



1. **Cuspid Lines**
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3. **Midline**
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5. **Vertical Dimension**
6. **Labial Contour**
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To help our dentists select and properly position denture teeth, the dentist shapes and positions the labial surfaces of the occlusion rims to approximate the amount of lip support required by the patient. Next, the dentist adjusts the vertical length of the maxillary occlusion rim to indicate the length of the incisor teeth. Some dentists scribe marks on the occlusion rims as aids in choosing and positioning denture teeth. Usually, the markings are made on the maxillary occlusion rim; occasionally they carry over onto the mandibular rim.

1. Cuspid lines: cuspid lines are placed on the right and left sides. They represent the estimated positions of the long axis of the cuspids. The distance between the lines is used to select the proper width of the 6 *anterior* teeth. The usual procedure is to make a measurement around the labial surface of the occlusion rim, from cuspid line to cuspid line, and add 8 mm. If a tooth's long axis roughly splits it down the middle, the 8 mm accounts for the distal halves of both cuspids. In addition, the combined width of the maxillary posterior teeth in a quadrant can be estimated by measuring between the cuspid line and the mesial beginnings of the maxillary tuberosity.



2. High Lip line: some dentists mark the high lip line on the maxillary rim. This line indicates the level to which the upper lip rises when the patient smiles. It aids in determining the gingivoincisor length of maxillary denture teeth so the patient displays a minimum of denture base. **Low Lip Line:** the lowest position of the lower lip during the act of smiling or voluntary retraction, or the lowest position of the upper lip at rest.

3. Midline marking: the midline marking represents the center of the patient's face. The incisive papilla is also a good guide.

4. Occlusal Plane: an imaginary surface that is related anatomically to the cranium and that theoretically touches the incisal edges of the incisors and the tips of the occluding surfaces of the posterior teeth; it is not a plane in the true sense of the word but represents the mean of the curvature of the surface.

5. Vertical Dimension:

To assist the dentist in determining the correct Vertical Dimension of Occlusion (VDO), a dentist may:

1. Make it a point to start the procedure with occlusion rims that obviously hold the jaws too far apart.
2. Makes a physiologic rest vertical dimension measurement and quickly reduces the vertical height of the wax rims to match the measurement.
3. From this point on, much more carefully cuts back the height of the occlusion rims and continually test the patient's speaking abilities.
4. Reaches the correct VDO when pronunciation of the "s" sound is distinct and the occlusion rims barely miss each other when the sound is spoken.

To enable the dentist to make a combined VDO and centric relation record, the dentist:

1. Makes an estimate of the correct VDO as described above.
2. Positions the mandible in centric relation.
3. Either keys or seals occlusion rims together. The dentist removes the entire assembly from the patient's mouth and gives it to the technician.

6. Labial Contour: The final labial contour of the maxillary denture is established by altering that surface of the contour rim. With the maxillary contour rim in the patient's mouth, observe the facial contours from both the front and side views. If necessary, re-contour the facial surface of the rim until the desired contour is achieved. Observe the relationship of the rim to the relaxed upper lip.

7. Buccal Contour: the negative space between the buccal surface of the maxillary first premolar and the inner point at which the lips join when the patient smiles. It is often stated as a ratio of the inner lip commissure width divided by the distance between the first maxillary premolars.