial design to be finalized on day of surgery.

STAGE 1: SURGICAL PHASE

THE OUTCOME OF THIS PHASE IS A TEMPORARY PROSTHESIS.

STAGE 1 SCANS NEEDED

The following scans should be acquired on the day of surgery *after* fiducial marker is placed.

Prior to Extraction

- Intraoral scan of working arch with fiducial marker in place (e.g. ARCHTRACER™/teeth/etc.)
- Intraoral scan (opposing arch)
- Intraoral scan (bite: desired VDO)

After Implant Placement

- Implant scan: Photogrammetry scan of Shining 3D scan bodies (HACS)
- Tissue scan: Intraoral scan with fiducial marker (ARCHTRACER) and Shining 3D Cap Scanbody

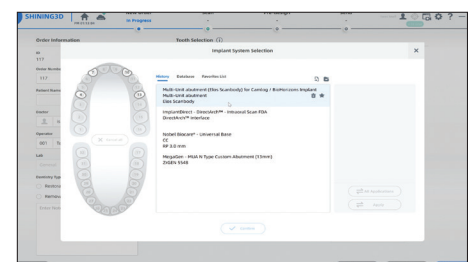
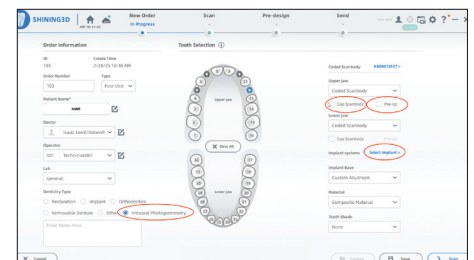
SURGICAL WORKFLOW

1

Shining Order Creation Form

Fill out the Shining 3D order creation form. Select **Intraoral Photogrammetry** option under **Dentistry Type** and select appropriate scan body for system used.

Make sure to check off (Cap Scanbody and Pre-op) underneath the corresponding arch.



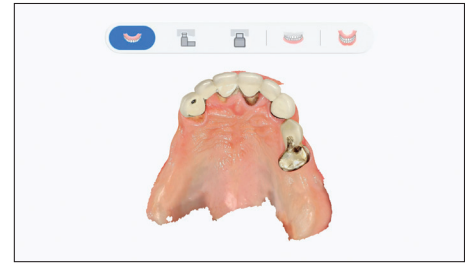
2 Determine Fiducial Marker and Scan

Place fiducial marker (e.g. ARCHTRACER).

Take a full-arch scan with intraoral scanner capturing soft tissue and fiducial marker(s).

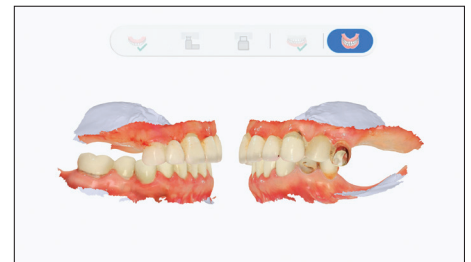
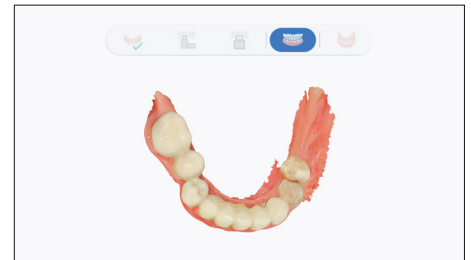
DENTATE CASES: Keep preselected teeth as additional markers if teeth are present in the presurgical records.

Keep fiducial markers in place throughout surgery until all scans are completed.



3 Scan Opposing and Bite

With fiducial marker in place, scan opposing arch and bite.



4 Implant Surgery

Using preferred surgical method, extract desired teeth and place implants. Secure MUAs to each implant.



5 Photogrammetry Scan

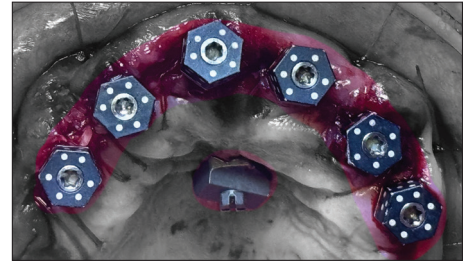
Place Shining 3D photogrammetry scan bodies (HACS) on MUAs and capture photogrammetry scan.

Pro Tip: For optimal results, position the HACS toward the center so the scanning window can capture multiple bodies at once.



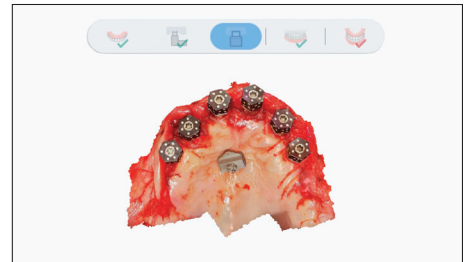
6 Seat Cap Scanbodies, Suture

Remove HACS photogrammetry scan bodies, place Shining 3D Cap Scanbodies and suture.



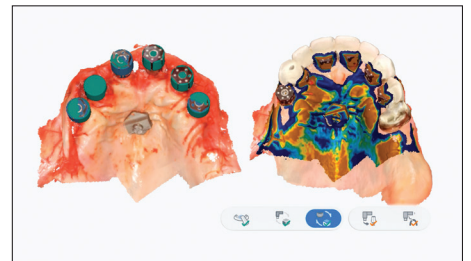
7 Tissue Scan

Seat Shining 3D Cap Scanbodies onto each MUA. Scan tissue, fiducial marker and Shining 3D Cap Scanbodies. Ensure to register at least two of the Cap Scanbodies.



