

# KATANA™ Zirconia RESTORATION SYSTEM

TRUE-TO-LIFE ZIRCONIA RESTORATIONS



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# KATANA™ Zirconia RESTORATION SYSTEM

STREAMLINED 'ONE-STOP' SOLUTION TO OPTIMISE YOUR WORKFLOW.



ALL YOUR HEART DESIRES

## KATANA™ Zirconia FAMILY

Kuraray Noritake Dental Inc. (Kuraray Noritake) offers five types of dental zirconia that fully meet your needs. But the line-up doesn't stop there. Kuraray Noritake has also developed specialised products for polishing, staining, glazing and porcelain veneering, based on a wealth of experience.

Our dental zirconia and ceramics ranges are well-aligned and designed to complement each other for streamlined procedures leading to brilliant treatment outcomes. On top of this, Kuraray Noritake's portfolio of resin cements offers all properties needed for an efficient cementation procedure leading to restorations that last.

### UTML

Suitable for monolithic true-to-life anterior restorations including veneers. This material offers a multi-layered colour structure and the highest translucency in the zirconia market.



#### RECOMMENDED APPLICATIONS

- ✓ Veneers
- ✓ Inlays / onlays
- ✓ Anterior crowns

### STML

First choice for beautiful monolithic restorations that need well-balanced flexural strength and different levels of colour and translucency in the incisal and cervical area.



- ✓ Crowns
- ✓ Up to 3-unit bridges

### YML

State-of-the-art zirconia with colour, translucency and strength gradation. It has a strong body and highly translucent enamel layer for a wide indication range and easy to achieve aesthetics.



- ✓ Full-arch restorations
- ✓ Frameworks in cut-back design
- ✓ Long- and short-span bridges
- ✓ Crowns

### HTML PLUS

High-translucency zirconia option offering the high strength needed for long-span bridges, combined with an optimised translucency and vivid colour for a natural appearance.



- ✓ Long-span bridges
- ✓ Frameworks

### HT

A classic high-strength zirconia suitable for single-unit copings and long-span bridge frameworks. Available in five different disc thicknesses for maximum design flexibility.



- ✓ Full-arch frameworks
- ✓ Restorations with gums or bone parts

## PROCESS



### MILLING WITH PRECISION

Thanks to the exceptional quality and density of KATANA™ Zirconia blanks, the milled restorations are characterised by a superior edge stability and high surface quality leading to an accurate fit.



### SINTERING AT THE DESIRED SPEED

The extraordinarily high quality of KATANA™ Zirconia raw materials allows Kuraray Noritake to streamline sintering, enabling faster procedures without reducing strength and aesthetics.

## CHARACTERISE



### FINISHING WITH EASE

Porcelain layering with cutback, (ultra-) micro-layering or maximising the aesthetic result by characterisation: Kuraray Noritake offers a range of matching materials for every possible finishing procedure.

## AMPLIFY

### POLISHING FOR A NATURAL GLOSS

Kuraray Noritake's PEARL SURFACE™ Z containing different sizes of blended diamond particles is the logical choice for optimising polished zirconia restorations and frameworks



## CEMENT

### CEMENTING WITH CONFIDENCE

Kuraray Noritake's PANAVIA™ V5 is an excellent choice for zirconia cementation procedures in the laboratory, such as luting crowns to implant abutments or frameworks.



Here comes the right page of the 3-fold  
The previous right page is the last (inside cover) page of the brochure

# EXPERT KNOWLEDGE IN ZIRCONIA MANUFACTURING

## HIGH-QUALITY RESTORATIONS EVERY TIME.

Although all zirconia blanks may look similar, quality and properties can differ widely as they are affected by:

- ✓ the quality of the raw materials
- ✓ raw material processing
- ✓ blank pressing
- ✓ pre-sintering

As the producer of KATANA™ Zirconia, Kuraray Noritake has established an end-to-end in-house production process that ensures full control over each of these steps.

1

## POWDER PRODUCTION

Kuraray Noritake benefits from in-house production of the raw materials required for dental zirconia. This provides the perfect base on which to use our multi-layering technology and add any other elements needed to create superior quality and purity of the formulation as well as a precise alignment of the desired properties.

### THE BENEFITS

- ✓ Natural translucency
- ✓ Shades matching "VITA classical A1-D4™ shade guide" concept
- ✓ Well-balanced flexural strength
- ✓ High aging resistance
- ✓ Reliable sintering performance

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## BLANK PRESSING

Variations in blanks density, air pockets and impurities can lead to poor quality restorations. This is why Kuraray Noritake uses a unique and highly meticulous pressing process that provides for uniform pressure distribution.

### THE BENEFITS

- ✓ Uniform mechanical and optical properties
- ✓ Outstanding edge stability
- ✓ High surface quality
- ✓ Controlled sintering deformation

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## PRE-SINTERING

Kuraray Noritake's state-of-the-art production facilities enable us to create highly stable pre-sintered blanks with precisely the right rigidity to withstand all kinds of milling.

