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Functional And Cosmetic Excellence

FACE Evolution System

EN

FORESTADENT®

GERMAN PRECISION IN ORTHODONTICS

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The Prescription

The orthodontic community has changed enormously in the last few years. In a competitive setting where sales of cosmetic products make up the majority of orthodontic treatments, we must today more than ever restate our belief that the present and future of our profession are based on clinical excellence. We understand orthodontics as a speciality whose purpose is integral oral health, in addition to aesthetics. Therefore, the aims of a stable functional occlusion, in addition to dental and facial aesthetics, are goals that cannot be waived.

Over many years, our group has accumulated a vast amount of clinical experience, which has been backed by clinical studies and evidence and which, little by little, has led us on the path to excellence. Nothing has changed in the philosophy we defend. It is still the guide that focuses us on attaining our aims.

However, the onset of new technologies in the last few years, in diagnostic as well as in mechanical aspects, has led us to compare factors not possible to determine previously. This obliges us to query certain aspects of tooth positions and other mechanical options.

A painstaking investigation backed by clinical evidence enables us to update our technique and determine more precise values for the prescription, to help us to resolve common problems and focus more easily and quickly on achieving our aims.

We are proud to present FACE EVOLUTION.

Domingo Martín
FACE Group Chairman

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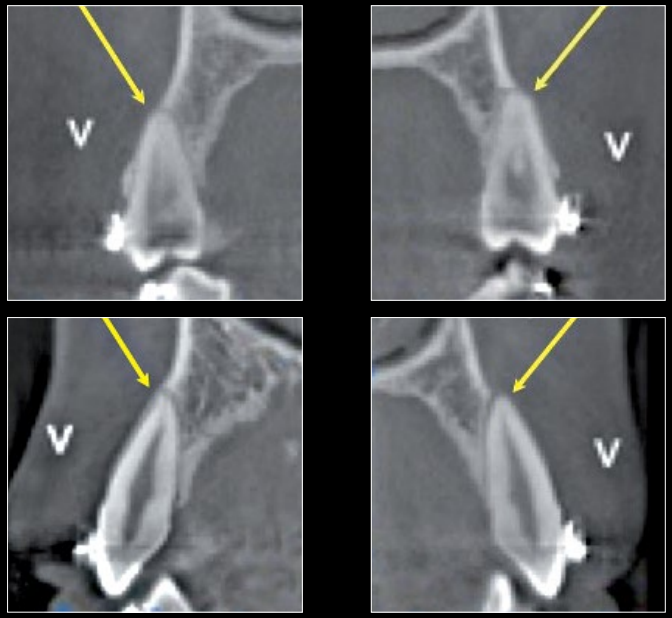
The Prescription.

Since the introduction of the straight wire appliance in 1970 by Lawrence F. Andrews, several prescriptions have arisen that modify some torque, angulation and rotation values. However, they basically maintain almost all of Andrews' original prescription values. In most cases, these modifications seek to resolve certain aspects of orthodontic biomechanics, while in some cases not even a clear justification for the changes can be found.

The latest developments also reveal that the concept of variable prescriptions has taken over the single prescription to treat the entire spectrum of orthodontic abnormalities.



Tomography that reveals the radicular position of the upper premolars 2 months after inserting a .019"x .025" steel archwire in a bracket with a torque of –7°.

Tomography that reveals the radicular position of the upper canines with straight arch brackets with –2° torque, 2 months after inserting a .019" x .025" steel archwire.

Technological progress imposes new challenges on us: among them Cone Beam Computed Tomography (CBCT), which provides us with a view of a reality we cannot deny and which will without doubt change many of the concepts of traditional orthodontics.

Studies performed with this diagnostic method reveal that a significant percentage of individuals show dehiscences and fenestrations before orthodontic treatment.

In addition to the above, CBCT examinations performed during the final stages of treatment reveal a disturbing rate of roots outside the bone in different sectors of both jaws. This questions many of the negative torque values used in most prescriptions.

We admire the contribution made by Andrews, as one of the most important advances in orthodontics but everything appears to indicate that the values advocated by him, obtained from his sample of "abnormal orthodontics patients", are not applicable to all orthodontic cases. Especially not to those exhibiting poor apical bases and/or thin periodontium which is a quite common situation.

Our hypothesis is that the individuals studied by Andrews had ideal occlusion, most probably because of their correct basal and alveolar development. A very different situation to that evident in most patients we treat in daily practice. It goes without saying that at the time of performing this research, the diagnostic methods we have today were not available.

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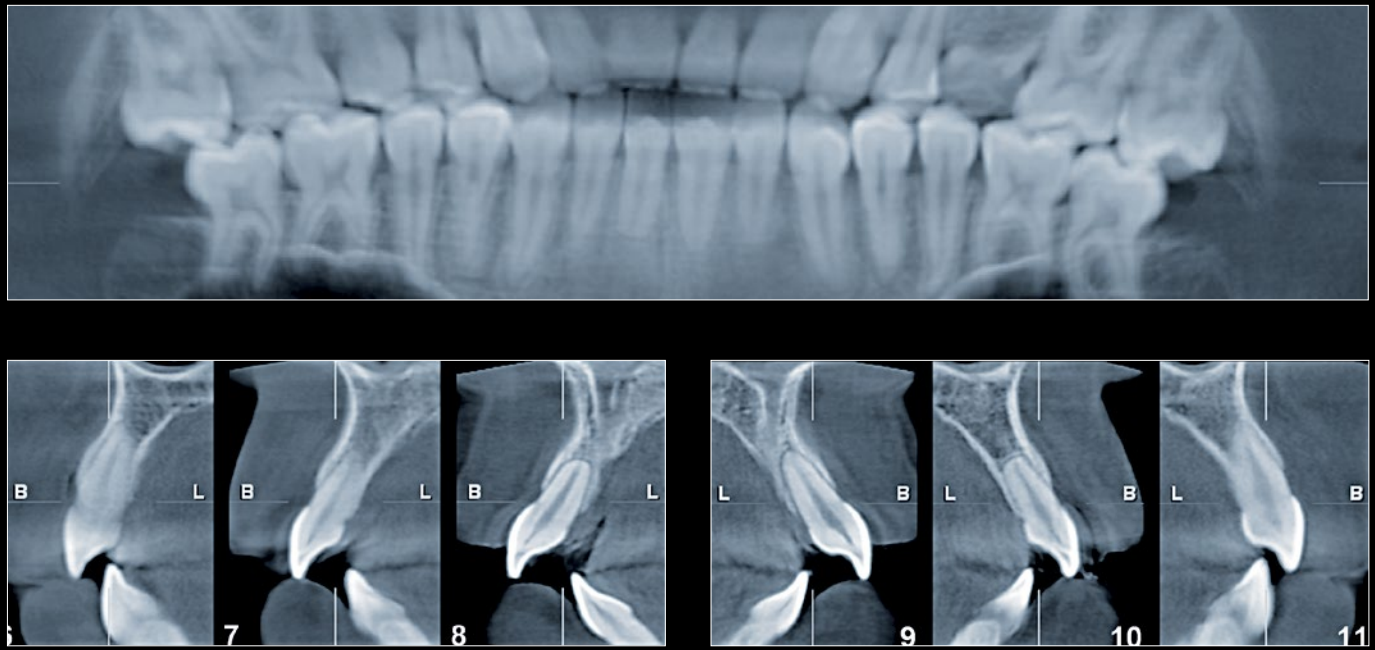


Difference between the information supplied in regard to bone by Orthopantomography and Cone Beam Computed Tomography.

