A leaf gauge is a very simple device similar to a “feeler gauge” except all leaves are of the same dimension of almost exactly 0.1mm thick. This gives the operator a very easy recording of the exact number of leaves measuring the exact amount of opening in mm’s (eg. 5 leaves equals 0.5mm opening; 17 leaves equals 1.7mm opening).

The leaf gauge is held by the dentist or assistant with “X” number of leaves placed into the oral cavity at the midline, resting on and parallel to the lingual surfaces of the maxillary central incisor teeth. The patient is instructed to close on their teeth until a lower incisor tooth touches the underside of the leaves. “X” number of leaves is that number where the patient can just barely feel a posterior tooth touch, arrived at by the trial and error addition or subtraction of leaves. With X+1 leaves, the patient cannot feel any initial posterior tooth contact. However, as he or she holds their jaw closed (with only half hard closing force) for approximately 15-20 seconds, they will again be able to feel a posterior tooth contact. At this time, the mandible is said to be tripodized in its centric relation position with the right and left condyles seated in their true, respective glenoid fossae housings with only a lower incisor tooth making contact on the under side of the leaves. This eliminates potential operator guided errors in centric relation by permitting the patients own neuromusculature to seat the condyles into their centric relation positions.

If you are using the leaf gauge for an occlusal equilibration or to adjust castings to centric relation occlusion, you start with the finalized X+? number of leaves. Gradually remove leaves one at a time, marking the premature contact each time with marking ribbon, making the necessary contact adjustments as each leaf is removed.

When utilizing the leaf gauge to make centric relation interocclusal records for mounting diagnostic casts, the operator starts with the finalized X+? leaves and arbitrarily adds 3 or 4 additional leaves as a “fudge” factor so the teeth cannot close completely through the registration material (which would result in an inaccurate record). An anterior cut-out is made in the Panadent Bite-Tray to house the leaves. The registration material is placed onto the Bite-Tray. The loaded Bite-Tray and leaf gauge are inserted into the patients mouth and the patient instructed to close until the lower front tooth touches the leaf gauge. Gently but firmly hold the mandible in this position until the registration material sets. You may use the registration material of your choice as long as a voided space is provide for the placement of the leaves.

Degree of Accuracy: within .1mm

⚠️ CAUTION: It has been reported in the literature that if the patient is permitted to close with maximum closing force on the leaf gauge, it is possible to displace the mandible slightly inferior and posterior. Caution the patient to close with only about half their closing force.