The Hycon® Device

Space Closure... fast, precise and successful - every patient, every time!

HYCON® Tube
Post inserted into the auxiliary-tube of your double buccal tube.

HYCON® Clip On
Clips on directly to your archwire (perfect when no auxiliary tube is available)

Successful
“My colleagues tell me that they are able to treat cases with the HYCON® device that before would have been beyond therapy. I close all my spaces with the HYCON® – it has never failed me.” Dr. Schütz, Germany

Fast
The movement of the tooth is determined solely by the advancement of the thread of the screw. The thread has been precisely calculated to a pitch of 0.014”, now you can precisely calculate this pitch by number of turns to precisely advance the screw and in-turn close the space with complete understanding and control

Precise
The HYCON® is activated in small steps at intervals that create an intermittent tooth movement. This allows recovery of the tissue in-between activations, and provides the physiological stimulus for the alteration processes. This perfect balance provides a high efficiency in tooth movement

Painless
Activated in small steps at intervals best suited to maintain adequate blood supply, closely emulates ideal bodily movement and produces pain free space closure for the patient
Ideal tissue remodeling during orthodontic tooth movement

Tooth movement by orthodontic force application is dependent on remodelling in the periodontal ligament and alveolar bone. Supplying the correct stimuli for optimal tooth movement, creates a fast, safe and reliable space closure.

The appliance used to supply this force should create a maximum rate of tooth movement avoiding irreversible damage to the root, periodontal ligament and alveolar.

Research has proven that the periodontal ligament can be compressed up to 70%, the 30% remaining will provide the blood supply to all the surrounding structures. This adequate blood supply insures a safe and fast tooth movement as it is the physiological stimulus for the desired alternation process to progress.

Elastic force problems

Although elastic forces have been used for space closure for many years, this method has many unanswered questions:

• How much force is applied to the tooth?
• How much of the elastic force is eaten up by the friction in the connected system?
• How can the orthodontist measure this force?

HYCON screw - the mathematics of SUCCESSFUL SPACE CLOSURE

In contrast to elastic force, we are able to control the compression of the periodontal ligament by measuring distance. The size and pitch of the screw threads is directly proportional to the movement of the screw. The distance the screw travels can easily be determined - each 180° rotation moves the screw 0.175mm.

Average width periodontal ligament
0.25mm x 70% = 0.175mm

Movement can be measured as to not overpower the PDL beyond 70% maintaining ideal blood supply

Capable of overcoming any friction in the system
Capable of controlled activation in intervals based on periodontal health
Pain free
**Easy activation protocol**

**HYCON® Tube**

Designed specifically with a support-wire which is inserted into the auxiliary-tube of the molar band from the mesial side and bent back.

_A double buccal tube is required for the use of this appliance._

Holding pin of the HYCON® Tube is inserted into auxiliary tube on your buccal tube.

**Activation rate**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Tissue Condition</th>
<th>Turn Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent + optimal tissue + No periodontosis</td>
<td>turn every 2 days</td>
<td></td>
</tr>
<tr>
<td>Adult + normal tissue + no/little periodontal tissue</td>
<td>2 turns per week</td>
<td></td>
</tr>
<tr>
<td>Adult + Reduced tissue + reduced marginal bone ridge</td>
<td>1 turn per week</td>
<td></td>
</tr>
</tbody>
</table>

**HYCON® ClipOn**

If a double buccal tube is not available, the HYCON® ClipOn simply clips onto the archwire.

HYCON®self-ligating locking clip is shown in open state, revealing the HYCON’s slot.

Close the HYCON® ClipOn by applying pressure with the pliers.