FACE EVOLUTION Prescription

Torque modifications

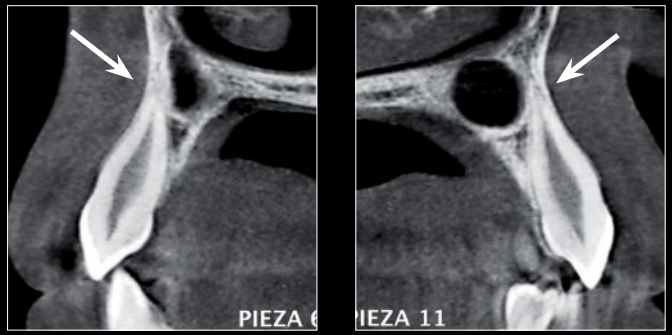
As we explained, extensive clinical research has enabled us to tackle and resolve the problems revealed on CBCT. Previously we had not been able to observe the thickness of the vestibular and lingual alveolar bone available for orthodontic movement. X-ray examinations only show the mesial and distal bone levels in the dental roots and it is not uncommon to see, thanks to CBCT, that the available vestibular or lingual bone of the teeth limits or even forbids certain kinds of movement.

This reality is especially common for the lower incisors and upper and lower canines, but can also be observed in any other area of the jaws.

Torque in the canines

At the canines the vestibular bone is usually thin while the palatal side is significantly thicker. Very often the prominence of the canine roots is so obvious, that different clinical approaches are necessary.

In these cases, the CBCT will show a very thin layer of vestibular cortical bone, and sometimes a bone fenestration that contraindicates any root movement in vestibular direction.



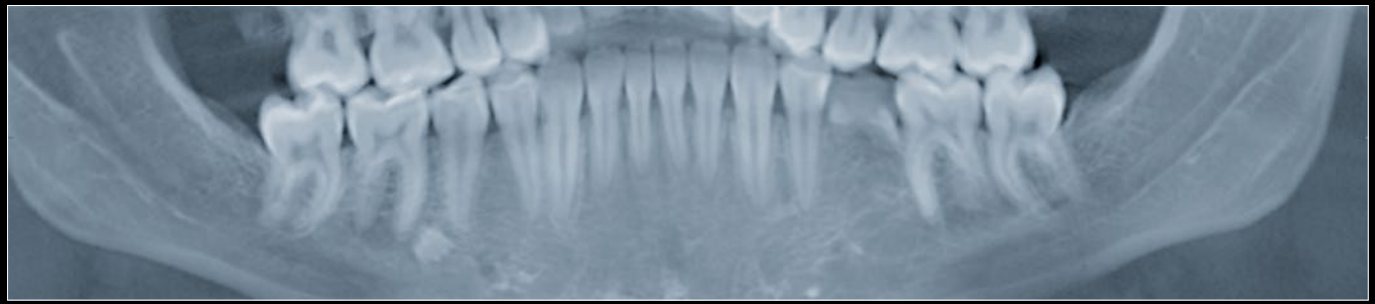
Tomography revealing the most common situation in canines: a very poor or no vestibular bone, which contraindicates any kind of negative torque.

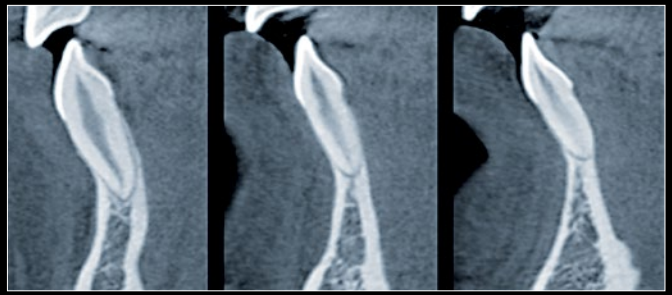
Clinical picture which clearly shows the radicular prominence and especially delicate periodontal situation in the upper canines.

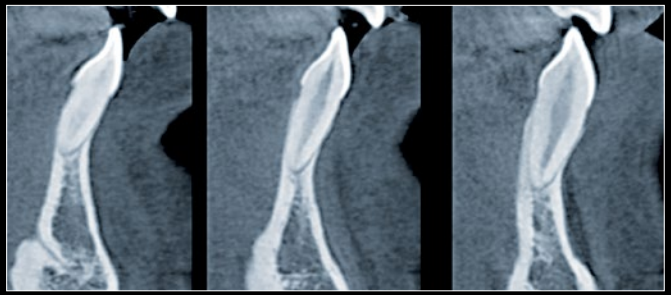
After using a .019" x .025" rectangular archwire with brackets with a torque of –2° in the upper canines, it can be seen that the radicular problem is exacerbated further.

This quite common situation is the basis for our torque modification from –2° to +3° in the upper canines and from –11° to –6° in the lower canines.

In those cases of extreme root prominence, FACE EVOLUTION suggests to move the root into the cancellous bone by means of a specially designed bracket. This bracket, which we call a working bracket and which we will explain below, has a positive torque of +20° for upper and lower canines. The objective sought with this bracket, is to quickly bring the canine root to the lingual cancellous bone. This torque may appear excessive, but it barely leads to sufficient movement, as its effect is higher on a crown than at the root level. And in cases of fenestrated roots, it enables us to achieve a recoating of the defect with bone. Once the expected effect is obtained, we switch the working bracket to the standard prescription bracket (+ 3° or 6°).







The CBCT image shows the bone limitations for movement of the incisors.

Torque in the lower incisors

For the lower incisors FACE EVOLUTION offers brackets with a torque of –1° and –6°, which we can transform into +6° by simply inverting the position of the -6° bracket.

While it is true that theoretically the bracket for lower incisors with +6° would be ideal to compensate Class II malocclusions and to give a correct anterior anchorage, for cases of minimum anchorage (and the opposite with –6°), the truth is that the choice of incisor torque will mainly be determined by the available alveolar bone in each case. The bone factor is the most important variable for the selection of torque and tooth inclination and for the possibilities of anterior expansion, protrusion and retrusion.

This way the prescription incorporates the important goal of periodontal health.

Picture of a tube of a known brand that reveals the features of the slot and the lack of rectangular form of a .019“ x.025“ steel archwire. Obvious explanation of the lack of efficiency to produce torque.

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Torque in the molars

Another area in which the torque has been modified is that of the upper molars. Any orthodontist concerned about obtaining a functional occlusion knows that premature contacts in the second molars are very common. This is mainly due to the existence of positive molar torque, marked by "hanging" palatal cusps which interfere with the mandibular closure as it occludes with the tip of the antagonist cusps. This commonly also leads to interferences in excursive lateral movements of the jaw. The problem we face clinically is that the straight archwire is commonly inefficient when correcting molar torque, even when using .021" x .025" steel archwires. Therefore we are forced to use transpalatal bars and/or compensation bends in the archwires.

One of the causes of this inefficiency is the play presented by the arches in the lumen of the tubes. Several studies have demonstrated that this play is because of a slight oversizing of the bracket slots and tube lumens and also the fact that the archwires are often slightly smaller than stated by manufacturers and often even have rounded edges. Tests performed with tubes from several companies reveal torque losses of up to 26° with .019" x .025" steel archwires and up to 11° with .021" x .025" archwires.

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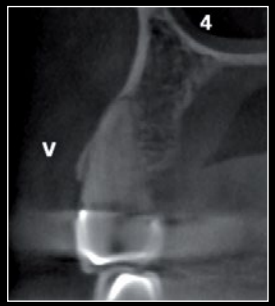
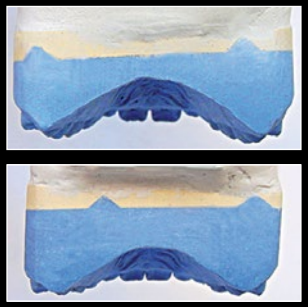
Tomography that reveals this clinical situation in a 2nd upper left molar. In this case with appropriate bone for torque correction (V: vestibular).

Common situation especially in the upper 2nd molars with positive torque, which not only leads to increased occlusal vertical size but also to interference with centric and eccentric mandibular movements.



Tomography showing the root situation to consider during torque correction (V: vestibular).



Models showing the situation before and after the torque correction of the 7s.

