

Strong solutions for beautiful teeth.



initial[™]
Zirconia Solutions

Initial Zr-FS
Lustre Pastes NF
Zirconia Disk

GC

Zirconia solutions with Initial™ from GC

Nowadays there is no getting around zirconia as a material for highly aesthetic and durable prosthetic restorations. It is strong, cost-productive, fits into the digital chain and has a wide range of applications. This allows the dental technician to fabricate restorations with a long-term stability and natural aesthetics in an economical and efficient way.

No other ceramic material can offer the same strength as zirconia. It is a durable, metal-free alternative for large constructions and more resistant to fractures than glass ceramics.

After scanning and modelling the design, frameworks or entire monolithic constructions can be milled from the **Initial Zirconia Disks** with high precision and in little time.

With the digital transformations coming to the industry at a high pace, it is important to keep up with this type of workflow. A product like zirconia is more than just another restorative material – it is the next step in improving the quality and sustainability of your work.

Combining strength and aesthetics, CAD/CAM ceramics can be a great alternative to more traditional materials in offering a variety of clinical solutions. GC offers a wide portfolio of ceramic materials that fit to the different clinical and economical considerations such as cost and ease of processing.

From Veneer-fused-to-zirconia with **Initial Zr-FS** to Paint-on-zirconia with **Initial Lustre Pastes NF**, GC offers a tailored solution for each patients' needs.

Be inspired by the many examples and enjoy the endless versatility of our zirconia solutions ...

Pictures: courtesy of M. Brüsich, Germany - R. Dahl, Germany - P. Freudenthal, Sweden - B. Marais, USA - S. Milliasseau, France - V. Mutone, Italy - S. Roozen, Austria - C. Rothe, Germany

GC Trademarks: Initial Lustre Pastes NF, Initial Spectrum Stains, Initial LiSi Press, Initial Zirconia Disk





Paint-on-zirconia - monolithic structure



Painting and micro layering - zirconia on implants



Veneer-fused-to-zirconia - Painting and micro layering



Veneer-fused-to-zirconia
Individualised layering

One quality standard for the beauty and function of nature

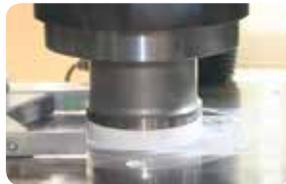
Zirconia's greatest advantage lies in its strength and resistance to repetitive loading from mastication. Its unique mechanical properties make it an outstanding restorative choice when maximum strength is a must. At the same time, a myriad of solutions exist to obtain the much desired vibrant and lifelike aesthetics, with various translucency levels and finishing options - **by GC**

In-house produced ceramics

CERTIFIED STRENGTH & QUALITY CONTROL

Zirconia, an extract from zirconium silicate, is processed to a crystalline white powder by a complex chemical process. The addition of organic binders enables to press the powder into blanks. The pre-sintering process assigns each blank's processing properties. After production, each individual blank is submitted to an extensive quality control.

This in-house production and quality process is subject to very strict test procedures following established, certified processes. Ensuring high quality materials with outstanding physical properties - **GC Initial Zirconia Disks**



NATURALLY BEAUTIFUL

GC Initial's aesthetic ceramics are based on the structural form of nature and made to the highest quality. This means the optical properties of the restoration, such as diffuse reflection, fluorescence, opalescence and translucency mimic those of the natural tooth.

The composition and quality of GC Initial render a ceramic that is simple to handle and extremely stable. It is easy to contour and very technique tolerant. Even after several firings, the ceramic colour and optical properties will not change.

The structure of GC Initial esthetic ceramics also has excellent physical properties so final restorations are exceedingly durable and fully functional - **GC Initial Zr-FS & GC Initial Lustre Pastes NF**



Regardless of the indication or veneering process,
a beautiful, natural-looking restoration can be made in a simple way.



GC Initial Zirconia Disks

Which is the optimal zirconia for which indication? Different factors will influence your choice: aesthetic requirements, the restoration's size, the shade of the prepared tooth,... In order to obtain the most predictable and accurate restorations, it is of utmost importance to always select the material that matches the specifications of each individual case.