**HYCON® order info**

<table>
<thead>
<tr>
<th>Item #</th>
<th>.018</th>
<th>.022</th>
<th>Sales Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYCON Tube*</td>
<td>HCN-018-5</td>
<td>HCN-022-5</td>
<td>5 Patient Kit</td>
</tr>
<tr>
<td>HYCON ClipOn</td>
<td>HCN-018-5</td>
<td>HCN-022-5</td>
<td>5 Patient Kit</td>
</tr>
</tbody>
</table>

*Available in .018” slot technique with a .018x.025 support wire.
*Available in .022” slot technique with a .021x.025 support wire.
EASY-WAY-COIL SYSTEM®

A Proven Technique for effective alignment of impacted incisors, canines, and premolars

- Zero inflammatory reactions recorded
- Zero loosening of bonded attachment
- Zero breakages recorded

(Clinical research conducted by Dr. Schubert, Germany)

EASY-WAY-COILSYSTEM® for lingual and buccal treatment clinically reliable, efficient, easy to use and economical system for the alignment of impacted and ectopic teeth.

Many different traction appliance options are available for the task of aligning the ectopic or impacted tooth. The forces in some of these appliances are generated by elastics. The quality of the material of elastics, elastic chains or an elastic rubber thread makes frequent replacement necessary for the purpose of re-activation. Lever designs are highly elastic and supply effective force for a relatively long period of time, but they are easily damaged, rather uncomfortable for patients, and make oral hygiene more difficult. The EASY-WAY-COIL SYSTEM® consists of a stainless steel tension spring which is pivot-mounted to a lingual button with a bonding base. The appliance is activated by systematically shortening the spring. It is reliable and demonstrates a constant application of force throughout the treatment procedure, including stable maximum anchorage.
Inventor Dr. Michael Schubert

The EASY-WAY-COIL system design did not come to me overnight, in fact this design formed slowly and gradually over a period of a few years. Each time I experienced an adverse effect directly related to the design and function of a particular appliance, I started to formulate new appliance design solutions.

In my opinion the EWC system has three distinct advantages:

CONTROL
The rigid nature of this traction spring system permits controlled tooth movement in all directions of space, as long as one point of anchorage is available. Remember this anchorage does not always have to be the archwire, however I choose the arch wire repeatedly for its ease of use.

FORCES
I wanted to design a system that was simple, easily reproducible and clinically easy to perform. Cutting 3 rings of the spring equals cutting 1mm of active length, which generates a force of 0.158N. Thus the total force generated can be adjusted by clipping multiples of 3 rings.

Control of rotational torque/moment
Probably the most pronounced advantages of my system is its ability to control torque. The rigid nature of this spring produces an anti-rotational movement. Now I can move my canines in a lateral direction without unintentionally exerting a rotational movement (favorable for canines with palatinal impaction). With a traction force of roughly 0.3N and the lingual button attached at a distance of 2-3mm from the cuspid’s longitudinal axis, an anti-rotational torque of 0.8-0.9 Nmm is generated.

My patients have greatly profited from the EWC system with excellent treatment results and optimal comfort. I have experienced a high level of controlled tooth movement with a full understanding and control of forces needed for efficient and safe tooth movement.

Dr. Michael Schubert

EASY-WAY-COIL spring system produces a complete treatment approach for impaction producing many advantages that other systems cannot provide.

- Sturdy and stable
- Prevents undesired rotation
- Repels Mucosa and scar tissue
- Prevents inflammatory reactions
- Intermittent forces
- Long activation
- Constant precise force during activation
- Simple re-activation and variable direction
- Variable direction of traction
- Simple re-activation
- Precisely quantified amount of force
- High degree of comfort for patients
- Clinically reliable & economical
- Unilaterally or bilaterally
- Can treat both lingual and buccally impacted teeth
The advantages of using a stainless steel spring vs. a NiTi spring can be seen clearly throughout all our clinical testing. Couple this high functioning spring with a custom designed button and you have the perfect traction appliance.

**Sturdy and stable**
Stainless steel springs permit accurate and sturdy formation of the eyelet, with no introduction of rotation and allows simple and easy re-activation later in treatment.

