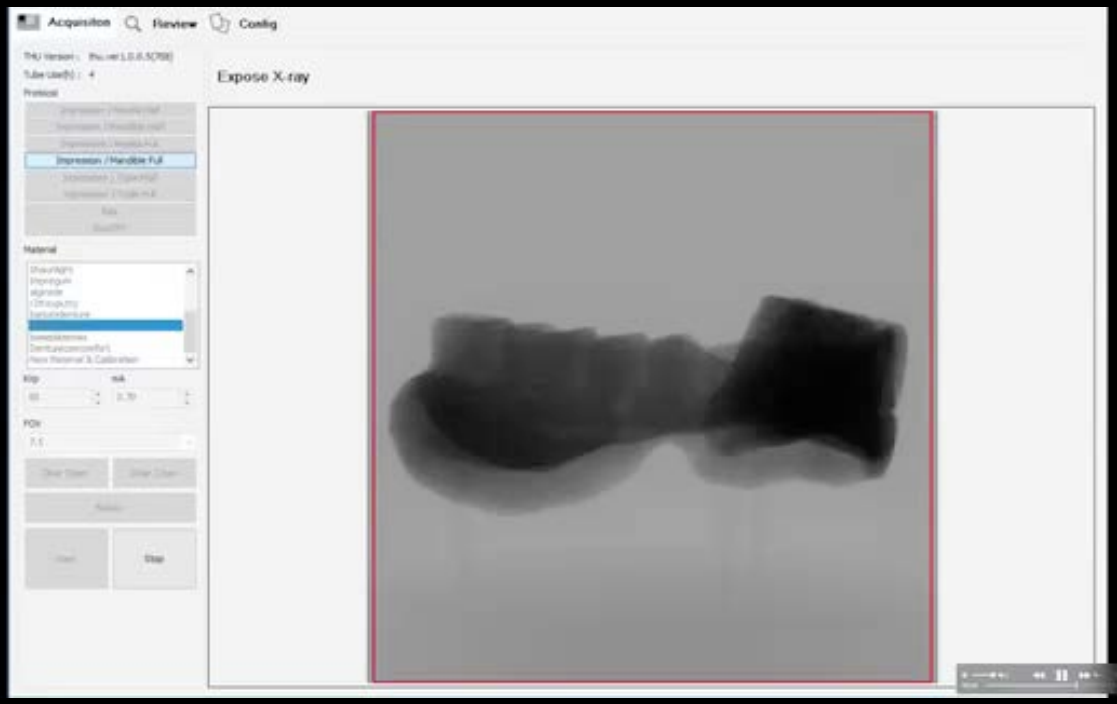
How to utilize Impression CT Scan Technology
to diagnosis & treatment planning, surgical guide and fabrication of provisional and final restorations.

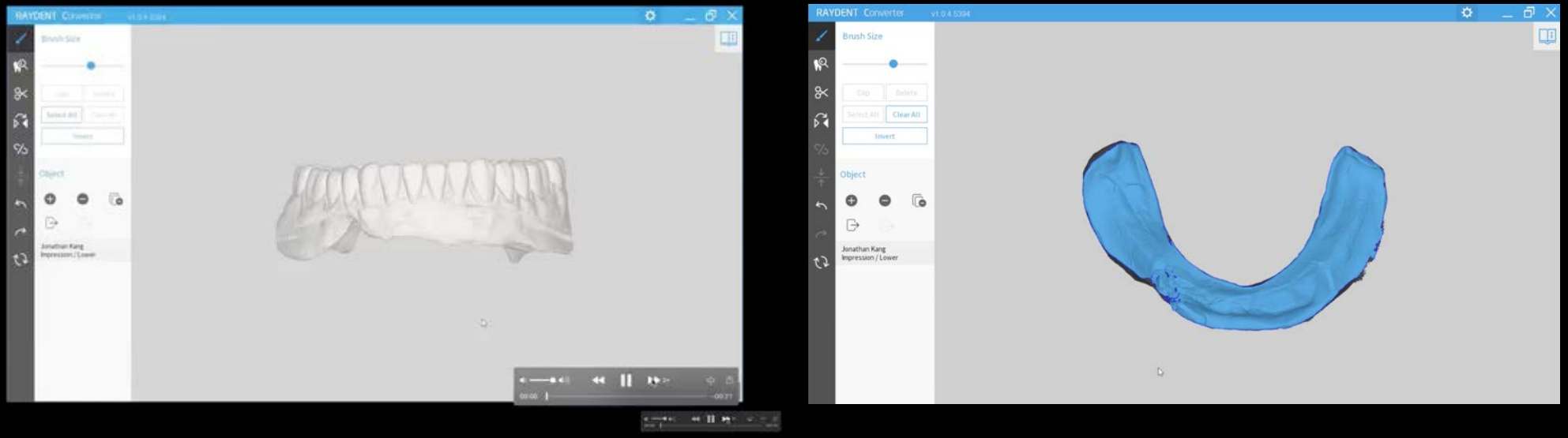
- All on x case, totally digital and modeless workflow -