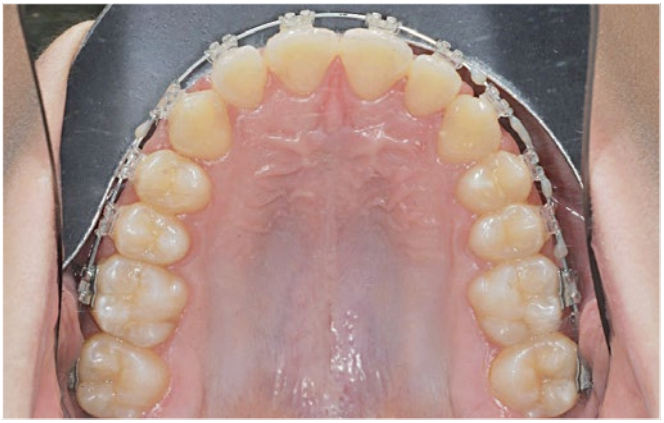
To resolve this problem, a negative torque of –30° has been introduced into the upper molar tubes, which allows us to compensate the play of the wires in the tube and correct the torque effectively. However, special care must always be taken in regard to the amount of available bone, because in some cases this could even contraindicate any kind of movement. We would like to emphasize the fact that the aim of this modification is not to attain a torque of –30°, but rather that this is a way of compensating the torque loss of the archwires in the tubes, to attain the torque of -14° specified by Roth which in turn is an overcorrection of the -9° torque recommended by Andrews.

To summarise, the differences in torque, compared to Roth's prescription, are found in the upper and lower canines as well as on the upper molars. Additionally the system is complemented by the alternative for lower incisors with -6° and +6°.

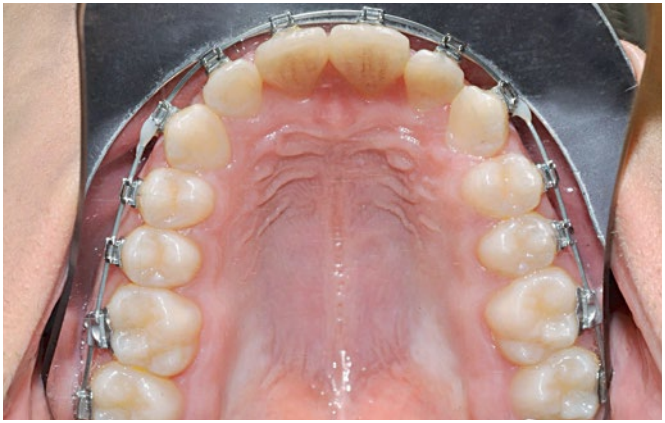
Rotations

One of the attributes of the Roth prescription is the excellent anchorage obtained, to a large extent thanks to the distal rotation produced in the upper and lower molars. However, this feature which is so useful for retrusion of the anterior teeth turns into a hindrance in two situations: first, in cases of minimal anchorage, especially in the lower jaw. Secondly, when trying to achieve a suitable finishing, since a correct intercuspidation and correct coordination of the antagonistic molars are not possible.

Indeed, virtually 100% of patients treated with this prescription, analysed in centric relation, show interferences with the bite closure, especially in the area of the second molars. In Roth's philosophy these interferences are resolved by a gnathologic positioner after debonding of the appliance. This situation results from the loss of alignment of the occlusal mesio-distal sulci of both upper and lower first and second molars.



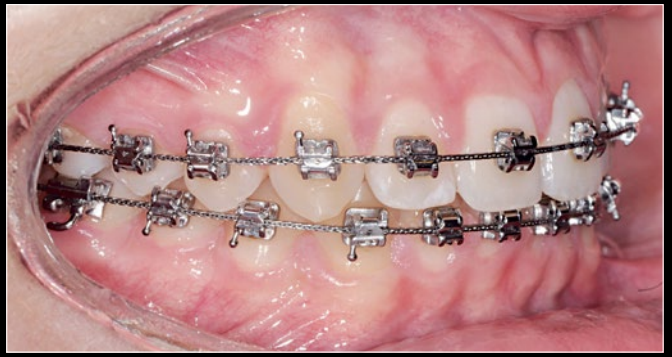
Occlusal photo that presents correct alignment of the mesiodistal sulci of the molars and premolars, a fundamental aspect to attain correct occlusion. The tubes used have a distal rotation of +10°.



Occlusal photo that reveals the misalignment of the marginal ridges of the first and second upper molars, with tubes of +14° distal rotation.

The reason for this loss of alignment is found in the 14° distal rotation in the first molars, as a consequence of an antagonistic reciprocal effect in the second molar, which is displaced towards the vestibular region. This undesired movement occurs when applying positive rotations above 10°, a usual situation in normal prescriptions, and conversely, does not appear when the rotation of the first molar is +10°. To obviate this problem, we have maintained +10° rotation in the upper molars and 0° rotation in the lower molars, as advocated by Andrews. This enables perfect finishing in most cases and at the same time facilitates space closure in cases of minimal or medium anchorage.

The Prescription



Working Prescription and Finishing Prescription

FACE EVOLUTION incorporates a new concept into orthodontic biomechanics: the Working Prescription and Finishing Prescription.

The Working Prescription comprises the temporary use of specific tubes and brackets in certain situations, in order to facilitate the achievement of certain tasks.

The Finishing Prescription is the standard FACE EVOLUTION prescription, allowing for a good finish in a high percentage of cases, without the need to bend the archwires. Necessary adjustments should be made in some situations due to minor anatomic variations.

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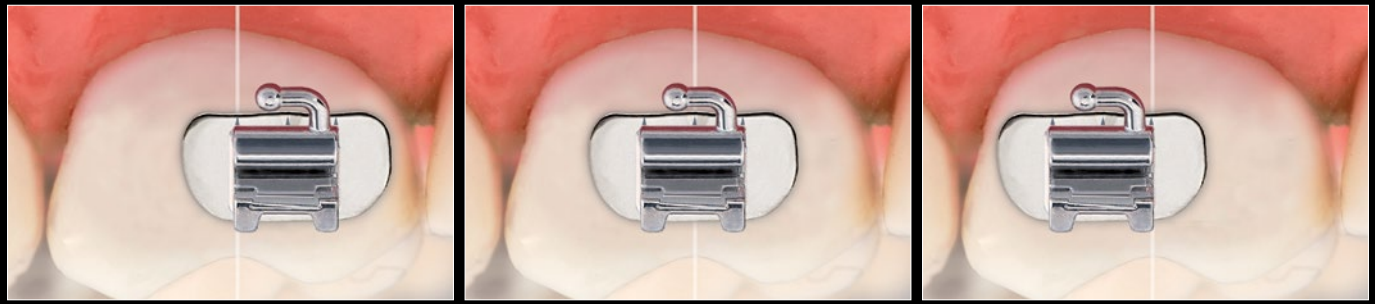


