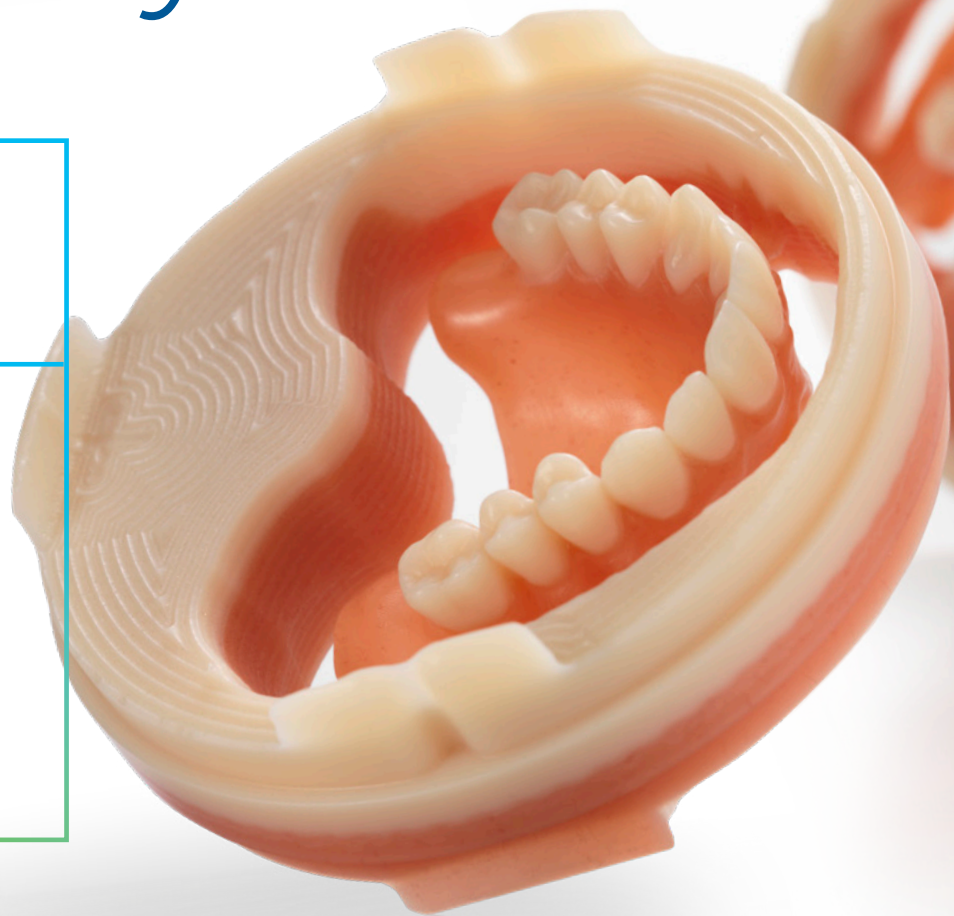


The key to amazing efficiency.

Ivotion™

Clinical guide



Innovation
Award Winner

Ivotion Denture System

Clinical workflows.....	1
A. Wax rim bite.....	2
B. Denture impressions & bite	5
C. Immediate dentures	9
D. Direct to try-in	14

