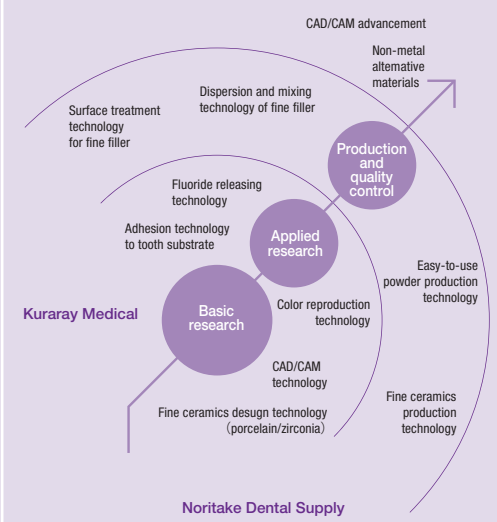


Company Profile

Kuraray Medical Inc. and Noritake Dental Supply Co., Ltd. merged in April 2012 with the aim of creating synergy in the areas of development, production, and sales, and strengthening their presence in the Japanese and global markets. The new company, Kuraray Noritake Dental Inc., seeks to develop new products based on the technologies cultivated thus far by the individual companies, and through it, to contribute to enhancing patients' quality of life, continuing to take on the daily challenge of expanding into new technology domains.



■ KATANA Zirconia & CERABIEN ZR (CZR) Porcelain Fused Zirconia (PFZ) Solution

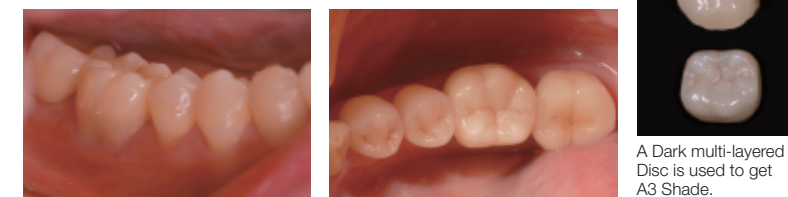
"The patient expressed a lack of confidence in her smile due to esthetic issues with her maxillary central incisors. Final crowns created using Noritake KATANA all-ceramics were cemented.

The result is a beautiful smile with completely natural-looking teeth."



■ KATANA Zirconia : Full Contour Zirconia (FCZ) Solution

KATANA Zirconia Material can make Full Contour Zirconia which has high cost performance. You can get strong and stable posterior restoration without layering. CERABIEN ZR (CZR) Internal & External Stain and E Graze will give more esthetic result with minimum intervention.



Postoperative Outcome
(The molar is FCZ made from KATANA Zirconia A Dark by polishing finish with Pearl Surface Z)

■ Related Materials



Pearl Surface Z (Polishing Materials)
Diamond Paste for Polishing Zirconia Material
*Polishing Brush should be used with.



CERABIEN ZR (CZR) E Glaze
Glazing material for Full Contour Zirconia



KATANA WAX Disc
Size
98.5mm X T : 14mm & 20mm
Color
Blue & Gray

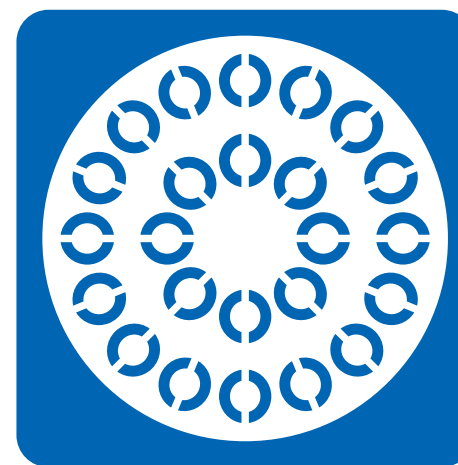


CERABIEN ZR (CZR) and CZR PRESS

Best matching with **KATANA Zirconia** Materials.

CERABIEN ZR (CZR) Series is a porcelain specifically developed for making all ceramic crowns in use with zirconia frameworks. Crown and Bridge made from with **KATANA Zirconia** can be used in the posterior as well as anterior due to its extremely high

flexural strength and excellent fracture toughness. The combination of CERABIEN ZR (CZR) Series and **KATANA Zirconia** will give you enhanced esthetics and fitness with maximum strength for an overall superior restoration.