Full Mandibular case,
By Dr. Jonathan Kang, Prosthodontist, New York

A male patient wearing Full denture case, 2018.
Planning Fixed Bridge over 8 implants on mandible.



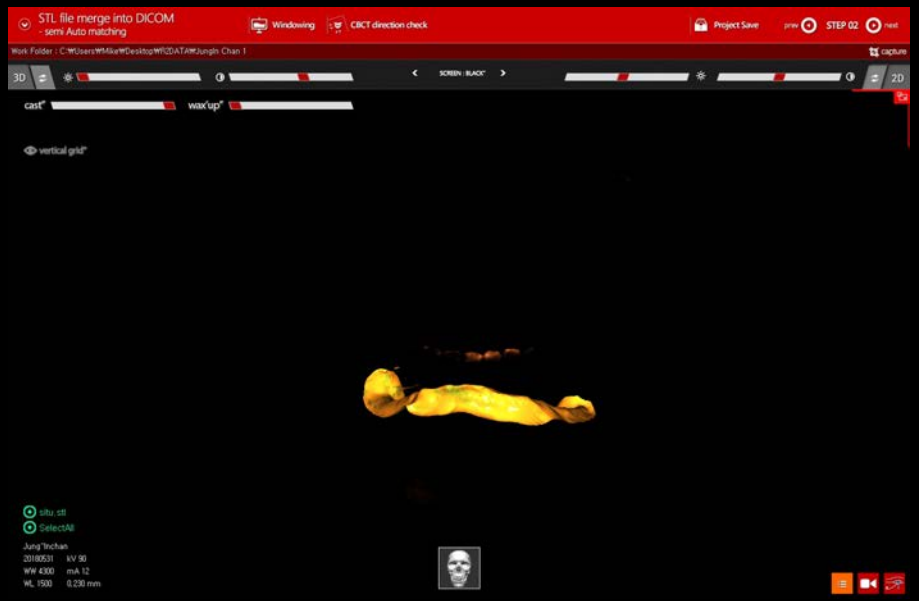
CT Scanning of patient's current lower denture.
Capturing complete 3D surface information of the denture without loss of any information due to undercuts/shadow.