### THE BENEFITS

- ✓ High surface quality after milling
- ✓ Shorter sintering times possible  
(54 minutes for single tooth restorations and bridges with up to three units)



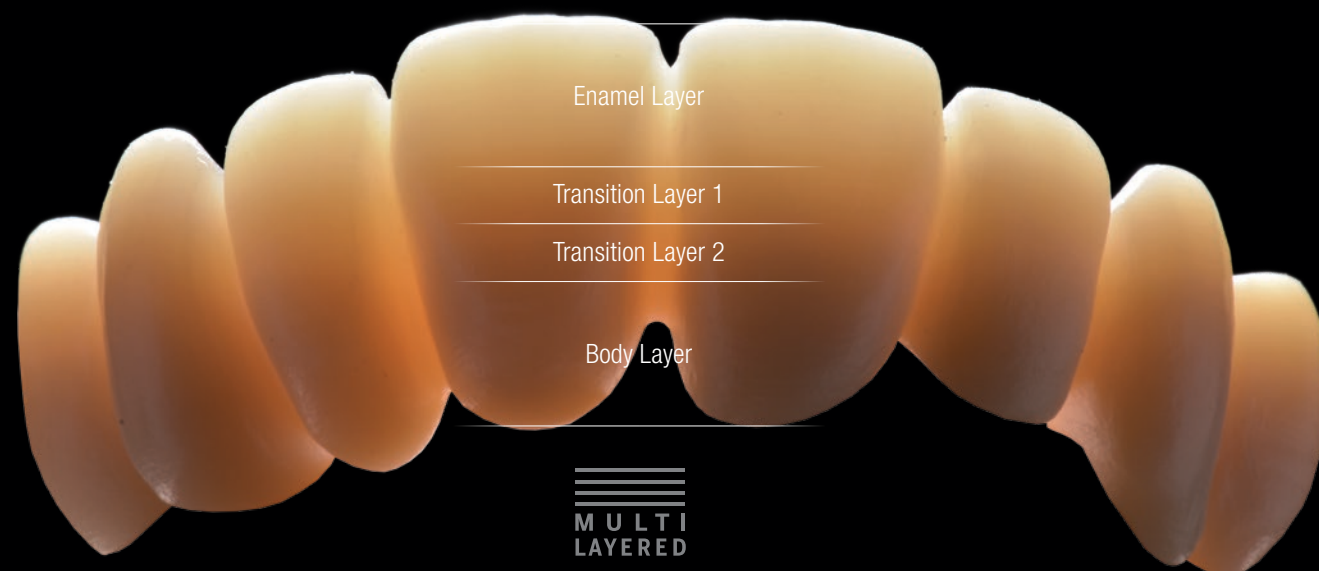
# NATURAL COLOUR GRADIENT

## FOR LIFELIKE OUTCOMES

Kuraray Noritake is well aware of the importance of varying levels of chroma and translucency in different parts of a natural tooth. Our aim has been to mimic this effect even without the use of porcelain layering. In areas where the dentin core is revealed, a tooth is highly chromatic and rather opaque. In contrast, those parts of a tooth mainly composed of enamel – such as the incisal edge - are highly translucent and have a low chroma.

Our patented KATANA™ Zirconia multi-layered technology has been developed to precisely imitate this gradient in chroma and has virtually seamless transition between layers, resulting in a tooth-like appearance without the need for porcelain layering. The four types of multi-layered KATANA™ Zirconia (UTML, STML, YML\* and HTML PLUS) have a four-layer colour structure. The optical outcome is revealed immediately after sintering.

### 4-LAYER COLOUR STRUCTURE



\*KATANA™ Zirconia YML detailed layer structure on page 5

# PROGRESSIVE ZIRCONIA GENERATION

## FOR A WIDE INDICATION RANGE

While some dental technicians like to switch between different zirconia materials and finishing techniques, others prefer to use a single zirconia for every indication. This is why Kuraray Noritake has developed a multi-layered zirconia with additional flexural-strength and translucency gradation – KATANA™ Zirconia YML. A smooth transition from one layer to the next delivers structural integrity and flawless aesthetics.



Image of gradation

Layer	Flexural Strength <sup>1</sup>	Translucency <sup>2</sup>
Enamel (35%)	750 MPa	49%
Body 1 (15%)	1.000 MPa	47%
Body 2 (15%)		
Body 3 (35%)	1.100 MPa	45%

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





Measurement condition: Evaluated by base material (white colour).  
 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.



# EVERYTHING THE LAB NEEDS

Kuraray Noritake offers four different types of multi-layered dental zirconia to cover every indication as well as a single-layer HT option for the production of frameworks and long-span bridges. In the below chart you can view the range of recommended applications for all KATANA™ Zirconia discs.

	Laminate veneer Inlay/Onlay	Anterior Crown	Posterior Crown	3-unit Bridge Anterior	3-unit Bridge Posterior	Long-span over 4-unit Bridge
 <b>UTML</b>	Blue	Blue	Blue	Blue	Blue	Blue
 <b>STML</b>	Light Purple	Light Purple	Light Purple	Light Purple	Light Purple	Light Purple
 <b>HTML PLUS</b>	Light Orange	Light Orange	Light Orange	Light Orange	Light Orange	Light Orange
 <b>YML</b>	Light Red	Light Red	Light Red	Light Red	Light Red	Light Red



# UTML

## THE EXPERT FOR ANTERIOR AESTHETICS



### KATANA™ Zirconia UTML

Is zirconia suitable for the production of lifelike monolithic anterior restorations, even veneers? KATANA™ Zirconia UTML with its predominantly cubic crystal structure is. Inspired by natural enamel, the material offers a light transmittance of 51 % and with it, the same as lithium disilicate LT ingot. Consequently, light passes through to the underlying natural tooth structure to reveal its original shade, leading to simply beautiful results!

### Recommended applications

- ✓ Veneers
- ✓ Inlays, onlays
- ✓ Anterior crowns

### Additional applications

- ✓ Anterior up to premolar 2- or 3-unit bridges
- ✓ Single posterior crowns

### Recommended finishing method

Monolithic design + ultra-micro-layering with CERABIEN™ ZR FC Paste Stain

### Alternative finishing method

Vestibular cutback (0.3 mm) + micro-layering

	Minimum wall thickness	Minimum connector cross section
Veneer	0.4 mm	-
Anterior crown	0.8 mm	-
Inlay/onlay	1.0 mm	-
Posterior crown	1.0 mm	-
Anterior 2- or 3-unit bridges	0.8 mm	12 mm <sup>2</sup>
Premolar 2- or 3-unit bridges	1.0 mm	16 mm <sup>2</sup>

### Translucency

51%

### Flexural Strength

557 MPa

All light transmittance, illuminant: D65, Thickness of sample: 1.0mm. White-colour zirconia (base material) is used as testing material. Source: Kuraray Noritake Dental Inc.

