MDL Digital Denture Workflows Clinical Options and Solutions

In this PDF are the most common workflows for digital dentures.

Depending on the prosthetic variables involved select a workflow then follow clinical steps. The technical steps are listed to help in communication and understanding of the proper digital sequence in each workflow. With some cases these workflows might be combined for example, when designing an immediate denture opposing an edentulous arch, to provide a complete maxillary and mandibular set of digital dentures. Depending on prosthetic variables involved, proposed workflows might be modified.

Digital Denture Workflow Solutions

- Duplicate Denture (2 appointments)
- Immediate Denture (2 appointments)
- Copy Denture (2 appointments)
- Reference Denture (3 appointments with Trial Denture)
- Monobloc Printed Diagnostic Trial Denture

Duplicate Digital Denture Workflow

The Duplicate workflow is used when Dentist desires an exact duplicate of existing Denture or dentures. This workflow will not have any design changes to Intaglio, teeth or occlusion.



Duplicate Denture Workflow

Clinical Technical

Appt 1

Evaluate existing dentures

Take photos of patient with dentures

Patient's Desires and Expectations

Select tooth and base Shade

Mould will be duplicated from denture

Scan Mx/Md Cameo and Intaglio Surface

Scan Bite at Centric Occlusion

Export files to Desired MDL Lab

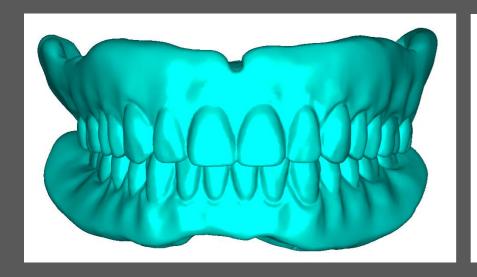
Appt 2

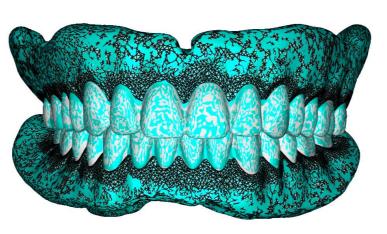
Insertion of Definitive Digital Denture

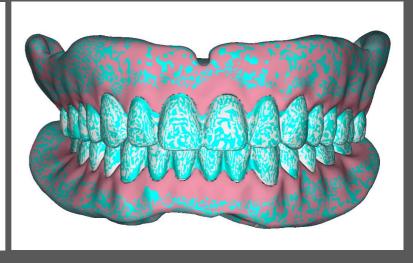


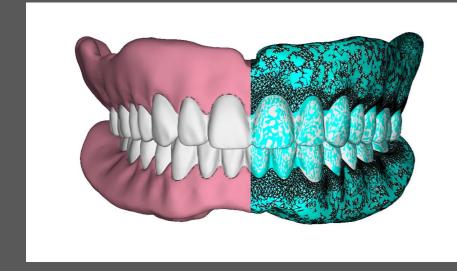
- 1. Import files from portal
- 2. Create Case in MT
- 3. Evaluate DATA
- 4. Design and DATA Analysis
- 5. Design according Checklist
- 6. Preview Design in Necessary
- 7. Receive STL Files place in queue
- 8. Mill Split file digital Dentures
- 9. Evaluate milled dentures
- 10. Bond Teeth to Base
- 11. Finish and Polish
- 12. QA/QC
- 13. Ship to customer









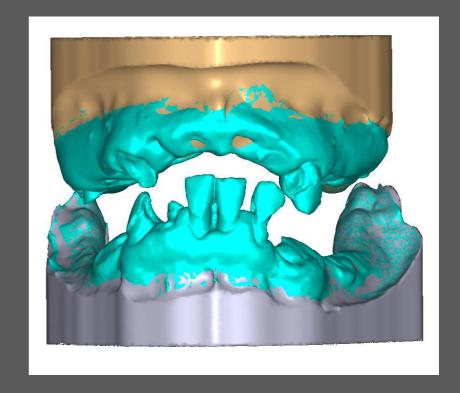




Immediate Digital Denture Workflow

This workflow is used when terminal dentition will be extracted. Important clinical variables to understand.