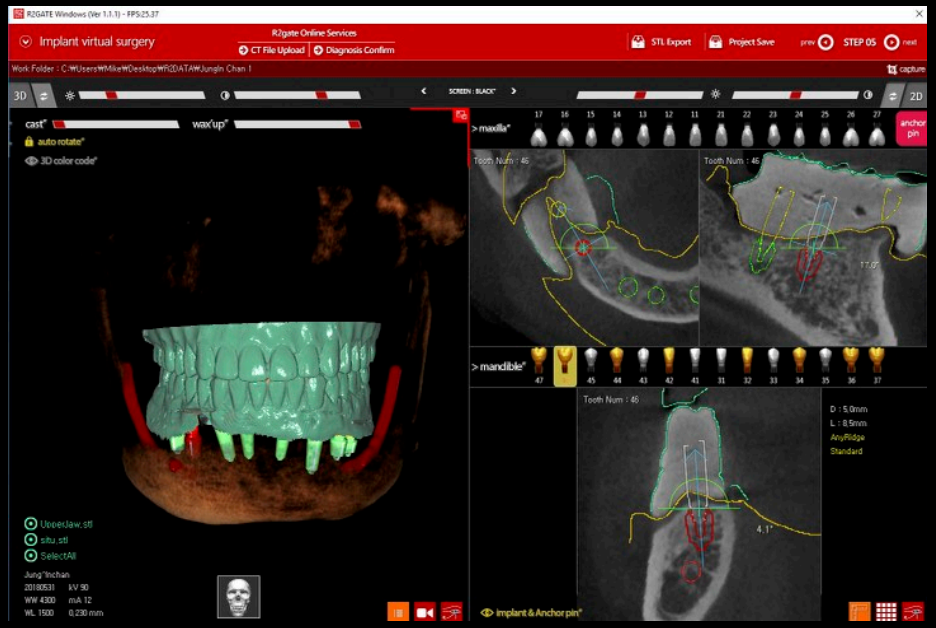
Capturing fitting side of a denture for a soft tissue information.

3D Printing a denture duplicate out of radiopaque resin.
Identical fitting as an original denture.

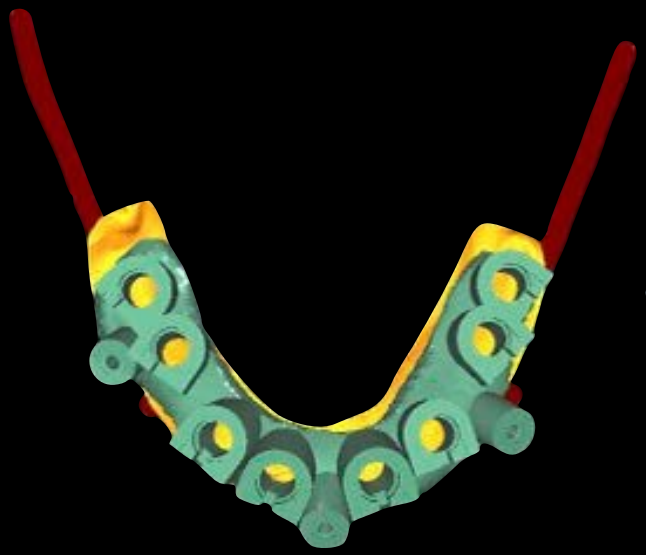
Taking a CBCT of a patient wearing a radiopaque denture.
The 3D printed radiopaque denture is clearly visible.

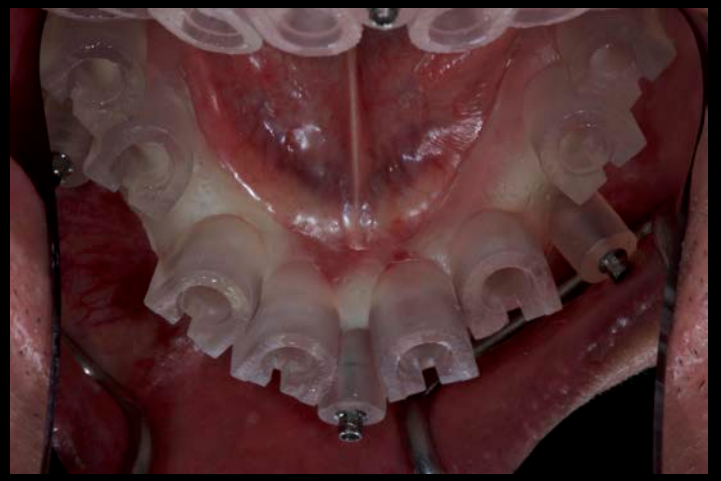


Mounting the maxillary / mandibular models and soft tissue information.



