

# MAZIC<sup>®</sup> Duro

*Nano Hybrid Ceramic for CAD/CAM*



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# **MAZIC<sup>®</sup> Duro**

*Nano Hybrid Ceramic for CAD/CAM*



***Elasticity & Easy Workability · High Flexural Strength ·  
Stain Resistance · Excellent Esthetics***



## Excellent esthetics and durability !

- Natural tooth-like esthetics and elasticity
- High flexural and compressive strength
- Excellent stain resistance
- Easy add-on with composite resin
- Excellent cementation
- Easy handling for adjustment of occlusal surface
- No firing and glazing : saving time, equipment and spaces
- Prosthesis treatment in 1-Day

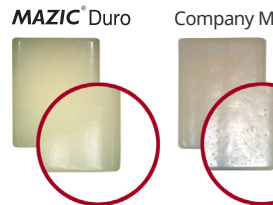


# MAZIC® Duro

**MAZIC® Duro** is an advanced Nano-Hybrid ceramic, consisting of ca.80% of Nano-particle sized ceramic fillers (zirconia, silicate) and 20% of high-density, hardening resin matrix. **MAZIC® Duro** has advantages of both high-density resin matrix and ceramics at the same time. You can take elasticity, easy workability of high-density resin matrix and also strength, stain resistance as well as aesthetics of ceramics.

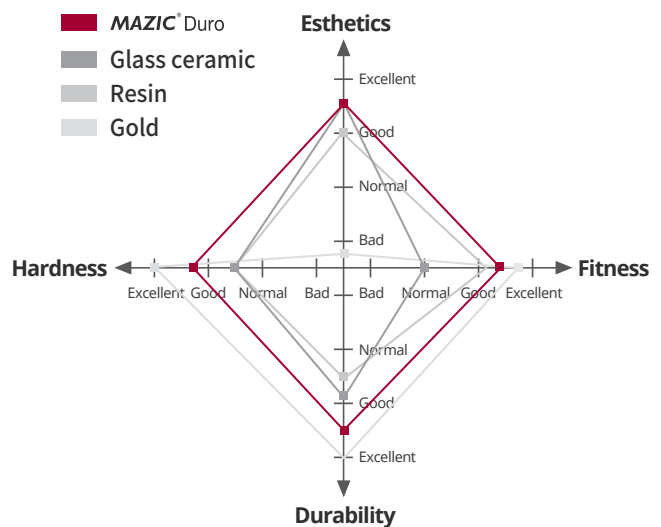
**MAZIC® Duro** applies to various prosthesis such as inlays, onlays, veneers and single crown with 1-Day treatment and makes sure of higher standard of esthetics than other materials, in spite of easy and simple workings only with CAD/CAM system.

## Patent On Control Technique Of All Direction Shrinkage-stress



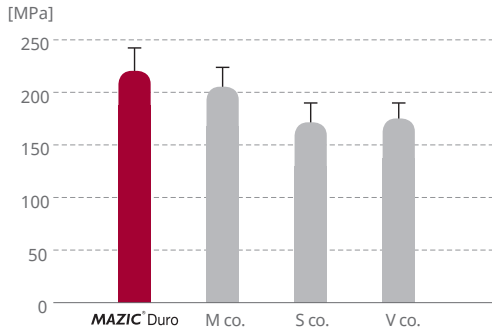
The patent technology for assuring high workability and esthetics by equally dispersing the stress of particular directions

## Physical Properties Comparison In Inlay Application



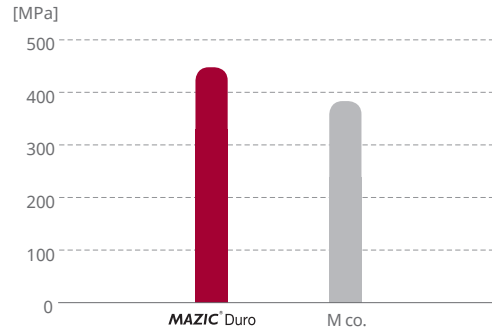
**MAZIC® Duro** has the closest physical properties and esthetics comparing with natural teeth and flexural/bonding/compressive strength are much better than glass ceramic as well as indirect resin. Realize the best esthetic prosthesis that every patient wishes with **MAZIC® Duro**.