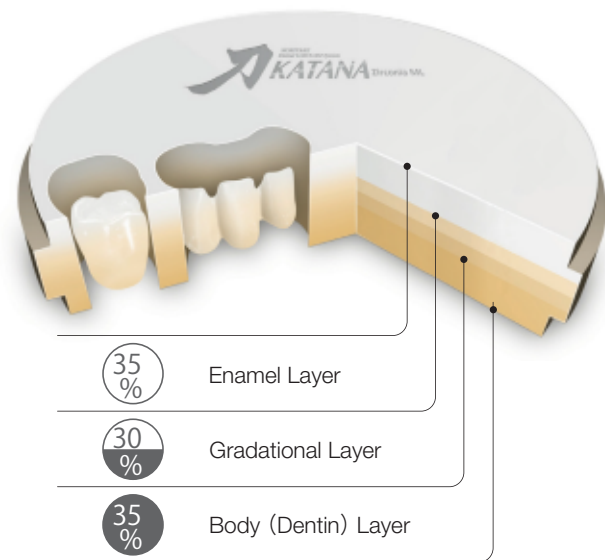
 Kuraray Noritake Dental Inc.

 **Kuraray Noritake Dental Inc.**
300 Higashiyama, Miyoshi-cho
Miyoshi, Aichi 470-0293, Japan
<http://www.kuraraynoritake.com>

“ High Translucency ” or “ Safety ” Which do you choose? You can get both with “ KATANA Zirconia (ML & HT)”

■ Collaboration between High Translucency & Pre-colored Technology

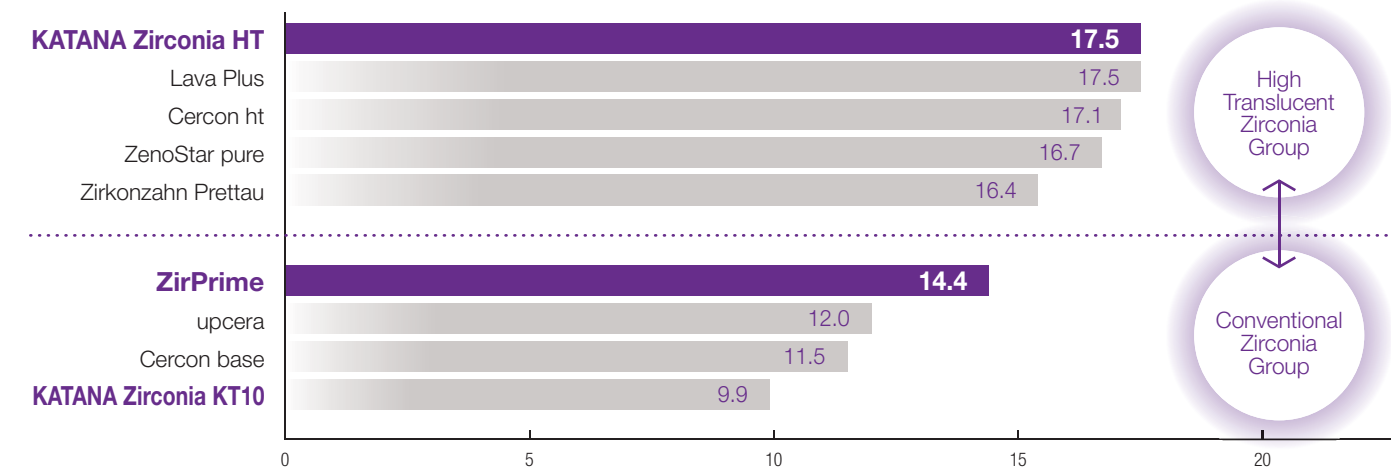
■ Multi Layered, KATANA Zirconia (ML)
Specialized for FCZ (Full Contour Zirconia)



■ Translucency of 1.0mm thickness



■ Translucency parameter



Quoted from Prof. Ban of Aichi Gakuin Univ.
the Conference of Japan Academy of CAD/CAM Dentistry, Tokyo, 2013

■ Esthetic High Translucency & Pre-colored Shade

■ Color Variety

KATANA Zirconia (ML & HT) Disc

| | |
|-------|--|
| ML | High-translucent, multi-layered and pre-colored disc for FCZ |
| HT 10 | High-translucent white |

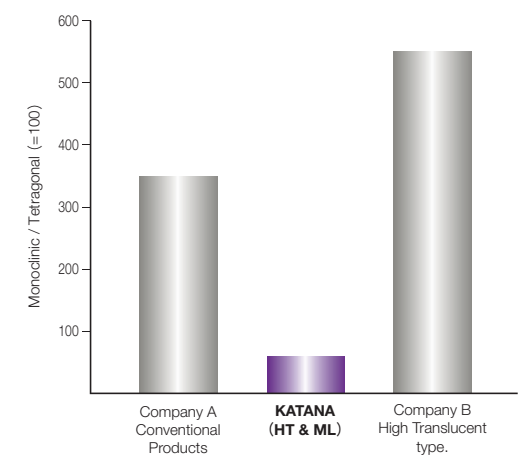


■ Low Monoclinic Transformation

What is Monoclinic Transformation ?

