

**KATANA™ Zirconia**

**HTML PLUS**

*High Translucent Multi Layered PLUS*

**Highest Strength Version of “KATANA™ Zirconia”**

STRONG, AESTHETIC,  
WITH HIGH SPEED SINTERING CAPABILITY.



## REBORN TO PUSH THE LIMITS

with newly created raw materials

“KATANA™ Zirconia” HTML PLUS is characterized by the use of unique raw materials that correspond to high speed sintering, improved translucency without compromising strength. This innovative material will truly empower your dental lab. See how it helps you bring more efficiency without compromising the quality of the outcome!

### PHYSICAL PROPERTIES



FLEXURAL STRENGTH

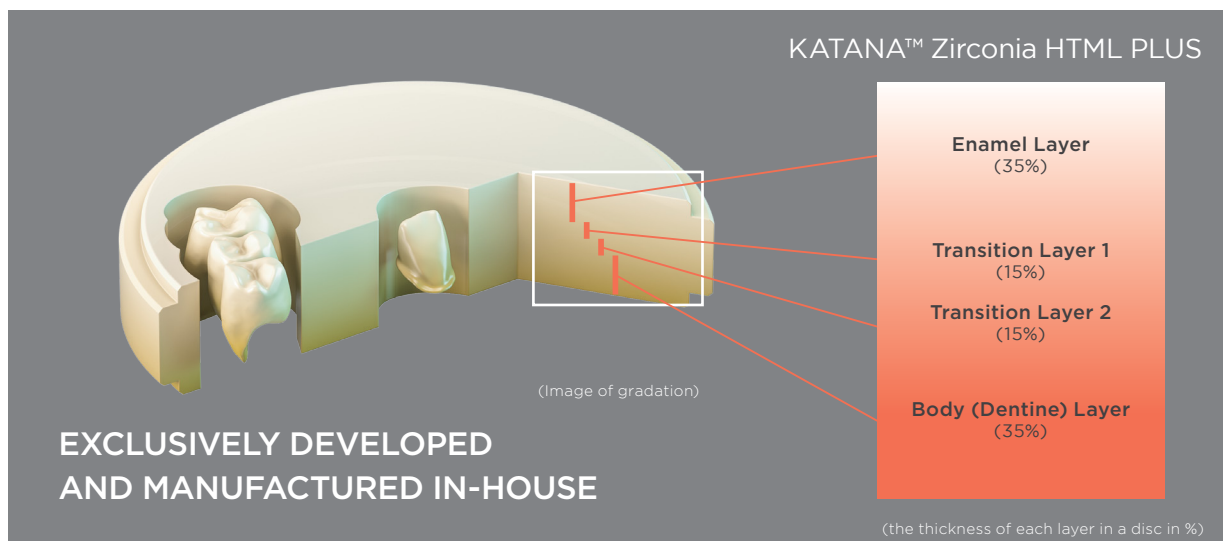
**1150** MPa

TRANSLUCENCY

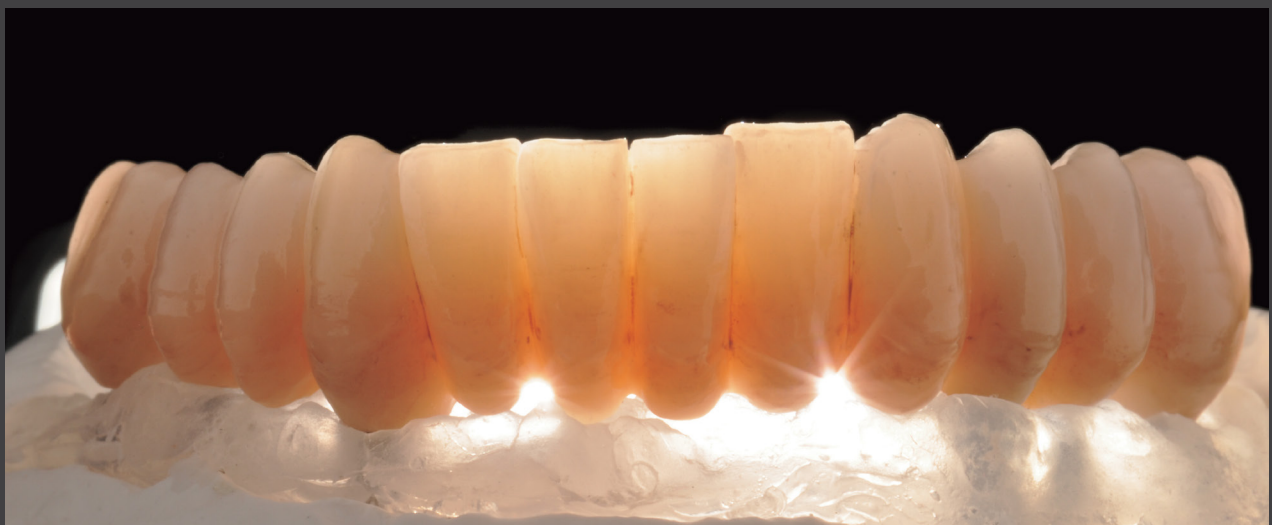
**45** %

Measurement condition: Evaluated by base material (white color)  
1 According to ISO 6872: 2015, Sample size: 3 x 4 x 40mm,  
2 All light transmittance, illuminant: D65, Thickness of sample: 1.0mm  
Data source: Kuraray Noritake Dental Inc.  
The numerical value varies according to a condition.

### MULTI-LAYERED TECHNOLOGY



# Sample Case





PLUS

## HARMONIZE WITH THE ORAL CAVITY

“KATANA™ Zirconia” HTML PLUS is developed in-house which allowed us to improve the translucency and optimize the color to harmonize with the oral cavity.



Sample: Base material(white color), Thickness: 0.5mm  
Photo source: Kuraray Noritake Dental Inc.

### Comparison of translucency:

“KATANA™ Zirconia” HTML PLUS vs. previous HTML.  
HTML PLUS has higher translucency, allowing the dark background to appear more visible.



Photo source: Kuraray Noritake Dental Inc.