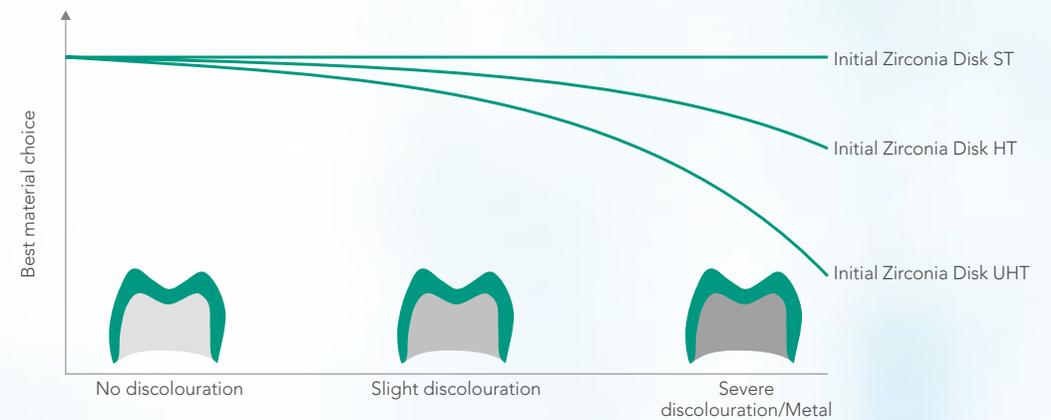
INDICATION						
	Inlay/Onlay	Veneer	Crown (Ant/Post)	Hybrid abutment	3-unit bridges (incl. molars)	Multi-unit bridges (≥ 4 units)
Initial Zirconia Disk ST (Standard translucency)			✓	✓	✓	✓
Initial Zirconia Disk HT (High translucency)			✓	✓	✓	✓
Initial Zirconia Disk UHT (Ultra-high translucency)	✓	✓	✓		✓	

	Initial Zirconia Disk ST (Standard translucency)	Initial Zirconia Disk HT (High translucency)	Initial Zirconia Disk UHT (Ultra-high translucency)
Vicker's hardness	1250 HV	1250 HV	1250 HV
CTE (50-500°C)	10.3	10.3	9.8
Sintered density	6.05 g/cm ³	6.09 g/cm ³	6.05 g/cm ³

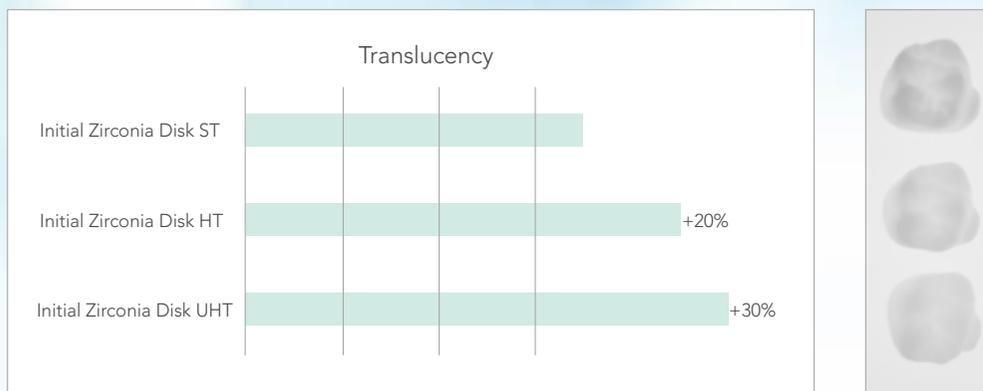
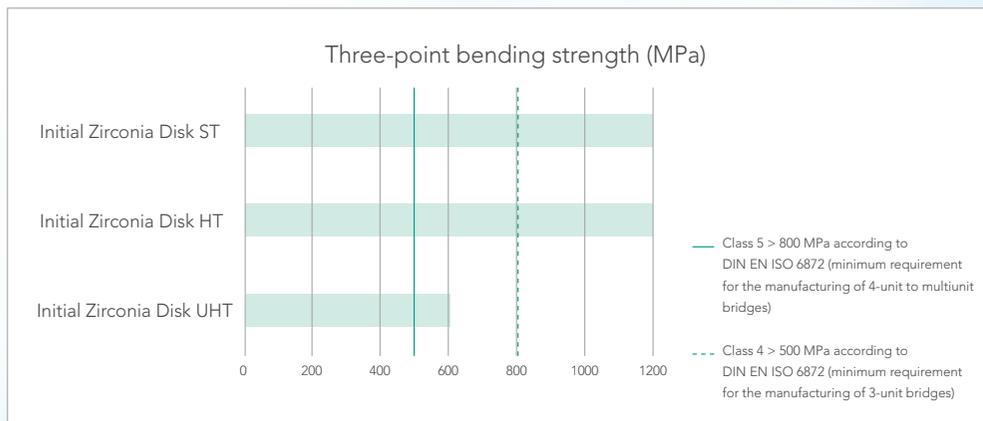
Source: GC R&D. Data on file.

