# initial™ LiSi Press

## Lithium Disilicate Redefined

# Natural beauty restored


Smile for the World

Since 1921

100 years of Quality in Dental

# GC Initial™ LiSi Press
# The revolutionary pressable ceramic

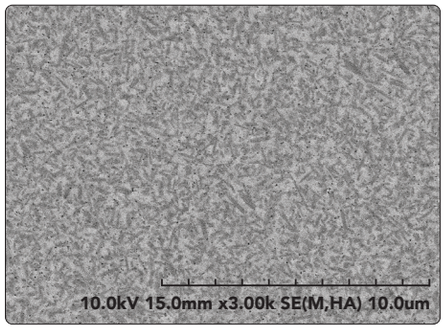
Imagine a pressable ceramic that outperforms all existing products.
Imagine a pressable ceramic that is stronger, more durable,
has better aesthetics and saves you significant lab time.


## The first lithium disilicate ceramic with HDM technology

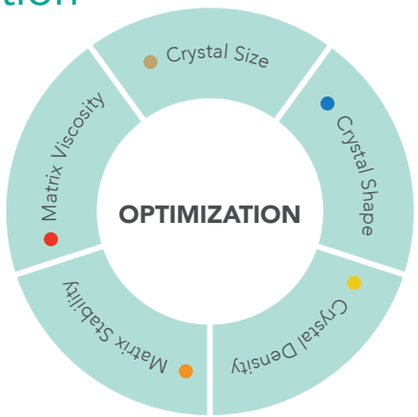

**GC Initial LiSi Press** is the first lithium disilicate ceramic ingot with High Density Micronization (HDM), a technology unique to GC that provides unsurpassed physical properties and the most natural, lifelike aesthetics of any pressed ceramic option on the market today. HDM uses equally dispersed lithium disilicate micro-crystals to fill the entire glass matrix rather than using traditional larger size crystals that do not take full advantage of the matrix structure. The result is the ultimate combination of strength and aesthetics, making **GC Initial LiSi Press** perfectly suitable for all types of restoration through all levels of transparency. Critically, HDM technology helps ensure the product remains super stable, without distortion or drop in value, even after multiple firings.

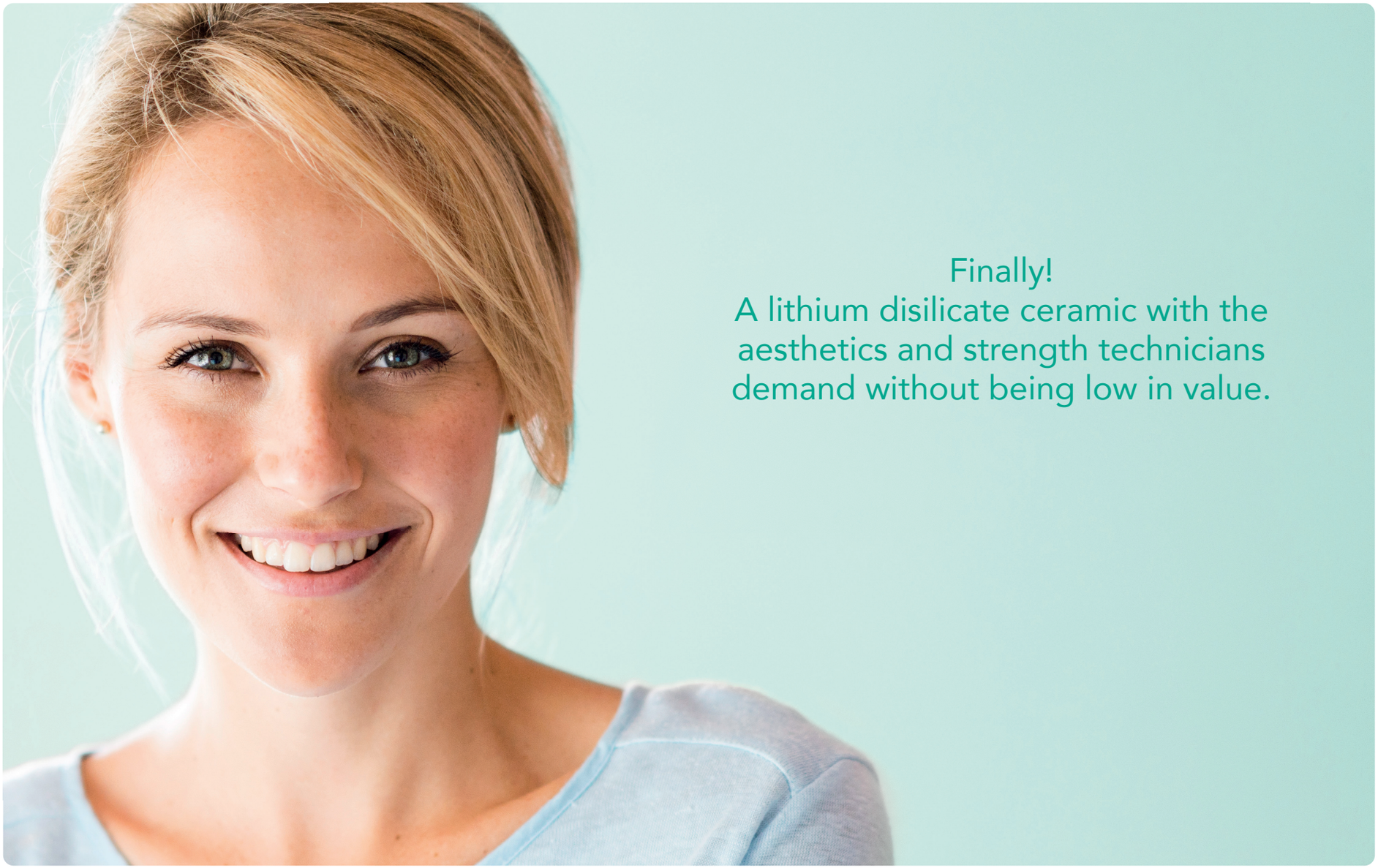
**GC Initial LiSi Press** has an extremely high density thanks to:
- optimised components
- a proprietary innovative new manufacturing technology (HDM technology)

## High Density Micronization




HDM - High Density Micronization




Finally!
A lithium disilicate ceramic with the aesthetics and strength technicians demand without being low in value.