Prescription

A. Tooth selection.....	26
B. Manufacturing processes.....	30
C. Communication tools (optional)	31

Clinical try-in.....	39
----------------------	----

Clinical Workflows

Traditional
wax rim bite



Impressions &
bite in dentures



Immediate
dentures



Direct
to try-in

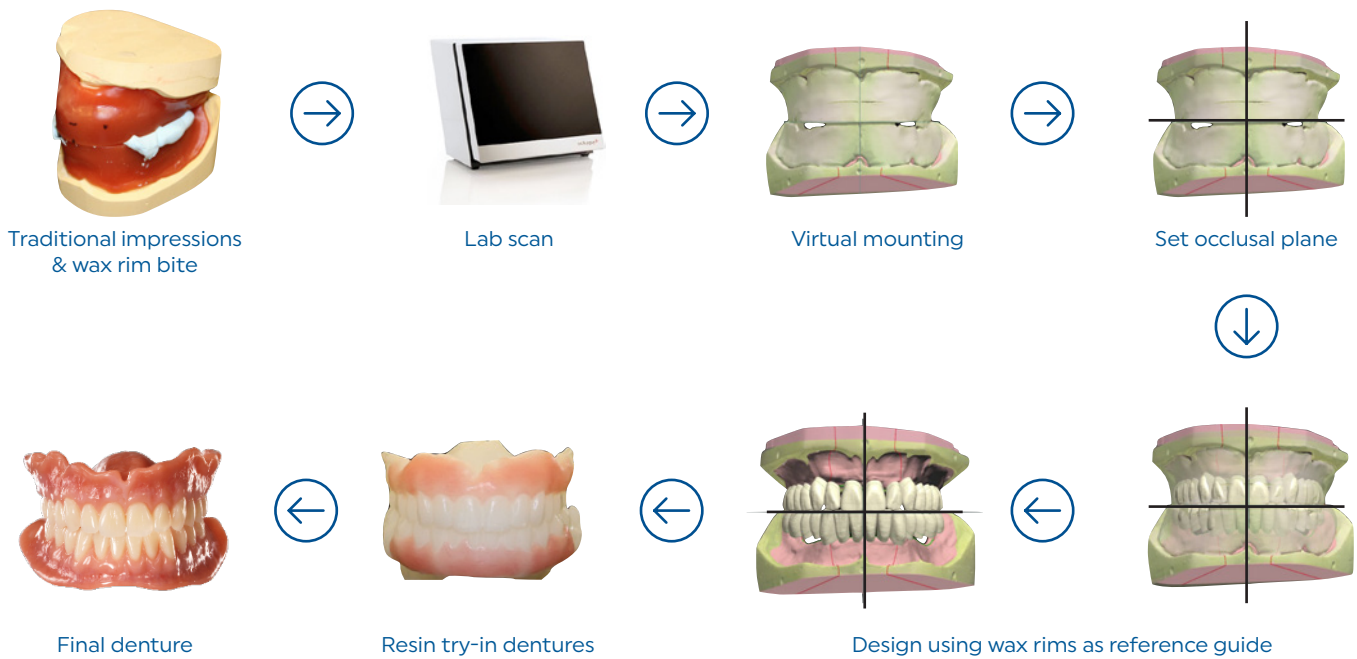


All procedures up to the wax rim bite registration are completed using the traditional materials and techniques familiar to the clinician.

- The first three workflows require virtually no changes in clinical materials or technique and will only be briefly outlined along with a suggested evaluation form.
- The "Direct to try-in workflow" will be described in more detail since it does introduce several new concepts.
- Please note that the try-in appointment information is common to all workflows (except immediate dentures) and will be addressed separately.