Three point bending test according to ISO 6872:2015 - sample size 3 x 4 x 40 mm. Source: Kuraray Noritake Dental Inc.

Available disc thickness: 14mm and 18mm



# STML

## THE FIRST CHOICE FOR CROWNS AND UP TO 3-UNIT BRIDGES



### KATANA™ Zirconia STML

In order to produce a beautiful monolithic restoration, the materials used need to have a medium-to-high flexural strength and varying levels of translucency in the incisal and cervical area. This is because a lot of light is transmitted in the enamel area, while the colour of the underlying tooth structure should not be revealed. KATANA™ Zirconia STML, with its mainly cubic formulation, offers the perfectly balanced solution.

### Recommended applications

- ✓ Anterior crowns and up to 3-unit bridges
- ✓ Posterior crowns and up to 3-unit bridges

### Additional applications

- ✓ Inlays, onlays
- ✓ Veneers

### Recommended finishing method

Monolithic design + ultra-micro-layering with CERABIEN™ ZR FC Paste Stain

### Alternative finishing method

Vestibular cutback (0.3 mm) + micro-layering

	Minimum wall thickness	Minimum connector cross section
Veneer	0.4 mm	-
Anterior crown	0.8 mm	-
Inlay/onlay	1.0 mm	-
Posterior crown	1.0 mm	-
Anterior 2- or 3-unit bridges	0.8 mm	12 mm <sup>2</sup>
Posterior 2- or 3-unit bridges	1.0 mm	16 mm <sup>2</sup>

### Translucency Flexural Strength

49% 748 MPa

All light transmittance, illuminant: D65, Thickness of sample: 1.0mm. White-colour zirconia (base material) is used as testing material. Source: Kuraray Noritake Dental Inc.

Three point bending test according to ISO 6872:2015 - sample size 3 x 4 x 40 mm. Source: Kuraray Noritake Dental Inc.

Available disc thickness: 14mm, 18mm and 22mm

# YML

## THE STATE-OF-THE-ART ALLROUNDER



### KATANA™ Zirconia YML

Long and complex geometries require the ultimate in strength, monolithic aesthetics and an ultra-high incisal translucency. For many years these properties were mutually exclusive, but they no longer are. With its strong body and highly translucent enamel layer, KATANA™ Zirconia YML offers the properties needed for a wide indication range. It is based on a new multi-layer technology featuring newly developed zirconia raw materials with different yttria concentrations integrated into a four-layer colour structure. The result is a chroma, translucency and flexural strength gradation with a seamless structure that allows to produce high-quality, lifelike restorations – including monolithic long-span bridges.

### Recommended applications

- ✓ Full-arch restorations
- ✓ Long- and short-span bridges
- ✓ Anterior and posterior crowns
- ✓ Frameworks

### Additional applications

- ✓ Inlays, onlays
- ✓ Veneers

### Recommended finishing method

Monolithic design + ultra-micro-layering with CERABIEN™ ZR FC Paste Stain

### Alternative finishing method

Vestibular cutback (0.3 mm) + micro-layering

	Minimum wall thickness	Minimum connector cross section
Veneer	0.4 mm	-
Anterior crown	0.4 mm	-
Inlay/onlay	1.0 mm	-
Posterior crown	0.5 mm	-
Anterior 2- or 3-unit bridges	0.4 mm	7 mm <sup>2</sup>
Anterior long-span bridge (more than 4 units)	0.4 mm	9 mm <sup>2</sup>
Posterior bridge	0.5 mm	9 mm <sup>2</sup>

### Translucency Flexural Strength

Enamel	49%	750 MPa
Body 1	47%	1,000 MPa
Body 2/3	45%	1,100 Mpa

All light transmittance, illuminant: D65, Thickness of sample: 1.0mm. White-colour zirconia (base material) is used as testing material. Source: Kuraray Noritake Dental Inc.

Three point bending test according to ISO 6872:2015 - sample size 3 x 4 x 40 mm. White-colour zirconia (base material) is used as testing material. Source: Kuraray Noritake Dental Inc.

Available disc thickness: 14mm, 18mm and 22mm

# HTML PLUS

## THE SOLUTION FOR COMPLEX RESTORATIONS



### KATANA™ Zirconia HTML PLUS

A high flexural strength is one of the most important preconditions for the production of long-span bridges. With a strength of 1,150 MPa, the latest evolution in high-translucency zirconia from Kuraray Noritake – KATANA™ Zirconia HTML PLUS – offers precisely the right strength throughout the entire blank. Thanks to the use of new raw materials developed in-house, the material also offers a higher degree of translucency than its predecessor KATANA™ Zirconia HTML, as well as a brighter, deeper and more vivid colour for a better shade match with natural teeth. The result is a delicate framework or monolithic bridge with a beautiful shape and colour fitting the patient's natural dentition.

#### Recommended applications

- ✓ Long-span bridges
- ✓ Frameworks in classical and cutback design

#### Additional applications

- ✓ Anterior crowns
- ✓ Posterior crowns
- ✓ Veneers

#### Recommended finishing method

Monolithic design + ultra-micro-layering with CERABIEN™ ZR FC Paste Stain.