Working Tubes

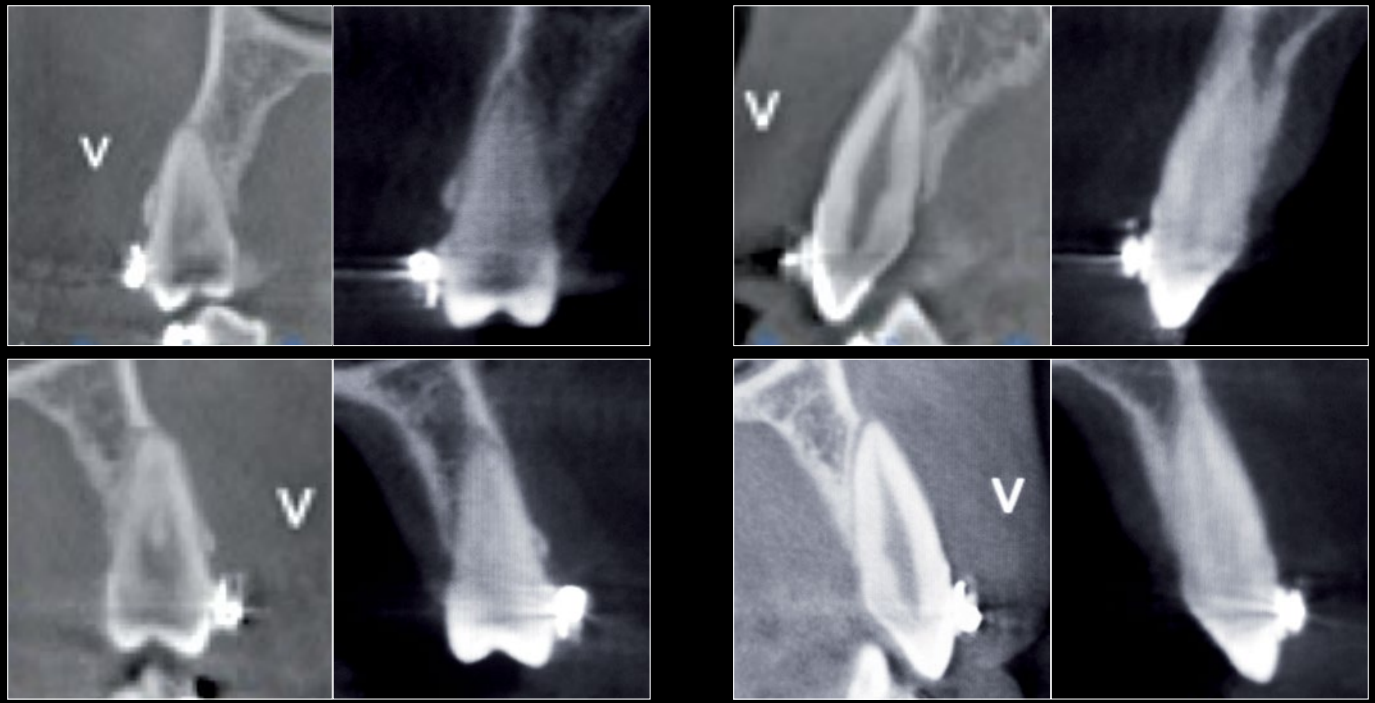
By varying the mesio-distal position of the tubes, we can modify the rotation values, and thereby the anchorage values, to tackle cases of minimum, medium and maximum anchorage.

Therefore the tube is provided with three vertical markings which enable us to locate the tube more mesially for cases of maximum anchorage or more distally for cases of minimum anchorage. Additionally the buccal tube has a central marking for cases with standard anchorage and the finishing stage. The markings are placed according to the indication on the individual vestibular sulcus. Tubes with marking will be available as of 2016.

This way we can easily and efficiently achieve three different anchorage values (standard, +4° and -4°) with one single tube.

As its name indicates, the Working Prescription is the one with which we can perform specific actions, for example distalisation or retrusion of the six maxillary anterior teeth or mesialisation of the posterior segments, by increasing or reducing the anchorage as required.

Once the required aim is obtained, in this case closure of the spaces, we switch to the Finishing Prescription by positioning the tubes in the usual way.



Before and after correction with working bracket; the apex is seen inside the bone.

Working brackets

For cuspids, the working bracket with 20° positive torque enables us to place these teeth in the required position. Subsequently it is replaced with the standard torque bracket or the finishing bracket.

For the mandible, the molar torque of –30° works efficiently in most cases, although at times not in the case of second molars. Indeed, in a low percentage of cases, the second lower molar "tips" towards the lingual, especially in those cases with an accentuated curve of Spee.

This undesirable and difficult to solve side effect obviously originates from the attempt to intrude these molars and the fact that the apices are in relation with the compact bone of the linea obliqua externa.

Therefore, FACE EVOLUTION proposes a working tube with 0° torque which, once the molar torque has been corrected, should be replaced with the prescription's standard finishing tube.

Working brackets and working tubes FACE EVOLUTION System

Maxillary CE 0297					**Slot .018"**		**Slot .022"**	
					Order no.		**Order no.**	
Tooth	**Torque**	**Angulation**	**In/Out**	**Rotation**	**Right**	**Left**	**Right**	**Left**
3 Cuspid	+20°	+8°	1,0	–	739-0323	738-0323	739-0321	738-0321
7 2. Molar	0°	0°	0°	6°	748-8311	748-8211	748-8321	748-8221

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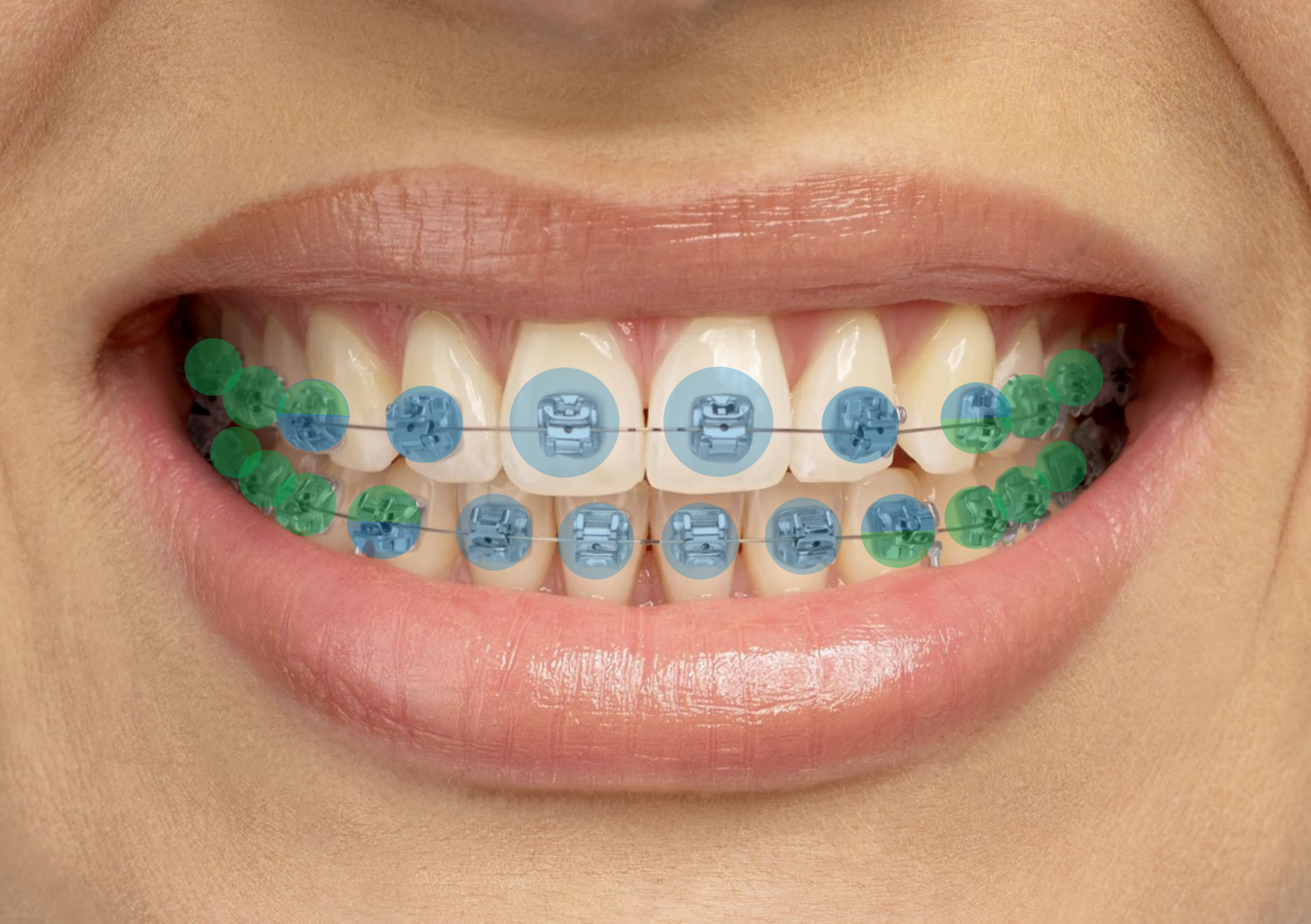

Active System and Hybrid System

It is difficult to come to an agreement in regard to which selfligating system has more advantages and less disadvantages. Various papers conclude that sliding mechanics are favoured by the use of passive self-ligating brackets but control of the root position could be comprised. They also confirm that the friction is necessary when we have to produce torque in order to correctly position the root for a correct finishing. The wish to minimise friction should be moderated, because of the need to control the tooth movement. In the new FACE EVOLUTION we have opted to take the advantages of both parts by means of two versions: the Active System and the Hybrid System.