# Press for a beautiful smile

**GC Initial LiSi Press** is optimised to be used with the rest of the GC Initial family, including the already proven GC Initial LiSi veneering ceramic and GC Initial IQ Lustre Pastes ONE – our universal 3D paintable ceramics, further enhancing aesthetics over the widest possible indications. And remember too, use **GC Initial LiSi Press** with our dual-cure adhesive resin cement, G-CEM LinkForce, and you will achieve extraordinarily strong and durable bonds.

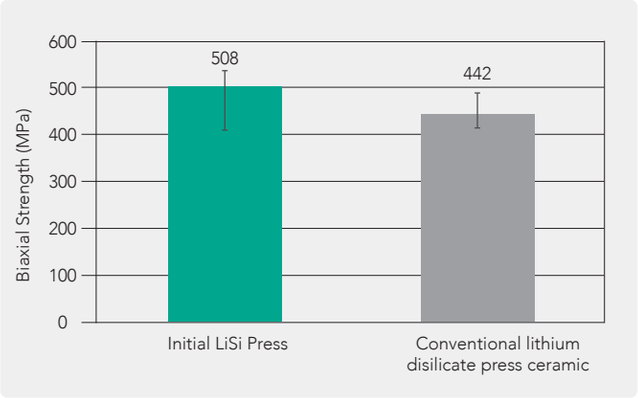
# Love GC Initial LiSi Press:

- Unsurpassed flexural strength
- Unparallelled aesthetics
  - Richer, warmer, brighter colours with excellent fluorescence
  - Predictable material and colour stability after repeated firings
  - Optimised for use with GC Initial LiSi veneering ceramic and GC Initial IQ Lustre Pastes ONE
- Real time savings
- Lower solubility than other leading brands – permanent gloss
- Antagonist-friendly and wear-resistant
- Almost no reaction layer when divested – cleaner presses
  - Easy layer removal with glass bead blasting – no hydrofluoric acid
- Seamless learning curve

# Unsurpassed physical properties

## High flexural strength

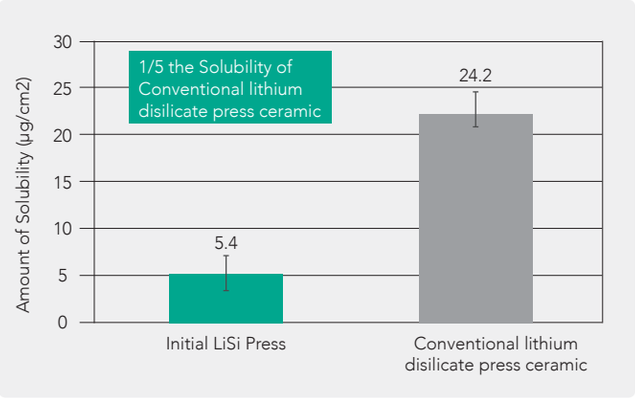
Biaxial Flexural Strength of Press Ceramics




Data on file.

## Lower solubility

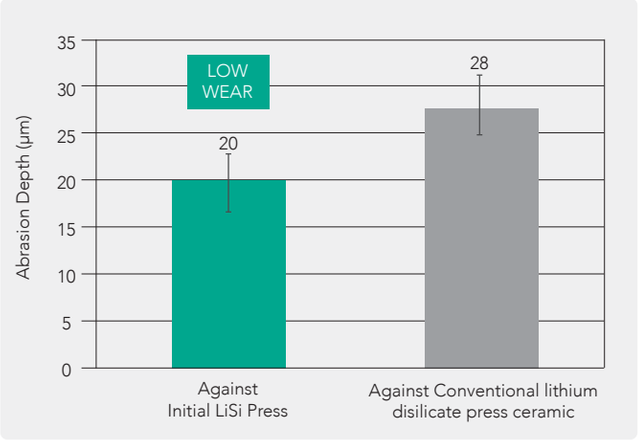
Amount of Solubility for each Sample under 4 vol.% Acetic Acid




Data on file.

## Antagonist friendly

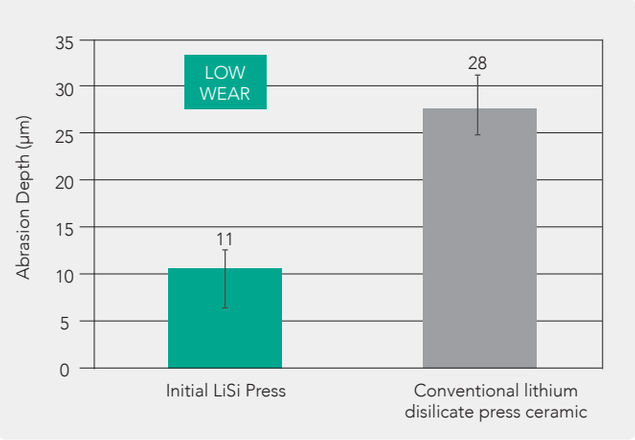
Abrasion Depth of HAp Antagonist after 400,000 Slides




Data on file.

