KURARAY

KATANA™ Zirconia

UTML Ultra Translucent Multi Layered
STML Super Translucent Multi Layered
NEW HTML High Translucent Multi Layered

90-minute Sintering∗
New Shade Lineup of HTML series

Kuraray Noritake Dental Inc.

∗ Only for 3-unit bridge
**KATANA™ Zirconia**

**High Esthetic Potential for Zirconia Dental Restorations**

The KATANA™ Zirconia UTML and STML, which feature translucency similar to natural enamel, are now available!

You can achieve a highly esthetic restoration, with predictable results, while saving time (even when fabricating esthetic anterior restorations).

*Comparison with our conventional products.

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**4 layer structure**

- Enamel Layer (35%)
- Transition Layer 1 (15%)
- Transition Layer 2 (15%)
- Body (Dentin) Layer (35%)

( ) represents the thickness of each layer in the disc.

**Actural disk surface after sintering**

The original innovative multi layered technology creates the smooth transition of color gradation.

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**Monolithic Restorations made with KATANA™ Zirconia UTML**

* with staining

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**Anterior crown**

**Laminate veneer**

Restorations fabricated by

- Anterior crown: FEAL Dental Laboratory, Yoshiteru Tomita, RDT
- Laminate veneer: Cusp Dental Supply Inc., Kazunobu Yamada, RDT
UTML has the most translucency among the KATANA™ Zirconia series, and is recommended for fabricating anterior crowns or laminate veneers. Two different shade types are available: Standard shade and Enamel shade.

Concept of Color and Translucency

Standard shade (A1-D4)
- Translucency: High translucency through all the disc layers.
- Color: Color of shade guide

Enamel shade (ENW, EA1, EA2, & EA3)
- Translucency: High translucency through all the disc layers.
- Color: Reduced chroma from incisal to the middle layer (1) part

By applying external stains, the translucency is more clearly enhanced. The Enamel Shade version has reduced color intensity in one half of the disk from the incisal edge ((1)part), giving you the ability to characterize and express color variations with stains.

Monolithic Anterior Crown made with KATANA™ Zirconia STML

* with staining

After sintering & morphological correction of zirconia

After staining and glazing
STML has a well-balanced combination of translucency and mechanical properties. This version of KATANA™ Zirconia has gradations of translucency as well as color, exhibiting a masking effect in the cervical area. Using this series, one can easily obtain the desired shades to accommodate the variety found in prepared tooth conditions of clinical cases.

**Concept of Color and Translucency**

<table>
<thead>
<tr>
<th>Standard shade (NW, A1~A3.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Translucency</strong></td>
</tr>
<tr>
<td>Translucency is gradually decreased from the incisal to the cervical region to increase the masking level in the cervical region.</td>
</tr>
<tr>
<td><strong>Color</strong></td>
</tr>
<tr>
<td>Color of shade guide*</td>
</tr>
</tbody>
</table>

*NW: Noritake Shade Guide, A1~A3.5: VITA Classical Shade Guide

**Range of masking level**

<table>
<thead>
<tr>
<th>Abutment color examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTML</td>
</tr>
</tbody>
</table>

| One can select a shade tab that corresponds to the final desired color. |
| Select a shade tab one level brighter than the final color (it will be necessary to complete using stains). |

Seating in the mouth

Restoration fabricated by Oriol de la Mata y Garcia
1.4 Times Higher Translucency Than Conventional Zirconia

Our proprietary research and development has increased the translucency of KATANA™ Zirconia UTML by 1.4 times more than conventional zirconia. This enables you to have natural translucency.

![Translucency graph]

Wide Range of Clinical Applications Using Monolithic Restoration

You can fabricate many restorations, from esthetic anteriors to posterior bridges by selecting the right translucency and mechanical properties.

**Recommended indications and applications**

**UTML**, **STML**, **HTML**

**Mechanical Property (Flexural Strength)**

**UTML**, **STML**, **HTML**
90-minute Sintering up to a 3-unit Bridge

In addition to the usual sintering time (approx. 7 hours), due to our proprietary zirconia technology, KATANA™ Zirconia can be sintered in approx. 90 minutes* without compromising translucency or mechanical strength.

*The material is removed from the furnace at 800°C.

Sintering schedule
STML/UTML: 1560°C (2840°F)
HTML: 1515°C (2759°F)

Hold for 30 minutes

35°C/min. (65°F/min.)
-45°C/min. (81°F/min.)
Removal temp. at 800°C (1472°F)

0 45 75 90 (min.)

Fast sintering furnaces
Listed below are examples of furnaces which can reach the desired high temperature:
- Austromat 674i
- inFire HTC speed
- Sintra Plus

Wide Shade Selection

<table>
<thead>
<tr>
<th>Series</th>
<th>Shade</th>
<th>Size (Diameter/Thickness)</th>
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<tbody>
<tr>
<td>UTML</td>
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<tr>
<td></td>
<td>A1</td>
<td>A2</td>
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<td>A3</td>
<td>A3.5</td>
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<td>A4</td>
<td>B1</td>
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</tbody>
</table>

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Website www.kuraraynoritake.com

* Before using this product, be sure to read the Instructions for Use supplied with the product.
* Specifications and appearance of the product are subject to change without notice.
* Printed color can be slightly different from actual color.

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