



Smart Dentistry™
Solutions

About Our Company

Smart Dentistry Solutions was established in 2019 to provide better products and service to Dental Laboratories. All of our materials are manufactured according to the strictest quality control standards under our direct supervision at OEM facilities located in Japan. This process ensures that our products are made to the highest possible material quality standards.

*Katana Zirconia ML, Kuraray Noritake, Tosoh and Merz Dental are not registered trademarks of Smart Dentistry Solutions Inc.

1M1



From the most natural shade guide (Vita 3D Master system), we welcome shade 1M1 to the palette of our LayZir zirconia material. 1M1 is considered a brighter and lifelike shade according to the dental community. White teeth don't need to be flat. Create more natural and beautiful restorations and smiles for your doctor's patients.

Vita 3D master is a trademark of Vita Zahnfabrik.

LayZir All Indication Layered Zirconia Disc

	Microstructure	Translucence	Flexural Strength
Layer 1	Incisal 5Y PSZ	44%	1,030 MPa
Layer 2	Mixture Transition		
Layer 3	Transition 5Y-PSZ and 3Y-TZR	40%	1,160 MPa
Layer 4	Mixture Transition		
Layer 5	Cervical 3Y TZR	37%	1,450 MPa

Internal data on file: ISO6872:2015

LayZir Discs are FDA-Cleared and manufactured to the highest quality standards at our state-of-the-art OEM facilities in Japan. Unparalleled strength and aesthetics comparable to lithium disilicate are achieved using a special blend of 3Y and 5Y yttrium stabilized zirconia pressed from 100% premium Tosoh* powder. Our proprietary multidimensional gradation technology ensures a seamless and highly aesthetic transition from 1,450 MPa at cervical with excellent chromatic expression, to a 44% translucency with 1,030 MPa flexural strength at incisal.

Testimonials

"My most demanding dentists and patients love the fit, beautiful aesthetics, luminosity, and material performance. LayZir is in a league of its own!"

Vincent Devaud CFC, MDT, MSD
Smile Design, West Hollywood, CA



"LayZir brings the value we need to meet our laboratory's high aesthetic standards. With the strength we expect from Zirconia, we can now confidently and predictably process anything from single units to full mouth reconstructions."

Yasu Kawabe MDT, CDT, RDT
Oral Design, Boston, MA



Clinician: Dr. Christopher Balaban MSc, DMD



Getting the Most from LayZir

All Indication Layered Zirconia:

- Inlays, Onlays, Veneers
- Full Contour Crowns
- Bridges (14-units Max 2 Pontics)
- Implant Supported Structures
- Custom Implant Abutments

Using LayZir for the first time:

LayZir incisal layers demonstrate distinctly high value and generous translucency. Our dentin layers exhibit intentionally understated chroma and natural opacity. This combination allows for consistent chromatic adjustment with a simple stain and glaze.

Recommended Protocols:

1. Enter the specific shrinkage value from label.
2. Mill dry. Avoid moisture (including liquid stains).
3. Introduce desired anatomy in the green state.
4. Sinter at 1,450° C per instructions.
5. Add stain characterization as desired.
6. Final glaze. Polish with LitZir Paste if needed.


Choosing your Shade:

Don't second guess your shade! Our low-chroma, high-value foundation will easily "stain-up" to enhance chromatic expression.

LayZir Sintering Schedule

	Starting Temp.	Rising Speed	Holding Temp./Time	Descending Temp./Time
Standard Cycle	R.M	10°C/min	1450°C 120 min	10°C/min Furnace Cooling
Long Cycle	R.M	5°C/min	1500°C 120 min	5°C/min Furnace Cooling

Layer Thickness & Nesting Information

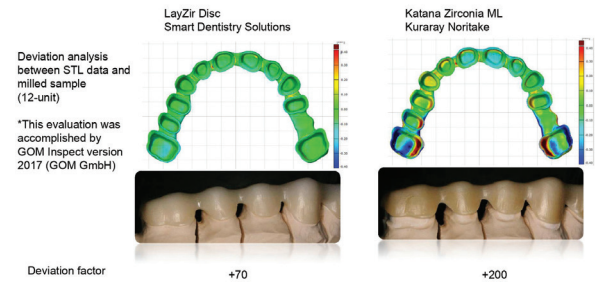


	T14	T16	T18	T20	T22	T25
1st	4.2			4.8		
2nd	1.4			1.6		
3rd	1.4			1.6		
4th	2.1			2.4		
5th	4.9	5.6	7.6	9.6	11.6	14.6

Unit: mm

Smart Dentistry Solutions recommend nesting the restoration at the 3rd layer to maximize translucency.

Reduced Sintering Distortion



Minimal distortion achieved post-sintering due to LayZir's low shrinkage value, proprietary technology, and premium quality materials. Seating the LayZir structure to the working model is effortless.

"We're here to help you... Call our Customer Service Department with any questions or comments."

949-446-9383

Contact@SmartDentistrySolutions.us



FDA Cleared

- ✓ All Indication Layered Zirconia Disc
- ✓ Aesthetics on Par with Lithium Disilicate
- ✓ Greatly Reduced Sintering Distortion
- ✓ Excellent Millability Across All Systems
- ✓ Proprietary 3Y and 5Y Blending



ORDER ONLINE

SmartDentistrySolutions.us

949-446-9383



SHADE

BL1 BL2 1M1 A1 A2 A3 B1 B2 C1 D2

DISC SIZE

98 x 12 mm 14 mm 16 mm 18 mm 20 mm 22 mm 25 mm

C1 and D2 are not available on 20mm and 22mm, for 25mm will be coming soon.



CONTACT US

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Artistry Without Compromise

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