

HUGE

A Reliable Glass Ionomer System for Everyday Clinical Needs

Designed for Stability, Built on Strontium-Based Glass



A unified glass ionomer system for everyday restorative and luting needs.

Built on a strontium-based glass platform, the system delivers reliable radiopacity, stable mechanical performance, and predictable clinical results across multiple indications.

Different formulations within the same platform are optimized for specific clinical applications while preserving consistent material characteristics and familiar handling.

Strontium-based Glass Ionomer Technology

*Elemental composition verified by SGS.

Key Roles of Strontium in Glass Ionomer Cement Restorations

01 Enhanced Radiopacity

Strontium is widely used as a radiopacifying element in dental materials.

In glass ionomer cement, it improves radiographic visibility, allowing restorations to be clearly distinguished from surrounding tooth structure and recurrent caries on X-ray images, without adversely affecting the visual opacity or esthetic appearance of the cement.

02 Synergistic Role in the Anticaries Mechanism of GIC

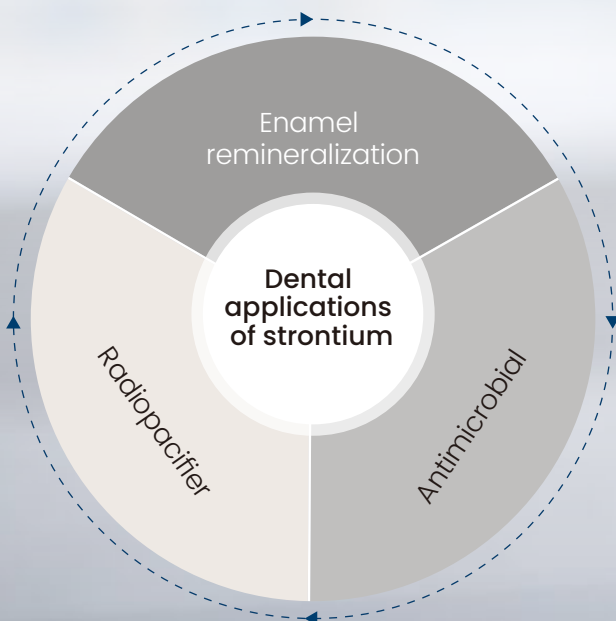
Fluoride release remains the primary anticaries mechanism of glass ionomer cement.

Within the ion-exchange environment, strontium ions coexist with fluoride and may act synergistically under acidic conditions, supporting the fluoride-based anticaries performance of the material.

03 Support for Enamel Remineralization

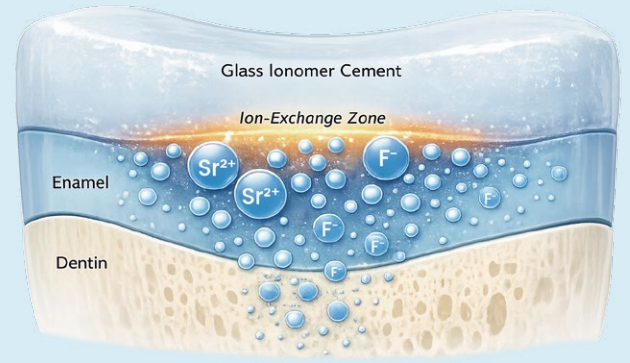
Glass ionomer cements are characterized by their ability to exchange ions with tooth structure.

Strontium ions, in combination with sustained fluoride release, may contribute to enamel remineralization and help slow the progression of early carious lesions, supporting minimally invasive caries management.



In strontium-containing glass ionomer cements, strontium and fluoride ions coexist within the ion-exchange environment at the tooth-material interface.

The combined presence of Sr^{2+} and F^- has been reported to enhance enamel resistance to acid dissolution and support remineralization processes more effectively than fluoride alone.