The active system gives us more control: During later treatment stages, friction increases along with the size of the archwire. This provides better three-dimensional control and fills the slot to produce a torque force that correctly positions the root and the crown.
The Hybrid system provides the clinician with the best combination of low friction and control, especially in cases with extractions.
A recent study performed by Dr Douglas Knight on 400 finished patients, concludes that the duration of treatment and number of appointments of 200 patients treated with the Hybrid System was reduced by 15%.

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The FACE EVOLUTION Bracket.
Fully redesigned bracket (4th generation 2014)

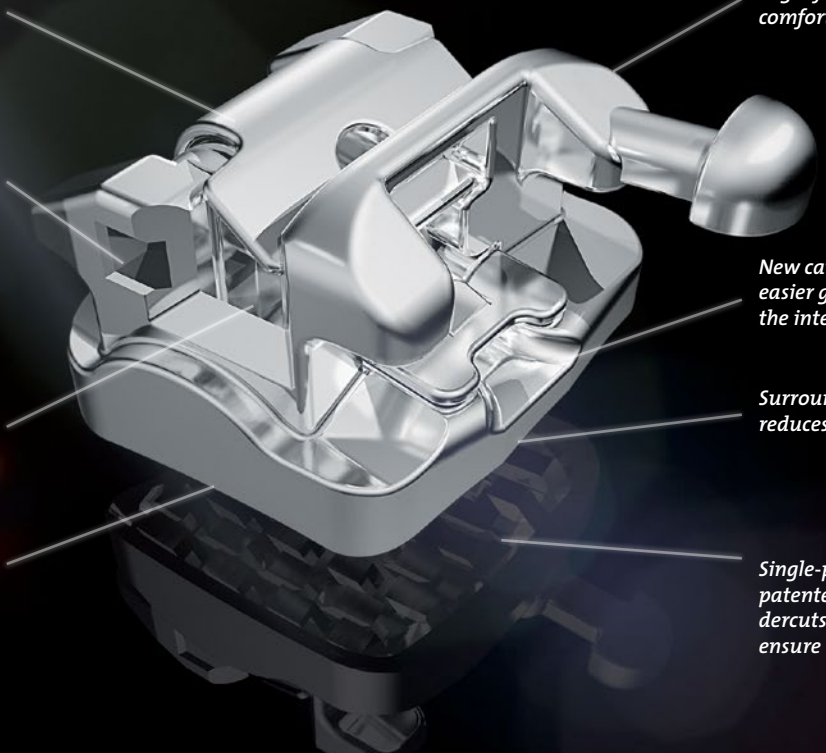
active – BioQuick® *passive – BioPassive®*

A stronger and wider clip, which can be replaced if required, and features a catch function for vestibular opening

Thanks to a separate 0.016" x 0.016" auxiliary slot, auxiliary units can be easily and simply inserted

Four rounded contact ribs in the slot reduce binding and notching

Thanks to the redesigned, anatomically-adapted base, positioning is a truly enjoyable task



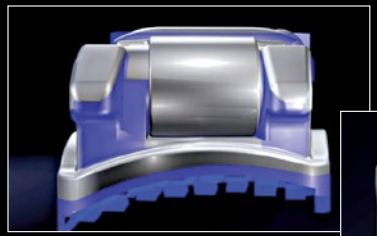
Rounded bracket and slot edges for greater intraoral comfort and less friction

New catch function for easier gingival opening of the interactive clip

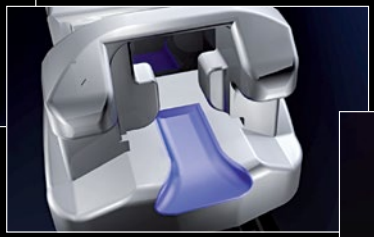
Surrounding pad edge reduces adhesive overflow

Single-piece bracket body: patented hook-shaped undercuts on the bracket base ensure reliable adhesion

The equipment



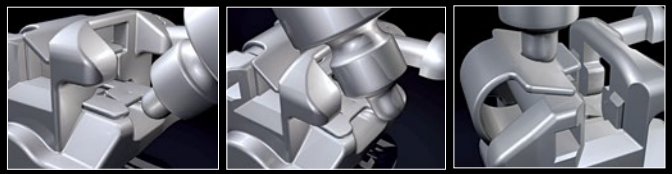
Ultralow profile: makes the bracket more efficient and comfortable.



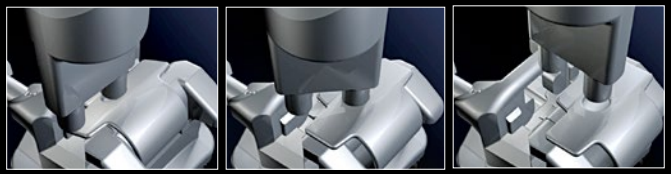
Broad canal in the funnel: facilitates contact with the clip, leading to a remarkably simple opening from this area.

Broader and thicker clip:increases durability and improves control.

Magnificent digitalised anatomical base: facilitates positioning and bonding of the bracket.

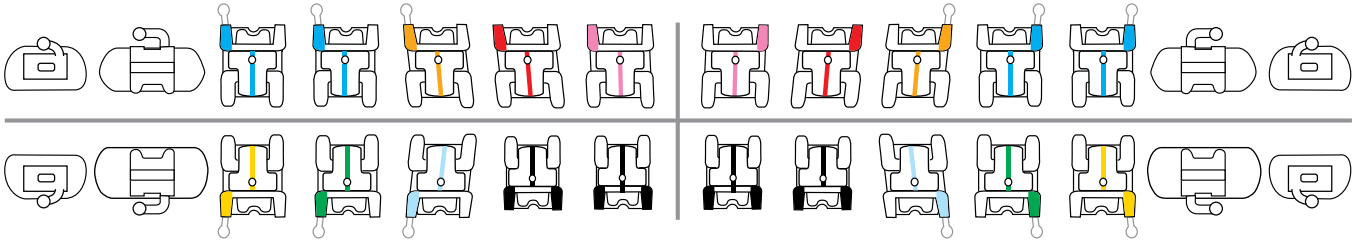


Triple opening and new instrument system:gives the system versatility and facilitates opening from any position.



Two-pronged probe.

BioQuick® active Brackets – FACE EVOLUTION System



Maxillary CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Order no. Right	Left
1 Centrals	+12°	+5°	1,0	–	739-0103	738-0103	739-0101	738-0101
2 Laterals	+8°	+9°	1,3	–	739-0203	738-0203	739-0201	738-0201
3 Cuspids	+3°	+8°	0,8	–	739-0303	738-0303	739-0301	738-0301
Cuspids + hook	+3°	+8°	0,8	–	739-0313	738-0313	739-0311	738-0311
4 Bicuspids	–7°	0°	0,9	–	739-0503	738-0503	739-0501	738-0501
Bicuspids + hook	–7°	0°	0,9	–	739-0513	738-0513	739-0511	738-0511
5 Bicuspids	–7°	0°	0,9	–	739-0503	738-0503	739-0501	738-0501
Bicuspids + hook	–7°	0°	0,9	–	739-0513	738-0513	739-0511	738-0511
6 1. Molar	–30°	0°	–	10	739-0704	738-0704	739-0702	738-0702
7 2. Molar	–30°	0°	–	6	739-0804	738-0804	739-0802	738-0802

Mandibular CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Right	Left
1 Centrals	–1°	0°	1,4	–	738-1303	738-1303	738-1301	738-1301
2 Laterals	–1°	0°	1,4	–	738-1303	738-1303	738-1301	738-1301
3 Cuspids	–6°	+2°	1,2	–	739-1403	738-1403	739-1401	738-1401
Cuspids + hook	–6°	+2°	1,2	–	739-1413	738-1413	739-1411	738-1411
4 Bicuspids	–17°	0°	1,2	–	739-1503	738-1503	739-1501	738-1501
Bicuspids + hook	–17°	0°	1,2	–	739-1513	738-1513	739-1511	738-1511
5 Bicuspids	–22°	0°	1,2	–	739-1603	738-1603	739-1601	738-1601
Bicuspids + hook	–22°	0°	1,2	–	739-1613	738-1613	739-1611	738-1611
6 1. Molar	–30°	0°	–	–	739B1704	738B1704	739B1702	738B1702
7 2. Molar	–30°	0°	–	–	739-1804	738-1804	739-1802	738-1802

Cases / Variations	Slot .018“			Slot .022“		
	1	5	10	1	5	10
	706-1200	706-1201	706-1202	706-1209	706-1210	706-1211
3	706-1203	706-1204	706-1205	706-1212	706-1213	706-1214
3–5	706-1206	706-1207	706-1208	706-1215	706-1216	706-1217

More optional torque for central and lower lateral teeth.