"Wax rim bite" workflow

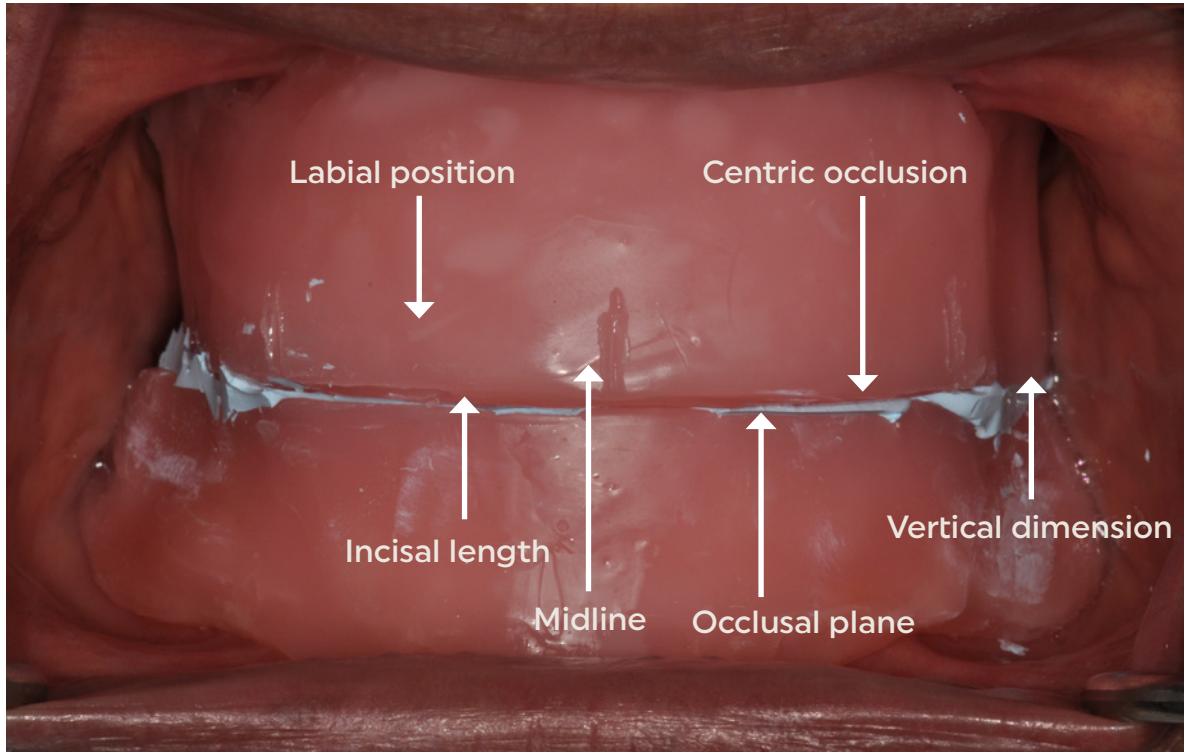
Traditional impressions & wax rim bite



- To convert to the digital design process, the **"wax rim bite"** is scanned along with individual scans for the "mandibular and maxillary casts".
- The wax rim bite will serve as a reference matrix to help guide the positioning of the "set-up template," which is positioned by using information provided by the wax rims. Therefore, it is important to adjust the wax rims as accurately as possible.
- The teeth can be virtually repositioned either individually or segmentally as desired; however, as mentioned, the wax rim matrix can be "ghosted in" at any time to function as a frame of reference.
- The process of designing the denture is the same for "resin try-in dentures" and "final dentures". The only difference is the choice of materials depending on the desired outcome.

"Wax rim bite" workflow

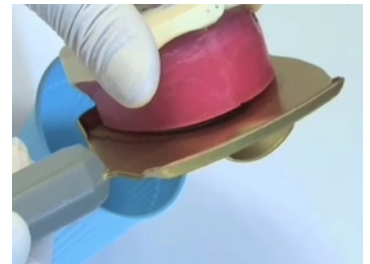
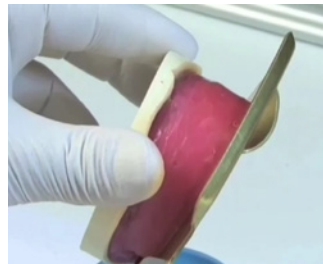
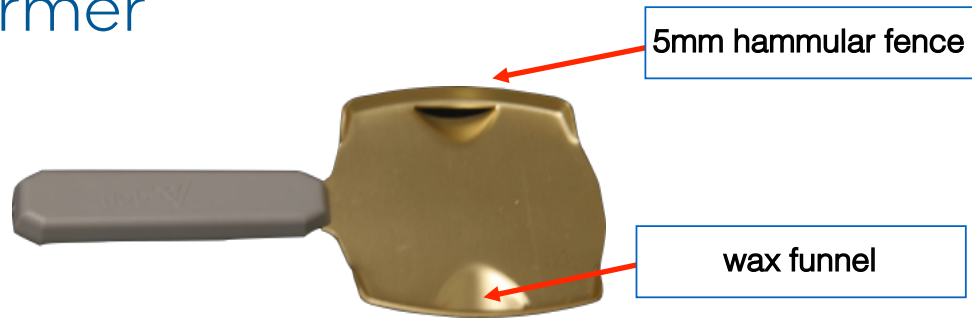
Wax rim prescription