LuFill HS

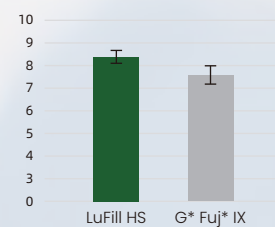
Glass Ionomer Cement

LuFill HS is a high-strength, self-curing glass ionomer cement for bulk-fill posterior restorations, offering self-adhesive bonding and dependable clinical durability.

1. Restoration of primary teeth.
2. Non-load-bearing Class I and Class II restorations in permanent teeth.
3. Intermediate restorative and base material for heavy stress situation in Class I and Class II cavities using sandwich laminate technique.
4. Class V and root surface restorations.
5. Core build-up.



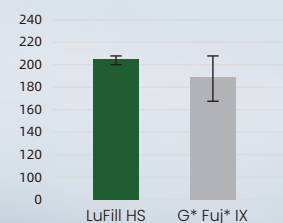
Bonding strength/MPa



Excellent Performance

- Easy to mix and handle for efficient clinical workflow
- Moisture tolerant for reliable placement and predictable results
- Sustained fluoride release helps prevent secondary caries
- Strong chemical bonding to tooth structure with no post-operative sensitivity
- High strength & low solubility for long-lasting restorations
- Radiopaque for clear X-ray diagnosis

Compressive strength/MPa



* All data from HUGE laboratory

Luting I

Glass Ionomer Cement

Luting I is a self-curing, self-adhesive glass ionomer luting cement designed for reliable and long-lasting cementation. It offers chemical bonding to tooth structure, moisture tolerance and easy handling, delivering predictable clinical performance with virtually no post-operative sensitivity.

Suitable for a Multitude of Clinical Cases

Indication		Luting I
Inlay/Onlay/ Crown/Bridge	Ceramic/Glass Ceramic	√
	Oxide Ceramic	√
	Metal/Metal-Based	√
	Composite Resin	
Post/Screw	Metal	√
	Oxide Ceramic	√
Orthodontic Bands		√

Advantages

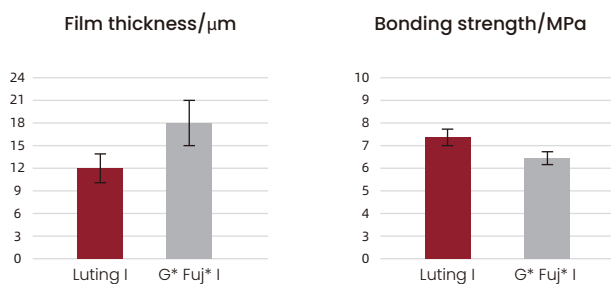
- Moisture tolerant when ideal isolation cannot be assured
- No etching or bonding steps required for fast and simple cementation
- Chemical adhesion to tooth structure for a reliable marginal seal
- Low film thickness for optimal seating and marginal fit
- Resin-free formulation, suitable for patients sensitive to methacrylates
- Virtually no post-operative sensitivity for comfortable cementation

Compared with brand G*, HUGE Luting I not only provides the same applications, but also has the function of bonding in orthodontic restoration.



Ideal Film Thickness

The ideal film thickness will allow the restoration to perfectly fit the abutment without causing clinical elevation. The ISO standard is less than or equal to 25 μm . The lower the data, the higher the clinical application value.



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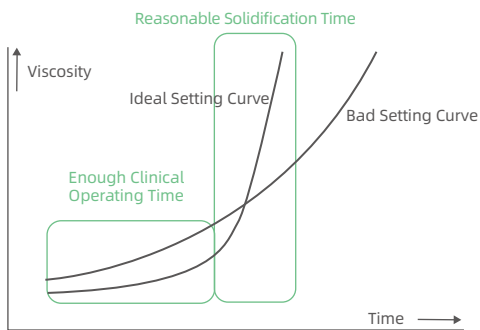


Filling I

Glass Ionomer Cement

Filling I is a self-curing, self-adhesive glass ionomer cement designed for routine bulk-fill restorations. It provides easy handling, reliable performance and sustained fluoride release, making it a dependable choice for everyday restorative applications with long-term caries protection.

