



> SPLINTS

> SLEEP / AIRWAY

> SMART MOVES® CLEAR ALIGNERS

Great Lakes guide to the latest appliances,  
technology, and customer support



Great Lakes™  
DENTAL TECHNOLOGIES

## Nylon appliances that deliver superior comfort and retention

### Strong. Lightweight. Flexible.

We have combined our in-depth technical experience with 3D software, the latest printing technology, and biocompatible nylon material to deliver an advanced appliance. Leveraging the details and accuracy of digital 3D models and fabricated in laser sintered nylon, these low-profile appliances are lightweight, flexible, and strong.

- > **Retention is optimized** in software
- > Digital accuracy and more **flexible material** promote **patient comfort**
- > Digital design ensures the **lowest possible** profile
- > **Great Lakes technicians** work individually with you
- > **Adjust** as you would a traditional appliance



### Nylon Flat Plane Splint

The Nylon Flat Plane Splint is a full coverage splint with an even, flat occlusal surface providing smooth contacts for the opposing arch. Also known as a hard nightguard.



### Nylon Full Contact Splint with Anterior Guidance

The Nylon full-coverage splint with an anterior ramp provides lateral and protrusive guidance against the opposing arch during function. Indicated for patients who can accept joint loading without pain.



### Nylon Anterior Biteplane

The Nylon Anterior Biteplane appliance is aesthetically appealing and suitable for a broad spectrum of patient cases. It can be used therapeutically or diagnostically.

**Each splint is digitally designed by our technicians, who optimize retention and engagement of the undercut in software.**

**The result is a splint with ideal and consistent retention.**

# SPLINTS / DEPROGRAMMERS

**Full-coverage splint or mini deprogrammers remove occlusal interferences and promote normal muscle function.**

*\*Indicated for patients who can accept joint loading without pain.*

## Full Contact Splint with Anterior Guidance - SpearStyle

*This full-coverage splint with an anterior acrylic ramp provides lateral and protrusive guidance against the opposing arch during function.*

- > Full occlusal coverage
- > Lateral and protrusive incisal guidance
- > Anterior acrylic ramp
  - Std angle 5° greater than required to disclude posterior teeth
  - Std protrusive and lateral length extends from contact point to just beyond the labial surface of the upper anteriors (approx. 4-6mm)
- > Point contact from lower posterior buccal cusp tips
- > Lower same as upper

*Bite recommended: Centric Relation (CR)*



## Flat Occlusal Plane Splint (Also known as a hard nightguard)

*This full-coverage splint with an even, flat occlusal surface provides contact for the opposing teeth.*

- > Full occlusal coverage
- > No guidance
- > No ramp
- > Even, flat occlusal surface
- > Point contact for each opposing tooth
- > Lower same as upper

*Bite recommended: Centric Relation (CR)*



## Anterior Deprogrammer

*This standard anterior deprogrammer features 1mm full occlusal coverage with maximum contact points.*

- > 3x3 anterior bite plate
- > No guidance
- > No ramp
- > 6-point contact of opposing anteriors
- > Open enough to eliminate interferences during function

*Bite recommended: Centric Relation (CR)*



*“The quality of service and products, along with an exceptional level of integrity to always do what is in the best interest of the customer, is what makes Great Lakes one of the premier companies in all of dentistry. Great Lakes Dental Technologies continues to be a pleasure to do business with.”*

**Frank Spear, DDS, MSD**  
Spear Education

## **Anterior Repositioning Splint** (Also known as a Pull Forward Splint)

*This full-coverage maxillary appliance is worn at night to recapture anteriorly displaced discs. Indicated for patients with the presence of a click in the joint.*

- > Fabricated with a wax bite bringing the mandible into a protrusive position
- > Upper splint position maintained by an acrylic flange, which rests lingual to the lower anteriors, and indexes the lower buccal cusps
- > Flange holds its position even at night when the jaw relaxes
- > Lower splint maintains position with deep buccal, lingual, and incisal indexing of the upper cusp tips

*Bite recommended: Protrusive*



## **Full Contact Splint with Anterior Guidance - Tanner Style**

*This appliance is indicated for patients who can accept joint loading without pain. Using cold cure, this splint is fabricated on the posterior segments on the mandibular arch.*

- > An acrylic cap, placed over the lower anterior teeth, contacts the lingual of the upper anteriors
- > Incisal guidance and cuspid protection are built onto the cap
- > Slight contact of the upper posterior lingual cusps helps maintain mandibular positioning
- > Lingual bar connects the acrylic segments
- > Ball clasps are used for retention

*Bite recommended: Centric Relation (CR)*



## **Gelb Splint**

*Used to reposition the mandible and recapture the disc. Fabricated in cold cure to a wax bite on the mandibular arch. Brings the condyle into a more anterior, inferior position in the fossa and increases the vertical opening.*

- > Posterior coverage connected by a lingual bar
- > Uses standard clasping with two ball clasps for retention
- > Slight indexing of the upper lingual cups is used to maintain the position

*Bite recommended: Protrusive*



**Material options:** Splint Biocryl (Hard), Hard/Soft Splint Biocryl (hard/soft dual layer material), Variflex (heat softening acrylic), and the Rhea Splint; a hard appliance with a soft re-formable inner layer.