### Flexural Strength



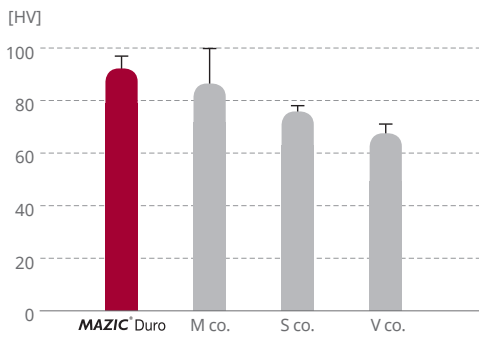
High flexural strength makes possible to use the material for a long time in oral.

### Compressive Strength



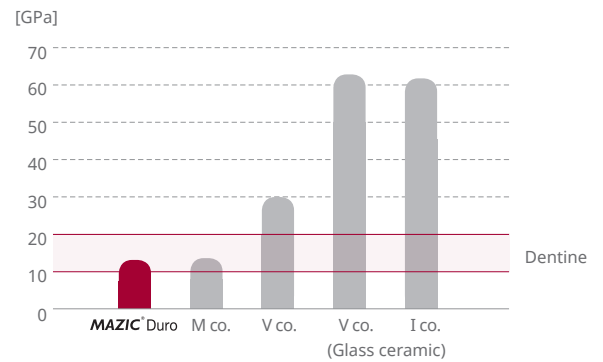
High compressive strength makes resistant to the stress of chewing.

### Vickers Hardness



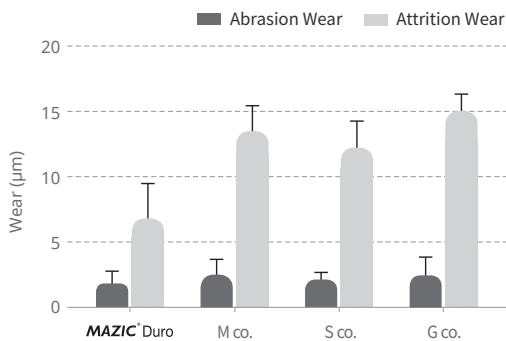
High vickers hardness makes resistant to micro-wear.

### Modulus of Elasticity



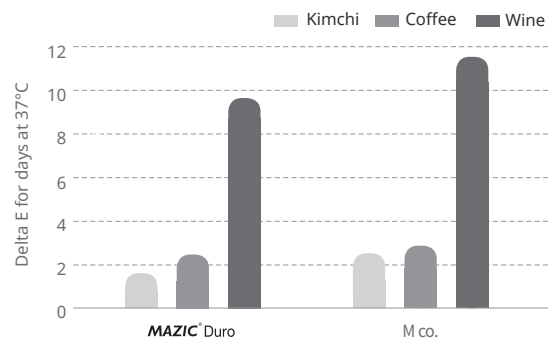
Modulus of elasticity similar to natural teeth minimizes the damages of antagonistic teeth as well as prosthesis.

### Wear Resistance

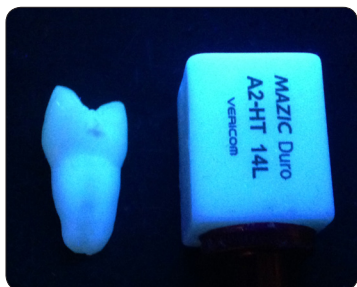


High wear resistance makes long-term use due to the high resistance to chewing and surface wear by food or toothpaste.

### Stain Resistance

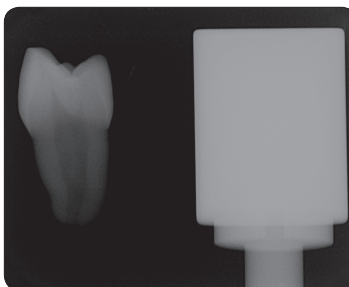


Low stain resistance maintains esthetics for a long time due to no shade variance of prosthesis.