						
Indication	Class I	Class II	Class III	Class V	Base/Liner	Core Build-up
Primary teeth	✓	✓	✓	✓	✓	✓
Permanent teeth			✓	✓	✓	✓

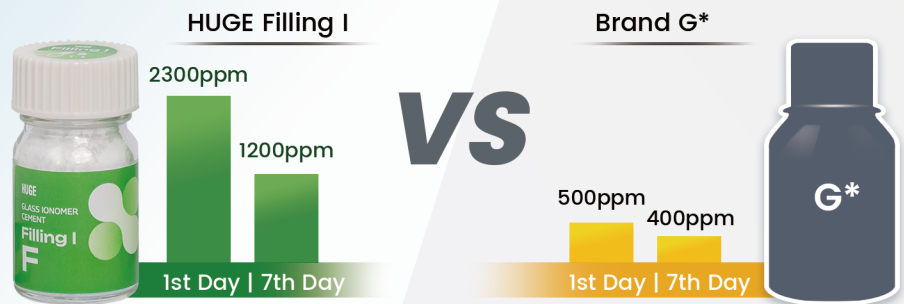


Advantages

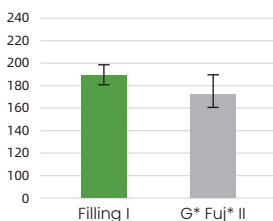
A well-balanced setting profile provides sufficient working time while allowing controlled viscosity development during placement.

The relatively steep rising phase of the curve reflects a rapid transition to final hardening intraorally, helping to minimize the risk of saliva contamination during the critical setting stage.

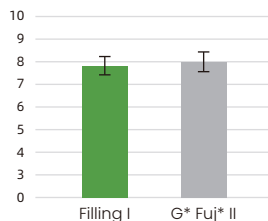
Excellent glass ionomer material provides high fluoride release for increased defense against dental cavities. At the same time, this advantage can last for a long time.



Compressive strength/MPa



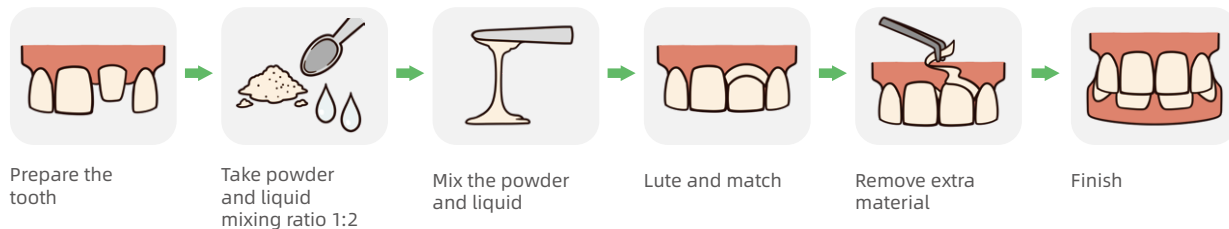
Bonding strength/MPa



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Designed for simple mixing & easy clinical handling

