

PREP GAUGE

How often have we heard our technicians complain of less clearance and how often have we cemented high crowns at the cost of grinding the opposing enamel?

One of the biggest hurdles most laboratories face with preparations is that of inadequate occlusal or incisal/ palatal clearance. In such a situation, the technician is faced with the challenge of fitting the prosthesis within a compromised space. The long-term prognosis for such a case is almost never a favourable one.

Although clinicians are aware of the amount of clearance desired, it can routinely be difficult to precisely gauge this intraorally. Usually, occlusal clearance is checked on the basis of visual inspection of the 'space' available between antagonist teeth when in maximum intercuspal position (MIP). This can be extremely subjective, as dentists often become myopic when evaluating their preparations (human nature) and teeth have cuspal slopes that can obscure the view of lingual/palatal reduction achieved. A simple, yet effective solution to this problem is the use of 'PrepGauge' from MIK Dental.

DESIGN CONCEPT



These are boomerang shaped, autoclavable silicone gauges that are available in 4 different thicknesses (1 mm, 1.5 mm, 2 mm, 3.5 mm) and are color coded for easy identification. Each gauge has its own indication:

1 mm gauge (Yellow):

Non-functional cusps for Lithium Disilicate (LiDiSi), Porcelain Fused to Zirconia (PFZ), monolithic metal and monolithic zirconia preparations.

1.5 mm gauge (Blue):

Functional cusps for LiDiSi, PFZ, monolithic metal and monolithic zirconia preparations. Non-functional cusps for PFM preparations.

2 mm gauge (Green):

Functional cusps for PFM preparations.

3.5 mm gauge (Pink):

PFM reductions involving maxillary and mandibular antagonist teeth.



TECHNIQUE FOR USE

The gauges have been particularly shaped for their easy placement between all teeth. Their wider arm (10 mm in width) is to be used for molar teeth, while the narrower arm (7 mm in width) is designed for use with teeth having a narrower diameter. The rounded end of the narrow arm (1 mm in width) can be used for mandibular anterior teeth where the mesio-distal width of the tooth is the least.



Once the desired amount of reduction has been achieved, the patient is asked to bite onto the corresponding PrepGauge. The clinician should then try to pull the gauge through the buccal aspect (feeler gauge concept).

One of the following three possibilities exist:

Possibility 1: The gauge can be pulled out through the buccal aspect with minimal resistance.

Clinical conclusion: The preparation is adequate in relation to the PrepGauge used.

Possibility 2: The gauge cannot be pulled out through the buccal aspect.

Clinical conclusion: The clearance is inadequate and requires further reduction.

Possibility 3: The gauge can be pulled out through the buccal aspect without any resistance.

Clinical conclusion: The preparation is over-reduced or the patient is not in MIP.

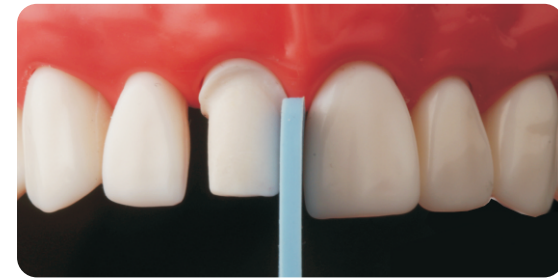


Although this technique helps gauge the adequacy of the preparation, it does not indicate specific areas where the preparation may need further reduction (if any). To meet this need, special paints or sprays can be used in conjunction with the PrepGauge, e.g. Arti-spot 2 from Bausch. Image shows areas that need further reduction (encircled portion) as they are marked by the color used on the gauge.

The ink gets selectively transferred to areas that need further reduction, thereby adding tremendous value to the system.



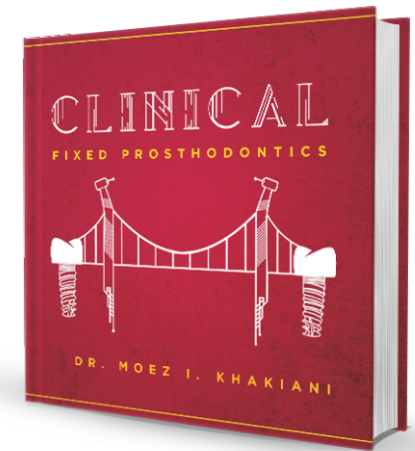
Evaluating excursive clearance is important, especially for anterior teeth, where uniform reduction along the entire path of anterior guidance is extremely crucial for long-term prognosis of the case. This can easily be achieved with the use of PrepGauge.



In addition, the gauges can also be used for evaluating the adequacy of proximal reduction.

Thus, predictability when performing fixed prosthetic preparations can be greatly enhanced with the use of PrepGauges. To purchase these gauges contact MIK Dental on www.mikdental.com; or email: support@mikdental.com.

Also check out the unique book “Clinical Fixed Prosthodontics” by **Dr. Moez I. Khakiani**. It comprises of 23 chapters that are spread over 400 pages with more than 1700 colored illustrations and clinical images. For further details contact **Excel Publication** on : +91 9833400664.



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