# BITE REGISTRATION MATERIALS & SUPPLIES



## ACU-flow™ Bite Registration Material

The hardest bite registration material available. This syringeable vinyl poly siloxane material is used for achieving highly accurate and detailed centric relation bites. Less brittle, dimensionally stable, and trims like acrylic. Often used in conjunction with a Lucia Jig.

- > Working time: 15 seconds
- > Minimal intraoral setting time: 45 seconds
- > Maximum total cure time: 1 minute

Kit **100-005**  
 (6 Cartridges/pkg / 12 Tips/pkg)  
 48 Dispensing Tips **100-006**

## ACU-flow™ Bite Impression Material

Advanced formula technology hydrophilic vinyl poly siloxane allows for 100% curing rate, excellent dimensional stability, and exceptional tear strength. Performs well with all impression techniques. Efficient working and set times minimizes chair time and reduces inaccuracies.

(6 Cartridges/pkg / 12 Tips/pkg)  
 Light Body **160-012**  
 Medium Body **160-017**  
 Heavy Body **160-013**  
 Rigid (Triple Tray) **160-014**



## Lucia Jigs

Helps obtain centric relation by de-programming muscles and allowing the condyles to seat in the most superior position. A variety of bite registration material can be used to fit the Lucia Jig such as ACCU-flow™ PVS material.

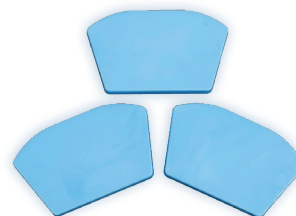
Kit **255-025**  
 (18 Class I Jigs / 6 Class II Jigs)  
 Class I - Standard Jigs (12/pkg) **255-021**  
 (24/pkg) **255-023**  
 Class II - Standard Jigs (6/pkg) **255-022**



## ACU-flow™ Putty Impression Material

Dimensionally stable, easy to use silicone material for taking bite registrations, impressions, matrices for temporary bridges, prep guides and indirect bonding of orthodontic brackets. Putty base and catalyst is ideal for multiple pours. Also used to create a matrix for bondable lingual retainers. Convenient mixing consistency with problem-free removal and perfect elasticity after setting.

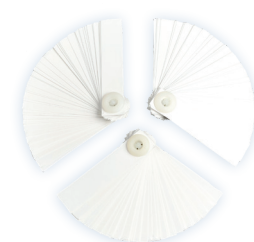
Pkg **100-085**  
 (420g Putty Catalyst & Putty Base)



## Great Lakes Tapered Wafers

Wafer shaped, thinner in the posterior section and thicker in the anterior, taking the arc of the closure into consideration. Results in an even indexing of teeth into the wax.

(25/pkg) **260-032**



## Leaf Gauge

Used in the diagnosis of TMJ and related problems. Made of durable white plastic.

(3/pkg) **056-045**



## Whale Tails

Used in conjunction with a Lucia Jig, the Plastic Whale Tail helps level to the occlusal plane. Cold sterilize.

(3/pkg) **255-035**

## Confidently treat your patients with sleep-disordered breathing

### Nylon Sleep Herbst®\* Patent Pending

The Nylon Sleep Herbst® appliance can be made very thin (less than 1mm thick), retains durability and retentiveness while also maintaining appropriate flexibility at this thickness. The appliance is easier to insert and much more comfortable for patients, especially at the first insertion. The low-profile design precisely engages the undercuts to enhance retention and fit.

- > Precise engagement of the undercuts
- > Uniquely strong, flexible, and durable
- > Digitally designed for accuracy and precision fit
- > PDAC approved | 2 Year warranty



**DIGITALLY DESIGNED <**  
**SUPERIOR FIT & COMFORT <**  
**RETENTIVE, LOW PROFILE DESIGN <**

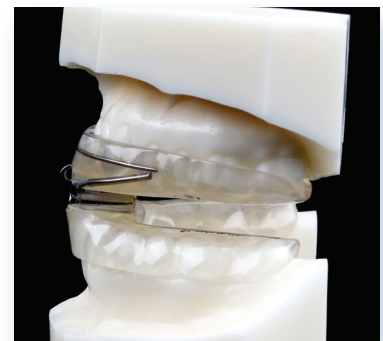
\* Herbst is a registered trademark of Dentaaurum, Inc.