#### Alternative finishing method

Vestibular cutback (0.3 mm) + micro-layering

	Minimum wall thickness	Minimum connector cross section
Veneer	0.4 mm	-
Anterior crown	0.4 mm	-
Inlay/onlay	0.5 mm	-
Posterior crown	0.5 mm	-
Anterior 2- or 3-unit bridges	0.4 mm	7 mm <sup>2</sup>
Anterior 4-unit bridges or more	0.4 mm	9 mm <sup>2</sup>
Posterior bridges	0.5 mm	9 mm <sup>2</sup>

#### Translucency Flexural Strength

45% 1,150 MPa

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

Available disc thickness: 14mm, 18mm and 22mm

# HT

## THE TIMELESS CLASSIC FOR FRAMEWORKS



### KATANA™ Zirconia HT

Due to its versatility, zirconia can even be the material of choice for complex cases with unbalanced jaw situations and patients with significant gingival recession or bone atrophy. KATANA™ Zirconia HT has been specifically developed for the production of full-arch frameworks or restorations with gum and bone parts. It offers an extremely high flexural strength of 1,125 MPa and is now available in five disc thicknesses – 10, 14, 18, 22 and 26 mm - for virtually unlimited design flexibility.

#### Recommended applications

- ✓ Full-arch frameworks
- ✓ Restorations with gum and bone parts

#### Additional applications

- ✓ Anterior crown copings or bridge frameworks
- ✓ Posterior crown copings or bridge frameworks

#### Recommended finishing method

Framework design + full porcelain layering

#### Alternative finishing method

Vestibular cutback (0.3 mm) + micro-layering

	Minimum wall thickness	Minimum connector cross section
Veneer	0.4 mm	-
Anterior crown	0.4 mm	-
Inlay/onlay	0.5 mm	-
Posterior crown	0.5 mm	-
Anterior 2- or 3-unit bridges	0.4 mm	7 mm <sup>2</sup>
Anterior more than 4-unit bridges	0.4 mm	9 mm <sup>2</sup>
Posterior 2- or 3-unit, more than 4-unit bridges	0.5 mm	9 mm <sup>2</sup>

#### Translucency Flexural Strength

45% 1,125 MPa

All light transmittance, illuminant: D65, Thickness of sample: 1.0mm. White-colour zirconia (base material) is used as testing material. Source: Kuraray Noritake Dental Inc.  
Three point bending test according to ISO 6872:2015 - sample size 3 x 4 x 40 mm. Source: Kuraray Noritake Dental Inc.

Available disc thickness: 10mm, 14mm, 18mm, 22mm and 26mm

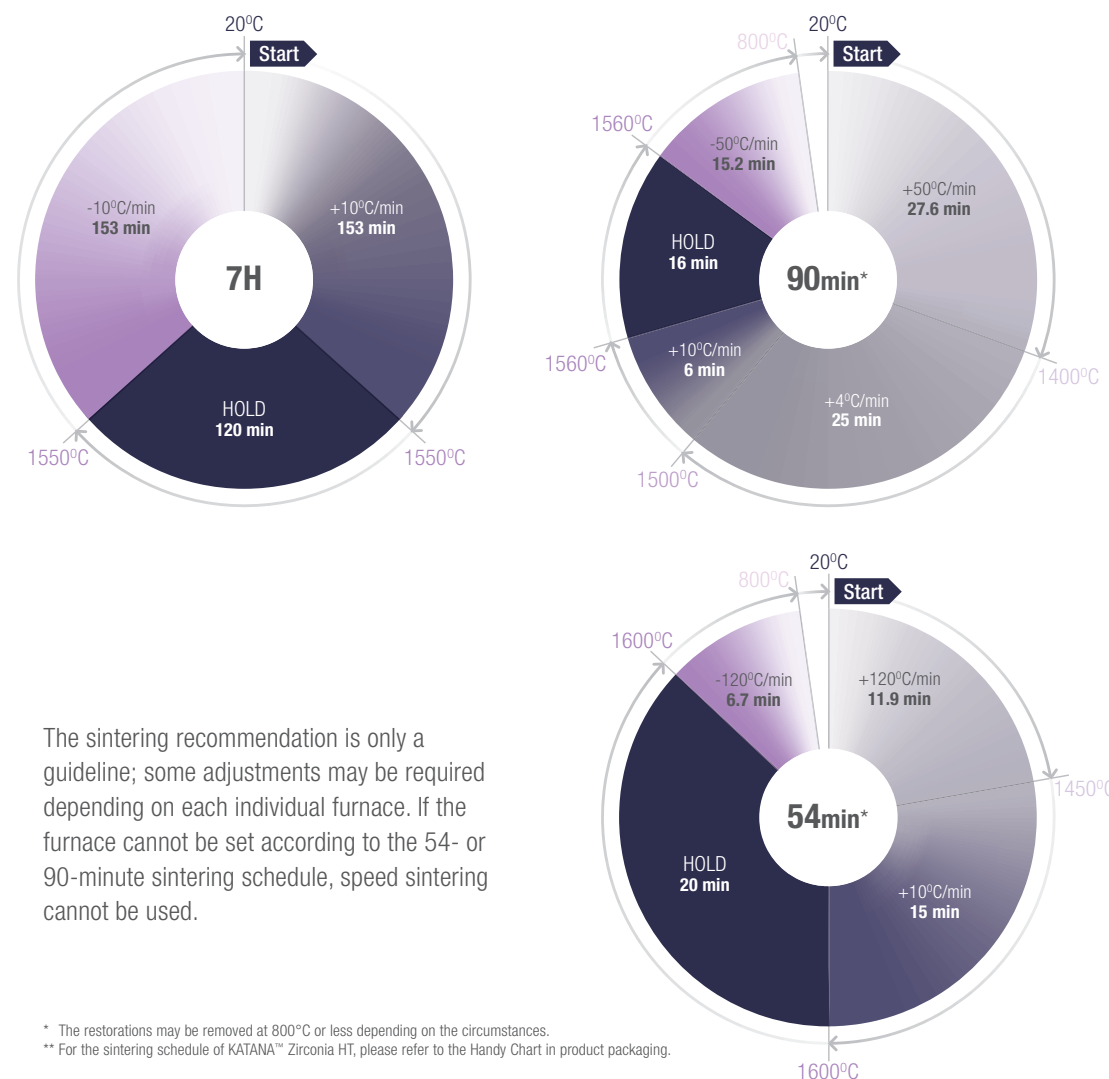


# DIFFERENT SINTERING PROGRAMMES

## ADAPTED TO YOUR NEEDS

The unique powder composition and specific in-house blank production procedure makes it possible to streamline the sintering of KATANA™ Zirconia multi-layered discs. As a result, users may choose between the general 7 hour sintering programme and a faster 90-minute or even 54-minute protocol for single-tooth restorations and two to three-unit bridges.