PROCESSING			
	Staining technique	Cut-back technique	Layering technique
Initial Zirconia Disk ST (Standard translucency)			👍
Initial Zirconia Disk HT (High translucency)	👍	👍	👍
Initial Zirconia Disk UHT (Ultra-high translucency)	👍	👍	👍

Choose your optimal zirconia type:
Relationship between the tooth prep shade and the translucency level of the zirconia restoration.



Perfectly balanced material properties



Release the full aesthetic potential with GC Initial Zr-FS

Initial Zr-FS is a refined feldspar based veneering ceramic for use with high strength zirconia frameworks.

The unequalled natural optical effects and increased stability after multiple firings, make it ideal for the fabrication of high demanding aesthetical crowns, complex and delicate substructures such as bridges on teeth or implants.



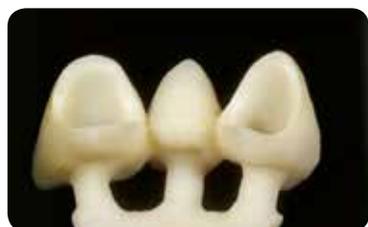
Both white and red aesthetics

To make gingival restorations with Initial even more aesthetic and more natural, the add-on set **Initial Zr-FS Gum Shades** meets all the requirements for highly aesthetic gingival reproductions.



Keep the focus on shape and function

The monolithic build-up of the GC Initial IQ One Body systems enable you to fully focus on shape and function by means of layering with only one powder or one press ingot on a zirconia structure. Further characterisation and gloss are easily achieved with the GC Initial Paintable Solutions: **Initial Lustre Pastes NF** and **Initial Spectrum Stains**.



The dedicated **Zr Light Reflective Liners** are ready-to-use liners designed for reliable shade masking of different coloured zirconia frameworks while maintaining the aesthetically relevant light effects. They also offer a solution for discoloured tooth preparations.

After conditioning the framework in this way, a standardised layering technique will lead to perfect shade results.



Related products



GC Initial IQ - One Body Layer-over-Zircon and Press-over-Zircon Feldspar-based ceramics for the "One Body Concept".



GC Initial Light Reflective Liner Set

Ready-to-use liners designed for reliable shade masking of zirconia frameworks while maintaining the aesthetically relevant light effects.

Standard Translucent (ST) and High Translucent Zirconia (HT)

The GC Initial Zirconia Disks ST (Standard Translucent) and HT (High Translucent) are well known for their high strength up to 1200 MPa, their biocompatibility and rigidity, resistance to deformation and optimal edge stability. ST is with its highest opacity level ideal for indications in which metal frameworks, discoloured tooth preparations are to be masked. HT is ideal for fully anatomical or reduced anatomical restorations in the posterior as well as the anterior region. Thanks to the perfect balance between strength and aesthetic possibilities, the most stunning monolithic restorations can be created with a perfect transition from the gingiva to the tooth. Frameworks can be customised with colouring liquids (brush technique), GC Initial Lustre Pastes NF and GC Initial Zr-FS.



