

The Alma range of precision measuring instruments

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

Bite Plane The Alma Bite Plane is an essential and dedicated instrument that can assist in determining the correct orientation of the occlusal plane to produce successful dentures.

Denture Gauge The Alma Denture Gauge not only helps in the provision of better dentures, but also saves time. It takes both horizontal and vertical readings of the existing denture reference to the incisive papilla.

Wax Tray A combined hotplate and tray system to keep work surfaces free from wax and help maintain efficient work procedures.

Alginate Syringe The Alma Alginate Syringe is a unique impression syringe specially designed to reach difficult areas and assist in the accuracy of impressions.

Edentulous Impression Trays Disposable plastic impression trays with enhanced anatomical shape for improved accuracy and better denture impressions. A very intelligent solution to a long standing problem.



ALMA

Astek Innovations Ltd

Astek House, Atlantic Street, Altrincham, Cheshire WA14 5DH, England
Tel: +44 (0)161 942 3900 Fax: +44 (0)161 942 3901

Email: info@astekinnovations.co.uk

www.astekinnovations.co.uk

Patented

Cleaning and Sterilising

Cleaning and Sterilising

General

- The Alma Bite Gauge is supplied non-sterile and should be cleaned and sterilised before use.
- The two dividers arms of the Bite Gauge should be fully separated during cleaning and sterilisation.
- Process equipment must be operated in accordance with the manufacturer's instructions.

Cleaning

The Bite Gauge can be cleaned either by using an automated process or manually cleaned by hand. All detergents used should be CE marked and specifically intended for cleaning medical devices.

Automated cleaning

- Use a validated washer-disinfector with disinfection at either 80°C for 10 minutes or 90°C for 1 minute (i.e. Ao of 600).
- After processing the Gauge must be visually inspected to ensure it is clean and dry. If there is any evidence that the Gauge is not clean it must be reprocessed.

Manual cleaning

- Fully immerse the Gauge in a solution of detergent and water throughout the cleaning process.
- Ensure the temperature of the water used for the initial immersion of the device does not exceed 45°C.
- When clean, rinse the Gauge in a solution of clean (preferably purified) water before drying using a lint free cloth.

N.B. Ultrasonic Baths may be used in addition to the above steps.

Sterilisation

- Sterilise using a moist heat (steam) autoclave operating on a 134°C to 137°C cycle for a minimum 3 minutes.
- If the autoclave is a vacuum steriliser, the Gauge can be placed in an autoclavable bag and sealed prior to processing. If the autoclave is a Type N benchtop (gravity displacement) steriliser the Gauge must not be wrapped prior to the sterilisation process as this will inhibit steam penetration.

Please view web site www.astekinnovations.co.uk for more details.

Astek has the measure of denture dimensions

Useful 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 $\pm 1.0\text{mm}$.

The Alma Bite Gauge

The essential measuring instrument for denture prescription and manufacture



CE
0473

ALMA

The measure of successful dentistry

The Alma Bite Gauge

Method 1: The Profile Technique

Method 2: The Two Dots Technique

Method 3: Inter Incisal Technique

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

- Measuring accuracy reduces error and guesswork
- 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 and lightweight construction
- Used to measure vertical dimension and freeway 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 Denture Gauge and the Alma 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 Fig 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. (Fig 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.



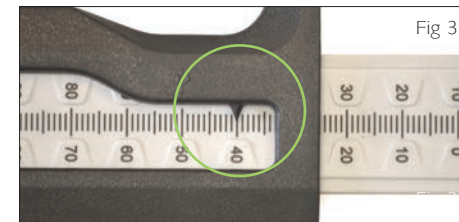
Patented

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 (Fig 2) from the scale and record it. (Fig 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 (Fig 3) (Method 1). You don't 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 ($RVD - OVD = FWS$). Don't 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 (Fig 4) Locate the upper and lower incisal teeth in the specially designed incisor locating notches in the divider arms (Fig 5) and take an maximum opening recording. Please refer to the scale marker as indicated in (Fig 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."

