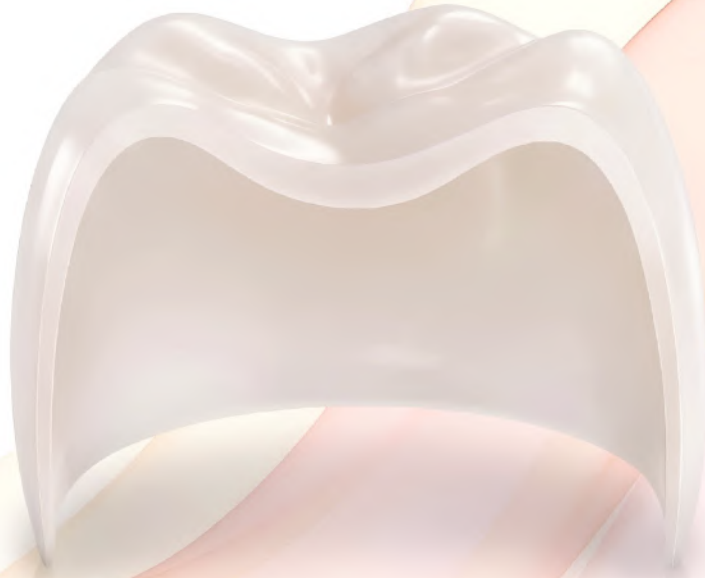




Pediatric Zirconia Crowns



Engineered for Growing Smiles
by **White Stone**
Advanced Dental Materials





 **Winizir**TM
Small Crowns Big Confidence



Welcome to MiniZir™

Who We Are

White Stone is a leading Egyptian manufacturer of advanced dental zirconia. **MiniZir™** is our specialized pediatric sub-brand, engineered exclusively for primary teeth. Born from White Stone's deep expertise in zirconia science, MiniZir™ delivers pediatric crowns that perfectly combine uncompromising strength, ultra-conservative preparation, and natural aesthetics-all proudly manufactured entirely in our state-of-the-art facilities.

We are more than just a material manufacturer;
we are your dedicated partners in dental excellence at every stage
of life-from growing smiles to full-arch restorations.

Our Mission

To provide pediatric dentists with zirconia crowns that are exceptionally strong, safe, and natural-looking-while preserving as much of the child's natural tooth structure as possible. We are committed to making every restoration a seamless, positive experience for both the clinician and the young patient

Our Vision

To be the trusted global choice for pediatric zirconia crowns-setting the absolute standard for quality, innovation, and child-centered care in every smile we protect.



Engineered by

White Stone

Advanced Dental Materials



Core Philosophy

Childhood development demands a restorative biomaterial that transitions flawlessly between structural permanence and physiological harmony.

Active lifestyles, high bruxism dynamics, and demanding parental expectations leave zero margin for clinical failure.

MiniZir™ addresses these challenges directly with a dedicated pediatric monolithic zirconia line.

Engineered specifically to bridge the gap between high microstructural strength and lifelike light refraction, we do not merely restore primary teeth—we preserve structural integrity for developing smiles

Material Science & Mechanical Properties

MiniZir™ pediatric crowns are synthesized from high-purity medical-grade Yttria-Stabilized Tetragonal Zirconia Polycrystal (3Y-TZP)

Advanced Crack Arrest Architecture

This specific crystal architecture utilizes localized transformation toughening. When subjected to stress, localized microstress prompts an immediate phase shift from tetragonal to monoclinic configurations. This localized volume expansion actively arrests micro-crack propagation under intense, cyclic masticatory loading