### Fluorescence

MAZIC® Duro shows natural esthetics even in mouth due to the fluorescence similar to your teeth.



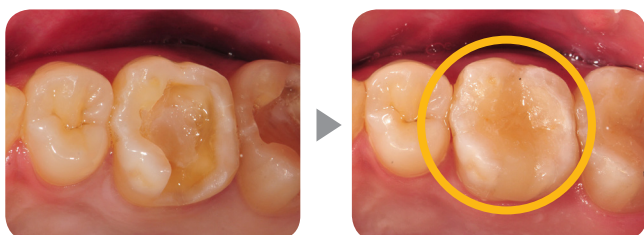
### Radio-opacity

MAZIC® Duro is easy to check dental procedures with high radio-opacity.

## Clinical Cases

MAZIC® Duro is available for fabricate single teeth such as Inlays, Onlays, Veneers and Full Crowns.

### • Case 1



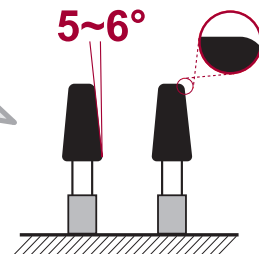
### • Case 2



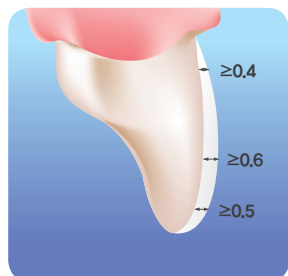
## Preparation Guidelines

- MAZIC® Duro follows a prep-guideline of all ceramics restoration.
- Inside of the edge and angle should be round.
- It is recommendable to prep rounded shoulder and chamfer.
- The numerical values in guide-lines are the minimum thickness of prosthesis by MAZIC® Duro.

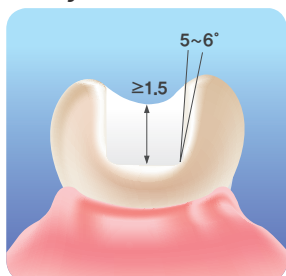
**Prep tooth with 5~6° taper, rounded edge and shoulder margin.**



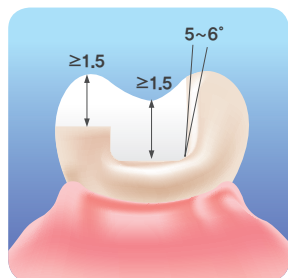
### Veneer



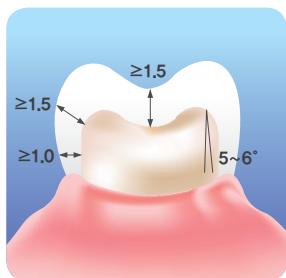
### Inlay



### Onlay



### Crown



### ✓ Check Point!

#### Good

- In case of crown, prep tooth with 5~6° taper, rounded edges and shoulder margin.
- Remove residues(temporary cement, tooth-debris and scanning spray) by a brush or soft pumice.
- Gently clean with water and blow dry by air. (Do not dry completely)

#### Bad

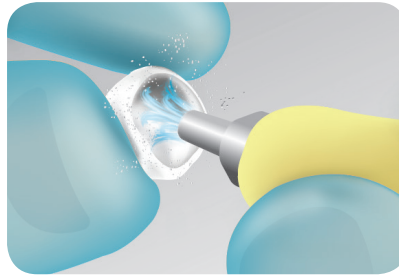
- Do not use chemicals after prep. (Example : EDTA, CHX, Bicarbonate, Hydrogen peroxide, Hyper-esthetic agent)
- Do not use laser etching.
- Do not use temporary cement in types of eugenol affiliation.