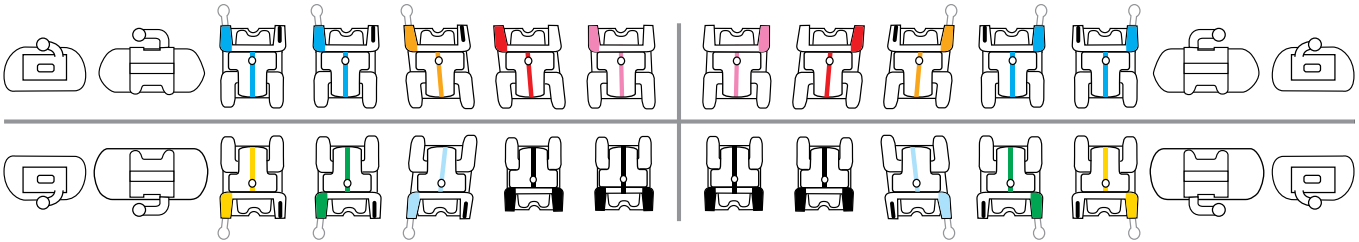
Mandibular CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Right	Left
1+2 Centrals / Laterals	–6° *	0°	1,4	–	738-1203	738-1203	738-1201	738-1201

*Bonding brackets upside down will convert from –6° Torque to +6° Torque. But keep in mind: the clip has to be opened to gingival. Please specify whether you prefer this option.

face™

The hybrid Prescription

BioQuick® + BioPassive® Brackets – FACE EVOLUTION Hybrid System



Maxillary CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Order no. Right	Left
1 Centrals	+12°	+5°	1,0	–	739-0103	738-0103	739-0101	738-0101
2 Laterals	+8°	+9°	1,3	–	739-0203	738-0203	739-0201	738-0201
3 Cuspids	–2°	+11°	0,75	–	739H0303	738H0303	739H0301	738H0301
Cuspids + hook	–2°	+11°	0,75	–	739H0313	738H0313	739H0311	738H0311
4 Bicuspids	–7°	0°	0,75	–	739H0503	738H0503	739H0501	738H0501
Bicuspids + hook	–7°	0°	0,75	–	739H0513	738H0513	739H0511	738H0511
5 Bicuspids	–7°	0°	0,75	–	739H0503	738H0503	739H0501	738H0501
Bicuspids + hook	–7°	0°	0,75	–	739H0513	738H0513	739H0511	738H0511
6 1. Molar	–30°	0°	–	10	739-0704	738-0704	739-0702	738-0702
7 2. Molar	–30°	0°	–	6	739-0804	738-0804	739-0802	738-0802

Mandibular CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Right	Left
1 Centrals	–1°	0°	1,4	–	738-1303	738-1303	738-1301	738-1301
2 Laterals	–1°	0°	1,4	–	738-1303	738-1303	738-1301	738-1301
3 Cuspids	–11°	+7°	1,15	–	739H1403	738H1403	739H1401	738H1401
Cuspids + hook	–11°	+7°	1,15	–	739H1413	738H1413	739H1411	738H1411
4 Bicuspids	–17°	0°	1,05	–	739H1503	738H1503	739H1501	738H1501
Bicuspids + hook	–17°	0°	1,05	–	739H1513	738H1513	739H1511	738H1511
5 Bicuspids	–22°	0°	1,05	–	739H1603	738H1603	739H1601	738H1601
Bicuspids + hook	–22°	0°	1,05	–	739H1613	738H1613	739H1611	738H1611
6 1. Molar	–30°	0°	–	–	739B1704	738B1704	739B1702	738B1702
7 2. Molar	–30°	0°	–	–	739-1804	738-1804	739-1802	738-1802

Cases / Variations	Slot .018“			Slot .022“		
	1	5	10	1	5	10
	706H1200	706H1201	706H1202	706H1209	706H1210	706H1211
3	706H1203	706H1204	706H1205	706H1212	706H1213	706H1214
3–5	706H1206	706H1207	706H1208	706H1215	706H1216	706H1217

More optional torque for central and lower lateral teeth.

Mandibular CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Right	Left
1+2 Centrals / Laterals	–6° *	0°	1,4	–	738-1203	738-1203	738-1201	738-1201

*Bonding brackets upside down will convert from –6° Torque to +6° Torque. But keep in mind: the clip has to be opened to gingival. Please specify whether you prefer this option.

face™

QuicKlear® III brackets offer an aesthetic alternative and may be combined with active or hybrid cases.

In our series of ceramic brackets, QuicKlear® III offers you an active, self-ligating version with flexible metal clip. QuicKlear® III is convenient to handle and, thanks to the wide and interactive clip, offers a high degree of angulation, rotation and torque control.

- *Translucent ceramic: Developed by us, less obvious for your patients.*
- *The clip is inconspicuous too: The chrome-cobalt clip shimmers with a matt lustre thanks to its surface treatment, rather than shining noticeably.*
- *Simply comfortable: Simple opening and closing of the clip makes application completely uncomplicated.*
- *Effectively combines: The bracket can be easily combined with BioQuick®.*

Strong hold: With the inverted hook base we developed for ceramic brackets, QuicKlear® III bonds to the tooth purely mechanically and excellently.

The equipment

Pauls-Tool for chip-free debonding.

QuicKlear® III brackets can be opened from the gingival or from vestibular direction. The clip moves in the occlusal direction in these cases.

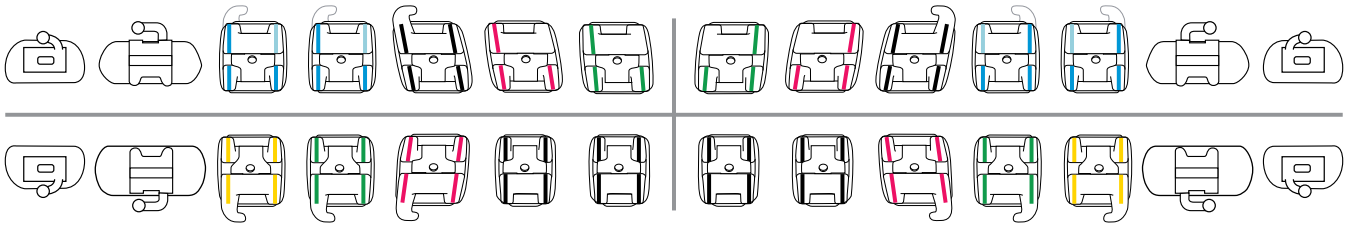
QuicKlear® III brackets are easy to remove with the Pauls-Tool. This special tool - which is only manufactured by us - is simple to apply and is used with a tilting movement in the mesial or distal direction. Without damaging the precious brackets or the even more valuable dental enamel. No chipping, no fracturing. At the end of the treatment or if you have to reposition during treatment: Place Pauls-Tool into position, remove the bracket, sandblast the base and bond again.

„Pauls-Tool" for debonding of QuicKlear® III brackets.
Order no. C501-0815.

Forestadent`s additional opening tool makes opening particularly easy. QuicKlear® III are easy to open with a classical opening instrument.