Indications

- Anterior and posterior crowns
- Multi-unit bridges
- Hybrid abutments
- Implant frameworks

Benefits at a glance

- High strength and aesthetics
- Optimal edge stability and millability
- Customisation with GC Initial Zr-FS and GC Initial Lustre Pastes NF



Ultra-High Translucent Zirconia (UHT)

Consisting of a mixture of ceramic powders - tetragonal (conventional) and cubic zirconia - the GC Initial Zirconia Disk has a translucency comparable to lithium disilicate. Natural, lifelike restorations with a high strength can be achieved, ensuring a long-lasting performance. The same colouring liquids (brush technique), GC Initial Lustre Pastes NF and GC Initial Zr-FS can be applied to this framework for the most stunning end results.



Indications

- Inlays
- Onlays
- Veneers
- Anterior and posterior crowns
- Three-unit bridges (including molars)

Benefits at a glance

- High translucency and aesthetics
- Optimal edge stability and millability
- Customisation with GC Initial Zr-FS and GC Initial Lustre Pastes NF



Related products



GC Initial Zr-FS
Improved feldspar based zirconium oxide veneering ceramic for use with high strength zirconium frameworks.

It possesses unequalled natural optical effects and increased stability after multiple firings.



GC Initial Lustre Pastes NF
Three-dimensional paintable ceramics to easily improve or modify all your ceramic workpieces. CTE between 6.9 and 13.3. In V-Shades and Gum Shades.

Endless painting options with GC Initial Lustre Pastes NF

With the Initial Lustre Pastes NF you no longer need complex layering or extra firing cycles to obtain an unsurpassed vitality and a natural glaze for all your restorations. The steps to complete your crown and bridgework remain identical, regardless of the technique you use to create ceramic-based restorations. They have a wide CTE range - between 6.9 and 13.3 - and thus can also be used for your other ceramic workpieces. They are available in ready-to-use jars, facilitating your life even more. With the Diluting and Refresh liquids, the optimal consistency is kept until the end.



A perfect transition between the crown margin and gum is obtained with Initial Lustre Pastes NF.



Add character to your monolithical restorations

Looking for a way to add vitality and gloss to your CAD/CAM produced zirconia monolithics ? **Initial Lustre Pastes NF** offer a solution for every case. All the characteristics and gloss can be added in just one firing cycle.

The pastes are ready-to-use with a fine thixotropic property, for precision and ease of use.. The requested surface texture and smoothness of the Initial Lustre Pastes NF layer can be obtained by gently vibrating or condensing the restoration.

No complex layering or extra firing cycles required. It is fast, easy and secure.



Related products



GC Initial Lustre Pastes NF
Three-dimensional paintable ceramics to easily improve or modify all your ceramic workpieces. CTE between 6.9 and 13.3. In V-Shades and Gum Shades.

Cementation of zirconia restorations

For optimal adhesion, restorations should be sandblasted.

When tooth preparations are nearly optimal, a resin-modified glass ionomer cement such as **FujiCEM Evolve** is advised. FujiCEM Evolve shows high bond strength to zirconia, without the need of any primer and is less technique-sensitive than composite cements. A self-adhesive resin composite cement such as **G-CEM LinkAce** is also highly suitable when moisture isolation is possible.

For minimal invasive preparations with minimal retention, a universal resin cement such as **G-CEM LinkForce** offers many advantages, such as a high bond strength and self-curing ability. The ultra-high translucency of Initial Zirconia Disk UHT has the additional benefit that light-curing through the restoration is possible, which saves time and is beneficial for the cement properties.



Download the luting app to select the correct cement and luting procedure

Related products



GC FujiCEM Evolve
Resin-modified glass ionomer luting cement that combines the best in handling characteristics and physical properties for your total peace of mind. Offers the benefit of moisture tolerance, chemical adhesion to tooth and bio-friendliness.



GC G-CEM LinkForce
Universal adhesive resin cement that offers predictable results and allows you to work in a standardised way. G-CEM LinkForce ensures a strong bond to all substrates in all indications, without compromises.

GC Manufacturing Europe

Welcome to GC's advanced CAD/CAM Production Centre where we offer solutions for your most elaborate cases.

Through years of dedicated research, our CAD/CAM system efficiently fabricates various kinds of prosthesis and applications made of an array of materials.

When you are looking for high quality products and services in CAD/CAM technology we are sure we can deliver you what you need. Because our open system approach can handle even the most elaborate cases.



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