**Prevents undesired rotation of spring**
An experimental study confirmed that the steel spring’s rigidity has an anti-rotation effect and can thus generate a counter-torque of 0.75 N mm, against the strong rotation of a palatally ectopic cuspid.

**Repels Mucosa and scar tissue**
Mucosa or scar tissue can grow in between the separated spiral winding of a NiTi spring, this prevents the spring from contracting, and thus making it impossible to estimate how much traction force is effectively being applied to the tooth. Activation with the steel spring is low, the “tube from” is retained and mucosa or scar tissue is easily repelled. This allows the spring to contract and slide easily with little friction.

**Prevents inflammatory reactions**
Since 2008 the EASY-WAY-COIL® system, no patient has suffered inflammatory reactions in the oral mucosa adjacent to the traction spring during treatment.

“Choosing the right force minimizes root damages and reduces treatment time!”
Dr. Schubert, Germany

**MULTI DIRECTIONAL & ANTI ROTATIONAL**

Intermitting forces
The EASY-WAY-COIL® is activated in small steps in 4 week intervals. As the tooth reaches the position needed for re-activation, this in turn creates an interval of tooth movement and allows recovery of the tissue in between activation steps. These intermitting forces allow permanent blood supply to all surrounding tissues.

**Activation Distance = 2mm - Optimum Force = 32 cN**

**Item** | **Sales Unit**
---|---
EWCS1 | 1 Patient Kit –
| 1 EASY-WAY-COIL spring
| 1 Space maintaining spring

EWCS5 | 5 Patient Kit –
| 5 EASY-WAY-COIL springs
| 5 Space maintaining springs

EWCS1-90 | 1 Patient Kit – 90° version
| 1 EASY-WAY-COIL spring
| 1 Space maintaining spring

EWCS5-90 | 5 Patient Kit – 90° version
| 5 EASY-WAY-COIL springs
| 5 Space maintaining springs
The DISTAL GLIDE™ - effective distalization

- Pre-manufactured distal glide spring for consistent precision
- CNA Beta III/TM Nickel-free combines wires which offers excellent resiliency when compared to Stainless Steel
- Easy oral hygiene
- Easily removed for activation outside the patient’s mouth
- Full control over torque, tip and rotation
- Clear acrylic Nance-plate for better visual control of hygiene and possible infections

The DISTAL GLIDE™ (modified Pendulum) has proved to be an incredibly efficient and predictable source of non-compliant Class II correction. Our aim was to develop the simplest, easy to handle appliance that would allow the patient to maintain good oral hygiene, improve patient comfort, ease of appliance placement and activation, and obtain the most effective distalization.

Quality - Adenta engineered an appliance to provide increased stability and improved overall response. The distalizing springs are of high quality Nickel-free Beta Titanium.

Pre-engineered - The distalizing springs are fabricated by machine with absolute precision. Each spring is identical to each other, and provides the practitioner with consistent forces.

Removable - To reactivate the old Pendulum appliances intraorally was cumbersome and was uncomfortable for the patient. The Distal Glide springs are inserted into tubes located inside the acrylic plate and into the lingual sheath, this provides a sturdy support, and can easily be removed for reactivation.

Hygienic - As the distalizing springs are easily removed, this provides easier access for the hygienist.

Distal Glide™ order info

<table>
<thead>
<tr>
<th>Item</th>
<th>Article Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP-DGP.Info</td>
<td>Adenta Distal Glide Information</td>
</tr>
<tr>
<td>DP-DGP.PR</td>
<td>Distal Glide - Office Kit, 10 distalizing</td>
</tr>
<tr>
<td>DP-DGP.ST</td>
<td>Distal Glide - Starter Kit, 5 distalizing</td>
</tr>
</tbody>
</table>
Clear button and clear aligner abutment former with light-polimerisation in pencil-size

This small light-cure pen forms a tooth-colored button quickly and economically.