Planning to place 8 implants on the mandibular

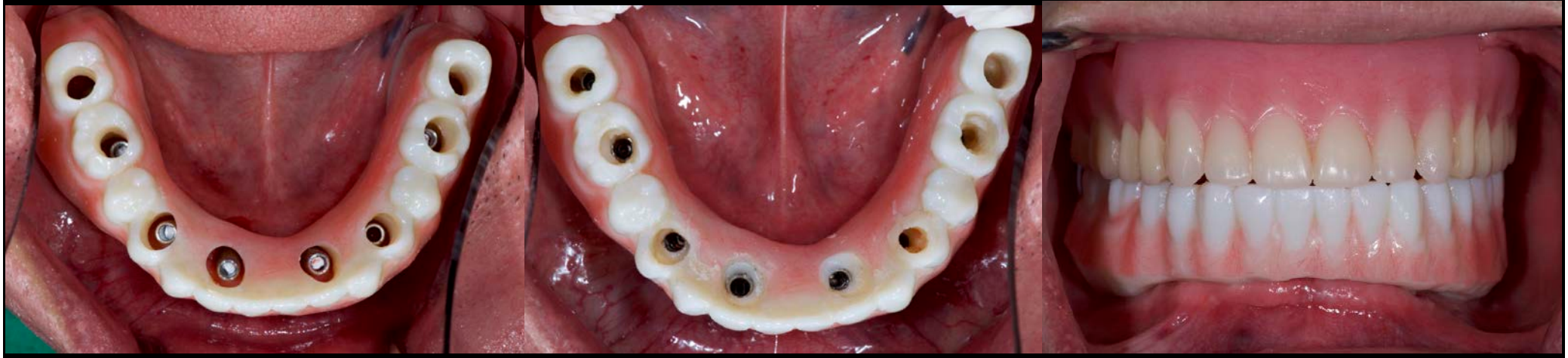




Designing surgical guide and 3D printing it.
Well fitting surgical guide.

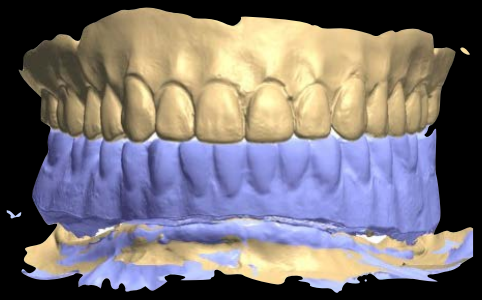
All implants externalized with multi unit abutments and temporary cylinders placed.

Designing denture conversion and 3D printing it for a provisional restoration.
Giving a shade to gingival tissue.



Place provisional restoration in the mouth with minimal adjustment.
Apply dual cure resin around temporary cylinders.