## Wear resistant

Abrasion Depth of Material after 400,000 Slides




Data on file.

NEXT LEVEL STRENGTH & AESTHETICS

HDM TECHNOLOGY

GCC R&D Internal test results following ISO6872:2015 (data on file)

# Unparalleled aesthetics

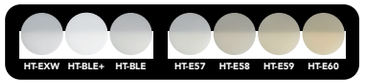
## Shade Selection

- Simplified shade line-up
- Reduction of inventory and cost
- Adaptable for a highly aesthetic build-up

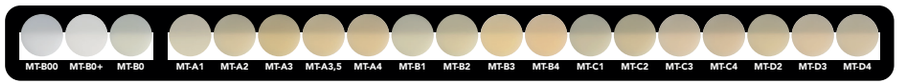
| Translucency Level | Bleach | | | A1 | A2 | A3 | A3.5 | A4 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | D2 | D3 | D4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HT | HT-EXW | BLE+ | HT-BLE | HT-E58 | | HT-E59 | | HT-E60 | HT-E57 | HT-E59 | | | HT-E60 | HT-E59 | | HT-E60 | | HT-E59 | |
| MT | MT-B00 | B0+ | MT-B0 | MT-A1 | MT-A2 | MT-A3 | MT-A3.5 | MT-A4 | MT-B1 | MT-B2 | MT-B3 | MT-B4 | MT-C1 | MT-C2 | MT-C3 | MT-C4 | MT-D2 | MT-D3 | MT-D4 |
| LT | LT-B00 | B0+ | LT-B0 | LT-A1 | LT-A2 | LT-A3 | LT-A3.5 | LT-A4 | LT-B1 | LT-B2 | LT-B3 | LT-B4 | LT-C1 | LT-C2 | LT-C3 | LT-C4 | LT-D2 | LT-D3 | LT-D4 |
| LT-IQ | | | | LT-A | | | | | LT-B | | | | LT-C | | | | LT-D | | |
| MO | MO-0 | | | MO-1 | | MO-2 | | | MO-1 | | MO-2 | | MO-1 | | MO-2 | | | | |

## Available in 4 translucencies

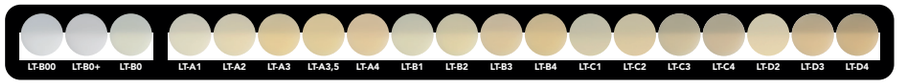
**High Translucency (HT) – Enamel replacement**
Best transparency match to natural tooth enamel, does not look dark (low value) in the mouth.




**Medium Translucency (MT) – Press & stain**
V-Shade line-up with warm colors from the Initial family of ceramic materials.

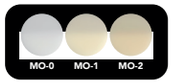



**Low Translucency (LT) – Stain or layer**
Low translucency ingots, following the V-Shade line-up. Ideal for staining or cut-back layering with GC Initial LiSi.




**Low Translucency (LT-IQ) – One body concept A, B, C, D or Layer**
Compact color line-up following the One Body concept.


**Medium Opacity (MO) – Layering**
Thanks to strong fluorescence, a life-like sense of colour can be reproduced when veneering Initial LiSi Porcelain.



# Processing & indications

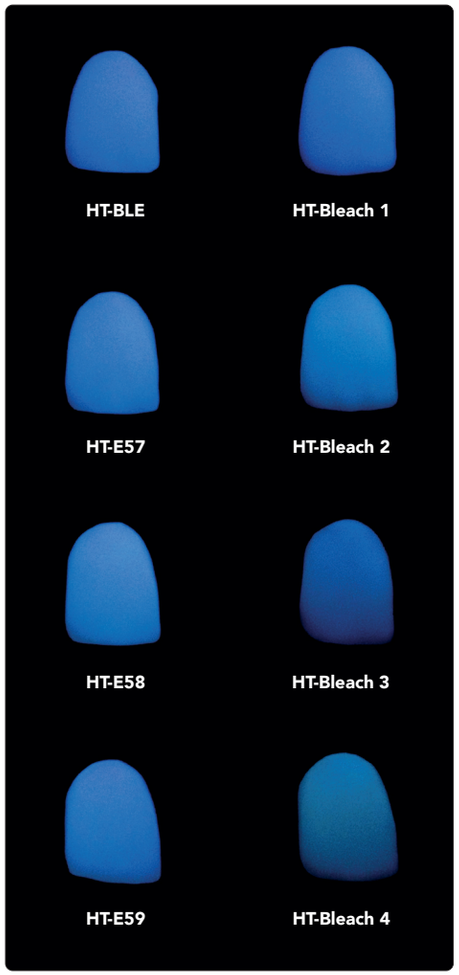
Courtesy MDT. Quini G., Spain

| | Processing techniques | | | Indications | | | | |
|---|---|---|---|---|---|---|---|---|
| | Staining Technique | Cut-Back Technique | Layering Technique | Veneers | Inlays | Onlays | Crowns | 3-Unit Bridges |
| HT | • | | | • | • | • | | |
| MT | • | • | | • | • | • | • | • |
| LT | • | • | | | | | • | • |
| LT-IQ | | • | • | | | | • | • |
| MO | | | • | | | | • | • |