- Are these traditional extractions?
- For traditional 1.5mm is reduced from gingival margin.
- Will any socket augmentation be done?
- Will any bone grafting take place?
- Are implants planned and will any alveoplasty be done during surgery?
- Will this be an immediate or conversion denture?



IMMEDIATE DENTURE WORKFLOW

Clinical

Technical

Appt 1

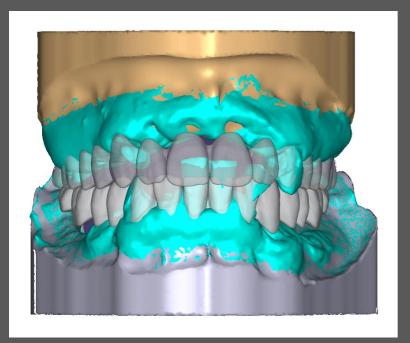
Evaluate existing terminal dentition Take photos of patient with dentures Patient's Desires and Expectations Select Shade and Mould Scan Mx/Md Soft Tissue and Dentition Scan Bite at Desired OVD & CR Export files to Desired MDL Lab

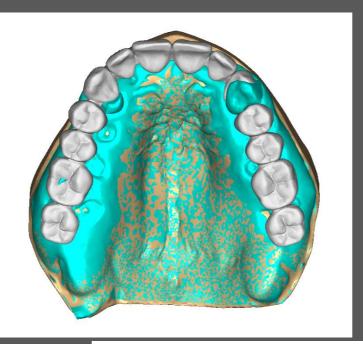
Appt 2 Extractions and Insertion or Conversion

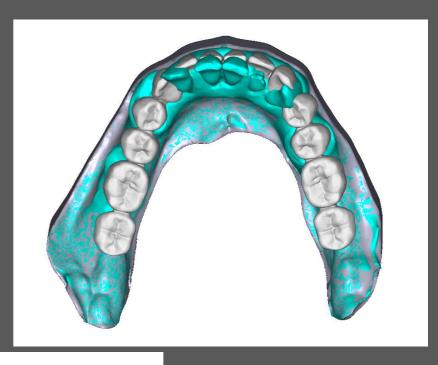


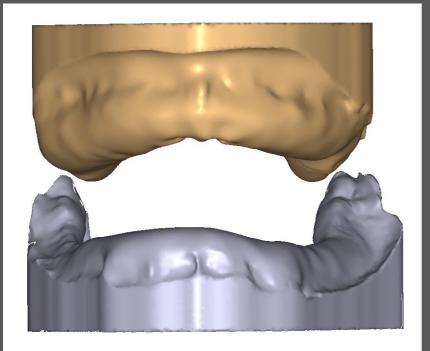
- 1. Import files from portal
- 2. Create Case in MT
- 3. Evaluate DATA /Physical Model work
- 4. Design and DATA Analysis
- 5. Design according to Checklist
- 6. Preview Design in Necessary
- 7. Receive STL Files place in queue for
- 8. Mill CAM5 or Split file digital Dentures
- 9. Evaluate milled dentures
- 10. Bond Teeth to Base if Split-File
- 11. Finish and Polish
- 12. QA/QC
- 13. Ship to customer