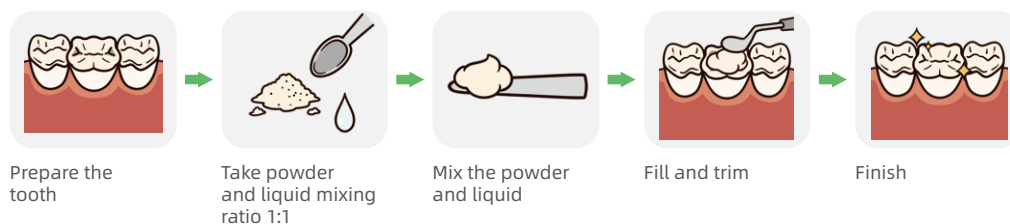
Crown cementation — Luting I



Class III restorations — Filling I



Non-load bearing Class I restorations — LuFill HS



Technical Data	LuFill HS	Luting I	Filling I
Mixing time	45s	45s	1min
Working time	3min30s	2min10s	2min40s
Net setting time	2min30s	3min05s	2min30s
Shade	A2, A3, A3.5 (VITA color system)	/	A1, A2, A3 (HUGE color system)
Standard Packaging	30g Powder+25g Liquid	30g Powder+25g Liquid	15g Powder+12g Liquid
Mini Packaging	10g Powder+10g Liquid	10g Powder+10g Liquid	5g Powder+5g Liquid
Film thickness (μm)	/	12(2)	/
Compressive strength (MPa)	204(4)	163(13)	186(6)
Bonding strength (MPa)	8.3(0.3)	7.4(0.4)	7.9(0.4)

* All data from HUGE laboratory () Standard Deviation



Shandong Huge Dental Material Corporation

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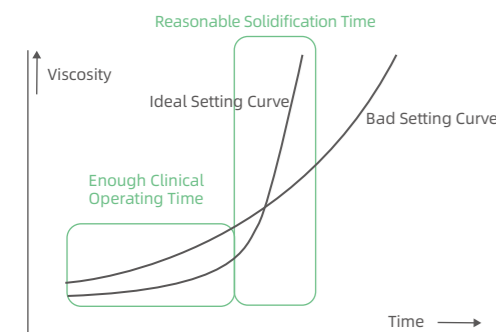
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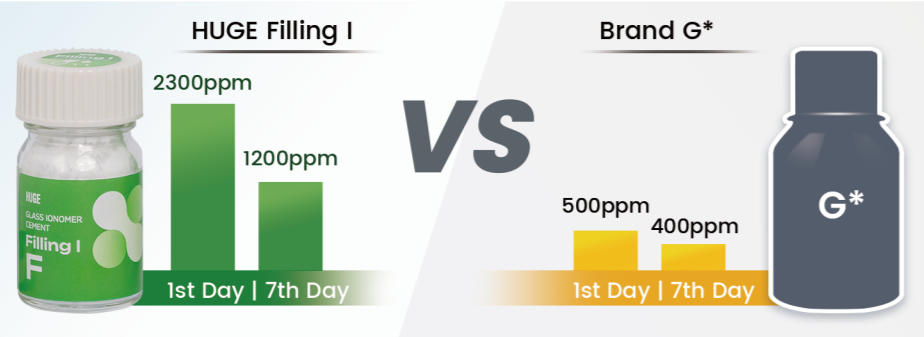


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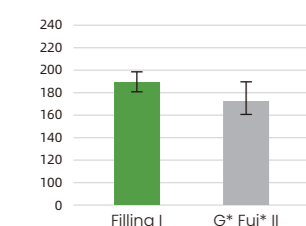
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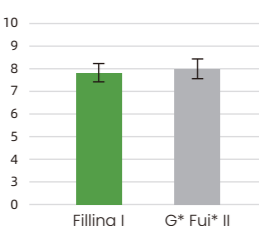


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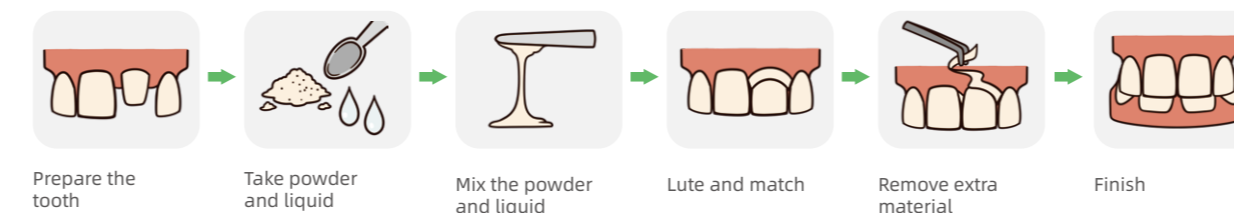
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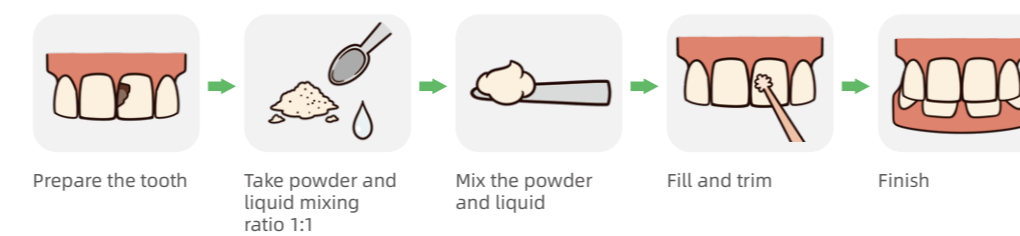