Classic opening instrument, double sided.
Order no. C501-1842

QuicKlear® III Brackets – FACE EVOLUTION System



Maxillary CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Order no. Right	Left
1 Centrals	+12°	+5°	1,0	–	C739-0103	C738-0103	C739-0101	C738-0101
2 Laterals	+8°	+9°	1,3	–	C739-0203	C738-0203	C739-0201	C738-0201
3 Cuspids + hook	+3°	+8°	0,9	–	C739-0313	C738-0313	C739-0311	C738-0311
4 Bicuspids	–7°	0°	0,9	–	C739-0503	C738-0503	C739-0501	C738-0501
Bicuspids + hook	–7°	0°	0,9	–	C739-0513	C738-0513	C739-0511	C738-0511
5 Bicuspids	–7°	0°	0,9	–	C739-0503	C738-0503	C739-0501	C738-0501
Bicuspids + hook	–7°	0°	0,9	–	C739-0513	C738-0513	C739-0511	C738-0511
6 1. Molar	–30°	0°	–	10	739-0704	738-0704	739-0702	738-0702
7 2. Molar	–30°	0°	–	6	739-0804	738-0804	739-0802	738-0802

Mandibular CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Right	Left
1 Centrals	–1°	0°	1,4	–	C738-1303	C738-1303	C738-1301	C738-1301
2 Laterals	–1°	0°	1,4	–	C738-1303	C738-1303	C738-1301	C738-1301
3 Cuspids + hook	–6°	+2°	1,2	–	C739-1413	C738-1413	C739-1411	C738-1411
4 Bicuspids + hook	–17°	0°	1,2	–	C739-1513	C738-1513	C739-1511	C738-1511
5 Bicuspids + hook	–22°	0°	1,2	–	C739-1613	C738-1613	C739-1611	C738-1611
6 1. Molar	–30°	0°	–	–	739B1704	738B1704	739B1702	738B1702
7 2. Molar	–30°	0°	–	–	739-1804	738-1804	739-1802	738-1802

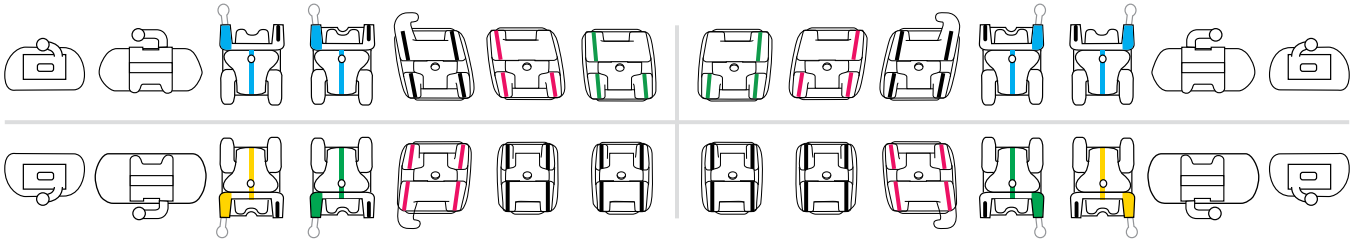
Cases / Variation	QuickKlear	BioQuick	Slot .018“		Slot .022“	
Cases			1	3	1	3
Maxillary	1-2 + 3-5	–	C706C1206	C706C1207	C706C1215	C706C1216
Mandibular	1-2 + 3-5	–				
Maxillary	1-2 + 3 + 4-5	–	C706-1203	C706-1204	C706-1212	C706-1213
Mandibular	1-2 + 3	4-5				
Maxillary	1-2 + 3-5	–	C706-1206	C706-1207	C706-1215	C706-1216
Mandibular	1-2 + 3	4-5				

Optionally more torque on mandibular Centrals and Laterals

Mandibular CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Right	Left
1+2 Centrals / Laterals	–6° *	0°	1,4	–	C738-1203	C738-1203	C738-1201	C738-1201

*Bonding brackets upside down will convert from –6° Torque to +6° Torque. But keep in mind: the clip has to be opened to gingival. Please indicate if you prefere this option.

QuicKlear® III + BioPassive® Brackets – FACE EVOLUTION Hybrid System



Maxillary CE 0297					Slot .018“		Slot .022“	
Teeth	Torque	Angulation	In/Out	Rotation	Order no. Right	Left	Order no. Right	Left
1 Centrals	+12°	+5°	1,0	–	C739-0103	C738-0103	C739-0101	C738-0101
2 Laterals	+8°	+9°	1,3	–	C739-0203	C738-0203	C739-0201	C738-0201
3 Cuspids + hook	+3°	+8°	0,9	–	C739-0313	C738-0313	C739-0311	C738-0311
4 Bicuspids	–7°	0°	0,9	–	739H0503	738H0503	739H0501	738H0501
Bicuspids + hook	–7°	0°	0,9	–	739H0513	738H0513	739H0511	738H0511
5 Bicuspids	–7°	0°	0,9	–	739H0503	738H0503	739H0501	738H0501
Bicuspids + hook	–7°	0°	0,9	–	739H0513	738H0513	739H0511	738H0511
6 1. Molar	–30°	0°	–	10	739-0704	738-0704	739-0702	738-0702
7 2. Molar	–30°	0°	–	6	739-0804	738-0804	739-0802	738-0802

Mandibular CE 0297		Torque	Angulation	In/Out	Rotation	Slot .018" Order no. Right	Slot .018" Order no. Left	Slot .022" Order no. Right	Slot .022" Order no. Left
1	Centrals	–1°	0°	1,4	–	C738-1303	C738-1303	C738-1301	C738-1301
2	Laterals	–1°	0°	1,4	–	C738-1303	C738-1303	C738-1301	C738-1301
3	Cuspids + hook	–6°	+2°	1,2	–	C739-1413	C738-1413	C739-1411	C738-1411
4	Bicuspids	–17°	0°	1,2	–	739H1503	738H1503	739H1501	738H1501
	Bicuspids + hook	–17°	0°	1,2	–	739H1513	738H1513	739H1511	738H1511
5	Bicuspids	–22°	0°	1,2	–	739H1603	738H1603	739H1601	738H1601
	Bicuspids + hook	–22°	0°	1,2	–	739H1613	738H1613	739H1611	738H1611
6	1. Molar	–30°	0°	–	–	739B1704	738B1704	739B1702	738B1702
7	2. Molar	–30°	0°	–	–	739-1804	738-1804	739-1802	738-1802

Cases / Variation	QuicKlear	BioPassive	Slot .018" 1	Slot .018" 3	Slot .022" 1	Slot .022" 3
Casi/Cases						
Maxillary			C706H1203	C706H1204	C706H1212	C706H1213
Mandibular						
Maxillary			C706H1206	C706H1207	C706H1215	C706H1216
Mandibular						

Optionally more torque on mandibular Centrals and Laterals

Mandibular CE 0297		Torque	Angulation	In/Out	Rotation	Slot .018" Order no. Right	Slot .018" Order no. Left	Slot .022" Order no. Right	Slot .022" Order no. Left
1+2	Centrals / Laterals	–6° *	0°	1,4	–	C738-1203	C738-1203	C738-1201	C738-1201

*Bonding brackets upside down will convert from –6° Torque to +6° Torque. But keep in mind: the clip has to be opened to gingival. Please indicate if you prefere this option.