### Comparison of color:

“KATANA™ Zirconia” HTML PLUS A3.5 vs. previous HTML A3.5.  
Color of HTML PLUS is brighter, deeper and more vivid even on the gingival.

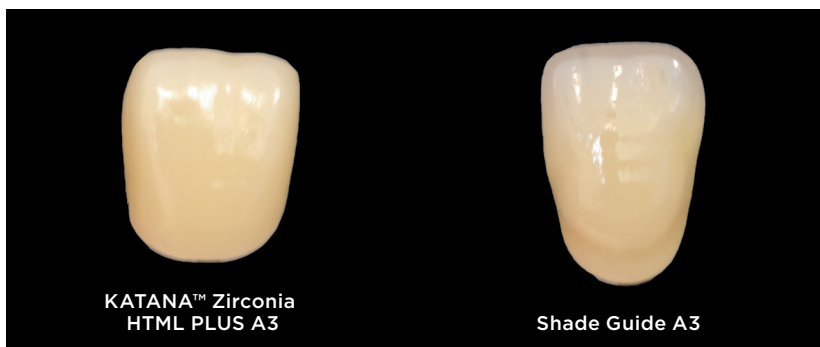


PLUS

## HIGH-SPEED SINTERING UP TO 3-UNIT BRIDGE

Outstanding quality paired combined with velocity is an absolute unique feature of “KATANA™ Zirconia” over all competitive products. The unique pressing and pre-sintering technique is the key to allow our customers to realize restorations of up to 3-unit bridges without any compromise in terms of aesthetics or mechanical properties using the 54-minute\* high-speed sintering process.

\*The material is removed from the furnace at 800°C. A furnace with a configurable firing program is required.



### Comparison:

“KATANA™ Zirconia” HTML PLUS A3 after 54-minute sintering (left) vs. Shade Guide A3 (right).

Photo source: Kuraray Noritake Dental Inc.



PLUS

# UNIFIED SINTERING SCHEDULE

“KATANA™ Zirconia” HTML PLUS, STML, and UTML can all be sintered using the same schedule.

## SINTERING PROGRAM

UTML STML HTML PLUS

	Temp.1	Rate of Temp. Increase °C/min(°F/min)	Temp.2	Rate of Temp. Increase °C/min(°F/min)	Temp.3	Rate of Temp. Increase °C/min(°F/min)	Temp.4	Hold Time	Rate of Temp. Decrease °C/min(°F/min)	Temp.5
54- minute	Room Temp.	120°C/216°F	1450°C/2642°F	10°C/18°F	1600°C/2912°F	-	-	20min.	-120°C/216°F	800°C/1472°F
90-minute	Room Temp.	50°C/90°F	1400°C/2552°F	4°C/7°F	1500°C/2732°F	10°C/18°F	1560°C/2840°F	16min.	-50°C/90°F	800°C/1472°F
7-hour	Room Temp.	10°C/18°F	1550°C/2822°F	-	-	-	-	2-hour	-10°C/18°F	RT.