### dreamTAP™ Appliance

This ultra comfortable appliance is designed with hardware on its exterior, offering greater tongue space with no obstructions. With more tongue space, patients experience greater comfort and a healthier sleep. The single point of midline adjustment prevents uneven bilateral adjustment that may create an irregular bite and jaw discomfort.

- > Stronger than stainless steel, the hardware is made from nickel-free cobalt-chromium, removing the risk of allergic reaction
- > Comes in three hook sizes for greater range of adjustment
- > Corrosion resistant
- > Utilizes custom-formed soft liners for superior retention
- > Adjustment mechanism advances the mandible 0.25mm with each turn of the key

Bite recommended: Protrusive



For over 25 years, we have been providing the most effective, clinically-proven sleep appliances, screening and record-taking tools, and technical support to dentists for their patients with sleep disordered breathing.

## Hard Telescopic Sleep Herbst®

This appliance allows patients some lateral and vertical movement without disengaging the appliance. If the initial position does not provide anticipated relief, the mandible can easily be moved forward in small increments by using advancement shims, or with our telescopic hardware advanced up to 5mm with a 1mm retrusion.

### Indications for use:

- > Optimum tongue space
- > Upper edentulous with at least 6 teeth on lower arch
- > Full complement of teeth
- > Gaggers
- > Midline deviations
- > Minimal inter-incisal opening
- > Maxillary/Mandibular tori

*Bite recommended: Protrusive*

**Note:** This appliance can be made of hard acrylic, thermoactive resin (Variflex™), clear Biocryl, or soft EVA material.

Telescopic Herbst Sleep Appliances are PDAC (Pricing, Data Analysis and Coding Contractor) verified for Medicare reimbursement.

\* Herbst is a registered trademark of Dentaaurum, Inc.



### Also available:

#### Soft Telescopic Sleep Herbst®

Fabricated using low profile, reinforced EVA, offering superior patient comfort and retention.

#### Herbst® Rhea® Sleep Appliance

Can be made with the Rhea technique, or with hard acrylic, thermoactive resin (Variflex™), clear Biocryl, or soft EVA material.

## Medley Rigid Nylon Links Appliance

A Great Lakes exclusive. Indicated for snoring/mild to moderate OSA. Ideal for the majority of qualified patients, this appliance utilizes a mandibular “pulling” force similar to the Medley Elastomeric appliance. However, the Medley Links differs from the Medley Elastomeric in that the nylon link material provides a more rigid, firmer advancement feel and won’t deform.

If the patient experiences any discomfort or slight joint pain, the Medley Rigid Nylon Links can be replaced (utilizing the same platform) with the Elastomeric Straps to provide maximum comfort. The discomfort is usually temporary. Once the symptoms are relieved, the appliance can then be transitioned back to the Links.

- > The link material will retain its rigidity and strength for up to 1-2 years.

*Bite recommended: Protrusive*



“Great Lakes is a company we have really learned we can rely on for absolutely straight answers and total commitment to service.”

Peter E. Dawson, DDS  
The Dawson Academy

## Panthera D-SAD™

One of the smallest, lightest and most durable sleep appliances on the market.

- > Maintains jaw in a forward position, relieving snoring and mild to moderate sleep apnea conditions
- > Worn at night
- > FDA approved
- > Fully CAD/CAM custom designed and 3D printed using biocompatible polyamide medical grade nylon
- > Will not disengage during sleep, elongate, or distort
- > Adjusts in increments of 1mm
- > Does not contain BPA, phthalate, or resin

*Bite recommended: Protrusive*



## Klearway™

This appliance offers ultimate control and is suitable for most patients including those who brux, have missing or complicated dentitions, some upper edentulous cases, extensive bridgework, and/or short clinical crowns.

