

FLAIR SLT™ Bracket - the softer side of braces

FLAIR SLT™ The almighty non-locking flexible clip - fulfilling all the requirements for optimal ligation for the ultimate in control, efficiency and results.

Ensure full bracket engagement of the archwire

A flexible spring clip gently and without loss of power pushes the arch wire to the slot base. This type of efficiency ensures effective rotation and torque control allowing earlier archwire changes and less visit frequency

Quick and easy to use

No complicated instrument is needed to operate the spring clip, it requires very little force to open or close, our doctors report fast archwire changes, and this simple operation requires a minimal learning curve for doctors and staff

Easy identification

Permanent laser marking

Secure robust ligation

Secure, reliable ligation that can withstand the rigors of full orthodontic treatment, and provides the power for efficient tooth movement

Be comfortable for the patient

Very little force is needed to open and close the self-ligating clip and during treatment the clip gently pushes the archwire into the slot. Patients enjoy this softer touch during and after archwire changes

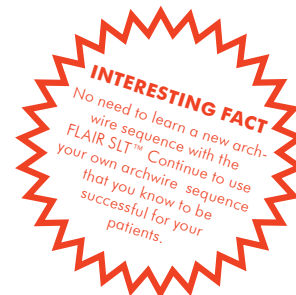


Reducing undesirable forces

Passive with round wires producing nearly frictionless movement and active with wires starting at .016x.016 (1,2,3) and .016x.022 (4,5) puts you in control of treatment, creating efficiency and reducing undesirable, unpredictable and uncontrolled frictional forces

Assists in good oral hygiene

No hooks and a streamline design reduces the accumulation of plaque as the entire bracket can be used as a hook



INTERESTING FACT
No need to learn a new archwire sequence with the FLAIR SLT™. Continue to use your own archwire sequence that you know to be successful for your patients.

The market is full of self-ligating brackets...so what makes this bracket different, and more successful than other self-ligating systems? The FLAIR SLT™ is the only non-locking flexible self-ligating clip available - all our clinical studies over the years lead us to this revolutionary conclusion, it was time to put our engineers to the challenge, difficult to engineer and manufacture but an absolute necessity to take self-ligation to the next level.



“ The FLAIR SLT™ flexible clip creates the ideal situation to produce the required criteria for ideal metabolism for efficient tooth movement. I experience fast, reliable and efficient tooth movement using lighter wires. Before this system, I would need to see my patients every 4 - 6 weeks for ligature changes to maintain steady progression, now I only see my patients every 8 weeks as this system has no loss of power. This reduction in chair-time and visits can save me and patients a total of 12 visits over the entire course of treatment, producing a significant improvement to my bottom line. I fondly call this bracket system, the Autobahn of treatment. ”

Dr. Loidl, Berlin, Germany



Locking self-ligating clips vs. Flexible non-locking self-ligating clip - the challenge was on!

Locking self-ligating clips dominate the self-ligation market, however, over the past number of years research and clinical experiences have revealed a number of undesirable effects.....The challenge was to understand why this locking design was creating these undesirable effects and how should we design a clip to eliminate them.

DESIGN CHALLENGE - Understanding why locking clips create undesirable effects

Unacceptable forces

The need to force the arch wire to the bottom of the bracket slot just to close/lock the clip can create strong unacceptable forces. The ideal metabolic state is lost, treatment slows down and unhealthy damaging pressure could possibly be produced

Pain

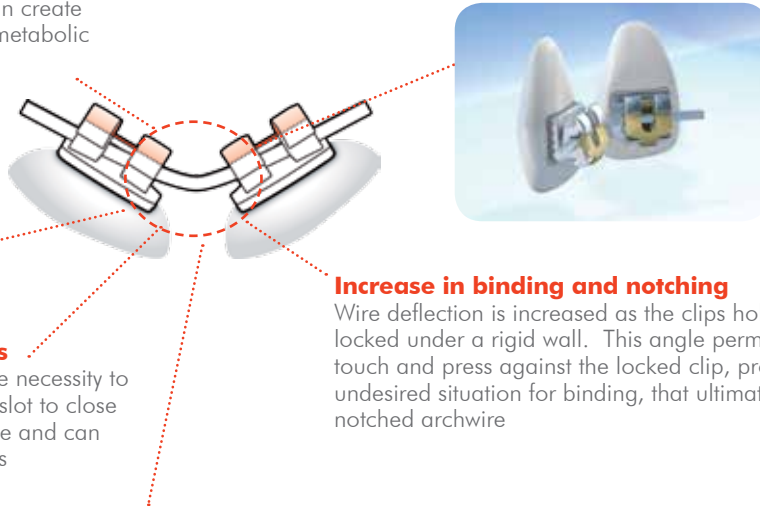
Patients report pain and discomfort and require emergency visits after wire changes

Breakage and de-bonding issues

Clips can be easily damaged due to the necessity to push the archwire to the bottom of the slot to close the clip. This creates unacceptable force and can easily break clips and de-bond brackets

Undesired friction

When forces and angles are inappropriate for that stage of treatment, undesirable friction occurs. Tooth movement is uncontrolled, unpredictable and now force must be increased to overcome this friction for tooth movement



Increase in binding and notching

Wire deflection is increased as the clips hold the wire locked under a rigid wall. This angle permits the wire to touch and press against the locked clip, producing the undesired situation for binding, that ultimately creates a notched archwire

DESIGN SUCCESS - Understanding why a non-locking flexible clip eliminates undesirable effects

The ability to flex like an elastomeric and respond to the actual tooth position, produces the ideal metabolic state for safe and efficient tooth movement.



