Metal Brackets

Important Terminology

Proven Quality
Maximum Performance

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3M Unitek
Important Terminology

Single Tie-Wing Brackets and Twin Tie-Wing Brackets

- Single tie-wing brackets offer greater inter-bracket distance, allowing for larger rectangular wires to be used earlier in the treatment process.

- Twin tie-wing brackets provide the rotational control and mechanics that single tie-wing brackets cannot.

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Important Terminology

**Chamfered** – Chamfering is a process applied to the outer edges of tie-wings, archwire slots, and auxiliary slots to round and smooth the edges. This promotes easy wire insertion, placement, and overall comfort.
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**Micro-etched** – Micro-etching is a process that uniformly etches the surface of the pad or inside of the band for increased retention. All 3M Unitek ligated metal brackets have a micro-etched pad. The alternative is to **photo-etch**, which may leave certain portions unetched.
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**Metal Injected Molded (MIM) versus CNC Milled Bracket** –
A MIM bracket is formed in a multi-step process. Basically, metal powder goes through several processes to be formed into a bracket. Computer Numerated Controlled (CNC) Milled Brackets are made by taking a single piece of metal which is cut and formed by a computerized machine to create the bracket.
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3-Point Base – The surface of teeth are rounded. The 3-Point Base is designed to improve the fit between the base and tooth.
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80-Gauge Mesh – Refers to the spacing of the wire in the woven steel mesh bonding pad. The lower the gauge, the wider the spacing between the wire mesh. 80-Gauge matches well to most bonding adhesives to provide optimum bond strength.
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*Torque-In-Base* – Where the center of the archwire slot, the center of the bracket base, and the center of the clinical crown are aligned. This design allows for level archwire slot and tie-wing alignment, which will indicate if the bracket is out of position.

*Torque-In-Face* – Where only the center of the bracket base and the clinical crown are aligned. This design can lead to incorrect tooth position.
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*Inter-Bracket Distance* - Greater inter-bracket distance allows the archwire to be more flexible, and allows for larger archwires to be used earlier in treatment.
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**Rhomboid Shape** – This design of the bracket helps orient the bracket on the tooth for better positioning of the bracket. With no center scribe line, the shape is used to line the bracket up with the incisal edge of the tooth for accurate placement.