

Treatment of dental and skeletal Class IIs remains a major concern for orthodontists. Hubert Droy, a dental prosthodontics technician specializing in orthodontics for the past 15 years, has thought long and had about the conventional systems.

Attentive to orthodontists' needs and drawing on his own ideas, he first devised in 2007 an innovative mandibular propulsion system, the Optimax laboratoire, equipped with non-dismountable vertical ball and socket joint which is both compact and perfectly adapted to the physiology of mandibular movements. This system has been tried and tested on numerous prototypes and has proven its efficacy in the propulsive correction of Class II malocclusions while enhancing patient comfort, the quality of sagittal discrepancy corrections and occlusion stability. The combination of a multi-attachment appliance and Optimax Lab has also been possible thanks to the adoption of an original retention system by means of molar hooks as well as the use of slide tracks. Optimax Lab is CE certified by the LNE (the French national test laboratory), a sure guarantee of quality. Since 2009 and Hubert Droy's encounter with the orthodontist, Dr Benoit THEBAULT, Optimax Lab has been improved still further to provide a system which is now totally reliable, meeting the needs and demands of both patients and practitioners.

Pooling their creativity, they have now developed Optimax Lab into Optimax Fix. The guiding principle underlying Optimax Fix has been to preserve the innovative solutions provided by Optimax Lab (comfort, functionality, reliability) and to combine them with a global multi-attachment technique while eliminating as far as possible the defects of existing systems (unwanted parasite movements, debonding, etc). Thus, Optimax Fix still boasts the efficacy and functionality of the original appliance, ensuring comfort, esthetics and the integrity of the multi-attachment appliance while reducing to a minimum any undesirable dental effects, notably at the mandibular incisors.

Class IIs, however, are not all of mandibular origin. Maxillary dental retraction, combined or not with mandibular dental advancement, is another possible cause. In order to achieve immediate distalization of the lateral segments without prior levelling, Optimax Distaler was devised. The distalizing force is provided by inter-maxillary traction supported by mandibular anchorage or by elastic modules secured to temporary anchorage devices (TADs). The Optimax Distaler can also be used on the mandible.

In summary, Optimax Laboratoire, Optimax Fix and Optimax Distaler, gathered under the "Optimax Global Class II treatment" concept, offer a broad range of therapies capable of resolving the majority of non-surgical Class II treatment indications.

The Optimax system

- ★ A system suited to all patients
- ★ A system suited to all practitioners
- ★ A system adaptable to all techniques

Optimax Lab	Nom	Références
Kit Lab N° 1	Optimax Lab Kit N° 1	92-3001-0000
Kit Lab N° 2	Optimax Lab Kit N° 2	92-3002-0000
Kit Lab N° 3	Optimax Lab Kit N° 3	92-3003-0000
Stop Forward 1 mm (X 20)	Stop Forward (X 20)	92-3010-0000
Stop Forward 2 mm (X 20)	Stop Forward (X 20)	92-3020-0000



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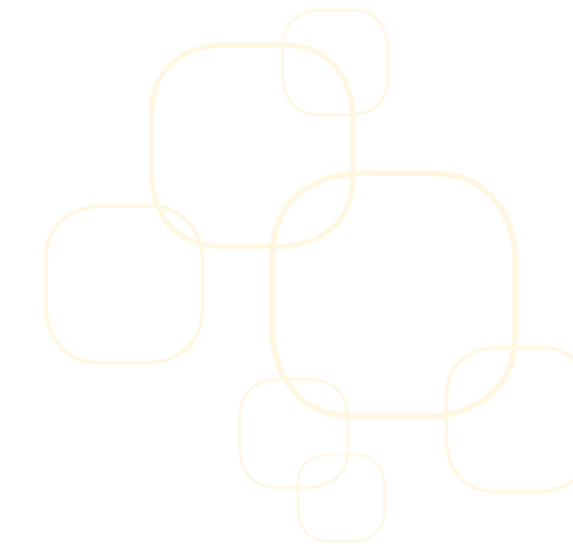
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Modus Operandi



Hubert DROY (Designer)
and Doctor **Benoît THEBAULT** (Qualified DFO specialist)

Optimax lab (O.Lab) is not just a removable mandibular propulsion system.

