

Finishing and polishing

All dental restorations must be smooth to promote comfort and cleanliness. After the selective grinding and milling are completed, the casts are removed from the dentures piece by piece so that the cast may be removed from the denture without breaking the denture or causing distortion.

The finishing of dentures consists of perfecting the final form of the denture by removing any flash of acrylic resin at the denture border, any flash and stone remaining around the teeth, and any nodules of acrylic resin on the surfaces of the tissue side of the dentures resulting from processing

If the denture was packed carefully, there will be a minimum of flash.

The flash: is the acrylic resin that was forced out between the two halves of the flask by pressure applied during the processing procedure.



Trim all gross excess acrylic, being careful to preserve and not to remove the following:

- Buccal, facial and lingual fold contour.
- Post-dam area.
- Gingival festooning around the teeth.
- Surface contour and root eminences.

If the impression was correctly boxed and the trial denture was carefully waxed, the outline of the denture can be determined easily and little finishing will be necessary.

The flash around the borders of the denture is removed with an arbor band mounted on a lathe. An alternate but less satisfactory method is to use a stone or acrylic bur mounted in a straight hand piece, be careful to preserve the border width & contour.



Remove any flash and any remaining stone from around the neck of teeth with a small sharp pick or sharp knife. Inspect the tissue side of the dentures for any nodules due to voids in the casts, and if they are present, carefully remove them with small stone or acrylic carbide burs that are made for denture finishing. An alternative but less satisfactory to use a large acrylic or stone bur in a straight dental hand piece.

The posterior area of the palate has been thinned to its proper thickness and the dentures are now ready for polishing.

The grinding and cutting instruments are:-

1. Acrylic carbide burs
2. Acrylic stone burs
3. Fissure burs.
4. Rubber wheels
5. Sand paper.

Polishing is defined as making a denture smooth and glossy by removing scratches without changing its contour.

The **first step** in polishing is to use wet pumice on a rag wheel running at slow speed used to polish the surfaces while a brush wheel and wet pumice mounted on a lathe is used to polish around the necks of the teeth and the interproximal areas.

pumice is very abrasive material and may obliterate the details placed on dentures when they were waxed. Borders are not reduced in height or width during polishing. The tissue surface of a denture is never polished because polishing destroys the details necessary for good fit and retention

Wet muslin buffing wheel is used to polish the border, lateral and palatal surfaces of denture.

Felt cones or small buff wheels may be used to polish the palatal portion of the upper denture. The choice of wheels or cones dependent on the shape of the palate.



Do not over polish in order not to loose the contours that were developed during waxing and festooning.

Resin teeth have approximately the same hardness as the denture base, so polishing a denture with resin teeth requires some precautions not necessary with porcelain teeth.

When polishing, only the denture base and not the teeth are polished.

If stippling is desired in the denture base and was not placed during the final waxing it can be added at this time using small round bur lightly stipple the denture base from the second

premolar to the second premolar on the other side. Lightly pumice the stippling with a brush wheel at low speed. During the finishing and polishing we should minimize the reduction of bulk because this cause warpage.

The **second stage** in polishing is to give a high shine to the polished surfaces with the use of (Tripoli) which is a somewhat greasy material applied to dry muslin buffing wheel and must be removed from the denture before the final polishing.

After the denture is completely polished with Tripoli, it is scrubbed thoroughly (Final polishing) with a high shine material which composed of fine particles which impart a glossy surface.

After each stage of polishing the denture should be dried and inspected to check all areas of the denture are polished completely to that particular stage.

Store the polished dentures in water until they have been delivered to the patient with high gloss, the borders are rounded and smooth, and the palate is highly polished and the proper thickness, compatible contour, and natural appearance. Store the denture in water all the time otherwise it will under go dimensional changes and shrinkage.



Denture insertion or Delivery

1) Instructions: First step at denture insertion appointment is to give the patient instructions about the use and care of dentures.

We must reassure the patient who is receiving his first complete denture that all the problems he will face at the first few days of wearing his C.D will be disappear within a week with continuous wearing like heavy salivation, heavy dentures, difficult swallowing and speaking.

He must wear his dentures all the day except at night, he must leave them and keep them in a glass of water so as to get ride from the residual monomer and to prevent any dimensional shrinkage of the dentures.

The dentures must be cleaned with brush and detergent or tooth paste without whitening or use denture cleansing tablets; never let food debris at the denture surfaces, also the patient must clean his mouth after each meal.

2) Evaluating tissue side: Second step at denture insertion appointments is evaluation of the tissue surface of the denture base for undercut areas by painting this surface with a thin coat of pressure disclosing paste, insert the denture inside patient mouth and bit on cotton roll then remove it, when tissue undercuts are present the paste will be dragged from the denture base in the area of tissue contact, relieve the denture by grinding with an acrylic bur.

3) Evaluating borders: Third step is to evaluate the borders and the contour of the polished surfaces in the mouth to determine:

1. The denture border extensions and contour are compatible with the available spaces in the vestibules.
2. The borders are relieved to accommodate the frenum attachments and tissues reflection in hamular notch area.

3. The dentures are stable during speech and swallowing.

This is done by applying disclosing wax to all dentures borders, insert the denture and ask the patient to open widely and move his jaw anteriorly and laterally, smile, speak, laugh and swallow so any overextension will displace the wax and must be grinded and polished.

4) Correcting occlusion: it is the fourth step, is corrected by careful selective grinding after remounting the dentures on the articulator or intraorally by using of articulating paper placed between upper and lower occlusal surfaces of the teeth in both sides in the patient mouth and close in centric occlusion and move his mandible anteriorly and laterally but articulating paper alone will not give an accurate indication of premature contacts because of the resiliency of the denture supporting tissues allows the dentures to shift, therefore the paper markings are frequently false and misleading. So addition methods can be used like using of occlusal wax or abrasive paste placed upon the denture's occlusal surface intraorally whiles the patient close.