## Cementation Guidelines



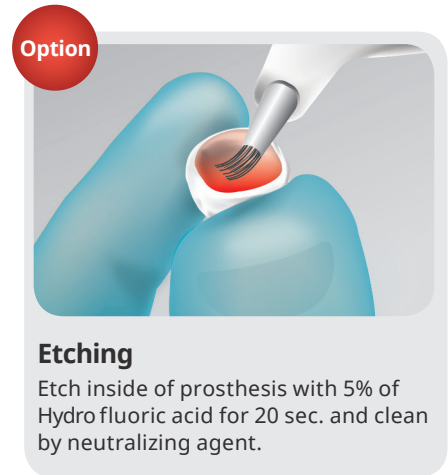
### 1. Intraoral Try-in

Check out proximate and occlusal surface between prosthesis and teeth. Trim the surface.



### 2. Sand Blasting

Sandblast with 25-30µm alumina(0.2MPa). Clean with oil free air syringe and with ethanol.



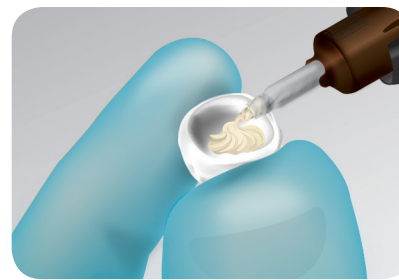
### Etching

Etch inside of prosthesis with 5% of Hydro fluoric acid for 20 sec. and clean by neutralizing agent.



### 3. Silanate

Before cementation, apply silane primer and dry for 60 sec.



### 4. Cementation

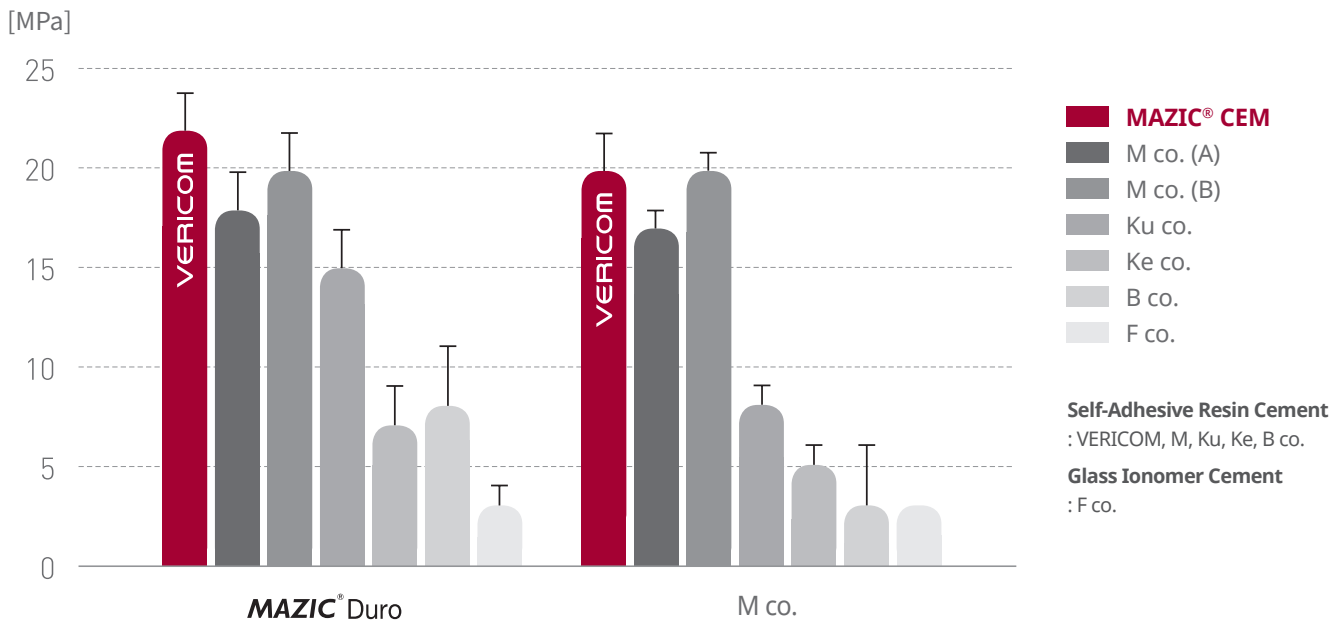
Apply high performance self-adhesive or adhesive resin cements.