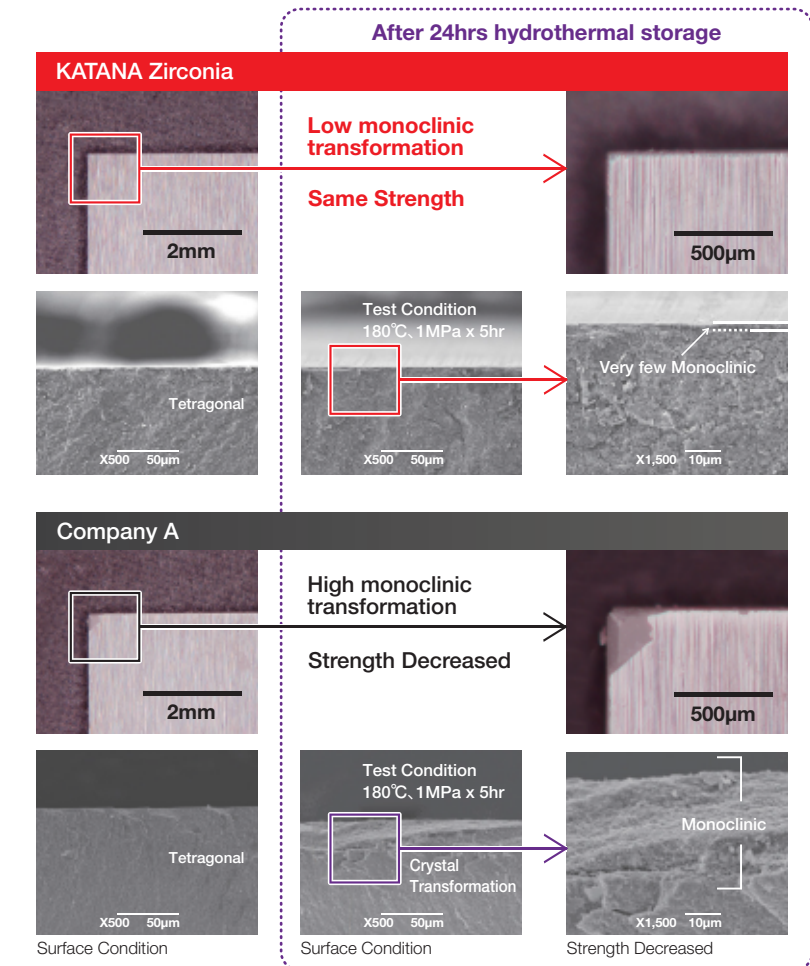
Under hydrothermal condition, tetragonal system of zirconia surface transforms to monoclinic and gets brittle. (See figure of Company A)
KATANA Zirconia, however, will have minimal monoclinic shift and maintain its strength. (See figure of KATANA Zirconia)

■ Outstanding Durability



KATANA Zirconia (ML & HT) have outstanding durability even if they have high translucency.

■ Lifetime Strength Persistence



Line-up of KATANA Zirconia Material (All Pre-sintered)

| Zirconia Line-up | | | KATANA Zirconia (ML) | KATANA Zirconia (HT) |
|------------------|----------|----|----------------------|----------------------|
| Diameter | | | 98.5mm | 98.5mm |
| Thickness | Straight | 10 | — | ● |
| | Collar | 14 | ● | ● |
| | Collar | 18 | ● | ● |
| | Collar | 22 | ● | ● |
| | Collar | 26 | — | ● |
| Shade | | | A Light | HT10 (white) |
| | | | A Dark | |
| | | | B Light | |

Physical Property

| KATANA Zirconia (ML & HT) | |
|---------------------------|------------------------|
| Flexural Strength | 1,100MPa |
| Fracture toughness (K1c) | ≥5MPa·m ^{1/2} |