The ultra-fast sintering programme of 54 minutes works with KATANA™ Zirconia UTML, STML, HTML PLUS and YML and becomes the go-to option for all rush cases. The optical and mechanical properties of the restorations are comparable to those achieved following a seven-hour sintering cycle.



The 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.

\* The restorations may be removed at 800°C or less depending on the circumstances.  
 \*\* For the sintering schedule of KATANA™ Zirconia HT, please refer to the Handy Chart in product packaging.

# PROCESSING KATANA™ Zirconia

## WHAT DO YOU NEED TO KNOW?

Select the right disc type and size considering the height of the restoration

Use surgical gloves when handling pre-sintered discs to avoid contamination

Follow the recommended processing protocols before sintering: - colouring and characterization with compatible products only - sprue removal and adjustments like surface texturing with fine-grid diamond instruments for oxide ceramics used at low speed (7,000 to 10,000 rpm) - removal of powder residues with a gentle stream of air or a brush, no steam cleaning, no ultrasonic bath. Drying is recommended

Remove the dust from the sintering chamber and heating elements with a soft brush before each use

Strictly adhere to the sintering protocols recommended by the material manufacturer  
 Do not place different zirconia on the same tray. Use a cover for the tray

If you use alumina sintering beads: Replace them whenever they show signs of discolouration (at least once per month) or use beadless tray

Calibrate your furnace and check the temperature every two weeks following instructions of the manufacturer. Adjust the temperature if needed

Run a decontamination program with decontaminating powder or white zirconia residues (γ-TZP) at least once per month

Sandblast before hand-polishing or glazing with aluminum oxide 50 micron, 20 or 25 psi, repeat the procedure on bonding surfaces afterwards

Use PANAVIA™ cements for cementation



Recommended by  
 CDT Jean Chiha

Official Kuraray Noritake Dental Inc. instructor

# ZERO-CUTBACK FINISHING

## FOR MONOLITHIC ZIRCONIA RESTORATIONS

Polishing, glazing, staining or porcelain layering? Kuraray Noritake offers perfectly matching products for every finishing procedure preference. For monolithic restorations comprising KATANA™ Zirconia UTML, STML and YML, we recommend the use of ultra-micro-layering with CERABIEN™ ZR FC Paste Stain.

### BENEFITS

Ready-to-use paste-type external stains, no mixing required

Consistent handling and mechanical properties due to use of synthetic feldspathic porcelain

Integrated fluorescence in all shades, additional Fluoro to boost this effect even more

Visual appearance during application closely resembles expected result after baking

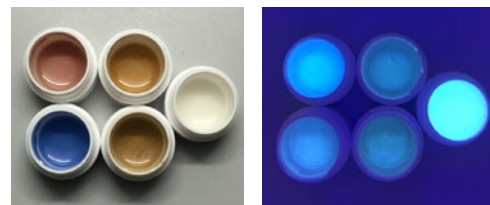
Paste-like consistency enables creation of surface texture

Wide shade range for virtually unlimited creation of individual effects (white and dark spots, crack lines, fissures)

Comparatively low firing temperature of 750°C/1382°F

Long-lasting effect – ceramic particles surround and protect shading elements from wear

Suitable for characterization of porcelain and zirconia restorations



CERABIEN™ ZR FC Paste Stain: Consistency, colour and fluorescence of the liquid ceramic.



# MICRO-LAYERING WITH 0.3 MM CUTBACK

## MIMIC NATURE WITH MINIMAL EFFORT

Whenever the aesthetic demands are particularly high and restorations are produced from KATANA™ Zirconia UTML, STML, YML or HTML PLUS, micro-layering is the recommended approach. For this purpose, a small vestibular cutback (of 0.3 mm) is typically performed. A combination of CERABIEN™ MiLai Porcelains and Internal Stains and FC Paste Stain is used to create a natural appearance.

- CERABIEN™ MiLai Internal Stains: imitation of enamel cracks, dark or white spots, mamelons etc.
- CERABIEN™ MiLai Porcelains: creation of a window effect, adding depth and volume, enamel replacement
- CERABIEN™ ZR FC Paste Stain: creation 3d effect, value correction, external staining, texturing etc.

### BENEFITS

Reproduce natural beauty with minimal effort and time

With aesthetic base materials like KATANA™ Zirconia UTML, STML or YML, the results are similar to those achieved with full porcelain layering on opaque frameworks

CERABIEN™ MiLai is based on synthetic feldspathic porcelain, designed to have excellent particle distribution.

Components may be combined as desired – from internal stains plus glaze alone to all three types of material





# FULL PORCELAIN LAYERING

## FOR ULTIMATE AESTHETICS

Full porcelain layering on a classical framework remains the most aesthetic way of finishing zirconia restorations. By adding different layers of porcelain, ceramists are able to imitate the natural internal colour structure of a tooth precisely, creating a piece of art that truly matches the appearance of the adjacent teeth.

The complete family of CERABIEN™ ZR line-up of internal stains, layering powders, external stains and even PRESS shade base stains is designed for this approach on frameworks typically made from KATANA™ Zirconia HTML PLUS or HT.