- The intent of the conventional **"wax rim bite"** is to serve as a vehicle to record patient data and provide the technician a guide for setting teeth. It will also serve the same purpose for the digital technician when designing the placement of teeth digitally. Therefore, the clinician should carefully form the wax rims to communicate midline, incisal lengths and occlusal plane.
- The Centric Occlusal (CO) record and the Vertical Dimension of Occlusion (VDO) will respectfully determine the virtual mounting.

Tips

Rim former



Biteplane



Clinical Workflows

Traditional wax rim bite



Impressions & bite in dentures

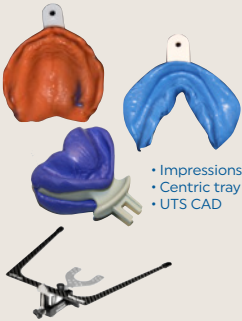


Impressions in patient's dentures or duplicate dentures are completed using the traditional materials and techniques familiar to the clinician.

Immediate dentures

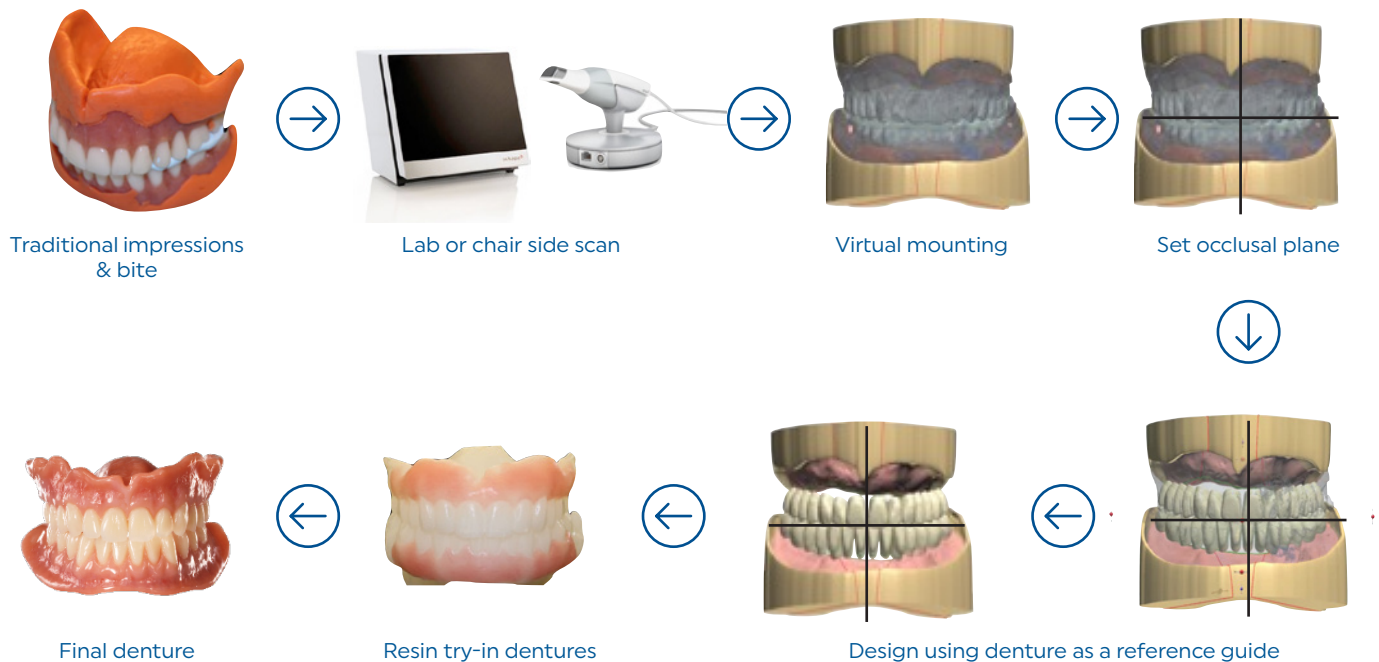


Direct to try-in



"Impressions & bite in dentures" workflow

Traditional impressions & bite

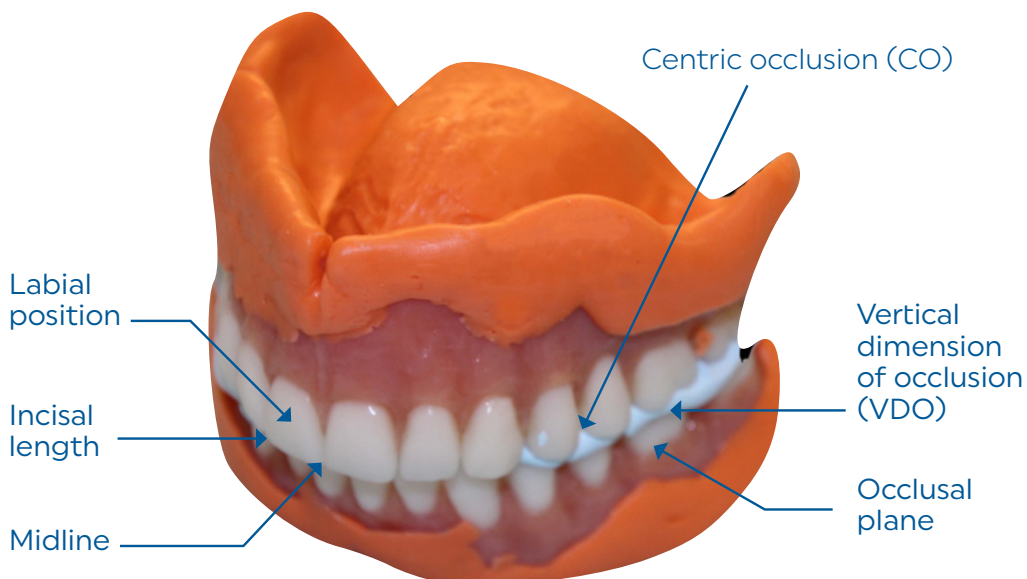


- The **"Impressions & bite in denture workflow"** uses the patient's old dentures (or duplicates) as impressions trays and bite.
- The impressions and bite are scanned using lab scanner or they can be scanned chairside with intra-oral scanner (IOS).
- The dentures act as a reference matrix for setting the occlusal plane template.
- The dentures are "ghosted in" at any time during the design process and act as a reference matrix for designing the new denture. Therefore, a complete evaluation of the patient's existing dentures prior to scanning is important.
- Depending on the desire of the clinician either a resin try-in denture or final denture can be fabricated.

"Impressions & bite in dentures" workflow

Existing denture evaluation

Midline	<input type="text" value="no change"/>	<input type="text" value="marked on denture"/>	<input type="text" value="refer to comments"/>
Maxillary incisal length	<input type="text" value="no change"/>	<input type="text" value="increase ___ mm"/>	<input type="text" value="decrease ___ mm"/>
Mandibular incisal length	<input type="text" value="no change"/>	<input type="text" value="increase ___ mm"/>	<input type="text" value="decrease ___ mm"/>
Lip support	<input type="text" value="no change"/>	<input type="text" value="increase ___ mm"/>	<input type="text" value="decrease ___ mm"/>
Bipupillary plane	<input type="text" value="acceptable"/>	<input type="text" value="comments:"/>	
Camper's plane	<input type="text" value="acceptable"/>	<input type="text" value="comments:"/>	
Bite (CO/VDO)	<input type="text" value="accept as per record"/>	<input type="text" value="comments:"/>	