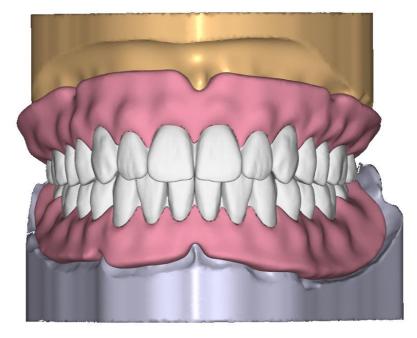








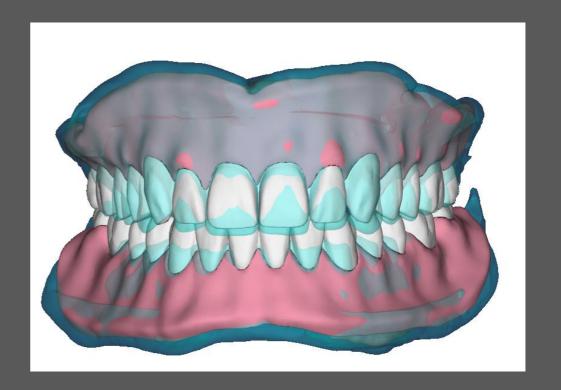


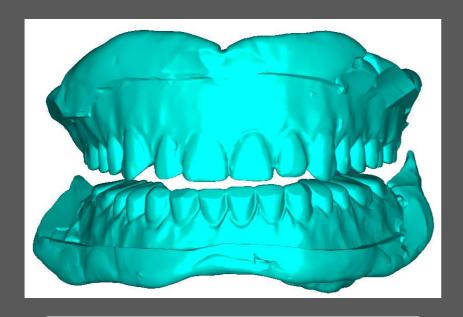


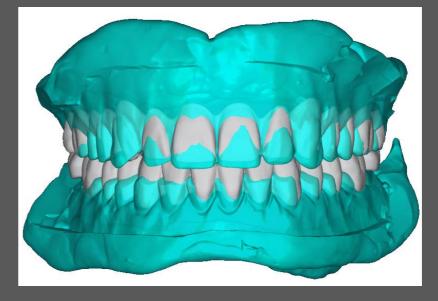
Copy Digital Denture Workflow

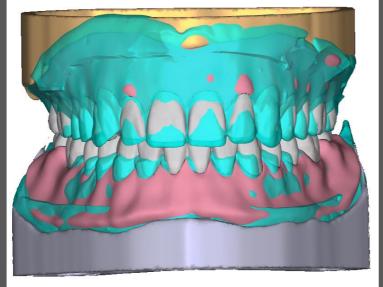
This workflow is used when dentist desires a copy of existing denture but changes to intaglio from wash impression or new Posterior teeth due to significant wear.

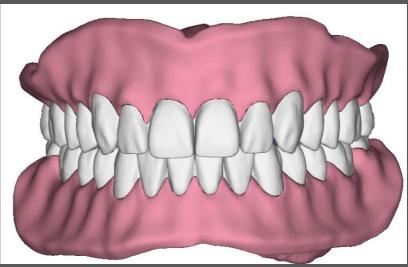
Copy Dentures are designed for an STL splitfile from scans of dentures with wash impression and check-bite record at desired relationship.











COPY DENTURE WORKFLOW

Clinical Technical

Appt 1

Evaluate existing dentures
Take photos of patient with dentures
Patient's Desires and Expectations
Select Shade and Mould
Wash Impression (Tissue Condition)
Scan Mx/Md Dentures Cameo/Intaglio
Scan Bite at Desired VDO/CR
Export files to Desired MDL Lab

Appt 2

Insertion of Definitive Digital Denture



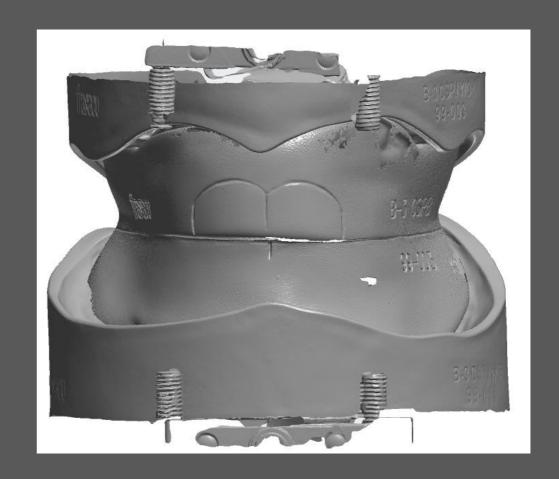
- 1. Import files from portal
- 2. Create Case in MT
- 3. Evaluate DATA
- 4. Design and DATA Analysis
- 5. Design according to Checklist
- 6. Preview Design if Necessary
- 7. Receive STL Files place in queue
- 8. Mill Split file digital Dentures
- 9. Evaluate milled dentures
- 10. Bond Teeth to Base
- 11. Finish and Polish
- 12. QA/QC
- 13. Ship to customer