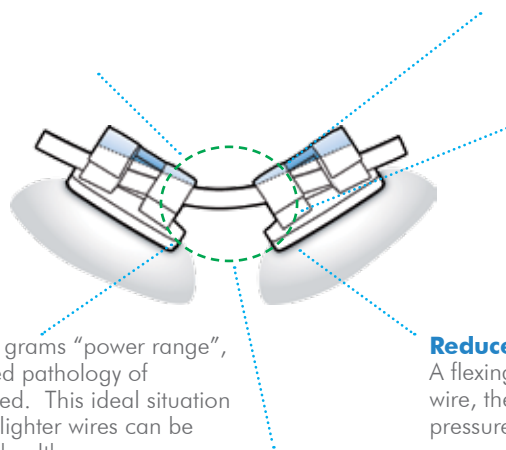
FLAIR SLT™ the softer side of braces

Reduction in friction

As the flexible clip does not need to be locked down, wire deflection is significantly reduced as binding is minimized and therefore forces are within the ideal range

Ideal forces

Provides an active force of approx. 650 grams "power range", the ideal force required for the controlled pathology of Osteoclast and Osteoblast to be achieved. This ideal situation requires less force for tooth movement, lighter wires can be used and treatment progresses within a healthy range



Reduction in pain

Flexing with the malocclusion produces less friction and appropriate pressure - patients report significantly less pain during treatment

Reduce binding - minimize notching

A flexing wall reduces the deflection on the archwire, the angle of the archwire is appropriate and pressure is ideal

No loss of power

Designed to actively flex and adjust to the actual tooth position mimicking an elastomeric but without losing the power needed to control treatment

Control of frictional forces during treatment

Findings suggest that self-ligating brackets are a great family of brackets that can generate different levels of force when coupled with thin, thick, rectangular or round archwires. At various stages in the orthodontic treatment we need frictional forces to be at a certain level. This situation occurs in the middle and end of treatment, when it is necessary to transfer an adequate torque. This is to say, whenever we need the most dental control possible.

In order to move teeth, frictional force is necessary - here we are referring to forces that we are controlling to make the movements we require.

Passive with smaller wires, producing nearly frictionless movement resulting in an efficiency increase in the leveling stage



Active with wires starting from .016x.016" (1-2-3) anterior zone and .016x.022" (4-5) bicuspid and molar zone - the bracket clip actively but gently guides the wire into the slot, creating early torque control and reducing treatment time by creating efficiency



The FLAIR™ self-ligating spring clip is engaged even if the wire does not fill the slot.

The importance of reducing binding and notching.

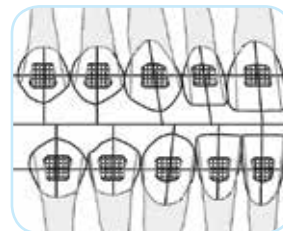
Binding and notching are well known for their resistance to sliding in orthodontics.

This was a key component during my design phase of the FLAIR SLT™. The self-ligating clip needed to flex to accommodate situations when the bracket to wire angle was at its most critical degree. This is seen predominately in highly rotated teeth. The challenge to design a clip that was strong enough to hold the ideal ligation without the need to lock the archwire into place. The FLAIR SLT™ flexes with the actual position of teeth, and is strong enough to hold the archwire even with a highly rotated situation without the need to lock the archwire into the slot. A highly rotated tooth can now be included earlier into treatment.



Easy to open, easy to close

The FLAIR™ self-ligating clip is designed to work like a spring, very little force is needed to open and close the bracket, creating optimum handling for the doctor and comfort for the patient.



Easy Positioning

The anatomical base allows for precise bonding, reducing the margin of error in positioning brackets.



- Clip opens with a flip gingivally
- Less off-bites with overbites
- Easy to open even with bad oral hygiene



Superior Bonding Strength

Micro-etched integral bonding base with mechanical undercuts for superior adhesive retention. Rated highest bond strength in clinical study. (S.K. Sharma-Sayal, University of Toronto, Ontario, Canada, 1999).



Built-in Over-Rotation Arch

No additional bracket bonding is necessary as the built in rotation arch of the adenta FLAIR SLT™ self-ligating clip allows to directly over-rotate a tooth with a heat-activated adenta THERMADENT™ archwire .012".



Ultra low IN/OUT

As a unique milled truly one-piece bracket the FLAIR SLT™ bracket is characterized by a remarkable proximity of the archwire to the point of force application.