### BENEFITS

Creates a true piece of art to fulfil the highest aesthetic demands

CERABIEN™ ZR portfolio is based on synthetic feldspathic porcelain providing for consistent handling and mechanical properties

Complete line-up may be combined as desired



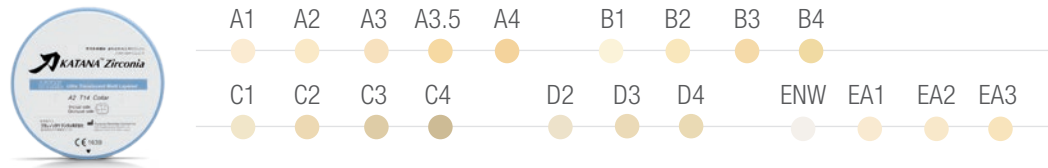
## MEET THE ARTIST

### Naoki Hayashi, RDT, MDT, MDC

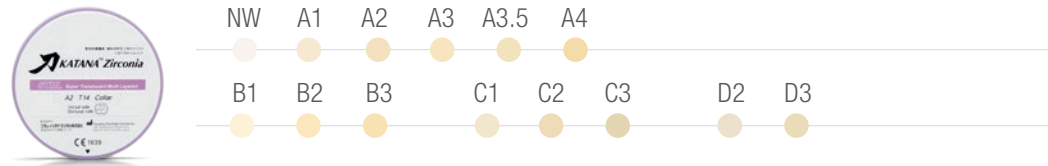
Naoki Hayashi is currently a master ceramist at Ultimate Styles Dental Laboratory in Irvine, USA. He constantly searches for the best methods for aesthetic porcelain restorations. He uses exclusively CERABIEN™ ZR to achieve the best aesthetic results.

# SHADE SELECTION

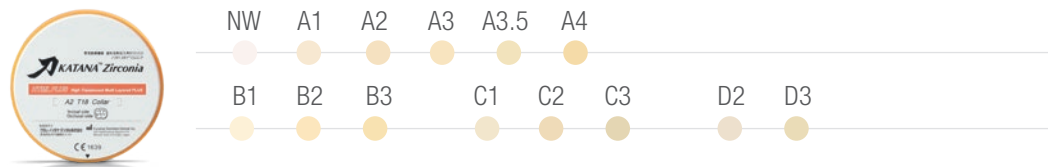
## KATANA™ Zirconia UTML



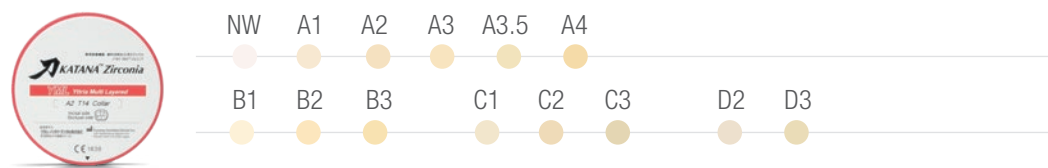
## KATANA™ Zirconia STML



## KATANA™ Zirconia HTML PLUS



## KATANA™ Zirconia YML



## KATANA™ Zirconia HT



# PRODUCT ASSORTMENT

## KATANA™ Zirconia UTML

#125-3302EU	EA1 COLLAR	T: 14 mm	#125-3872EU	A2 COLLAR	T: 14 mm	#125-4022EU	B2 COLLAR	T: 14 mm	#125-4172EU	C3 COLLAR	T: 14 mm
#125-3313EU	EA1 COLLAR	T: 18 mm	#125-3883EU	A2 COLLAR	T: 18 mm	#125-4033EU	B2 COLLAR	T: 18 mm	#125-4183EU	C3 COLLAR	T: 18 mm
#125-3332EU	EA2 COLLAR	T: 14 mm	#125-3902EU	A3 COLLAR	T: 14 mm	#125-4052EU	B3 COLLAR	T: 14 mm	#125-4202EU	C4 COLLAR	T: 14 mm
#125-3343EU	EA2 COLLAR	T: 18 mm	#125-3913EU	A3 COLLAR	T: 18 mm	#125-4063EU	B3 COLLAR	T: 18 mm	#125-4213EU	C4 COLLAR	T: 18 mm
#125-3362EU	EA3 COLLAR	T: 14 mm	#125-3932EU	A3.5 COLLAR	T: 14 mm	#125-4082EU	B4 COLLAR	T: 14 mm	#125-4232EU	D2 COLLAR	T: 14 mm
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#125-3842EU	A1 COLLAR	T: 14 mm	#125-3992EU	B1 COLLAR	T: 14 mm	#125-4142EU	C2 COLLAR	T: 14 mm	#125-4292EU	D4 COLLAR	T: 14 mm
#125-3853EU	A1 COLLAR	T: 18 mm	#125-4003EU	B1 COLLAR	T: 18 mm	#125-4153EU	C2 COLLAR	T: 18 mm	#125-4303EU	D4 COLLAR	T: 18 mm