Provisional Restoration

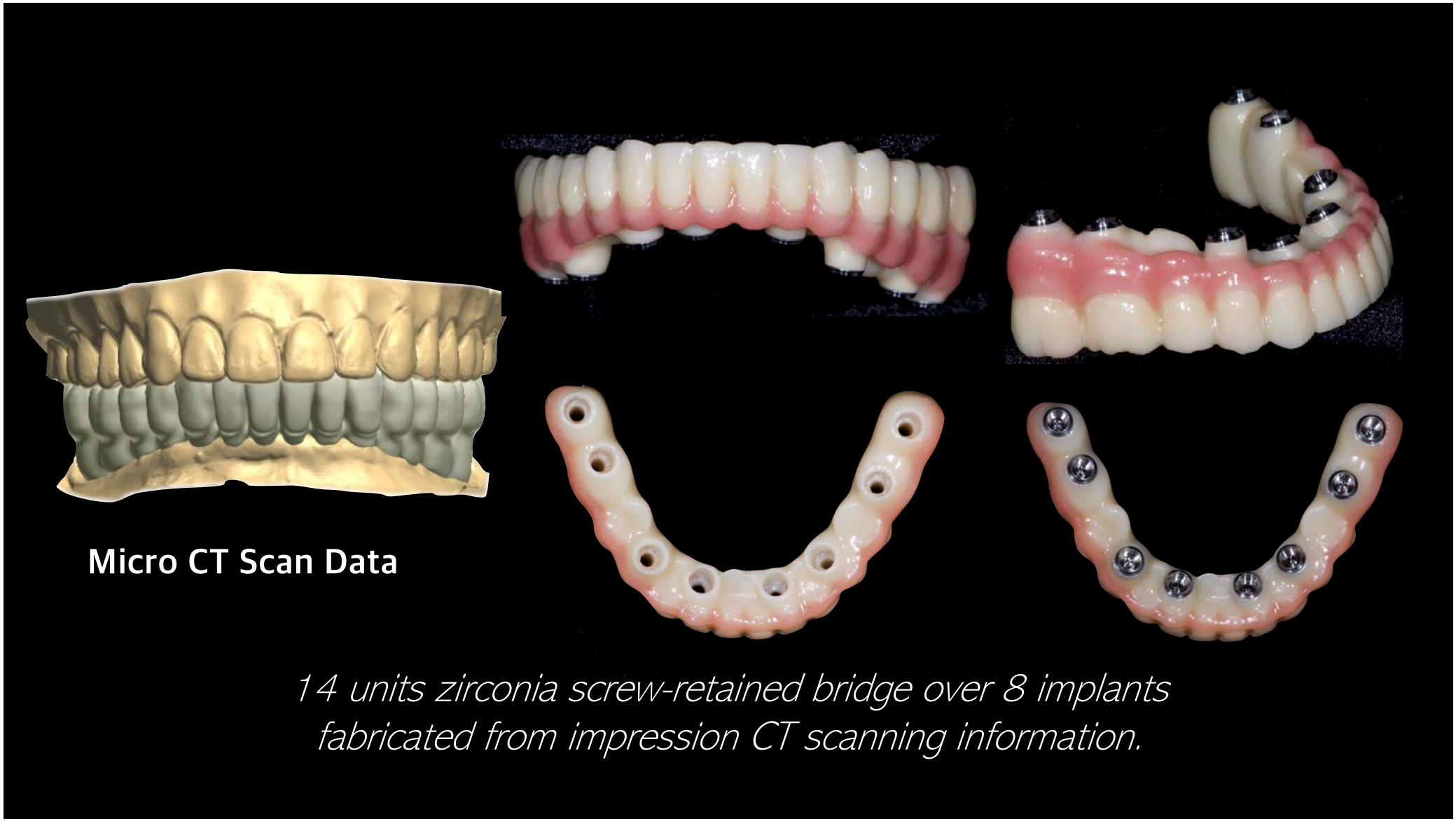


3D Scan of Provisional Restoration

8 Scan Bodies

Rubber Impression of Scan Bodies

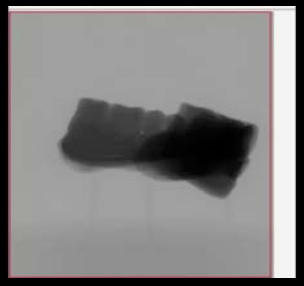
Micro CT Scan Data

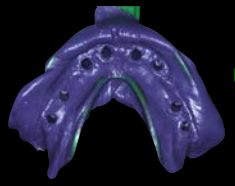


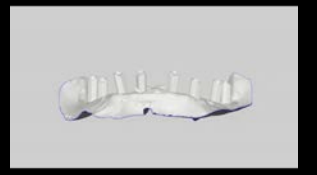
14 units zirconia screw-retained bridge over 8 implants fabricated from impression CT scanning information.

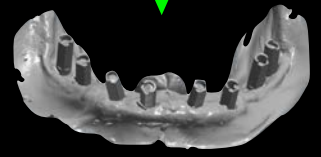
In 2 weeks final application

All on X With Impression CT Scan Technology

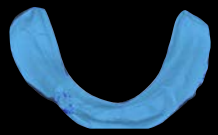








radiopaque denture



soft tissue model

Provisional Bridge

Surgical Guide

Preparations Before Surgery

Final Restoration