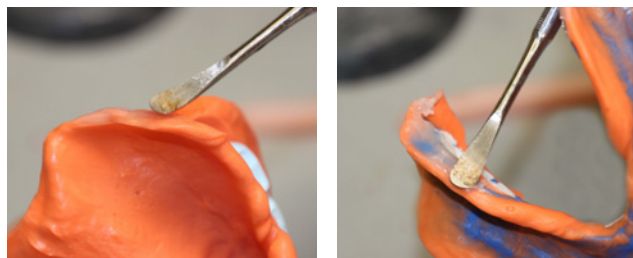
Tips

Closed mouth functional impressions



Patient is guided to centric occlusion during each step of the border molding process and the final wash impression in order to maintain an occlusal relationship. This also allows the patient to more physiologically perform border movements.

Add wax to thicken thin areas of the impression borders to facilitate the scanning procedure.



Clinical Workflows

Traditional wax rim bite



Impressions & bite in dentures



Immediate dentures

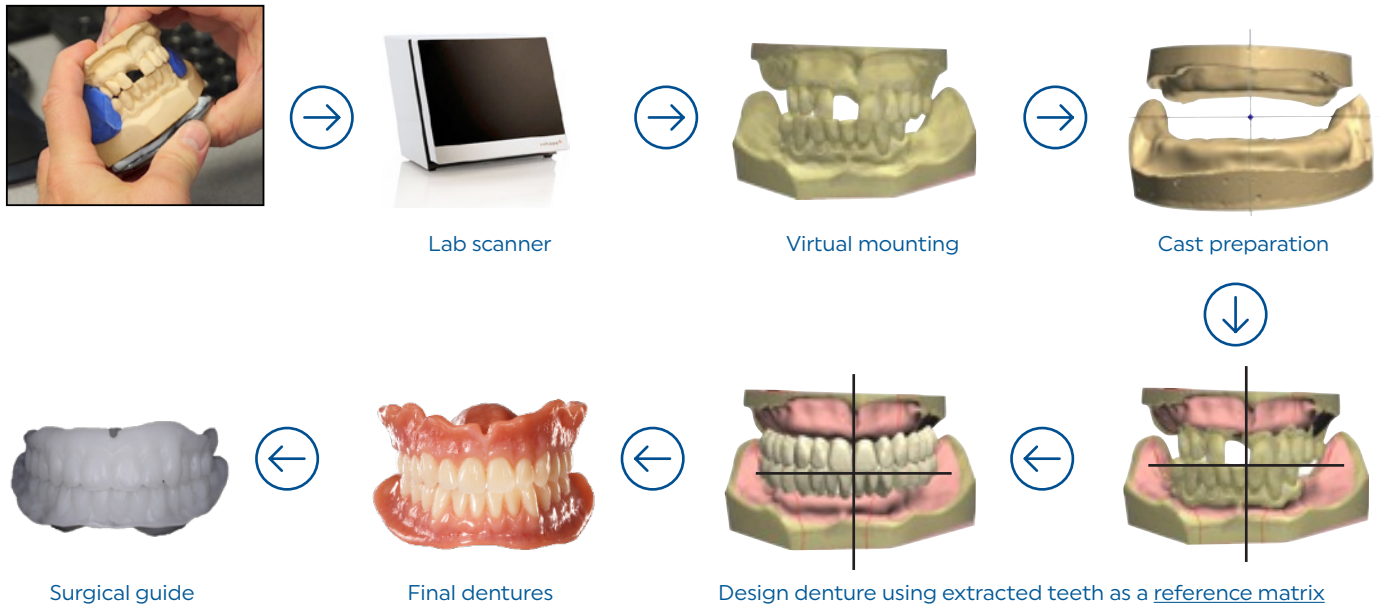


Direct to try-in



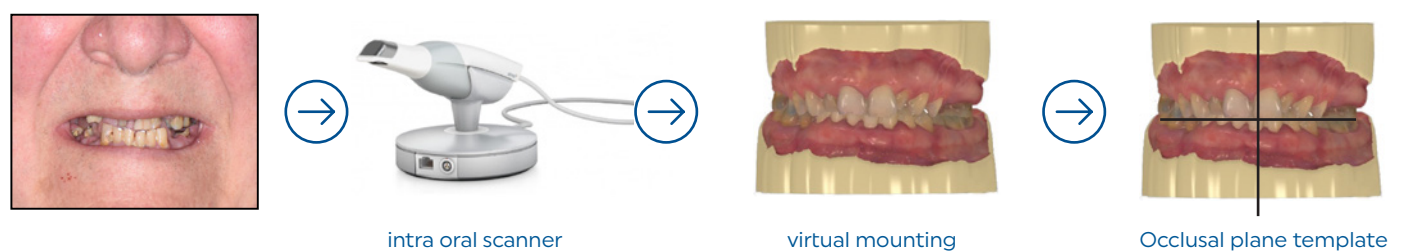
Pre-extraction impressions for immediate dentures are completed using the traditional materials and techniques familiar to the clinician. The option of intra-oral scanning is also noted in the outline.

"Immediate denture" workflow



- There are many benefits to using digital technology for **immediate dentures**. In particular, the extracted teeth scan can be recalled into view and serve as a guide for tooth positioning. Therefore, the new teeth can be positioned similar to the natural teeth positions which significantly aids the patient during this very difficult transition phase from natural teeth to artificial teeth.
- As mentioned, the extracted teeth can be "ghosted in" during the design process to help guide tooth placement based on the pre-extraction evaluation of the extracted teeth. Therefore, it is important to evaluate the teeth prior to extraction.
- A clear surgical guide with or without teeth can also be provided if desired.

Note: The intra oral scanner may be used instead of traditional impressions. Other than scanning, the denture design process is the same.



"Immediate denture" workflow

Pre-extraction clinical evaluation

Midline	<input type="text" value="no change"/>	<input type="text" value="marked on denture"/>	<input type="text" value="refer to comments"/>
Maxillary incisal length	<input type="text" value="no change"/>	<input type="text" value="increase ____ mm"/>	<input type="text" value="decrease ____ mm"/>
