## Tips

For either method, it is important to have your patient completely relaxed, sitting in a comfortable upright position with the head OFF the head-rest and with the mandible in its postural position. A useful tip is to request the patient to hum (make the sound of the letter 'm') while relaxing. Licking the lips or sipping and swallowing water may also prepare the mandible for assuming its usual rest position.

With Method 1, errors may be caused by the instrument touching the patient's face and causing jaw movement.

With Method 2, errors may arise by unconscious movement of the soft tissues of the chin by the patient. This is a habitual compensation in people whose lips do not naturally close at rest (incompetent lips). Care must be taken to ensure that the mentalis muscle is relaxed (and the skin of the chin not puckered) or else the lower spot can move up or down in an unpredictable way.

Make RVD and OVD measurements at least twice to reduce error; while the occluding position is usually constant and reproducible, the rest (postural) position may vary from time to time and repeated readings should isolate an unusual one.

With edentulous patients, at least one reading should be taken with one of the dentures out, preferably the upper. This will allow a more normal rest position to be assumed where the OVD of the dentures is too great, and a false FWS has occurred.

NOTE: The Alma Bite Gauge is accurate to ± 1.0 mm.

## Cleaning & Sterilising

#### Cleaning

- · Wash the surface of the Alma Bite Gauge.
- After cleaning, disinfect and sterilise the Alma Bite Gauge according to your Practice infection control protocols and the following directions.

### Disifection

- The Alma Bite Gauge should be disinfected using a registered hospital use disinfectant.
- Apply the disinfectant by wiping onto the external surfaces of the Alma Bite Gauge using a suitable cloth or towel. Do not spray directly onto the Alma Bite Gauge faces. Do not disinfect the Alma Bite Gauge by immersion.

### Sterilisation

- Following cleaning and disinfection, as above, remove the moving pointer from the handle. Place the pointer and handle in a suitable autoclave pouch.
- Place in an autoclave and sterilise using a standard steam autoclave cycle to 134°C for a minimum of 3 minutes.
- Use only steam autoclave sterilisation method.



# Alma Autoclavable Bite Gauge





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## The Alma Autoclavable Bite Gauge

The Alma Bite Gauge combines tried and tested principles of facial height with superior design technology to guarantee pinpoint accuracy and significantly improved ease of use.



- Measuring accuracy reduces error and guess work.
- Easy-to-read 0 to 100mm measurement scale on both sides, laser-etched for performance.
- Compact, ergonomic design fits comfortably in the hand.
- Easy one hand adjustability.
- · Suitable for both right and left-handed use.
- Reversible for dot-to-dot or under nose to under chin measurement.
- Strong, durable & lightweight construction.
- Used to measure vertical dimension & free way space.
- Used to measure mouth opening.
- Non-rust, non-dirt trapping plastic construction.
- Steam autoclavable to 134°C.

The Alma Bite Gauge is used to determine and prescribe the correct vertical dimension of new and replacement dentures and to diagnose errors in old dentures.

An adequate freeway space is necessary for prostheses to function properly. The Alma Bite Gauge provides a new level of simplicity and accuracy in assessing this. It is used to measure the vertical dimension of the face first with the mandible in its rest position (RVD) then with the teeth in occlusion (OVD). The difference between these two readings is commonly called the freeway space (FWS). By careful adjustments at various clinical stages it is possible to make new dentures with an optimum freeway space. This will assist in the success of the dentures.

When the Alma Bite Gauge is used in conjunction with the Alma Gauge and the Autoclavable Bite Plane a predictable result can be achieved. The Alma Bite Gauge allows the freeway space to be determined in two ways. The upper arm of the Alma Bite Gauge can be removed and turned around depending on which method is preferred.

# Method 1: The Profile Technique

First establish the patient's 'rest position'. With reference to figure 1 and with the patient sitting upright with the head unsupported, relaxed and breathing quietly, locate the two divider arms as illustrated: the upper and moveable divider arm touching the underside of the nose, the lower fixed arm touching the underside of the mandible. Record the distance from the mm scale.

Repeat the exercise after asking the patient to close the teeth together. Record the new distance from the scale.(figure 3). Repeat both measurements once or twice. With the Alma Bite Gauge this takes only a few seconds.

Calculate the averages of RVD and OVD readings and then the difference between the averages. This is the freeway space (nose-chin approximation; the distance between the teeth or rims is less).

The accuracy of Method 1 measurements is assured because with the upper arm reversed, the location of the measuring arrow compensates for the height of the arm itself.

# Method 2: The Two Dots Technique

Using a fine tip pen with water-based ink, mark a small dot on the tip of the patient's nose and another on the patient's chin. With the patient sitting upright as described in Method 1, slide the upper divider arm so that the points of the upper and lower arms line up with the dots. Read off the distance between the two points (figure 2) from the scale and record it (figure 3).

Then measure the distance between the same points with the teeth closed together. Repeat the measurements, average them and calculate the freeway space as before (figure 3, Method 1). You do not need to place the dots in exactly the same places if measuring the vertical dimensions on another occasion because it is only the difference between RVD and OVD that matters (RVD - OVD = FWS). **Do not forget to remove the dots before the patient leaves.** 









### Method 3: Inter Incisal Technique

The Alma Bite Gauge can be used for measuring inter incisal tip distance or mouth opening (figure 4). Locate the upper and lower incisal teeth in the figure 4 specially designed incisor locating notches in the divider arms (figure 5) and take an maximum opening recording. Please refer to the scale marker as indicated in (figure 6). The measurement can be repeated in order to achieve a consistent result This recording can be repeated at different visits in order to follow the progress of jaw opening.