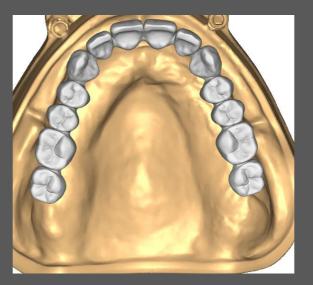
Reference Digital Denture Workflow

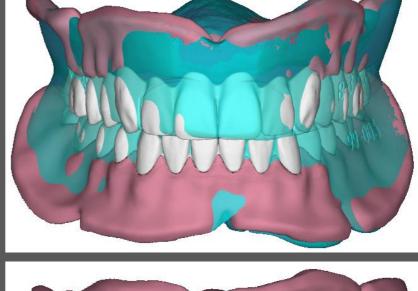
This workflow is used when a reference such as wax occlusion rim, tooth set-up or existing denture is scanned.

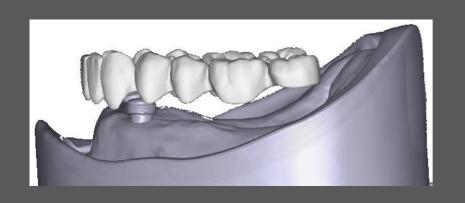
This workflow can be done in either a CAM5 File format or STL. The variables are tooth shade and prosthetic space. If the tooth shade is not available in Ivotion Monolithic CAM5 then all A-D shades are available in STL Spilt-File format.



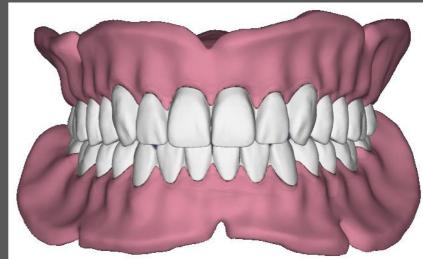












Reference Denture Workflow

Clinical

Technical

Appt 1

Understand patients desires and expectations

Analysis of existing denture if any

Papillameter Measurement of Mx Lip at Rest

Scan Reference; Cameo & Intaglio

Scan Opposing if Single Arch

Scan Bite

Tooth Shade

Photos

Complete Rx for Monobloc design instructions

Export STL files to desired MDL Lab

Appt 3

Insertion of Definitive Digital Denture

Appt 2 Trial Denture



- 1. Import files from portal
- 2. Create Case in MT
- 3. Evaluate DATA
- 4. Design and DATA Analysis
- 5. Design according to Checklist
- 6. Preview Design if Necessary
- 7. Receive STL or CAM5 Files place in queue
- 8. Mill Split file digital Dentures
- 9. Evaluate milled dentures
- 10. Bond Teeth to Base if Split File
- 11. Finish and Polish
- 12. QA/QC
- 13. Ship to customer

Monobloc Trial Denture Workflow

This workflow is used when a try-in is needed or requested by the dentist. The Monobloc printed Trial Denture enables the clinician to verify records, fit, function and esthetics of denture. If the try-in is verified then patient can take Monobloc home for testing speech, eating and fit while getting family and friends approval.





MONOBLOC TRIAL DENTURE

Clinical

Technical

Appt 1

Understand patients desires and expectations

Analysis of existing denture if any

Scan Reference; Cameo & Intaglio or Impression

Scan Opposing if Single Arch

Scan Bite

Select Tooth and Base Shade

Photos

Complete Rx for Monobloc design instructions

Export STL files to desired MDL Lab

Appt 2

Evaluate fit, function and stability

Evaluate esthetics and phonetics

If design modifications are needed, then mark on teeth or base

If Monobloc is not retentive then take a wash impression and bite scan
If denture design is approved take a check bite scan, then export file

 \longrightarrow

- 1. Import files from portal
- 2. Create Case in MT
- 3. Evaluate DATA
- 4. Transfer Scan Files and Checklist
- 5. Preview Design if Necessary
- 6. Design Modifications if Necessary
- 7. Receive STL Files place in queue
- 8. Print Monobloc STL file
- 9. Post Printing Process
- 10. Evaluate Printed Monobloc
- 11. Finish and Polish
- 12. QA/QC
- 13. Ship to customer