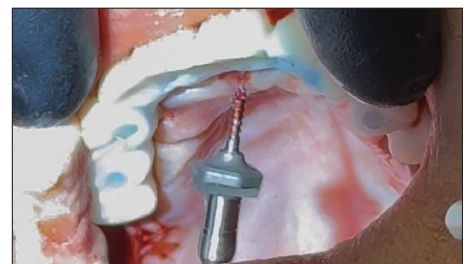
8 Verify Scans

Verify scans match with auto matching or manual match using fiducial marker. Leave fiducial marker in place until scans are verified.



9 Send Scans to Glidewell to Fabricate Immediate Provisional

Receive confirmation from Glidewell Lab team that all scans are received and are of sufficient quality for alignment and temporary design finalization.



Once Glidewell confirms scans are received, the fiducial markers can be removed.

Glidewell finalizes the design by merging the three surgical day scans with the pre-surgical planning design to finalize the temporary prosthesis with two options:



Same-Day Delivery: Receive STL file for in-office printing or milling.

Next-Day Delivery: Glidewell overnights temporary (printed or milled) for next-day delivery.

STAGE 2 : RESTORATIVE PHASE

THE OUTCOME OF THIS PHASE IS A FIXED TRY-IN PROSTHESIS.

STAGE 2 SCANS NEEDED

The following scans should be acquired in the restorative phase. Updated scans are required, even if scans were acquired in surgical phase.

- Facial photos or scans
- Intraoral scan (seated prosthesis with surrounding tissue)
- Intraoral scan (opposing arch)
- Intraoral scan (bite: desired VDO)
- Shining 3D Workflow:
 - Tissue scan with MUAs
 - Photogrammetry scan with Shining 3D scan bodies
 - Intraoral scan with Shining 3D scan bodies (Match Scan)

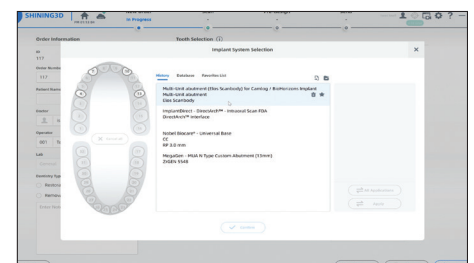
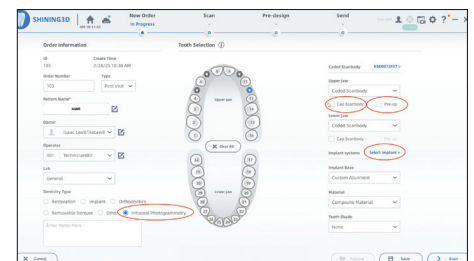
RESTORATIVE WORKFLOW

NOTE: Ensure all MUAs are torqued to manufacturer's recommendations prior to beginning workflow.

1 Shining Order Creation Form

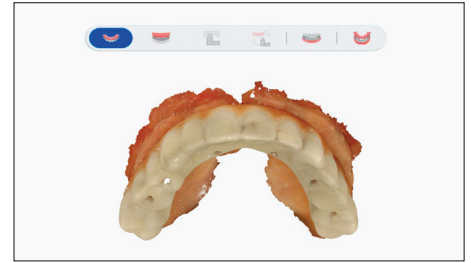
Fill out the Shining 3D order creation form. Select **Intraoral Photogrammetry** option under **Dentistry Type** and select appropriate scan body for system used.

Make sure to check off (Pre-op) underneath the corresponding arch.



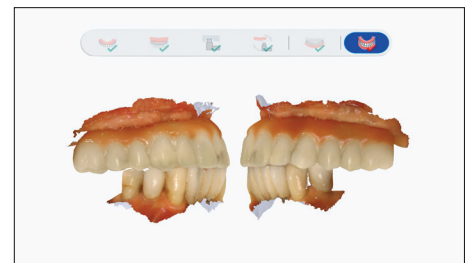
2 Scan Provisional Intraorally

Scan seated provisional, ensuring to capture surrounding tissue.



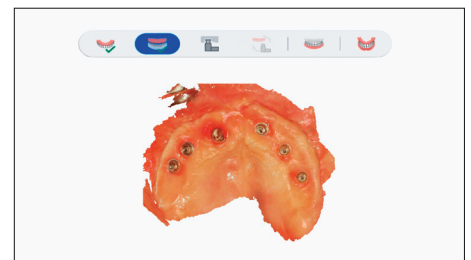
3 Scan Opposing and Bite

Adjust bite if needed.



4 Scan MUA and Tissue

Remove provisional. Scan MUA and tissue.



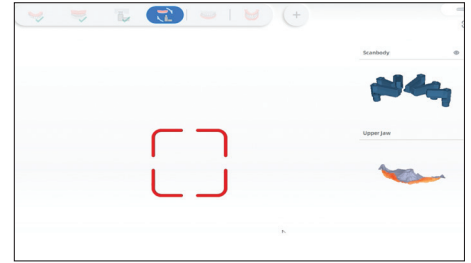
5 Photogrammetry Scan

Place IPG photogrammetry scan bodies on MUAs and capture photogrammetry scan.



6 Match Scans

Scan photogrammetry scan bodies with tissue for auto scan match on each side (right and left).



7 Send Files to Lab

Reseat provisional and send files to Glidewell through *My Account*.

FINAL STAGE

1 The Definitive Prosthesis

When a try-in is approved, complete the case in your *My Account* portal and confirm the final material.



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GUARANTEED!

 **Glidewell**
for the sake of smiles