25 years - around the globe

research - design - manufacturing - distribution
HOW TO SUBMIT YOUR LINGUAL CASE
WE WILL GUIDE YOU STEP BY STEP

1. Prepare your Silicon impression
2. Fill out lab order form and create your treatment plan
3. Ship all relevant data to Adenta USA
4. A wax based set-up with the required tooth positions is made
5. Lab contacts you to review, change and authorize your set-up
6. Your bracket and wires are customized
7. Lingual lab returns your customized set-up
8. Patient bonding can now be completed
**IMPRESSIONS**

A-Silicone-based impression tools and tips

The aim is to provide an accurate representation of the malocclusion using an A-silicone-based impression and a corrective impression.

**Preparation for the impression**

Dental cleaning:
The teeth should have no deposits such as plaque or tartar. Use prophylactic measures where necessary.

Undercuts:
Crowns with border seals and provisional crowns are especially at risk of coming loose as a result of the dental impression.

Strong undercuts should therefore be blocked out with wax in advance. Interlinks must also be blocked for bridges. All dental caries should be completed by this date. Any new restorative work should, if possible, be postponed until the orthodontic treatment is complete.

**Taking the perfect impression**

A. Knead the individual components of the putty material together in equal parts (note the handling instructions provided by the manufacturer). Do not use latex gloves during this process, as this material affects the setting properties of the silicone compound. Place slightly more putty in the distal area to create an edge-like boundary. Rarely does the tray have to be customized with boxing wax.

B. Now place Plicafol separating foil on top of the putty and apply gentle pressure. Fold back or cut off the overlapping parts of the separating foil.

C. The initial impression can now be taken from the patient. Forcefully press the tray filled with putty and covered by the foil onto the teeth of the patient. Keep the tray in place by equally and centrically applied constant pressure, so the foil and the putty will surround the teeth – use two fingers in the maxilla on each side and one thumb in the mandible on each side. Push back any putty that spread past the tray with the dental mirror towards the last teeth to be molded.

D. Move the tray up and down and slightly back and forth immediately after positioning. Doing so ensures that no overlapping areas/undercuts remain and that a large enough space layer is created. Moving the tray allows for the assessment of the repositioning capability of the tray for the later, second impression phase. The up and down movement is especially important in the mandible, where the teeth lean towards the tongue.

E. Take out the tray and remove the foil after the putty is set. Due to the pronounced elasticity of Plicafol, there will be no perforations or folds. The result is a custom made tray without undercuts, showing rough tooth indentations and a defined space layer. The surface is uncontaminated by saliva or blood.

**Second Impression - apply free-flowing silicone**

To make the second impression-taking is easier and more comfortable for the patient, any excess putty compound on the edge of the tray should be cut off. However, anything up to 5 mm from the sulcus should be left in place.

A. The following steps represent the actual impression taking. Foil impression is much more comparable with the one-step impression technique than with the two-step dental impression technique. Fill free-flowing silicone of medium consistency into the pre-impression in a thickness of 3 mm. Put the filled tray aside briefly.

B. Coat the teeth, starting at the gingiva in the occlusal direction, coat the air-dried teeth with free-flowing silicone of medium or low consistency by use of the proper syringe until they are covered completely.

C. Bring the filled tray evenly and with moderate pressure into position. Hold it in place until the silicone is completely set. Now the impression is finished and can be removed.

**Impressions Using Bands:**

If the impression is taken using bands, please ensure a sufficiently large impression tray is used given the usual buccal attachments. The attachments must also be adequately covered with dental wax for the putty impression in order to create the space required for the corrective compound. The impression can now be taken using the putty compound and Plicafol. However, if the impression is taken without using bands, please enclose the appropriate bands for the impression. The bands will be transferred to the model teeth as part of the work undertaken in the laboratory.
# ORDER FORM

**For patient**

**Planned bonding appointment**
- Date
- Time
  - [*approx. 3 weeks after impressions]*

## Treatment plan

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Upper jaw</th>
<th>Lower jaw</th>
<th>Pretreatment</th>
<th>Brackets</th>
<th>Treatment plan:</th>
</tr>
</thead>
<tbody>
<tr>
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<td>copy attached</td>
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<tr>
<td>ATR (stripping)</td>
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<tr>
<td>(Achilles Tendon Rupture)</td>
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<tr>
<td>Teeth which will retain in the same position</td>
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</tbody>
</table>

## Bolton-discrepancy

- Upper jaw: [ ] yes [ ] no
- Lower jaw: [ ] yes [ ] no

**Extraoral**

- Anterior Tooth Torque: [ ] yes [ ] no

**Overcorrection desired?**

- [ ] yes [ ] no

**Anchoraging**

- [ ] yes [ ] no

**TransPalatal Arch (TPA)**

- [ ] yes [ ] no

## Archwires

**Heat activated**

- [ ] Steel .016
- [ ] Stainless .016
- [ ] Duradent 16 x 22
- [ ] Trident 16 x 16
- [ ] Ultratherm 16 x 16
- [ ] Ultratherm 16 x 22
- [ ] Ultratherm 17 x 25
- [ ] Ultratherm 18 x 18

**Incisals Premolars Molars**

<table>
<thead>
<tr>
<th>Incisals</th>
<th>Premolars</th>
<th>Molars</th>
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<tbody>
<tr>
<td>Upper</td>
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<td>Upper</td>
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<tr>
<td>Lower</td>
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<td>Incisals</td>
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<tr>
<td>Lower</td>
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</tbody>
</table>

**Additional order options:**

- Customized wires
- Individual caps
- Re-positioning of set-up
- Distalizers
The SMART Lingual indirect bonding system provides a secure, repeatable, fast and precise method customized to the patients’ case and habits of the practitioner.