- > Features a snap lock expansion screw that prevents unwanted deactivation
- > Adjusts in increments of 0.25mm for gradual jaw positioning
- > Fabricated of comfortable thermoactive acrylic (Variflex™)
- > Easy to insert, conforms securely to teeth, and permits lateral movement
- > Provides full occlusal coverage of both arches

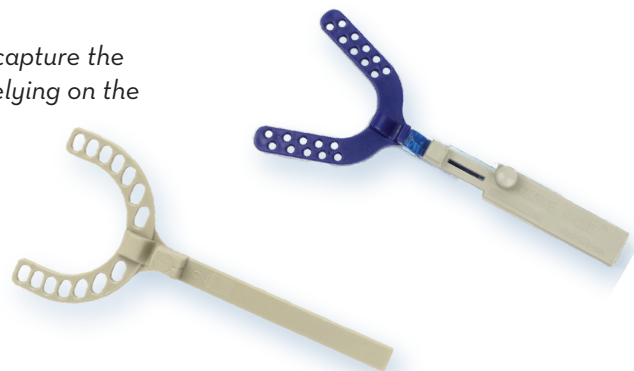
*Bite recommended: Protrusive*



## The George Gauge®

Ideal for mandibular repositioning. Allows the clinician to capture the protrusive bite registration and vertical opening without relying on the patient to achieve proper positioning.

- > Eliminates guesswork
- > Extremely accurate and easy to use
- > Available in 2mm, 3mm, and 5mm sizes
- > Autoclavable
- > Bite Forks are single patient use



See our complete line of diagnostic products, sleep screeners, and record-taking tools at [GreatLakesDentalTech.com](http://GreatLakesDentalTech.com)



# SMART MOVES® CLEAR ALIGNERS

## The smarter way to a beautiful smile

smart moves® complete is a clear aligner system designed for full arch treatment and managed through a cloud-based software platform. Manufactured in and supported by U.S. based technicians, smart moves® integrates realistic aligner treatment plans with sophisticated 3D software and is compatible with any intraoral scanner. The smart moves® predictability index provides a baseline for case outcomes so treatment projections are realistic.

smart moves® features a tiered pricing structure based on the number of aligners each case requires. You won't pay for aligners you won't need.

The smart moves® predictability index provides a baseline for case outcomes so projections will be realistic. The index contains 3 charts for aligner predictability by:

1. Malocclusion
2. Individual tooth movements
3. Arch form adjustment

The guidelines are estimates and influenced by patient compliance, tooth anatomy, and many other factors. The jaws and malocclusion should always be considered in addition to these parameters.

The smart moves® workflow is similar to the workflow of other aligner systems. It features online case modification and approval options, treatment simulations including attachments, interproximal reduction, and the number of stages required.

Contact Great Lakes to register for an account and we'll set it up for you. Once you have an account, you'll have access to the smart moves® portal where you can submit patient records to start a case and review throughout the process as necessary.

The smart moves® case is delivered in a patient take-home box which includes individually-labeled aligners, an aligner storage cup, Chewies™, aligner removal tool, and patient instructions. If the case requires, it will also include transfer matrices for attachments and interproximal reduction instructions.



predictability by tooth movement

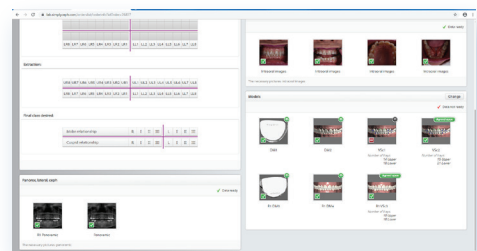
predictability by malocclusion

TYPE OF MALOCCLUSION	MILD TO MODERATE MALOCCLUSION			SEVERE TO EXTREME MALOCCLUSION		
	VERY PREDICTABLE	MODERATELY PREDICTABLE	UNPREDICTABLE	VERY PREDICTABLE	MODERATELY PREDICTABLE	UNPREDICTABLE
CROWDING	0-3mm	3-6mm	6mm+	0-5"	5-15"	15"+
SPACING	0-3mm	3-6mm	6mm+	0-5"	5-15"	15"+
OVERJET	0-3mm	3-6mm	6mm+	0-5"	5-15"	15"+
OVERBITE	0-2mm	2-6mm	6mm+	0-5"	5-15"	15"+
OPEN BITE	0-3mm	3-6mm	6mm+	0-5"	5-15"	15"+
WIGGLE	0-2mm	2-6mm	6mm+	0-5"	5-15"	15"+

predictability of arch form adjustment

In this chart, you'll see the five categories of arch form adjustment. The overall movement within an arch is dictated by the teeth and alveolar bone within the arch. Every one of your patients are uniquely different, and can display varying results.