The above sintering recommendation is only a guideline; some adjustments may be required depending on each individual furnace. If the furnace cannot be set according to the 54- or 90-minute sintering schedule, speed sintering cannot be used.

## Shade / Thickness selection

Select the target shade and the correct disc thickness to achieve an appropriate graduation between crown length, enamel and body (dentin).

Series	Shade									Size (Diameter/Thickness)
HTML PLUS	NW	A1	A2	A3	A3.5	A4	B1	B2	B3	98.5mm/14, 18, 22mm
	C1	C2	C3	D2	D3					

## What makes “KATANA™ Zirconia” HTML PLUS different ?

Kuraray Noritake Dental Inc. distinguishes itself from its competitors by its unique in-house production of zirconia raw materials.

### Features

HIGHEST STRENGTH\*

### Benefits

Suitable for a variety of cases within minimum thickness. You may choose a monolithic, cut-back or framework design with the appropriate fabrication procedure.

\*Highest strength of “KATANA™ Zirconia”series

SIMPLE AESTHETICS & HANDLING

The seamless multi-layered technology eliminates visible transition lines and optimizes layer balance for improved natural color. Ensures a simplified, time-saving procedure .

FAST PROCESSING

Re-make and rush cases? No problem. High-speed sintering (54-minute) offers completely new possibilities. Finish the work easily within one day.

EXCELLENT QUALITY

The fitting accuracy of restorations after the final sintering process reduces remanufacturing risk. No waste of time and materials.

# PRODUCT CHARACTERISTICS



## KATANA™ Zirconia multi-layered

Material Class*3	Class3	Class4	Class5
Product Multi-layered	<b>UTML</b>	<b>STML</b>	<b>HTML PLUS</b>
Translucency*1	<b>51%</b> Ultra Translucency	<b>49%</b> Super Translucency	<b>45%</b> High Translucency
Flexural Strength*2	<b>557 MPa</b> All layers	<b>748 MPa</b> All layers	<b>1150 MPa</b> All layers
Minimum wall thickness (Crown)	Anterior: 0.8mm Posterior: 1.0mm	Anterior: 0.8mm Posterior: 1.0mm	Anterior: 0.4mm Posterior: 0.5mm
Application range	<ul style="list-style-type: none"> <li>✓ Monolithic Crowns (Anterior)</li> <li>✓ Monolithic Bridges (Anterior, up to 3-unit)</li> <li>✓ Cut-back frameworks (Anterior, up to 3-unit)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Monolithic Crowns</li> <li>✓ Monolithic Bridges (up to 3-unit)</li> <li>✓ Cut-back frameworks (up to 3-unit)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Monolithic Crowns</li> <li>✓ Monolithic Bridges</li> <li>✓ Cut-back frameworks</li> <li>✓ Frameworks</li> </ul>
Technique	<ul style="list-style-type: none"> <li>✓ Monolithic design + Glazing(Staining)</li> <li>✓ Monolithic design + Polishing</li> <li>✓ Cut-back + Micro layering</li> </ul>	<ul style="list-style-type: none"> <li>✓ Monolithic design + Glazing(Staining)</li> <li>✓ Monolithic design + Polishing</li> <li>✓ Cut-back + Micro layering</li> </ul>	<ul style="list-style-type: none"> <li>✓ Monolithic design + Glazing(Staining)</li> <li>✓ Monolithic design + Polishing</li> <li>✓ Cut-back + Micro layering</li> <li>✓ Framework design + Layering</li> </ul>
Sintering Schedule	The fastest program of 54 minutes can be used for all products of Multi-Layered series. 7-hour and 90-minute sintering programs are also available for all discs.		

Measurement condition: Evaluated by base material (white color), \*1 All light transmittance, illuminant: D65, Thickness of sample: 1.0mm

\*2 According to ISO 6872: 2015, Sample size: 3 x 4 x 40mm, \*3 ISO 6872:2015

Data source: Kuraray Noritake Dental Inc.

The numerical value varies according to a condition.

## YOUR CONTACT

### Kuraray America, Inc.

32 Old Slip Phone (800) 879-1676  
 FL 7 Fax (888) 700-5200  
 New York, NY 10005 E-Mail info@kuraraydental.com  
 Website kuraraydental.com

- Before using this product, be sure to read the Instructions for Use supplied with the product.
- The specifications and appearance of the product are subject to change without notice.
- Printed color can be slightly different from actual color.
- Read the IFU (Instructions For Use) before the procedure.

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