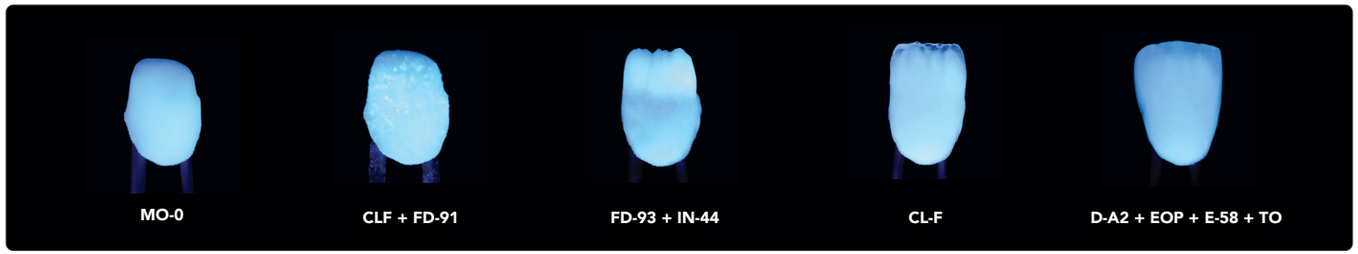
Courtesy MDT. D. Ibraimi, Switzerland

# Natural light dynamics

**GC Initial LiSi Press** Conventional lithium disilicate press ceramic




**Fluorescence starts from the internal frame**
MO-0 layered with GC Initial LiSi




Courtesy MDT. S. Maffei, Italy

## Natural opalescence

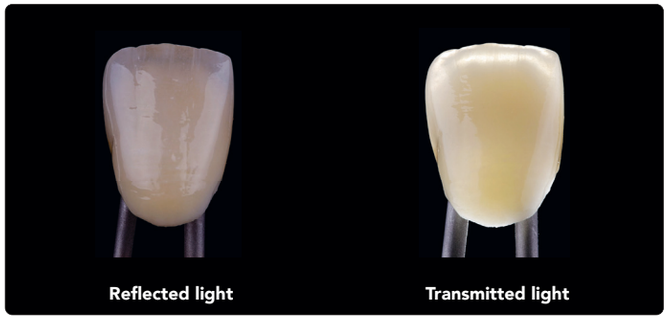
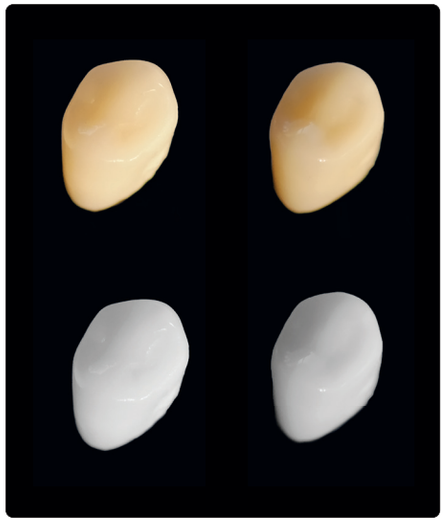



Image with courtesy of MDT. S. Roozen, Austria

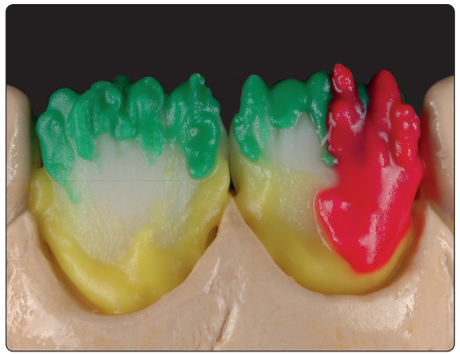
## Vibrant & brighter color tones

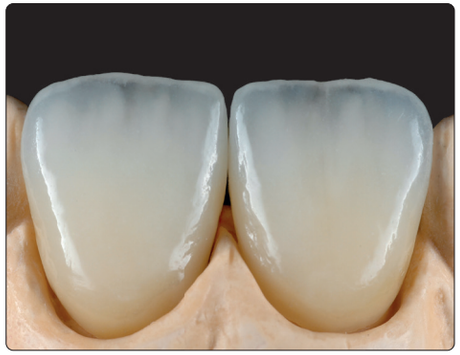
**GC Initial LiSi Press** MT-A2 | Conventional lithium disilicate press ceramic MT-A2



# Unparallelled aesthetic system approach

Optimised for use with GC Initial LiSi veneering ceramic and GC Initial IQ Lustre Pastes ONE, adding extra vitality to your pressed crowns!