- Anchored to the maxillary and mandibular 6s, it provides optimum retention, thus making for an evolutive multi-phase system.
- Its vertical ball and socket mechanisms make for a more compact design and guarantee perfect function.
- The systems smaller size and greater patient comfort ensure easier patient compliance and predictable results.

Step 1 : Impressions

ACCORDING TO THE MODE OF TREATMENT

First-line leveling :
First-line leveling is preferable in cases where the mandibular propulsion test reveals the presence of occlusal interference.



- If the leveling is done first-line, bonding can extend from 15 to 25 and at the maxilla and from 32 to 42 at the mandible.
- If 17 and 27 are on the arch, bonding can extend from 16 to 26. The O.Lab retention hooks are then shaped around the second molars.

Step 2 :

1. Alginate and impression-taking. Before impressions are taken, retention wedges are bonded on:
 - the buccal upper 6s
 - the buccal lower 6s

= maximum retention
= improved positioning of the Optimax Lab retention hook



2. Occlusal wax-bite
 - Moyco wax or pink wax.
 - Shaping and exposure of the incisor segment.
 - Marking of indentations in the mouth.

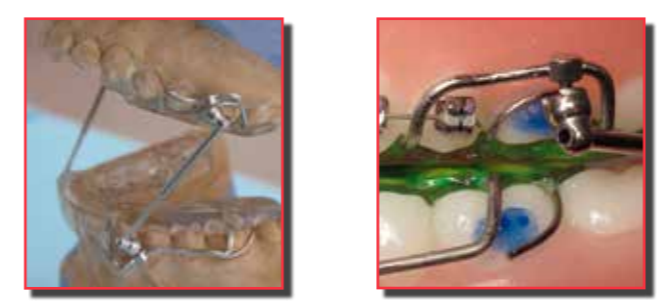


Greater visibility of the incisor block in order to manage the amount of propulsion and the vertical dimension.

3. Design

With completely open mouth:

- The vertical ball and socket hinges permit optimal functional movements. (mouth-opening, lateral movements).
- Retention is ensured by the hooks.



Beware of interference between the propulsion system and the composite surfaces.

Step 3: try-in

- Hook adjustments = ideal retention.
- Verification of functionality:
 1. Retention at maximum mouth opening



2. Right and left lateral movements, to ensure absence of interference.



Step 4 : Appliance worn 24/24

- On average, Class II correction takes 6 months if the O.Lab has been worn sufficiently.
- Adjustments during propulsion. Positioning of the propulsion ring. Positioning of the ring at the extremity of the rod and cinching, if needed.



Nota Bene 1 or 2 mm propulsion ring according to the amount of propulsion required.



Step 5 : Following achievement of Class I

- Management of lateral segment extrusion while maintaining the Class I occlusion. The O.Lab is worn from return home from school until the evening meal, then at night (12 to 14 hours) until correct occlusal interdigitation is achieved.



- The hooks on the 6s are kept in place. The composite at the premolar region and at the intrados of the maxillary 6s is reamed to allow correct occlusion.



- The maxillary metal framework is cut mesial to the ball and socket hinge in order to allow maximum exposure of the maxillary lateral segments.

Step 6: leveling

- Maxillary and mandibular leveling can be initiated during the stabilization of the Class I occlusion stage.



Nota Bene: if second-line leveling is performed, bonding can extend from 5 to 5 or 6 to 6 at the maxilla (depending on the position of the retention hooks). At the mandible, the multibracket appliance is applied from 32 to 42.



Step 7 - finishing

- Discontinuation of the O.Lab.
- Transition of complete multibracket system.
- Finetuning of intercuspation using Class II elastics,
- Debanding.
- Conventional supple or rigid splint-type retainers.
- In extreme cases, involving risk of relapse, an Optimax Lab retainer may be needed.

