Complete Denture Processing
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- Festooning and preparation for processing
- Flasking
- Boilout procedures
- Packing acrylic
- Recover and divesting
Cut wax at an obtuse angle leaving a shelf of wax at CEJ
Reduce shelf to 2 mm in width and carve root prominences.
Remove baseplate from cast, and then remove palate with 170L bur as close to teeth as possible.
Double check occlusion and V.D.O. after palate removal and seal baseplate to cast.
Add wax to edges of baseplate to create “dish pan” and thin coat to palate to thicken palatal form and help it adhere.
Preformed palatal pattern or one thickness baseplate wax.
Smooth transition from teeth to palate.
Sealed and filled peripheries.
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Triple check occlusion and V.D.O. Watch for posterior interferences.
Soak casts and mounts to facilitate removal.
Dentures almost ready for processing!
Check out flasks from dispensing when you’re ready to flask. Record flask numbers. Note differences in upper and lower flasks.
Trim casts to fit flasks without trimming bottom (indexed) portion. Casts must be remounted after processing.
Cast properly trimmed for flasing.
Whoops! I wish I’d trimmed the cast right before I mounted it in the articulator!
Vaseline the stone, especially the indexes. **Not the wax pattern!**
Add stone to flask first. Seat cast completely to bottom of flask
Notice that there is no stone on surface of flask, preventing seating of next (middle part) of flask.
Smooth, sanded, no undercuts. Stone removed from cast surface. Placing your initials on stone for your own identification would be a good idea!
Watch out for undercuts here!
Smooth, NO UNDERCUTS, and lubricated.
Don’t forget the vaseline!!!
Vacuum mixed stone. **Rub stone around teeth to prevent bubbles.** You’ll regret it if you don’t!
Cover cast and teeth with vacuum mixed stone, barely covering teeth. Don’t bury the teeth.
If you run short of stone, mix some more. Don’t leave teeth exposed to chipping during deflasking.
Vaseline second pour to facilitate deflasking.
Clean flasks, ready for boilout/wax removal.
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Boilout controls located under the boilout units. **Turn back to pilot and add water when finished!**
When in doubt, find some instructions and follow them. (You’re supposed to be in doubt!) Don’t ask your neighbor. He’s in doubt, too!

- Basket & Flasks
- Stay Here
- Soap, Wary H₂O
- Transfer H₂O to sink when full *
- Clean rinse H₂O
- Keep full w/ plastic bucket *
- Garbage
- Extra H₂O
- Turn boiler back to "Pilot" when finished (inside cabinets)
Flask compress used to place and remove flasks in boilout and keep flasks closed during curing.
Place dentures in left boilout. (The other left!) Keep right boilout clean for rinse water.
Boil 6 minutes to soften the wax.
Shortened boilout results in pulling teeth from second pour.
Remove flasks from boilout and gently pry open flask from anterior. Most undercuts will be in posterior. If it doesn’t come apart easily, there were undercuts in the first pour, or not enough vaseline.
Opened flasks after six minute boilout. Remove palatal form and baseplates and discard. Watch for loose teeth. Teeth should have stayed in middle part of flasks.
Discard baseplates and preformed palatal rugae.
Remove stone from metal surface to allow metal to metal contact during closure.
Place flasks in pan and hold over dirty boilout tank (left tank) while boiling off and removing all wax.
Rinse with clean, boiling water.
Scrub with denture brush to remove small stone particles, wax, and remaining impression material. Re-rinse with clean water.
Clean, HOT flasks, ready for separator application.
Separator, Tin-Foil substitute, Coe Sep, sodium alginate. It’s all the same.
None of it works very well!
Paint separator on thick and when flasks are very hot. Keep sep out of diatomic holes in porcelain teeth.
Stand up flasks and allow excess separator to drain and evaporate. Don’t allow your dentures to get mixed up with someone else’s!
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When separator has dried, additional retention can be added by drilling diatorics in acrylic teeth with #4 round bur. Aim for cusps to avoid drilling all the way through the teeth. Remove shavings with air.
Add 1.5 scoops Lucitone polymer to 13 ml monomer PER DENTURE (26 ml liquid to 3 scoops powder for both average sized dentures. Cover and let set to doughy state (10 - 15 min). While waiting, scrub teeth with monomer to remove Coe sep.
Check acrylic for proper consistency. Acrylic has lost its shine, is doughy, and does not stick to your fingers.
Knead acrylic to finalize mix. If acrylic “snaps” discard and mix new batch. It’s too set to extrude excess.
Divide acrylic in half and place in tooth portion of flasks. To trial pack, cover with plastic sheet before closing flasks so flasks can be re-opened to add acrylic, remove flash or insert names.
Place flasks together and press to remove excess acrylic.
If trial packing, separate flasks and check for acrylic flash. If none present, add additional acrylic.
Excess acrylic used when eliminating trial packing procedure. Plastic sheet not present. Flask ready for curing.
**Remove excess acrylic especially in chisel slots.**
Final closure of flask. Plastic sheet has been removed.
Transfer flasks to compress and tighten completely. If processing only one denture, use an empty flask.
Heat cure dentures at 165 degrees F for 9 hours (overnight).
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Cured dentures ready for ejection from flasks using flask ejector.
Pry off the cover first.
Store processed dentures in water!!!