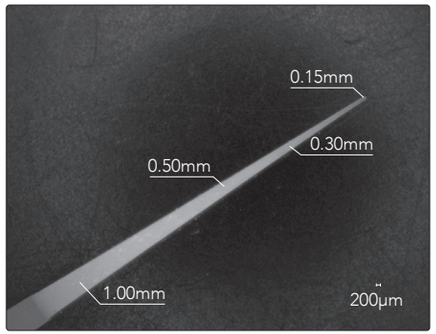





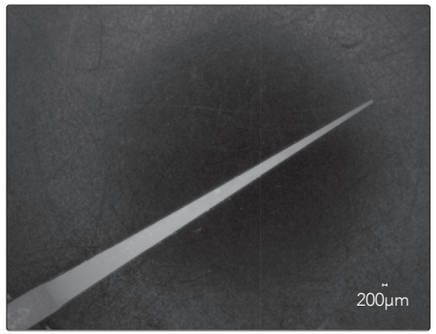
Courtesy MDT. M. Brüsch, Germany

# Stability during multiple firings

**Initial LiSi Press**
Before firing

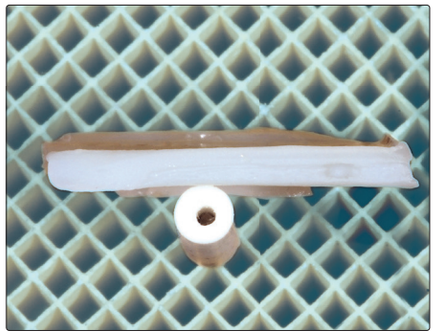



**Initial LiSi Press**
After firing

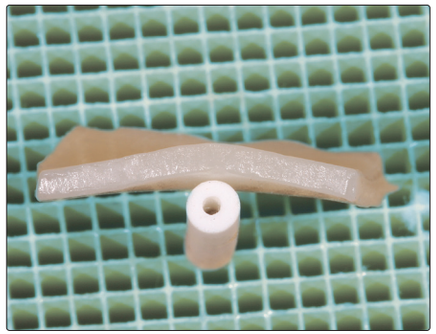



Simulating the margin, specimen with edge was fired repeatedly. No warping or cracking after multiple firings.

**Initial LiSi Press**

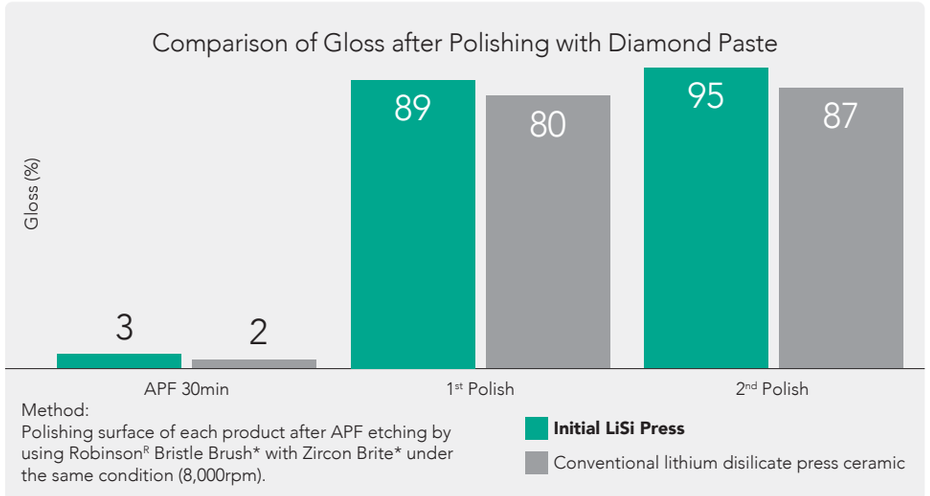


Conventional lithium disilicate press ceramic



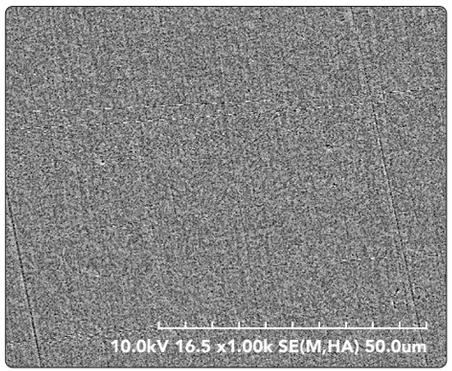
Results after 5th firing (770°C 1min, Hold). Test conducted by Masayuki Hoshi, RDT.

# Superior polishability

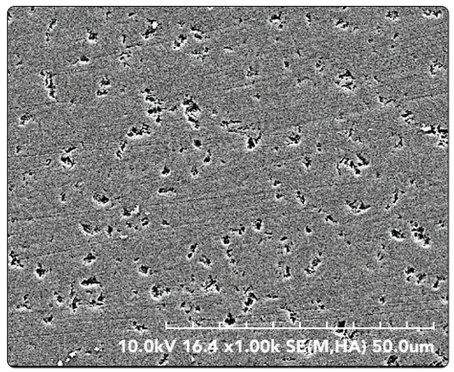



Data on file.

**Initial LiSi Press**
Polished surface (2nd polish)




Conventional lithium disilicate press ceramic polished surface (2nd polish)

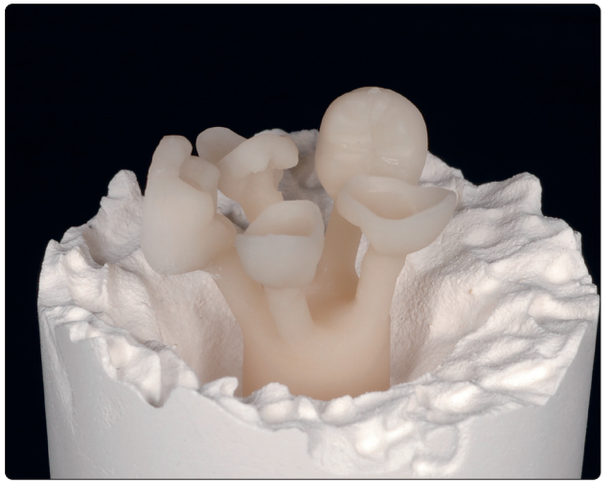


# Invest & Press GC LiSi PressVest

## Investing made easy!

- High fluidity
- Long working time
- Stable setting time
- More flexible time to furnace
- Time savings – great for lab workflows
- Wider sprueing capacity
- Better internal adaptation
- Easy removal of reaction layer
  – no hydrofluoric acid

## It's simply easier to use!

Courtesy MDT. M. Brüsch, Germany

Initial LiSi Press

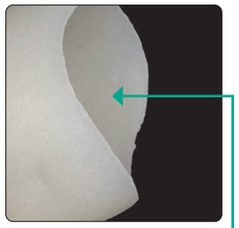

Conventional lithium disilicate press ceramic system

There is only a minimal reaction layer with GC LiSi PressVest, and it is easily removed just with glass beads. There is no need for hazardous hydrofluoric acid or alumina blasting. A key element in reaction layer inhibition is the GC LiSi PressVest SR (Surface Refining) Liquid, which is lightly sprayed on the intaglio before investing.