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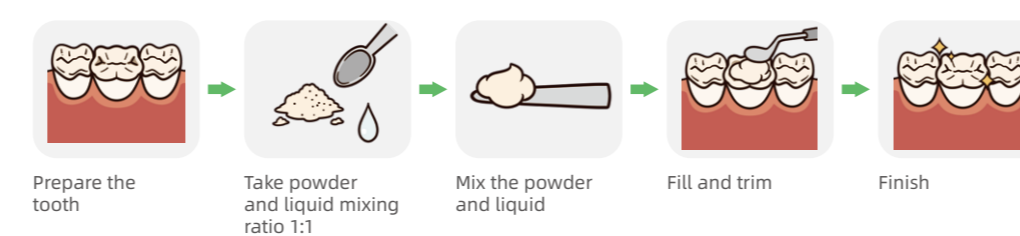
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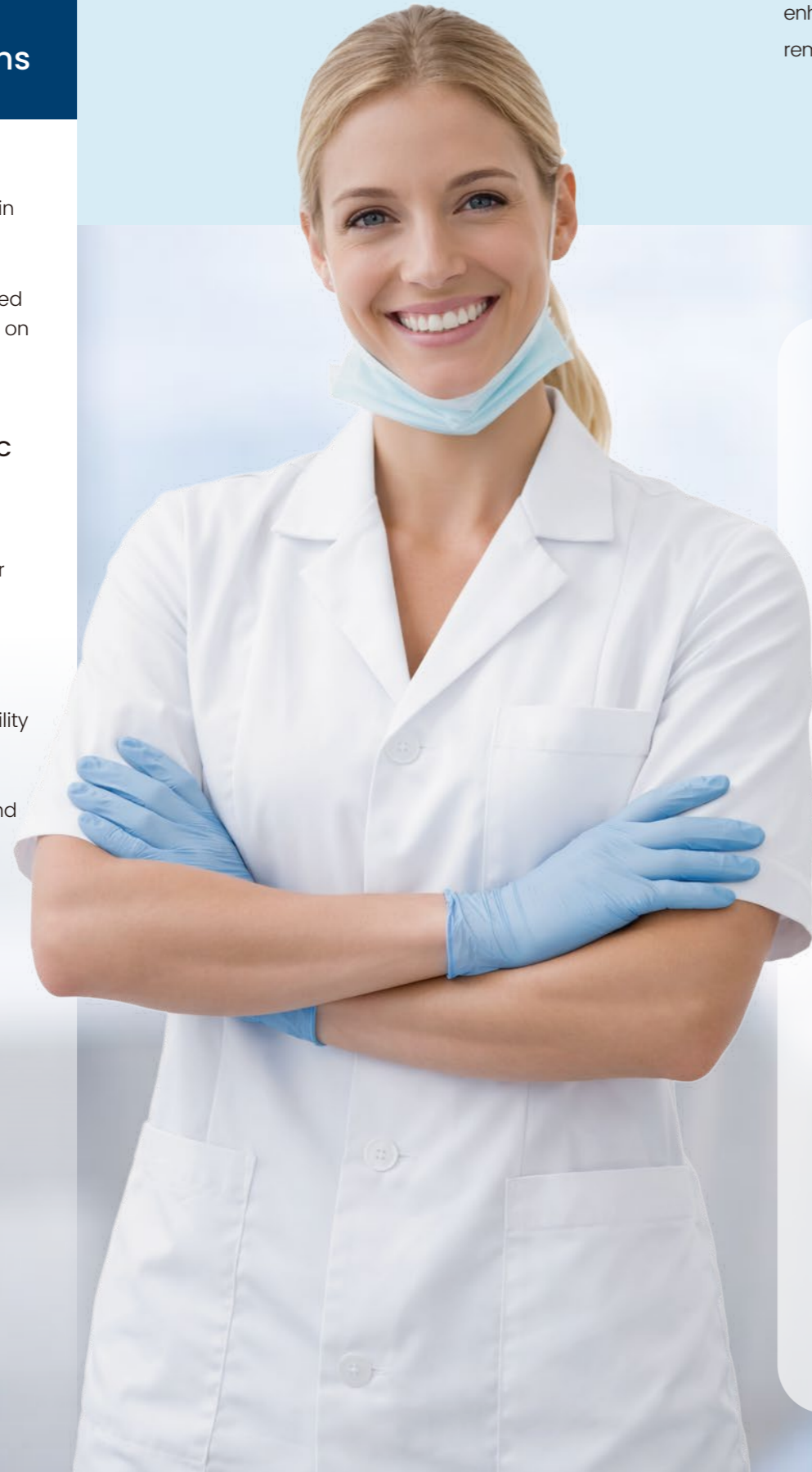
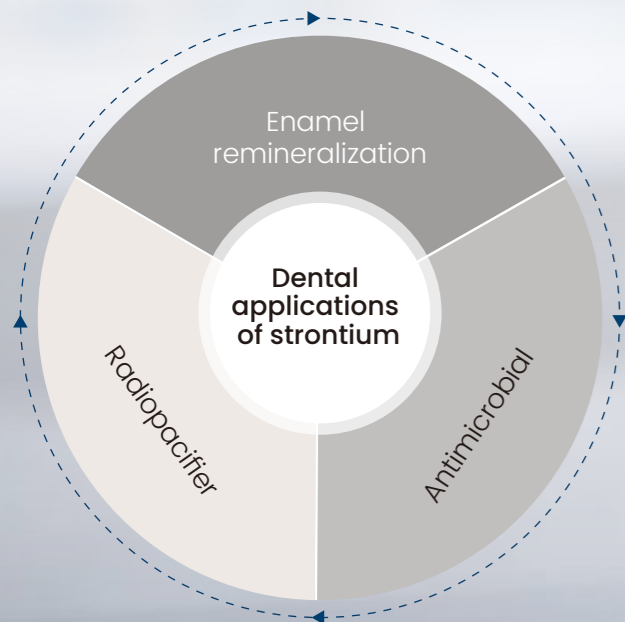
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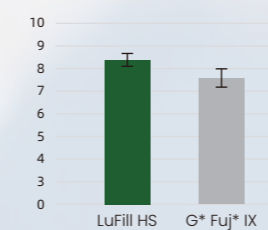


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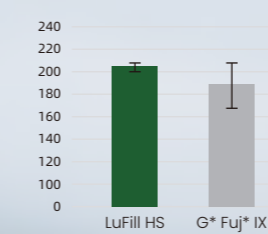
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Bonding strength/MPa



Compressive strength/MPa



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	Oxide Ceramic	✓
	Metal/Metal-Based	✓
	Composite Resin	
Post/Screw	Metal	✓
	Oxide Ceramic	✓
Orthodontic Bands		✓

Advantages

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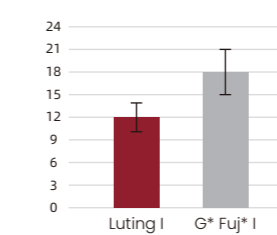
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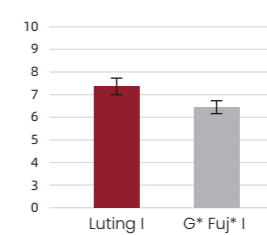
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Film thickness/µm



Bonding strength/MPa



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