Mandibular incisal length	<input type="text" value="no change"/>	<input type="text" value="increase ____ mm"/>	<input type="text" value="decrease ____ mm"/>
Lip support	<input type="text" value="no change"/>	<input type="text" value="increase ____ mm"/>	<input type="text" value="decrease ____ mm"/>
Bipupillary plane	<input type="text" value="acceptable"/>	<input type="text" value="comments:"/>	
Camper's plane	<input type="text" value="acceptable"/>	<input type="text" value="comments:"/>	
Bite	<input type="text" value="acceptable"/>	<input type="text" value="comments:"/>	



Tips

Impressions



Virtual XD Putty impression material is an excellent material to take an immediate impression due to its extra body which enables it to extend into the vestibular areas. The putty impression can be trimmed and washed with a light body material to increase the accuracy if desired.

Tips

Impressions



If teeth are severely undercut or loose, an alginate material is recommended. The AccuDent XD is an excellent choice since it is provided as a two phase material. The injection (light body) is injected around the teeth and the tray material (heavy body) provides the viscosity necessary to reach and record the vestibular areas.

Clinical Workflows

Traditional wax rim bite



Impressions & bite in dentures



Immediate dentures



Direct to try-in



Unlike the other workflows described, the "Direct to try-in workflow" basically starts from "scratch" and does require learning some new techniques.

In addition, this workflow is unique from the other three workflows since there is no reference matrix (wax rim, existing denture, extracted teeth) to provide a guide for the placement of teeth for the new denture.

Also, an inter-arch relationship (bite) must be taken in order to virtually mount the scanned impressions in the design software.

The Centric Tray and UTS CAD are unique to this workflow and facilitate recording the inter-arch relationship.