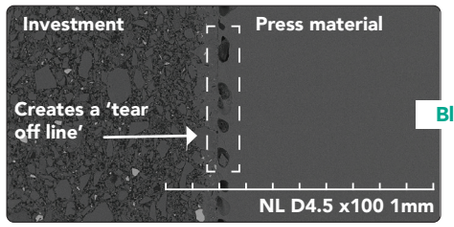
# The Secret of GC LiSi PressVest

## Less generation and easier removal of reaction layer

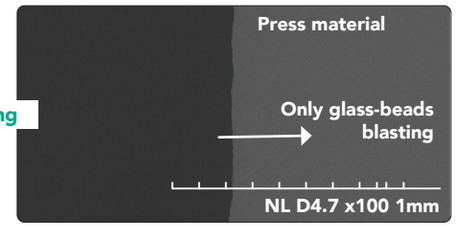
**Initial LiSi Press**



Smooth, clean press



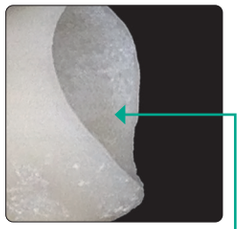

Blasting



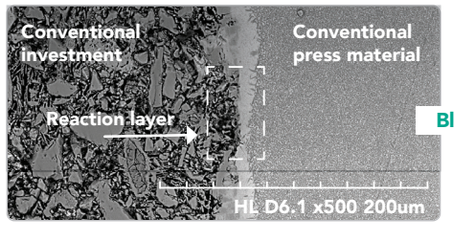

By using a unique release agent in the investment powder and LiSi PressVest SR liquid, a gap or "tear off line" is created, resulting in an easily broken reaction layer.

LiSi PressVest SR Liquid is sprayed to the intaglio (inside) of the crown, in which there is generally a stronger reaction layer.

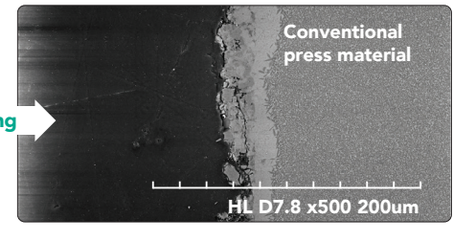
Conventional lithium disilicate press ceramic



Reaction layer:
Hybrid layer consisting of investment and press material

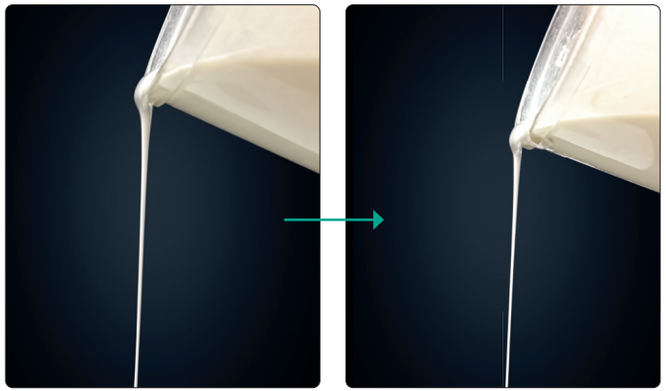



Blasting



# High fluidity & long working time

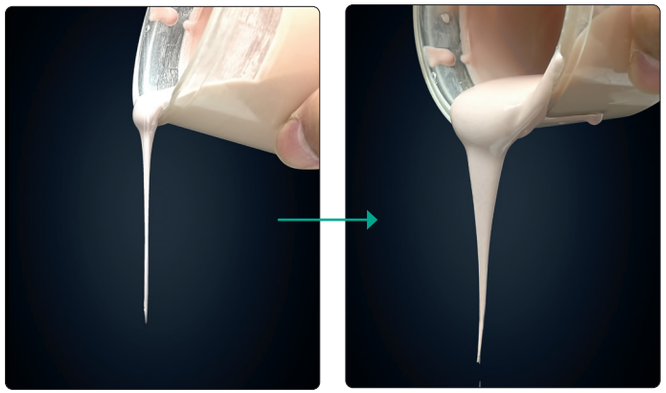
**GC LiSi PressVest**



1 min. after mixing

5 min. after mixing

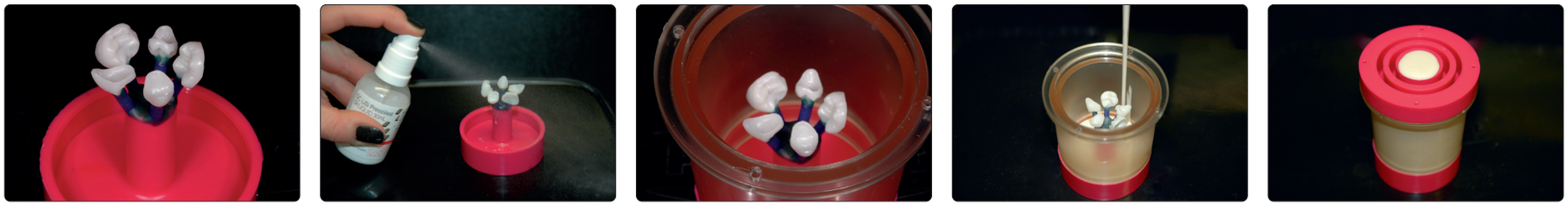
Conventional lithium disilicate press ceramic