Simply fill the preformed tip with your light-curing bonding or resin material in syringes and light-cure for a button or a clear aligner abutment that is virtually invisible.

All advantages at a glance

- Compact pencil size
- Light weight
- Battery powered for convenience
- Fast and easy to use
- Clear button former
- Clear aligner abutment former
- Can be also used on most standard light-curing lamps
- Fast curing time
- Economical

User Instructions

Simply push the mold on the top of the Starlight Express or on your own light curing lamp.

Fill the preformed mold with your light-curing bonding or resin material in a syringe.

Etch the tooth as usual.

Press the Starlight Express™ lightly on the relevant tooth and cure according to the bonding/resin material instructions.

After curing remove the Starlight Express™ carefully with a small tipping motion and reveal your tooth colored button or aligner abutment bonded and ready to use.

Starlight Express order info

<table>
<thead>
<tr>
<th>Item #</th>
<th>Article Description</th>
<th>Sales Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP-Starlight Kit</td>
<td>Starlight Express Starter Kit with 2 button formers</td>
<td>1 Kit</td>
</tr>
<tr>
<td>DP-Star-Lamp</td>
<td>Starlight Light-Polimerisation Lamp</td>
<td>1 pc</td>
</tr>
<tr>
<td>DP-Star-Button</td>
<td>Starlight Express Button Former</td>
<td>2 pc</td>
</tr>
<tr>
<td>DP-Star Aligner</td>
<td>Starlight Express Aligner Abutment Former</td>
<td>2 pc</td>
</tr>
</tbody>
</table>
BAXMANN MINI TELESCOPE™

The new generation of Class II correction - comfort, strength and control with simple installation and activation

Dr. Baxmanns’ Mini Telescope is designed specifically to reduce and eliminate common problems experienced during Class II correction - undesirable intrusive molar forces, undesired protrusion, lack of control, breakage issues, complicated installations and activation:

With all flexible common Class II appliances the patient can easily hold the lower jaw backwards, this problem not only deforms or breaks the appliance, but also introduces undesirable intrusive forces on the molars. The BMT™ has been designed to control the patients lower jaw movement, as this jaw can no longer be held backwards, this eliminates the undesirable intrusive forces on the molars. The orthodontist can choose two options to best suit the patients needs. A rigid appliance, or as a soft bouncing appliance - adding the spring offers a softer more comfortable treatment, and the ability to overcome the differences in asymmetric cases easily. The force applied with either option still applies a rigid force and easily controls the patients jaw movement.

The BMT™ is designed specifically to attach easily and quickly to a headgear tube or lip bumper tube. Directly attaching to the buccal tube, eliminates uncontrolled forces being transmitted to the main arch, creating undesirable protrusion. Attachment is fast and easy as this system requires no prior lab work.

### Comfortable
Smooth, ultra low profile body for patient comfort - perfect for adults and children

### Durable
Laser welded components can withstand the repeated rigours of Class II treatment

### Easy installation
No lab work needed simply fix directly into either a lip bumper tube or headgear tube

### Easy activation
Springs or distance rings are used for fast and easy activation

### Lateral movement
Uniquely designed appliance allows for lateral movement of the lower jaw

### Mono & bilateral
Use it on both sides or only on one side

### One size
No lefts or rights - no need to stock different sizes or sides

### Buccal or lingual
Can be used with buccal and lingual appliances

#### Item # | Article Description | Sales Unit
--- | --- | ---
BMT-10 | Baxmann Mini Teleskop Office Kit | 10 pcs
BMT-2 | Baxmann Mini Teleskop Starter Kit | 2 pcs
BMT-SP | Baxmann Mini Teleskop Spring 100 mm | 1 pc
BMT-T | Baxmann Mini Teleskop Distance Rings | 5 pcs

Prof. Dr. Martin Baxmann
Winner of our SMART INNOVATION AWARD
For outstanding innovation in the treatment of Class II correction
FLEX DEVELOPER™

Durable and effective Class II Correction

“But even after continuous use for many months there is no breakage or loss of power.”

