



Nomenclature for Device Design

Device design is a very important part of providing effective oral appliance therapy and is reviewed throughout the AADSM Mastery Program. To ensure unbiased education that remains applicable as device manufacturers change and products evolve, the AADSM Mastery Program uses design categories, rather than device names, to guide dentists through oral appliance fabrication.

We encourage industry to adopt this terminology when discussing their products with dentists to ensure that consistent language is being used throughout the field

Materials and Manufacturing

1. Polyacrylic Polymers: PMMA (polymethyl methacrylate)
 - a. Laboratory powder-liquid
 - b. Milled from industry control-cured
 - c. Thermal-sensitized elastomeric polyacrylic
 - d. Non-thermal-sensitized elastomeric polyacrylic
2. Elastomeric polymer laminate liners
 - a. Poly-ethylene-vinyl acetates
 - b. PMMA elastomeric polymers
3. Thermalplastic polymer blend laminate liners
 - a. Biodegradable polyesters-liquid at 160°F, 130°C
 - b. Beads or wafers
4. Thermo-formed plastic in moldable sheets
5. Polyamides for printing or sintering
6. Class II photopolymerizing resins for printing

Retention Mechanism

In alphabetical order:

1. Dual-laminate liner flexion into undercuts
2. Elastomeric polyacrylics flexion into undercuts
3. Metal wire flexion into undercuts
 - a. Distal molar wrap
 - b. Interproximal ball clasps, C clasps
4. Polyamide elastomeric flexion into undercuts
5. PMMA milled frictional resistance to displacement
6. Thermal-sensitized elastomeric polyacrylic flexion into undercuts
7. Thermo-formed plastic flexion into undercuts
8. Thermoplastic polymer blends frictional resistance to displacement

Extension

In alphabetical order:

1. Fully edentulous or edentulous areas
2. Teeth and extension beyond teeth
3. Teeth only
4. Teeth-partial lingual coverage or lingual-less
5. Teeth-partial occlusal coverage

Attachment and Propulsion

In alphabetical order:

1. Attached
 - a. Bilateral compression
 - b. Bilateral traction
 - c. Midline traction
 - d. Other
2. Unattached
 - a. Bilateral interlocking
 - b. Other
3. Semi-attached
 - a. Elastics to encourage mouth closure

Protrusive Mechanism and Protrusive Range of Motion (pROM)

In alphabetical order:

1. Incremental units or exchangeable pieces
2. Screw turn
3. Strap or elastic band change

Occlusal Support

What should be considered during design: parafunctional habits, concern for joint support, muscle function, tongue space, vertical interocclusal space. In alphabetical order:

1. Anterior only, discluding
2. Full occlusal
3. Posterior only
4. Tripod

Customizable Options

In alphabetical order:

1. Accommodation for mouth breathing
2. Anterior ramp
3. Attachment for PAP
 - a. Adaptable chairside with pre-manufactured components
 - b. Lab adaptation
4. Elastic attachments to promote mouth closure
5. Minimal interocclusal distance, cut away of most distal or hyper erupted teeth
6. Open screws during fabrication to allow for retrusive ROM
7. Reinforcement with metal for strength
8. Changeable propulsion options
9. Externally titratable

Nomenclature for Protrusive Bite Gauges

As with device selection, the AADSM Mastery Program provides an overview of protrusive bite acquisition. The AADSM Mastery Program uses the following category descriptors to review the many styles of bite gauges and to educate dentists on the best practices for bite acquisition.

In alphabetical order:

1. Horizontal sliding bite gauge
2. Horizontal sliding bite gauge with vertical adjustments
3. System of horizontal positioning simulators and vertical keys
4. Three-axis bite gauge