1 min. after mixing

3 min. after mixing

| Time until inserting invested pattern into burn out oven | |
|---|---|
| **20 min. to 180 min.**<br>Invested pattern can be inserted into oven up to 160 minutes. | **30 min. to 45 min.**<br>Only 15 minutes is allowed until placing in oven. |



# Time saving

**Initial LiSi Press**

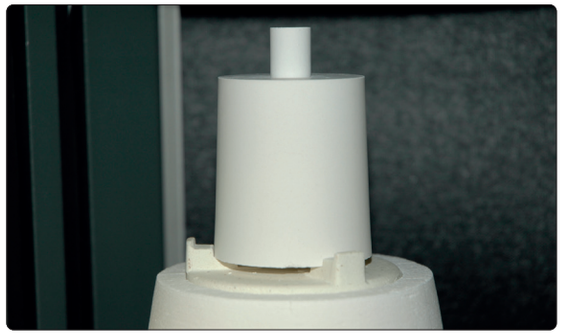
Pressing → Divesting → Glass beads blasting → → → Finishing

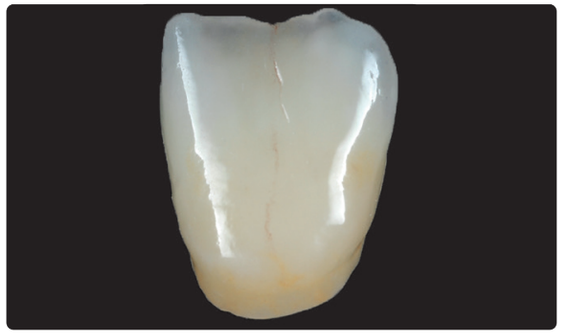
Time saved: Between 15-20 minutes.
No need for hydrofluoric acid.

Conventional lithium disilicate press ceramic system

Pressing → Divesting → Glass beads blasting → Hydrofluoric acid → Alumina blasting → Finishing