Archwire selection

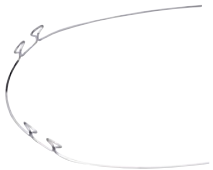
Alignment stage

CE 0297

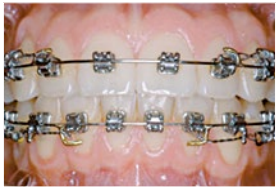
description	Straight-Arch-Form Maxillary	Straight-Arch-Form Mandibular	Euro-Smile-Form Maxillary	Euro-Smile-Form Mandibular	Profile	Force	ø Inch	Cont.
BioStarter®	203-0825	203-0925	203-1825	203-1925	●	20 g	.010	10
	203-0830	203-0930	203-1830	203-1930		30 g	.012	10
	203-0835	203-0935	203-1835	203-1935		40 g	.014	10
	203-0845	203-0945	203-1845	203-1945		70 g	.018	10
BioTorque®	203-2048	203-2148	203-4048	203-4148	▬	170 g	.019 x.025	10

Working stage

CE 0297

description	Order no.	Profile	Size	ø Inch	Content
 Forestalloy chrome-cobalt archwires, 4-loop	257-2648	▬	26 mm	.019 x .025	10
	257-2848		28 mm	.019 x .025	10
	257-3048		30 mm	.019 x .025	10
	257-3248		32 mm	.019 x .025	10
	257-3448		34 mm	.019 x .025	10
	257-3648		36 mm	.019 x .025	10
	257-3848		38 mm	.019 x .025	10
	257-4048		40 mm	.019 x .025	10
	257-4248		42 mm	.019 x .025	10
	257-4448		44 mm	.019 x .025	10

description	Order no.	profile	size	ø inch	content
Betaflex T-Loop archwire	256-2648	■	26 mm	.019 x .025	5
	256-2848		28 mm	.019 x .025	5
	256-3048		30 mm	.019 x .025	5
	256-3248		32 mm	.019 x .025	5
	256-3448		34 mm	.019 x .025	5
	256-3648		36 mm	.019 x .025	5
	256-3848		38 mm	.019 x .025	5
	256-4048		40 mm	.019 x .025	5



Stainless Steel posted archwire	255-2648	■	26 mm	.019 x .025	10
	255-2848		28 mm	.019 x .025	10
	255-3048		30 mm	.019 x .025	10
	255-3248		32 mm	.019 x .025	10
	255-3448		34 mm	.019 x .025	10
	255-3648		36 mm	.019 x .025	10
	255-3848		38 mm	.019 x .025	10
	255-4048		40 mm	.019 x .025	10

Finishing stage

CE 0297

BioFinisher®	203-2054	203-2154	203-4054	203-4154	■	140 g	.017 x .025	10
	203-2053	203-2153	203-4053	203-4153	■	200 g	.021 x .025	10
Stainless steel arch wires	202-3748	202-3848	201-3748	201-3848	■	–	.019 x .025	10
	202-3754	202-3854	201-3754	201-3854	■	–	.021 x .025	10

Eight strand Braided stainless steel archwire	Maxillary	Mandibular	Profile	ø Inch	Content
	200-8440	200-8540	■	.019 x .025	10

The FACE EVOLUTION VPT Tubes

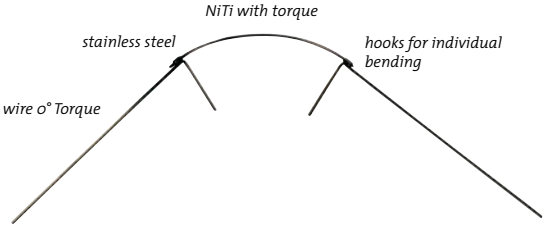
(Variable Prescription Tube. Marking available as of 2016.)

VPT FACE EVOLUTION tubes for 1st Maxillary molar enable different bonding positions, which are marked on the base of the pad:

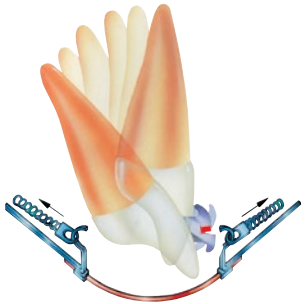
Variation in position	***Upper Tube 1st Molar***
Minimum anchorage	*6°*
FACE EVOLUTION Prescription	*10°*
Maximum anchorage	*14°*

In this way the same tube with the FACE EVOLUTION prescription serves as a "working bracket" for different situations throughout treatment. Several prescriptions in the same tube mean versatility and a reduced inventory.

Special Auxiliares
*Retraction and torque arch**



The retraction and torque arch wire is used for bodily retraction and torquing of anterior teeth.

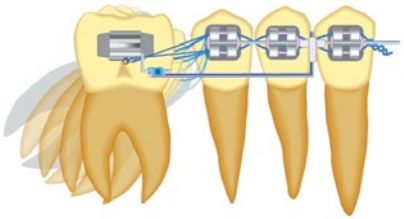


CE 0297

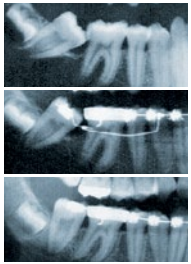
Order no.	anterior segment	torque	lateral segment	technique	content
210-3040	.016 x .022	30°	.017 x .022	.018	1
210-2040	.016 x .022	45°	.017 x .022	.018	1
210-2044	.017 x .025	30°	.017 x .022	.022	1
210-2046	.018 x .025	45°	.017 x .022	.022	1
311-1030			Titanol Instant tension spring	12 mm	10
311-1031				18 mm	
654-0001			Plastic protection tube for tension spring		1
732-0005	 CE		Torque key	.018	1
732-0006				.022	

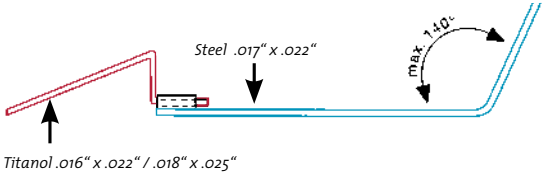
*acc. to Prof. Dr. F. G. Sander

*Memory Titanol® Spring for uprighting of the molars**



*acc. to Prof. Dr. F. G. Sander





Uprighting spring
By using the superelastic Titanol® wire with its Martensite plateau a biological favourable low force is effective to the uprighting of the molars.

Order no. Slot .018	Order no. Slot .022		content	description
307-1011	307-1013		10 + 10	Set with cross tube
307-1010	307-1012		10	Uprighting spring
760-0062	760-0063		10	Cross tube
.016" x .016"	307-1009		10	Molar-Uprighting spring (.016" x .016" – Stiff) High resilient, for the auxilliary slot of the Quick brackets

Collar probe
For all brackets of the Quick range
(Attention: QuicKlear only to be used from vestibular!)

Order no. *501-1843*

Classic opening instrument,
double sided

Order no. *C501-1842*

Two-pronged probe
For opening by rotary movement, two-sided,
(straight prong tip/angled collar tip)

Order no. *501-1844*

Archwire-Director

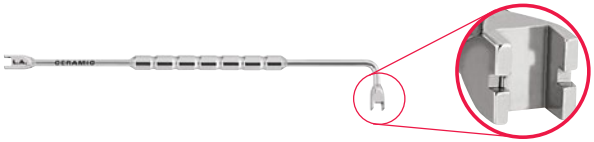
Order no. *501-0861*

Bracket removing plier
with plastic insert, disinfectable, sterilisable

Order no. *501-0815*

QuicKlear® bracket debonding plier
with notch

Order no. *C501-0828*



Pauls-Tool *for debonding of QuicKlear® brackets, double sided*

Order no. *C501-0815*

FACE Evolution System Starter Kits

BioQuick® Brackets

CE 0297

Description	Order-No.	
	Slot .18"	Slot .22"
BIoQuick FACE Starter Kit – 5 cases Brackets to be specified	707-1016	707-1017

Additional content in every FACE Starter Kit:
- *BioQuick collar probe*
- *special director BioQuick & QuicKlear double*
- *Archwire director*
- *BioStarter archwires .014" (5 max. & 5 mand.)*
- *Typodont BioQuick FACE max./mand.*
- *presentation-model, plastic (10:1)*
- *FACE Workbook*

QuicKlear® III

CE 0297

Description	Mandibular	Order-No.	
		Slot .18"	Slot .22"
QuicKlear III FACE Starter Kit – 3 Cases Brackets to be specified	3+4 BioQuick Brackets	C707-1016	C707-1017
	3+4 QuicKlear III Brackets	C707C1016	C707C1017

Additional content in every FACE Starter Kit:
- *BioQuick collar probe*
- *special director BioQuick & QuicKlear double*
- *Archwire director*
- *BioStarter archwires .014" (5 max. & 5 mand.)*
- *Typodont QuicKlear III FACE max./mand.*
- *presentation-model, plastic (10:1)*
- *FACE Workbook*

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