Dr. Winsauer, Austria

- Reliable
- Highly durable and flexible
- Eliminates breakage issues
- More comfortable / slim patient profile
- No loss of power
- Easy to install
- Customize your force per patient
- Customize your length per patient
- No storing of different sizes
- Correct Class II and use it for 7 more applications

The FLEX DEVELOPER™ is designed to deliver a reliable force between mandible and maxilla. The power derives from an elastic mini rod that can be thinned to enable a range of treatment forces. The force ranges from 1,000 grams to as little as 50 grams (10 – 0.5 N) and is individually adjusted for the perfect fit for each patient. This one of a kind elastic rod is highly durable, able to withstand the rigorous forces of treatment while maintaining its power and elasticity.
2.5 mio cycles - Unbreakable and long lasting elasticity

The FLEX DEVELOPER™’s mini rod was put through an Un test (in vitro). This test was stopped after 2,5 Mio. cycles, as practically no changes in the force deliverance rate could be observed. This equals 500 days of treatment time, if a bite rate of 5,000 cycles per day is estimated. Clinical testing proved optimal endurance and strength and has set a new benchmark for inter-maxillary force deliverance.

Length and force adaptability

The ability to customize the mini rod to your patients’ needs eliminates your need to stock many different sizes and forces. Length can be customized quickly, just measure and cut. Force can be customized easily by reducing the diameter of the mini rod, producing a range of forces from 1,000 grams to as low as 50 grams.

Reducing undesired effects

In contrast to effect of Class II mechanics with elastics’ where the forces increase and become more vertical with increased mouth opening (undesired), the FLEX DEVELOPER™ only produces a horizontal force just before tooth contact. The vertical force is negligible small. When the mouth is opened, it slides back passively, without force or side effect.

More comfortable and a slim patient profile

The FLEX DEVELOPER™’s mini rod offers the added benefits of streamlining this appliance, less material and increased ultra-smooth comfort of the appliance.

Applications

• Distalising upper molars (HG-like)
• Mesialising lower molars or premolars (Aplasia or after extractions)
• CI II-corrections between upper and lower dental arch
• Helping to grow the mandible forward
• Retrusion of upper incisors
• Protrusion of lower incisors
• Midline corrections (unilateral application)
• Unilateral dental CI II correction (unilateral application)
• Space closure (even single-sided) in the mandible (aplasia)

Unique features

• Reliable
• Highly durable
• Length adaptable to individual need
• Force adaptable to individual need
• Lasting elasticity
• Relockable anterior piece
• Measuring gauge for quick installation
• Can be combined with lip bumper or headgear
• Securing mini disc for pin safety
• Auxiliary bypass arch pre-bent for precise function
• Small and streamline -- more comfortable
• Easy to install

FLEX DEVELOPER™ order info

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Sales Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDS-KIT</td>
<td>FLEX DEVELOPER Starter Kit 5 Patients</td>
<td>1 kit</td>
</tr>
<tr>
<td>FDA-KIT</td>
<td>FLEX DEVELOPER Refill Kit 5 Patients</td>
<td>1 kit</td>
</tr>
</tbody>
</table>
Fogged up mirrors make intraoral photography time consuming and frustrating.

The TRUEOPTICS™ handle continuously blows a light steady flow of air across the mirror, eliminating the production of fog and the built-in LED lights create fast, easy brilliant optics.

Picture quality is directly dependent on the quality of the dental mirror. To achieve high quality dental photos good enough for research, teaching, marketing or presentation of cases, the mirror should reflect with exceptional exposure optics.