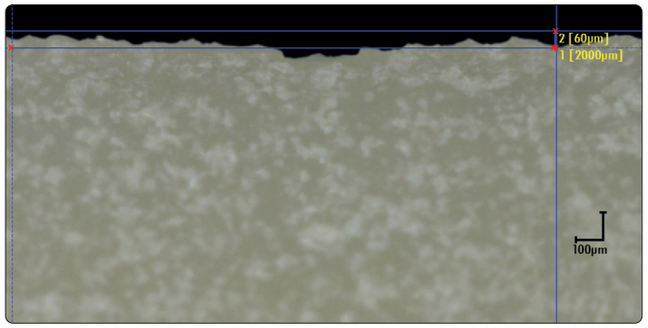




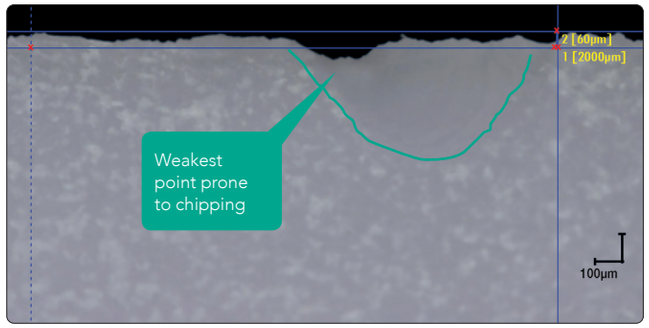


# Unsurpassed marginal integrity

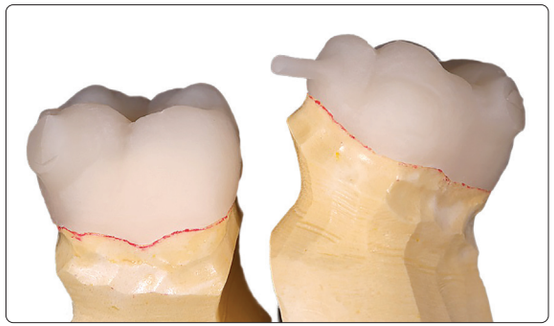
**Initial LiSi Press**




Conventional lithium disilicate press ceramic



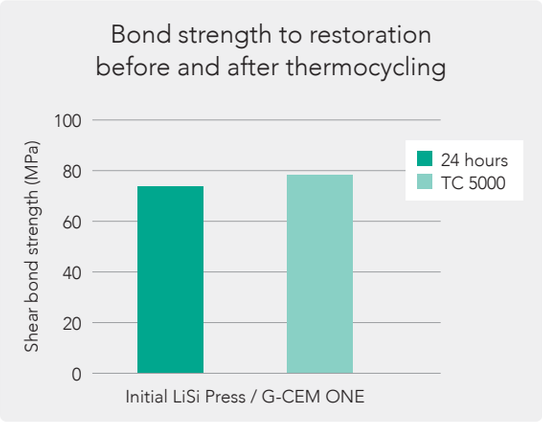

Ideal marginal integrity with Initial LiSi Press



Courtesy CDT. A. Hodges, USA

## Strong & durable bond strengths


Courtesy MDT. S. Maffei, Italy




Source: GC R&D data, Japan, 2021

# Cases with Initial LiSi, Family of Ceramics


Case by MDT. C. De Gracia, Spain


Case by MDT. J-C Allègre et Dr. Rousselet/Image by Dino Li, France


Case by MDT. S. Maffei, Italy

Case by MDT. P. Llobell, France

Case by MDT. M. Bladen, UK

Case by MDT. B. Marais, USA

Case by CDT. C. Fischer, Germany

Case by MDT. O. Yildirim and Dr. S. Tavas, Turkey

Case by MDT. P. Brito, Portugal


Case by MDT. Mirko Picone, Belgium

# GC Initial LiSi Press packaging


| | | |
|---|---|---|
| 901428 | GC Initial LiSi Press, HT-EXW, | 3g x 5 |
| 10006955 | GC Initial LiSi Press, HT-BLE+, | 3g x 5 |
| 901429 | GC Initial LiSi Press, HT-BLE, | 3g x 5 |
| 901430 | GC Initial LiSi Press, HT-E57, | 3g x 5 |
| 901431 | GC Initial LiSi Press, HT-E58, | 3g x 5 |
| 901432 | GC Initial LiSi Press, HT-E59, | 3g x 5 |
| 901433 | GC Initial LiSi Press, HT-E60, | 3g x 5 |


| | | |
|---|---|---|
| 901434 | GC Initial LiSi Press, MT-B00, | 3g x 5 |
| 10006956 | GC Initial LiSi Press, MT-B0+, | 3g x 5 |
| 901435 | GC Initial LiSi Press, MT-B0, | 3g x 5 |
| 901436 | GC Initial LiSi Press, MT-A1, | 3g x 5 |
| 901437 | GC Initial LiSi Press, MT-A2, | 3g x 5 |
| 901438 | GC Initial LiSi Press, MT-A3, | 3g x 5 |
| 10006957 | GC Initial LiSi Press, MT-A3.5, | 3g x 5 |
| 10006958 | GC Initial LiSi Press, MT-A4, | 3g x 5 |
| 901439 | GC Initial LiSi Press, MT-B1, | 3g x 5 |
| 901440 | GC Initial LiSi Press, MT-B2, | 3g x 5 |
| 10006959 | GC Initial LiSi Press, MT-B3, | 3g x 5 |
| 10006960 | GC Initial LiSi Press, MT-B4, | 3g x 5 |
| 901441 | GC Initial LiSi Press, MT-C1, | 3g x 5 |
| 901442 | GC Initial LiSi Press, MT-C2, | 3g x 5 |
| 10006961 | GC Initial LiSi Press, MT-C3, | 3g x 5 |
| 10006962 | GC Initial LiSi Press, MT-C4, | 3g x 5 |
| 901443 | GC Initial LiSi Press, MT-D2, | 3g x 5 |
| 10006963 | GC Initial LiSi Press, MT-D3, | 3g x 5 |
| 10006964 | GC Initial LiSi Press, MT-D4, | 3g x 5 |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|---|---|---|
| 901541 | GC Initial LiSi Press, LT-B00, | 3g x 5 |
| 901621 | GC Initial LiSi Press, LT-B0+, | 3g x 5 |
| 901542 | GC Initial LiSi Press, LT-B0, | 3g x 5 |
| 901538 | GC Initial LiSi Press, LT-A1, | 3g x 5 |
| 901539 | GC Initial LiSi Press, LT-A2, | 3g x 5 |
| 901540 | GC Initial LiSi Press, LT-A3, | 3g x 5 |
| 901622 | GC Initial LiSi Press, LT-A3.5, | 3g x 5 |
| 901623 | GC Initial LiSi Press, LT-A4, | 3g x 5 |
| 901543 | GC Initial LiSi Press, LT-B1, | 3g x 5 |
| 901544 | GC Initial LiSi Press, LT-B2, | 3g x 5 |
| 901624 | GC Initial LiSi Press, LT-B3, | 3g x 5 |
| 901625 | GC Initial LiSi Press, LT-B4, | 3g x 5 |
| 901545 | GC Initial LiSi Press, LT-C1, | 3g x 5 |
| 901546 | GC Initial LiSi Press, LT-C2, | 3g x 5 |
| 10006951 | GC Initial LiSi Press, LT-C3, | 3g x 5 |
| 10006952 | GC Initial LiSi Press, LT-C4, | 3g x 5 |
| 901547 | GC Initial LiSi Press, LT-D2, | 3g x 5 |
| 10006953 | GC Initial LiSi Press, LT-D3, | 3g x 5 |
| 10006954 | GC Initial LiSi Press, LT-D4, | 3g x 5 |

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|---|---|---|
| 901444 | GC Initial LiSi Press, LT-A, | 3g x 5 |
| 901445 | GC Initial LiSi Press, LT-B, | 3g x 5 |
| 901446 | GC Initial LiSi Press, LT-C, | 3g x 5 |
| 901447 | GC Initial LiSi Press, LT-D, | 3g x 5 |


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|---|---|---|
| 901448 | GC Initial LiSi Press, MO-0, | 3g x 5 |
| 901449 | GC Initial LiSi Press, MO-1, | 3g x 5 |
| 901450 | GC Initial LiSi Press, MO-2, | 3g x 5 |

# initial™ LiSi Press

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