## KATANA™ Zirconia STML

#125-3122EU	A1 COLLAR	T: 14 mm	#125-3234EU	A3.5 COLLAR	T: 22 mm	#125-5303EU	B2 COLLAR	T: 18 mm	#125-5412EU	C3 COLLAR	T: 14 mm
#125-3133EU	A1 COLLAR	T: 18 mm	#125-3242EU	NW COLLAR	T: 14 mm	#125-5314EU	B2 COLLAR	T: 22 mm	#125-5423EU	C3 COLLAR	T: 18 mm
#125-3144EU	A1 COLLAR	T: 22 mm	#125-3253EU	NW COLLAR	T: 18 mm	#125-5322EU	B3 COLLAR	T: 14 mm	#125-5434EU	C3 COLLAR	T: 22 mm
#125-3152EU	A2 COLLAR	T: 14 mm	#125-3264EU	NW COLLAR	T: 22 mm	#125-5333EU	B3 COLLAR	T: 18 mm	#125-5442EU	D2 COLLAR	T: 14 mm
#125-3163EU	A2 COLLAR	T: 18 mm	#125-5232EU	A4 COLLAR	T: 14 mm	#125-5344EU	B3 COLLAR	T: 22 mm	#125-5453EU	D2 COLLAR	T: 18 mm
#125-3174EU	A2 COLLAR	T: 22 mm	#125-5243EU	A4 COLLAR	T: 18 mm	#125-5352EU	C1 COLLAR	T: 14 mm	#125-5464EU	D2 COLLAR	T: 22 mm
#125-3182EU	A3 COLLAR	T: 14 mm	#125-5254EU	A4 COLLAR	T: 22 mm	#125-5363EU	C1 COLLAR	T: 18 mm	#125-5472EU	D3 COLLAR	T: 14 mm
#125-3193EU	A3 COLLAR	T: 18 mm	#125-5262EU	B1 COLLAR	T: 14 mm	#125-5374EU	C1 COLLAR	T: 22 mm	#125-5483EU	D3 COLLAR	T: 18 mm
#125-3204EU	A3 COLLAR	T: 22 mm	#125-5273EU	B1 COLLAR	T: 18 mm	#125-5382EU	C2 COLLAR	T: 14 mm	#125-5494EU	D3 COLLAR	T: 22 mm
#125-3212EU	A3.5 COLLAR	T: 14 mm	#125-5284EU	B1 COLLAR	T: 22 mm	#125-5393EU	C2 COLLAR	T: 18 mm			
#125-3223EU	A3.5 COLLAR	T: 18 mm	#125-5292EU	B2 COLLAR	T: 14 mm	#125-5404EU	C2 COLLAR	T: 22 mm			

## KATANA™ Zirconia HTML PLUS

#125-8922EU	HTML A1 COLLAR	T: 14 mm	#125-9034EU	HTML A3.5 COLLAR	T: 22 mm	#125-9143EU	HTML B3 COLLAR	T: 18 mm	#125-9252EU	HTML D2 COLLAR	T: 14 mm
#125-8933EU	HTML A1 COLLAR	T: 18 mm	#125-9042EU	HTML A4 COLLAR	T: 14 mm	#125-9154EU	HTML B3 COLLAR	T: 22 mm	#125-9263EU	HTML D2 COLLAR	T: 18 mm
#125-8944EU	HTML A1 COLLAR	T: 22 mm	#125-9053EU	HTML A4 COLLAR	T: 18 mm	#125-9162EU	HTML C1 COLLAR	T: 14 mm	#125-9274EU	HTML D2 COLLAR	T: 22 mm
#125-8952EU	HTML A2 COLLAR	T: 14 mm	#125-9064EU	HTML A4 COLLAR	T: 22 mm	#125-9173EU	HTML C1 COLLAR	T: 18 mm	#125-9282EU	HTML D3 COLLAR	T: 14 mm
#125-8963EU	HTML A2 COLLAR	T: 18 mm	#125-9072EU	HTML B1 COLLAR	T: 14 mm	#125-9184EU	HTML C1 COLLAR	T: 22 mm	#125-9293EU	HTML D3 COLLAR	T: 18 mm
#125-8974EU	HTML A2 COLLAR	T: 22 mm	#125-9083EU	HTML B1 COLLAR	T: 18 mm	#125-9192EU	HTML C2 COLLAR	T: 14 mm	#125-9304EU	HTML D3 COLLAR	T: 22 mm
#125-8982EU	HTML A3 COLLAR	T: 14 mm	#125-9094EU	HTML B1 COLLAR	T: 22 mm	#125-9203EU	HTML C2 COLLAR	T: 18 mm	#125-9312EU	HTML NW COLLAR	T: 14 mm
#125-8993EU	HTML A3 COLLAR	T: 18 mm	#125-9102EU	HTML B2 COLLAR	T: 14 mm	#125-9214EU	HTML C2 COLLAR	T: 22 mm	#125-9323EU	HTML NW COLLAR	T: 18 mm
#125-9004EU	HTML A3 COLLAR	T: 22 mm	#125-9113EU	HTML B2 COLLAR	T: 18 mm	#125-9222EU	HTML C3 COLLAR	T: 14 mm	#125-9334EU	HTML NW COLLAR	T: 22 mm
#125-9012EU	HTML A3.5 COLLAR	T: 14 mm	#125-9124EU	HTML B2 COLLAR	T: 22 mm	#125-9233EU	HTML C3 COLLAR	T: 18 mm			
#125-9023EU	HTML A3.5 COLLAR	T: 18 mm	#125-9132EU	HTML B3 COLLAR	T: 14 mm	#125-9244EU	HTML C3 COLLAR	T: 22 mm			

