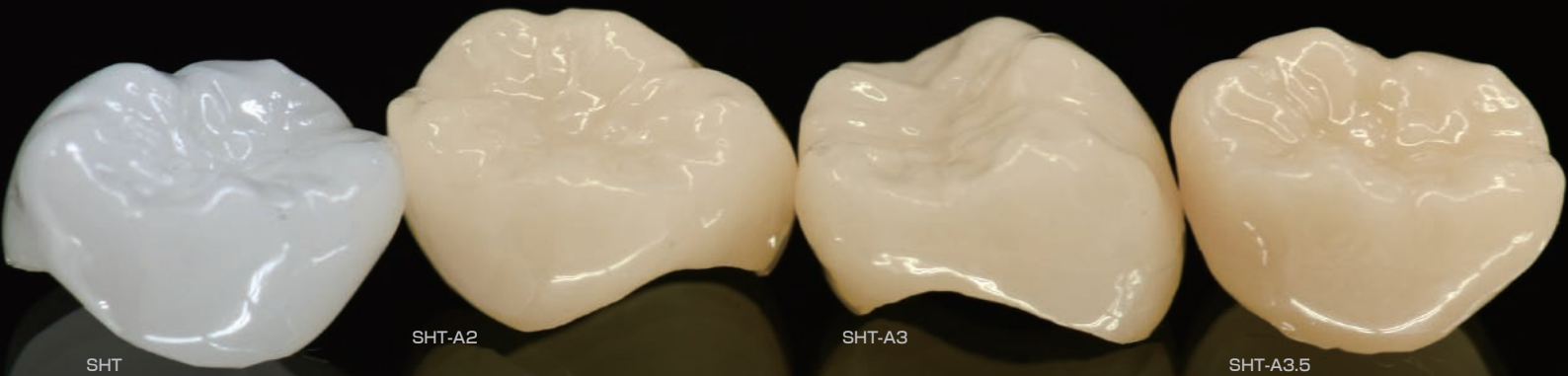


Super High Translucent (SHT) Zirconia Disc

SHT Color Shades Available!



Purely Made-in-Japan Zirconia Disc with Isostatic Pressure Technique and YAMAKIN's Unique Technology*1

*1: Pre-Sintering Technology

Zirconia Disc for CAD/CAM

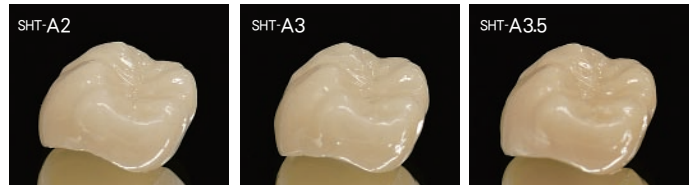
KZR-CAD Zr

Product Lineup

SHT (Super High Translucent)

- The highest light transmission in the series.
- Makes it possible to perform restoration utilizing the color of the abutment tooth.
- Suitable for cases requiring high aesthetic quality on anteriors so as to harmonize with natural teeth.

*Due to the physical properties of SHT, please do not use for cases which require high strength.



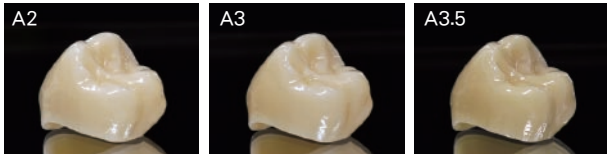
NEW Lineup HT and SHT Offer Pre-Colored Shades!

HT (High Translucent)

- Higher translucency than T(Translucent) with well-balanced of strength and translucency.
- Minimizes the working time required for layering and staining.
- Pre-colored shades are available.



HT Color lineup



T (Translucent)

- Original Shade was released in April, 2014.
- Suitable for making frameworks on an abutment tooth.
- High strength enables long bridges.



Characteristics (reference values)

	SHT	HT	T
Comparison of light transmission using a pellet of 0.5 mm thickness			
Light Transmission (%)	51	43	33
Flexural Strength (MPa)	770	1,080	1,280

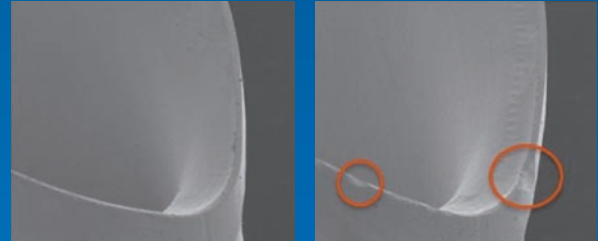
SHT has excellent light transmission, T has high flexural strength, and HT is designed to have a good balance of flexural strength and light transmission. For these reasons, KZR-CAD Zr is suitable for use with a broad range of cases.

Zirconia Crown



High Machining Precision by CIP and Optimal Sintering Technology

KZR-CAD Zr has excellent compatibility thanks to non-directional CIP (Cold Isostatic Pressing) compression molding. Carefully controlled CIP pressure and optimal sintering prevent fractures, cracks and detachment; also, they are designed so as to make machining precision higher.



Left Image: Optimal sintering under good conditions

Right Image: Over-sintering

Enlarged Image of Margin Area after Machining

Made in Japan

Y_2O_3 enables high levels of strength and fracture toughness in zirconia, as it stabilizes zirconia crystallization. The raw materials for KZR-CAD Zr are produced by TOSOH Corporation, a Japanese company with a proven record worldwide. This means that KZR-CAD Zr is a purely made-in-Japan product.

Raw Material Composition of Zirconia Disc (Weight Percentage)

	T	HT	SHT
ZrO ₂ (HfO ₂)+Y ₂ O ₃	>99.00	>99.00	>99.00
Y ₂ O ₃	4.95 ≤ ~ ≤ 5.35	5.15 ≤ ~ ≤ 5.55	9.15 ≤ ~ ≤ 9.55
Al ₂ O ₃	0.20 ≤ ~ ≤ 0.30	0.03 ≤ ~ ≤ 0.07	0.03 ≤ ~ ≤ 0.07
SiO ₂	≤ 0.020	≤ 0.020	≤ 0.020
Fe ₂ O ₃	≤ 0.010	≤ 0.010	≤ 0.010

For control of color shade type, pigments are added to the composition of HT and STH raw materials.

Short Sintering Time

KZR-CAD Zr sintering is completed in less than 8 hours, including cooling time. Mass production of restorations is possible, as KZR-CAD Zr enables operation 3 times a day.

<Sintering Program>

	Heat Rate	Heat Rate	Hold	Cooling
Temperature (°C)	1,000	1,450	1,450	400 (in the furnace)
Time (hour)	2	1.5	2	1.5

In the case of a single crown to an 8-unit bridge made of T or HT or a single crown to a 3 unit-bridge made of SHT

Lineup



Color	Diameter(Φ) 98.5mm					
	Thickness (t)					
	14mm	16mm	18mm	20mm	22mm	25mm
SHT	○	—	○	○	—	—
HT	○	—	—	○	—	○
T	○	○	○	○	○	○
HT-A2, HT-A3, HT-A3.5	○	—	—	○	—	○
SHT-A2, SHT-A3, SHT-A3.5	○	—	○	○	—	—