Straight wire appliances make it imperative that the brackets be positioned with accuracy in order to fully exploit the interaction of their written prescription. The SMART Lingual indirect bonding system offers the orthodontist the precision of the Hiro technique with the speed and efficiency of a full bonding tray, or individual tooth cap. You choose which option works best for you - or combine the advantages of both options for ultimate customizing to best suit your needs. This system has complete flexibility, even teeth that are difficult to isolate or re-bonds are simple and easy to handle.

BONDING OPTIONS

EVOLUTION SLT™ SMART CAP™ LINGUAL BONDING SYSTEM

Individual SMART CAP™ indirect bonding cap

Full tray SMART CAP™ indirect lingual bonding

SHIP TO YOUR LINGUAL LAB

Please always send your lingual case in a shipment that can be tracked easily.

Include the following in your shipment:
• Patients RX treatment plan - completed lab form
• A silicon impressions
• Cephalometry chart
• Panoramic and lateral x-rays

INDIRECT BONDING TRAY OPTIONS

2

3

GERMANY
Owner: Thomas Halbich
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Bonding methods:
EVOLUTION SLT™ Smart Cap indirect method
EVOLUTION SLT™ Smart Jig indirect method
JOY™ indirect modified Hiro method

SPAIN
Lingual Orthodontics
LADENT LAB
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E-mail: n.pescic@centroladent.com
Internet: www.centroladent.com

Bonding methods:
EVOLUTION SLT™ Smart Cap indirect method
EVOLUTION SLT™ Smart Jig indirect method
JOY™ CLO2 indirect method
LAB10 CERTIFIED

USA
Owner: Remo Sagastume
ORTHO LINGUAL LAB
2201 Dellcrest Lane, Spring Valley, CA U.S.A 91977
Phone: (619) 469-4356 Mobile Phone: (858) 945-0923
Email: remo@ortholingualab.com
Internet: www.ortholingualab.com

Bonding methods:
EVOLUTION SLT™ Smart Cap indirect method
EVOLUTION SLT™ Smart Jig indirect method
JOY™ indirect modified Hiro method
A wax setup with the required tooth positions are made.

Our lingual lab will now contact you via email with digital photos of the wax set-up in ideal occlusion.

At this time you can completely review all angles of this model, and continue to make further changes or authorize for lingual bracket and tray fabrication to start.
YOUR CUSTOMIZED INDIRECT BONDING KIT

- Sturdy shipping case
- Malocclusion model
- Model of the ideal occlusion
- Indirect bonding trays with brackets (full or individual tray)
- Preformed .018 x .025 Stainless Steel archform templates. Full customized wires included
- All materials stored in well organized storage box

BONDING PROTOCOL

1. Click the Quick Stick onto the Quick Base.
2. Press from the inside to the outside to secure the cap on the tooth.
3. Loosen the cap and the bracket cartridge from the tooth by moving from the outside to the inside.
4. Light cure
5. The used caps must be cleaned with a disinfectant solution or alcohol and stored in the cap case after being removed from the oral cavity.
6. Connect the Quick Stick to your instrument (e.g. bracket opening instrument)
7. Clear wing cap designed to fit snugly to the corresponding tooth.
8. Red wing cap is the modified form. The red plastic surfaces are supporting surfaces to the adjacent teeth. This type of cap offers completely secure form-fitting application without any slippage on unclear tooth surfaces (tray effect).

Recommended products:
- 3M Transbond XT - Light Cure adhesive primer
- 3M Transbond™ MIP Moisture Insensitive Primer
- Assure Primer
- 3M Unitek — Transbond LR
- 3M Unitek — Transbond Supreme LV
BONDING PROTOCOL

Using the SMART CAP & TRAY combination

The tray is designed so that the fixed plastic caps are embedded within the silicone tray and easy designed to easily compensate for any positional deviation of the teeth (impression appointment–bonding appointment).

Note regarding the full tray: If there is limited space for all caps to be bonded at once, then individual caps can be omitted accordingly, and can be either bonded individually or placed back in the silicon tray for 2nd bonding stage.

Full tray

Handling the full tray:
- After the bonding process (number of caps, segmentation) has been defined, the tooth surfaces must be prepared accordingly.
- Apply Transbond Supreme LV to the composite bases.
- Position the tray. Hold in position on the row of teeth with a small amount of pressure.
- Cure intensively with light (check curing light).

Every other tray

Handling an every other tray:
- The two trays are used one after the other. Only every second bracket is bonded in this procedure. The advantage is that there are optimal space conditions for light polymerization.
- See also single tray.
- We recommend bonding molars separately.

Removal of the silicon tray

The silicone tray is removed by its end from the ball heads of the quick base. Support this procedure with your finger, keeping the caps pressed down on the tooth surface from the vestibular.

Removal of SMART CAPS

Loosen the cap and the bracket cartridge from the tooth by moving from the outside to the inside.

NOTE:
The used caps must be cleaned with a disinfectant solution or alcohol and stored in the cap case after being removed from the oral cavity. Do not discard the caps.

RE-BONDING WITH THE SMART CAP

Rebonding instructions with the Adenta Evolution SLT bracket

1. Insert the bracket into the SMART Cartridge
2. Push bracket into the SMART Cartridge using your fingernail
3. De-grease the bracket base with alcohol/acetone and apply composite
4. Rub the composite into the bracket base
5. Apply the surplus of composite
6. Hold the cap while pressing it down on the cast in a form-fitting manner and light cure

Rub the composite into the bracket base