## KATANA™ Zirconia YML

#125-7932EU	YML A1 COLLAR	T: 14 mm	#125-8044EU	YML A3.5 COLLAR	T: 22 mm	#125-8153EU	YML B3 COLLAR	T: 18 mm	#125-8262EU	YML D2 COLLAR	T: 14 mm
#125-7943EU	YML A1 COLLAR	T: 18 mm	#125-8052EU	YML A4 COLLAR	T: 14 mm	#125-8164EU	YML B3 COLLAR	T: 22 mm	#125-8273EU	YML D2 COLLAR	T: 18 mm
#125-7954EU	YML A1 COLLAR	T: 22 mm	#125-8063EU	YML A4 COLLAR	T: 18 mm	#125-8172EU	YML C1 COLLAR	T: 14 mm	#125-8284EU	YML D2 COLLAR	T: 22 mm
#125-7962EU	YML A2 COLLAR	T: 14 mm	#125-8074EU	YML A4 COLLAR	T: 22 mm	#125-8183EU	YML C1 COLLAR	T: 18 mm	#125-8292EU	YML D3 COLLAR	T: 14 mm
#125-7973EU	YML A2 COLLAR	T: 18 mm	#125-8082EU	YML B1 COLLAR	T: 14 mm	#125-8194EU	YML C1 COLLAR	T: 22 mm	#125-8303EU	YML D3 COLLAR	T: 18 mm
#125-7984EU	YML A2 COLLAR	T: 22 mm	#125-8093EU	YML B1 COLLAR	T: 18 mm	#125-8202EU	YML C2 COLLAR	T: 14 mm	#125-8314EU	YML D3 COLLAR	T: 22 mm
#125-7992EU	YML A3 COLLAR	T: 14 mm	#125-8104EU	YML B1 COLLAR	T: 22 mm	#125-8213EU	YML C2 COLLAR	T: 18 mm	#125-8322EU	YML NW COLLAR	T: 14 mm
#125-8003EU	YML A3 COLLAR	T: 18 mm	#125-8112EU	YML B2 COLLAR	T: 14 mm	#125-8224EU	YML C2 COLLAR	T: 22 mm	#125-8333EU	YML NW COLLAR	T: 18 mm
#125-8014EU	YML A3 COLLAR	T: 22 mm	#125-8123EU	YML B2 COLLAR	T: 18 mm	#125-8232EU	YML C3 COLLAR	T: 14 mm	#125-8344EU	YML NW COLLAR	T: 22 mm
#125-8022EU	YML A3.5 COLLAR	T: 14 mm	#125-8134EU	YML B2 COLLAR	T: 22 mm	#125-8243EU	YML C3 COLLAR	T: 18 mm			
#125-8033EU	YML A3.5 COLLAR	T: 18 mm	#125-8142EU	YML B3 COLLAR	T: 14 mm	#125-8254EU	YML C3 COLLAR	T: 22 mm			

## KATANA™ Zirconia HT

#125-2111EU	HT 10 STRAIGHT	T: 10 mm	#125-2155EU	HT 10 COLLAR	T: 26 mm	#125-2284EU	HT 12 COLLAR	T: 22 mm	#125-2323EU	HT 13 COLLAR	T: 18 mm
#125-2122EU	HT 10 COLLAR	T: 14 mm	#125-2251EU	HT 12 STRAIGHT	T: 10 mm	#125-2295EU	HT 12 COLLAR	T: 26 mm	#125-2334EU	HT 13 COLLAR	T: 22 mm
#125-2133EU	HT 10 COLLAR	T: 18 mm	#125-2262EU	HT 12 COLLAR	T: 14 mm	#125-2301EU	HT 13 STRAIGHT	T: 10 mm	#125-2345EU	HT 13 COLLAR	T: 26 mm
#125-2144EU	HT 10 COLLAR	T: 22 mm	#125-2273EU	HT 12 COLLAR	T: 18 mm	#125-2312EU	HT 13 COLLAR	T: 14 mm			

A1-D4 shades mentioned are in accordance with "VITA classical A1-D4™ shade guide" concept.



# CEMENTING SOLUTION FOR THE DENTAL LAB

## FOR LONG-TERM BONDING

### PANAVIA™ V5

An aesthetic and reliable cementation material designed to work predictably with the selected zirconia is not only essential in the dental surgery but also in every laboratory. It is needed to cement a zirconia crown to an implant abutment or titanium base, or to bond restorations to frameworks. PANAVIA™ V5 is the go-to product for situations demanding the highest possible bond strength. It is Kuraray Noritake's strongest-ever cement and, with five shades, it is also the most aesthetic.



### INDICATION RANGE

Cementation of prosthetic restorations on implant abutments and frames

Cementation of crowns, bridges, inlays and onlays

Cementation of veneers

Cementation of adhesion bridges and splints

Cementation of posts and cores

Amalgam bonding

### KATANA™ Cleaner

KATANA™ Cleaner removes contamination to optimise adhesive procedures. It has a high cleaning effect due to the surface-active characteristic of MDP Salt. Suitable for intra- and extra-oral use, it is the excellent choice for the cleaning of all bonding surfaces (teeth and restorations), which are potentially contaminated with saliva or blood after try-in.



### BENEFITS

Intra- and extra-oral use

High cleaning effect

Easy procedure – rub, rinse and dry

Fast application – 10 seconds of rubbing

# ALIGNED PRODUCTS FOR THE DENTAL OFFICE

## HIGHLY COMMENDABLE

The performance of zirconia restorations is determined not only by production processes carried out in the dental laboratory; clinical procedures such as cementation and intra-oral adjustments have an impact as well. This is why Kuraray Noritake offers a variety of products for dentists to be used for cementation and finishing.

### PANAVIA™ SA Cement Universal

The self-adhesive resin cement contains the unique LCSi monomer that delivers a strong, durable chemical bond to various materials such as, porcelain, lithium disilicate and composite resin without the need for a separate primer. The original MDP monomer, also present in the paste, allows for chemical reactivity with zirconia, dentin and enamel.



### BENEFITS

Wide range of indications (including adhesion bridges)

Easy application: No separate etching, priming and bonding required

Easy excess removal

### PANAVIA™ Veneer LC

Minimally invasive procedures using highly aesthetic restorations is what patients expect when they seek restorative treatment. With the various types of restorations available today, it is possible to meet these expectations – provided that the right materials are used. For the placement of veneers the PANAVIA™ Veneer LC is precisely what you need.



### BENEFITS

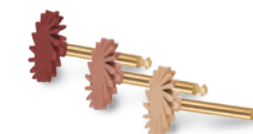
Innovative curing technology

Optimized handling

High esthetics

### TWIST™ DIA for Zirconia

TWIST™ DIA for Zirconia has an innovative shape with flexible polishing spirals offering various application benefits to the dentist for outstanding polishing results in the context of intra-oral adjustments or maintenance measures.



### BENEFITS

Polishes all types of tooth shaped surfaces made of zirconia

Highly suitable for occlusal surfaces

Shape and contour of zirconia restoration is maintained

Sterilisable, reusable and economically efficient