MOVEMENT TYPE	TOOTH	VERY PREDICTABLE	MODERATELY PREDICTABLE	UNPREDICTABLE
ARCH FORM ADJUSTMENT	Distalize	0-2mm	2-4mm	4mm+
	Mesialize	0-2mm	2-4mm	4mm+
	Lingualize	0-2mm	2-3mm	3mm+
	Anterior Forward	0-2mm	2-3mm	3mm+
	Width Expansion	0-2mm	2-4mm	4mm+



*Ideal for the patient waiting room: The smart moves® complete patient brochure can be professionally displayed to provide patients with all the information they need to ask about Great Lakes' clear aligner system.*

Getting started with our lab is easy

## Mail Traditional Models

You can mail in physical models with an Rx or you can submit them to us digitally. Our design technicians will contact you with any questions they have on your case. If you have any questions on how to get started, contact our laboratory customer service department at 800.828.7626.

All our prescriptions and shipping labels are available on our website. Contact us if you need boxes, labels, or Rx forms mailed to you at no charge.

## Upload Digital Models

**Option 1:** Instructions are available on our website for the following scanners:

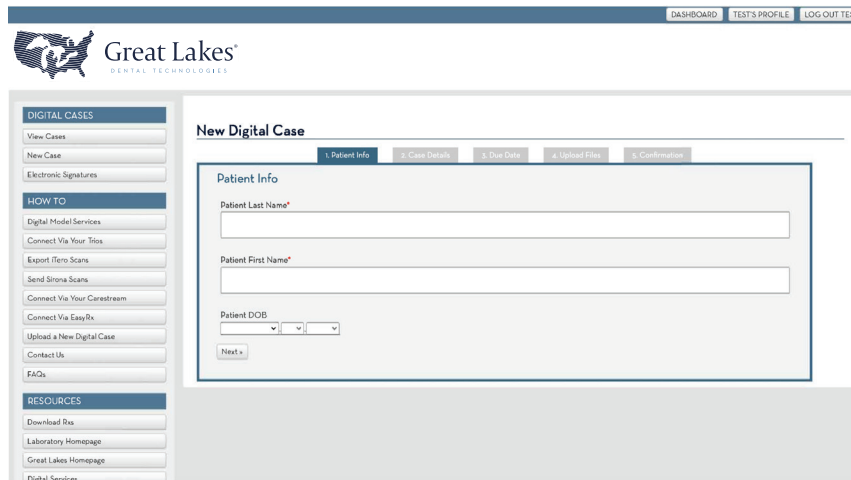
- > 3 Shape
- > Itero
- > Sirona
- > Carestream
- > EasyRx

Great Lakes also supports DDX, Medit, and Planmeca.

**Option 2:** Upload your digital models to the Great Lakes Digital Portal ([upload.greatlakesortho.com](http://upload.greatlakesortho.com)). It's a simple and secure way that accepts STL files from any scanner. Instructions are available on our website.

### 3 EASY STEPS

- 1**  
Download and complete an Rx
- 2**  
Print a shipping label
- 3**  
Mail it in



### NEED ASSISTANCE?

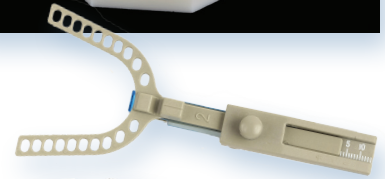
GreatLakesDentalTech.com  
800.828.7626 (U.S. & Canada)  
716.871.1161 (Worldwide)

**Articulator options:** Great Lakes has the most common models of articulators in-house, so there is no need to ship your articulator. We recommend sending the bite registration with mounted cases. If unmounted, all cases will be mounted on a SAM® 2 articulator unless otherwise specified.

## Count on Great Lakes for exceptional laboratory services

### Here's what you can count on:

- > **Superior Technical Support**...we have more years of combined technical expertise than any other lab in the U.S.
- > **We'll call with questions or concerns**...if we have a question, concern, or recommendation, we will call you to ensure that your appliance is fabricated with precision and accuracy.
- > **We'll keep you informed about delivery dates**...a laboratory customer service representative will contact you with any exceptions regarding your due date or case status.
- > **Appliance Protection Program**...provides protection against loss or irreparable damage to an original appliance for up to one year or one re-make.
- > **FREE Appliance Design Services**...our laboratory technicians are available to discuss the appliance design options available to you.
- > **FREE Appliance Master Prescription Program**...your specifications are kept on file and issued a design number to each. This assures consistent, accurate fabrication of any appliance designs that deviate from our standard.
- > **FREE Lifetime Warranty**...on material defects on every appliance we fabricate.
- > **Fast Shipping**...your case can be quickly and economically shipped to and from our lab. Call for available shipping options.
- > Information available at [GreatLakesDentalTech.com](http://GreatLakesDentalTech.com):
  - Replacement, Credit & Repair Policies
  - Laboratory Lead Times
  - Shipping to and from our Laboratory





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GREAT PEOPLE. GREAT PRODUCTS. **GREAT LAKES.**