FLAIR SLT™ BRACKETS and self-ligating TUBES Roth*

UPPER	Torque	Ang	In/Out	Width	U - R .018	U - L .018	U - R .022	U - L .022
Central	12°	5°	0.59	2.60	205M-11	205M-21	255M-11	255M-21
Lateral	8°	9°	0.94	2.60	205M-12	205M-22	255M-12	255M-22
Cuspid	-2°	9°	0.50	2.80	205M-13	205M-23	255M-13	255M-23
1. Bicuspid	-7°	0°	0.60	2.80	205M-14/25	205M-14/25	255M-14/25	255M-14/25
2. Bicuspid	-7°	0°	0.60	2.80	205M-14/25	205M-14/25	255M-14/25	255M-14/25

UPPER MOLARS	Torque	Ang	Distal Offset	U - R .018	U - L .018	U - R .022	U - L .022
1. & 2. Molar - bondable	-10°	0°	0°	205M-16/27	205M-16/27	255M-16/27	255M-16/27
1. & 2. Molar extended base - bondable	-10°	0°	0°	205M-16/27E	205M-16/27E	255M-16/27E	255M-16/27E

LOWER	Torque	Ang	In/Out	Width	L - R .018	L - L .018	L - R .022	L - L .022
Anterior	-1°	0°	0.85	2.60	205M-31/42	205M-31/42	255M-31/42	255M-31/42
Cuspid	-11°	7°	0.50	2.80	205M-43	205M-33	255M-43	255M-33
1. Bicuspid	-17°	0°	0.50	2.80	205M-44	205M-34	255-44	255M-34
2. Bicuspid	-22°	0°	0.52	2.80	205M-45	205M-35	255M-45	255M-35

LOWER MOLARS	Torque	Ang	Distal Offset	U - R .018	U - L .018	U - R .022	U - L .022
1. & 2. Molar - bondable	-25°	0°	0°	205M-36/47	205M-36/47	255M-36/47	255M-36/47
1. & 2. Molar extended base - bondable	-25°	0°	0°	205M-36/47E	205M-36/47E	255M-36/47E	255M-36/47E

HIGH TORQUE	Torque	Ang	In/Out	Width	Right .018	Left .018	Right .022	Left .022
Upper Central	17°	4°	0.59	2.60	205M-11-17	205M-21-17	255M-11-17	255M-21-17
Upper Lateral	10°	8°	0.94	2.60	205M-12-10	205M-22-10	255M-12-10	255M-22-10
Lower Anteriors	-6°	0°	0.85	2.60	205M-31/42-6	205M-31/42-6	255M-31/42-6	255M-31/42-6

Cases-Single trays or 10-case tray

1 case .018	10 case .018	1 case .022	10 case .022	Description
205M-001	205M-001/10	255M-001	255M-001/10	FLAIR Bracket ROTH Upper + Lower 5-5

FLAIR SLT™ BRACKETS and self-ligating TUBES MBT (McLaughlin/Bennett/Trevisi)*

UPPER	Torque	Ang	In/Out	Width	U - R .018	U - L .018	U - R .022	U - L .022
Central	17°	4°	0.59	2.60	206M-11	206M-21	266M-11	266M-21
Lateral	10°	8°	0.94	2.60	206M-12	206M-22	266M-12	266M-22
Cuspid	-7°	8°	0.50	2.80	206M-13	206M-23	266M-13	266M-23
1. Bicuspid	-7°	0°	0.60	2.80	206M-14/25	206M-14/25	266M-14/25	266M-14/25
2. Bicuspid	-7°	0°	0.60	2.80	206M-14/25	206M-14/25	266M-14/25	266M-14/25

UPPER MOLARS	Torque	Ang	Distal Offset	U - R .018	U - L .018	U - R .022	U - L .022
1. & 2. Molar - bondable	-14°	0°	0°	206M-16/27	206M-16/27	266M-16/27	266M-16/27
1. & 2. Molar extended base - bondable	-14°	0°	0°	206M-16/27E	206M-16/27E	266M-16/27E	266M-16/27E

LOWER	Torque	Ang	In/Out	Width	L - R .018	L - L .018	L - R .022	L - L .022
Anterior	-6°	0°	0.85	2.60	206M-31/42	206M-31/42	266M-31/42	266M-31/42
Cuspid	-6°	3°	0.50	2.60	206M-43	206M-33	266M-43	266M-33
1. Bicuspid	-12°	2°	0.50	2.80	206M-44	206M-34	266M-44	266M-34
2. Bicuspid	-17°	2°	0.52	2.80	206M-45	206M-35	266M-45	266M-35

LOWER MOLARS	Torque	Ang	Distal Offset	U - R .018	U - L .018	U - R .022	U - L .022
1. & 2. Molar - bondable	-20°	0°	0°	206M-36/47	206M-36/47	266M-36/47	266M-36/47
1. & 2. Molar extended base - bondable	-20°	0°	0°	206M-36/47E	206M-36/47E	266M-36/47E	266M-36/47E

Cases-Single trays or 10-case tray

1 case .018	10 case .018	1 case .022	10 case .022	Description
206M-001	206M-001/10	266M-001	266M-001/10	FLAIR SLT™ Bracket MBT Upper + Lower 5-5

*The adenta version of this technique does not indicate endorsement by the doctor. They do not claim to be a duplication of any other.