

# KATANA™ Zirconia HTML PLUS

**REBORN TO PUSH THE LIMITS**



**STRONG, AESTHETIC, WITH HIGH SPEED SINTERING CAPABILITY.**

# HIGHEST STRENGTH VERSION OF “KATANA™ Zirconia”

“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 outcomes!

## PHYSICAL PROPERTIES



FLEXURAL STRENGTH<sup>1</sup>  
**1,150 MPa**

TRANSLUCENCY<sup>2</sup>  
**45 %**

Measurement condition: Evaluated by base material (white color)  
1 According to ISO 6872: 2015, Sample size: 3x4x40 mm  
2 All light transmittance, illuminant: D65, thickness of the sample: 1.0 mm  
Data source: Kuraray Noritake Dental Inc.  
The numerical value varies according to a condition.



## MULTI-LAYERED TECHNOLOGY



### Layers

**Enamel**  
35%

**Transition 1**  
15%

**Transition 2**  
15%

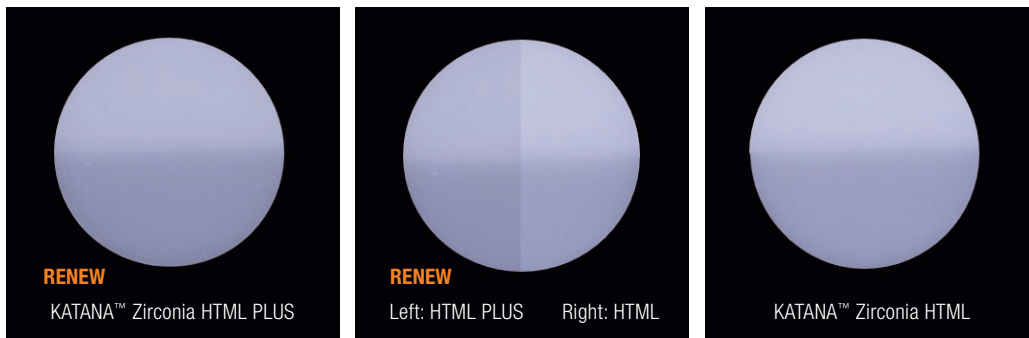
**Body**  
35%

(.%) the thickness  
of each layer in  
a disc in %

**EXCLUSIVELY DEVELOPED  
AND MANUFACTURED IN-HOUSE**

# HARMONIZE WITH THE ORAL CAVITY

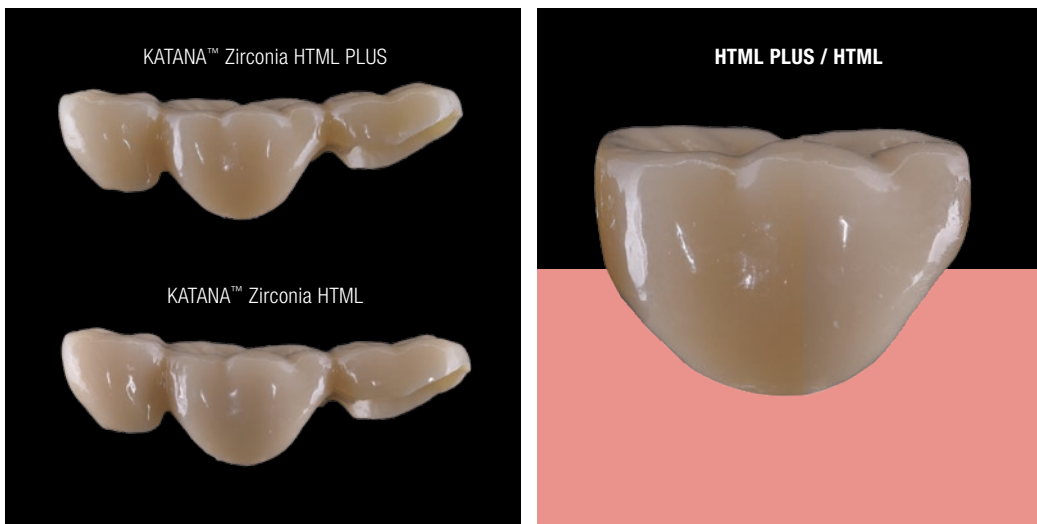
“KATANA™ Zirconia” HTML PLUS is developed in-house which allowed us to improve the translucency and optimize the color to harmonize with the oral cavity.



## Comparison of translucency:

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

Sample : Base material(white color), Thickness: 0.5mm  
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 gum area.

Photo source: Kuraray Noritake Dental Inc.

# 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/1472°F. A furnace with a configurable firing program is required.

**KATANA™ Zirconia HTML PLUS A3**



**Shade Guide A3**



## **Comparison**

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

Photo source: Kuraray Noritake Dental Inc.

# UNIFIED SINTERING SCHEDULE

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

## SINTERING PROGRAM

	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. Increase °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	–	–	20 min.	-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	16 min.	-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)
<b>HTML PLUS</b>	A1	A2	A3	A3.5	A4	B1	B2	98.5 mm/14, 18, 22 mm
	B3	C1	C2	C3	D2	D3	NW	

# 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\***

**SIMPLE AESTHETICS  
& HANDLING**

**FAST PROCESSING**

**EXCELLENT QUALITY**

## 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

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

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

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

# SAMPLE CASE



Photos courtesy of MDT Daniele Rondoni and MDT Roberto Rossi

# PRODUCT CHARACTERISTICS



## KATANA™ ZIRCONIA MULTI-LAYERED

Material Class*3	Class 3	Class 4	Class 5	Class 5
Product Multi-layered	<b>UTML</b>	<b>STML</b>	<b>HTML PLUS</b>	<b>YML</b>
Translucency*1	<b>50%</b> Ultra Translucency	<b>49%</b> Super Translucency	<b>45%</b> High Translucency	Enamel: <b>49%</b> Body 1: <b>47%</b> Body 2, 3: <b>45%</b> Integrated Translucency Gradient
Flexural Strength*2	<b>550 MPa</b> All layers	<b>750 MPa</b> All layers	<b>1,150 MPa</b> All layers	Enamel: <b>750 MPa</b> Body 1: <b>1,000 MPa</b> Body 2, 3: <b>1,100 MPa</b> Integrated Strength Gradient
Minimum wall thickness (Crown)	Anterior: 0.8 mm Posterior: 1.0 mm	Anterior: 0.8 mm Posterior: 1.0 mm	Anterior: 0.4 mm Posterior: 0.5 mm	Anterior Enamel: 0.8 mm Body: 0.4 mm Posterior Enamel: 1.0 mm Body: 0.5 mm
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>	<ul style="list-style-type: none"> <li>• Monolithic Crowns</li> <li>• Monolithic Bridges</li> <li>• Cut-back 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>	<ul style="list-style-type: none"> <li>• Monolithic design + Glazing(Staining)</li> <li>• Monolithic design + Polishing</li> <li>• Cut-back + Micro 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.

## UW CONTACT

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- Lees vooral de meegeleverde gebruiksinstructies voordat u dit product gebruikt.
- Specificaties en uiterlijk van het product kunnen zonder voorafgaande kennisgeving worden gewijzigd.
- Afgedrukte kleuren kunnen licht afwijken van de echte kleuren.
- Neem de gebruiksinstructies vóór de procedure door.

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