### 5. Final Restoration

Hold restorations in place until cement sets. And remove excess cement.

## Bonding Strength





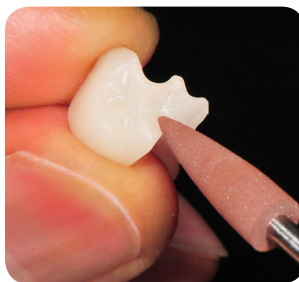
## Polishing Procedure



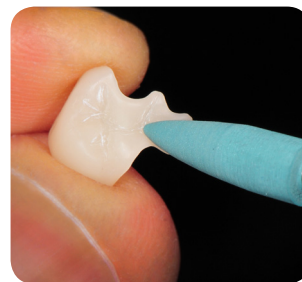
1. Removing sprue by diamond disc



2. Grinding with cerapol wheel



3. Polishing with rubber point



4. Polishing with silicon point



5. Polishing with a soft brush applied by diamond paste



6. Finish with cotton wheel



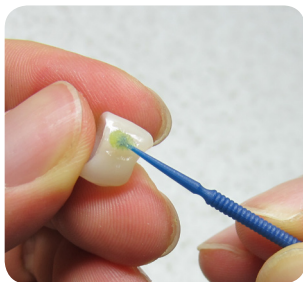
< Comparison of gloss before and after >

## Add-on Guide

Easy repair with our light-cured composite resin is possible.



1. Prepare Add-on part rough



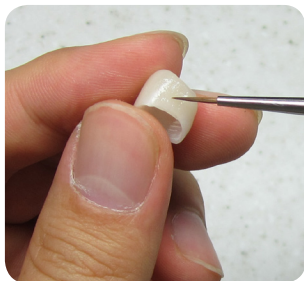
2. Apply for BC Plus twice to Add-on part



3. Dry enough with soft air (Approx. 10 sec.)



4. Light-curing for Approx. 20 sec.



5. Apply for DenFil™ Flow to Add-on part



6. Light-curing for Approx. 20 sec.



7. Finalization by polishing the part of Add-on and surroundings



## Order Information



### Mandrel Type (Cerec Type)

Product		12	14L
Size (W×L×H, mm)		12.2×10.2×15	14.5×14.5×18
Shade	HT	A1, A2, A3, B1	
	LT	A1, A2, A3, A3.5, A4 (B1, C2, D2, W1)	



### Disk Type

Size		8T	10T
ø98H ø100H		ø98×8 ø100×10	ø98×10
Shade	HT	A1, A2, A3	A1, A2, A3
	LT	A3.5	A3.5

## Product Line-up

Pressable Lithium Disilicate Glass Ceramic

### MAZIC® Claro CAD



MAZIC® Claro CAD is a high-strength glass ceramic block by Lithium Disilicate for CAD/CAM process. Applications are single restoration unit such as Inlays, Onlays, Veneers and Crowns.

Long-term Temporary Restorative Resin Blank

### MAZIC® Pro



The next-generation in hybrid temporary restorative material consists of 10nm fine-particles and pearl type polymer. And it has a different aesthetic and workability compared to conventional PMMA for temporary prosthesis manufacturing.

Zirconium Oxide

### MAZIC® Zir



The zirconium oxide block has a high flexural strength over 1300 MPa, excellent fracture resistance, and has twice the fracture toughness than glass infiltrated ceramic.

Self-Adhesive Universal Resin Cement

### U-Cem™ Premium



U-Cem™ Premium is a dual-cured self adhesive resin cement that requires no pre-treatment. This material shows high bonding strength on various prosthesis in Zirconia, Metal, Composite resin, Glass ceramic and no micro-leakage. Also, it is easy to use and to remove excess cement.

Surface Pretreatment Primer

### MAZIC® Primer



MAZIC® Primer improves bonding strength between resin cement and indirect restoration such as zirconia, metal glass ceramic, lithium disilicate glass ceramic and composite resin.

**VERICOM**  
Making the World Smile