Built-in ventilation for a fog-free mirror

Ideal long fluted handle provides optimal positioning and handling and supplied with custom made disposable plastic bags for optimal hygiene

Brilliant, high-quality image reproduction

Rhodium free - significantly improves resistance to scratches

LED for clean bright visibility and easy camera focusing

Mirror cassette provided for convenient sterilization and storage
Cheek retractor
Permits an unobstructed view

Sterilization Cassette Tray
Holds up to 4 mirrors

Lip retractor
Permits an unobstructed view

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRC</td>
<td>Cheek retractor Columbia CRC, ca. 135mm, distances 30mm &amp; 42mm, stainless steel</td>
</tr>
<tr>
<td>CRLA</td>
<td>Lip retractor CRLA, ca. 160mm, for upper + lower jaws, stainless steel</td>
</tr>
<tr>
<td>FSFD01</td>
<td>Intraoral Photo Mirror 01, Occlusal, Front Surface, for adults, Material: stainless steel</td>
</tr>
<tr>
<td>FSFD02</td>
<td>Intraoral Photo Mirror 02, lateral, Front Surface, for adults, Material: stainless steel</td>
</tr>
<tr>
<td>FSFD03</td>
<td>Intraoral Photo Mirror 03, Occlusal, Front Surface, for adults, Material: stainless steel</td>
</tr>
<tr>
<td>FSFD04</td>
<td>Intraoral Photo Mirror 04, lateral, Front Surface, for adults, Material: stainless steel</td>
</tr>
<tr>
<td>FSFD05</td>
<td>Intraoral Photo Mirror 05, occlusal, Front Surface, for children, Material: stainless steel</td>
</tr>
<tr>
<td>FSFD06</td>
<td>Intraoral Photo Mirror 06, lateral, Front Surface, universal, Material: stainless steel</td>
</tr>
<tr>
<td>FSFK43</td>
<td>Photo mirror tray FSFK43 for 4 mirrors, stainless steel, 290x187x35mm, incl. Silicon rails &amp; clothing crossbar</td>
</tr>
<tr>
<td>FSFK02</td>
<td>Storage case for photo equipment (empty), 360x300x105mm, anodized aluminium, incl. customized foam parts, lockable</td>
</tr>
<tr>
<td>FSG2</td>
<td>Photo Mirror handle FSG 2, 155mm, anod. Aluminium, inclination angle 0-45° universal, for mirror gauge 1.5 - 3.0mm</td>
</tr>
</tbody>
</table>

Further combinations are available on request!
REFLEX COMMUNICATOR™

“Visible dangers frightens us less than the imaginary” William Shakespeare...

• Increase patient understanding
• Increase patient cooperation
• Decrease patient fear

This proven simple solution to the age old problem of communicating effectively with patients. The Reflex Communicator™ is an inconspicuous mirror attached securely to the operating light, allowing the patient to view his or her mouth directly, and observe what is happening. An excellent tool for easing fear and tension, and freeing the orthodontist to concentrate on intricate procedures. The light and mirror are positioned onto the mouth and encourages patients to stay still as this is the only position to watch. No necessity to reposition the lamp.

Ideal for:
The Reflex Communicator™ is a particularly useful accessory during intraoral procedures involving orthodontics, oral hygiene instruction and also during consultation when description and advice is needed.

For those not interested in seeing what is happening in their mouth the orthodontist can easily deflect the mirror by simply pressing the colored buttons.

Reflex Communicator order info

<table>
<thead>
<tr>
<th>Item</th>
<th>Article Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFIX</td>
<td>REFELEX Communicator, 90 mm</td>
</tr>
<tr>
<td>RFIX-7000</td>
<td>REFELEX Communicator, 70 mm</td>
</tr>
<tr>
<td>RFIX-90S</td>
<td>REFELEX Communicator, 90 mm complete w/adapter for Siroux-Lamp</td>
</tr>
<tr>
<td>RFIX-70S</td>
<td>REFELEX Communicator, 70 mm complete with Adapter for Sirolux - lamp</td>
</tr>
</tbody>
</table>

The Reflex Communicator™ can be attached in the center of most lamps at the solid center.