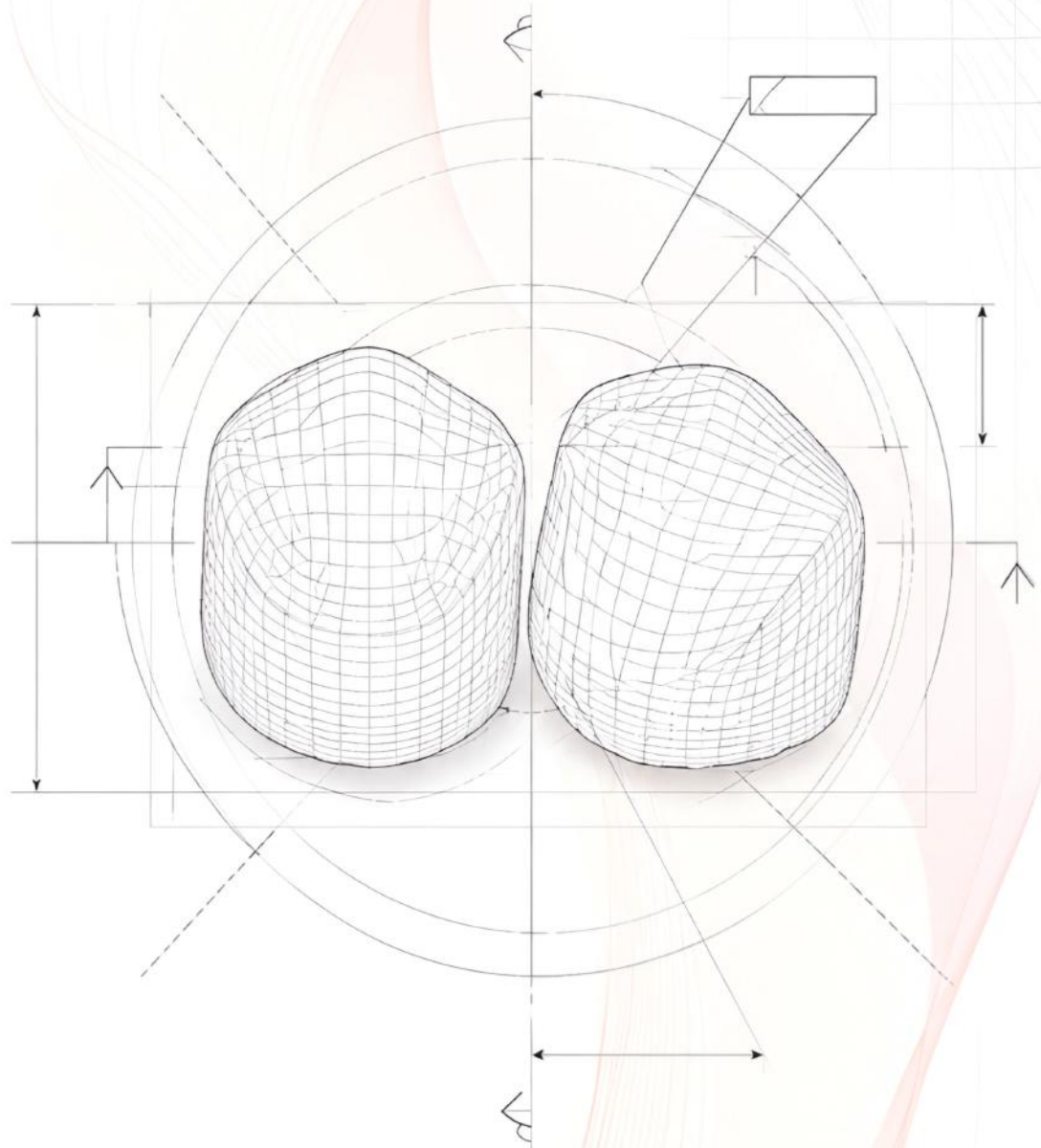
Flexural Strength: $\geq 1,200$ MPa

Testing Standards: Rigorously validated via **ISO 6872** three-point bending criteria



Micro-Engineered Geometric Architecture

The physical parameters of MiniZir™ crowns are mathematically optimized to balance maximum structural permanence with minimal biological invasion.



Feature	Specification	Clinical Advantage
Wall Dimensions	Uniform axial thickness of 0.5 mm; occlusal reduction threshold of 0.6 mm.	Minimizes sound tooth preparation requirements while conserving vulnerable primary pulp cavity boundaries.
Cervical Design	Pre-contoured, scalloped margins tapering to a fine feather-edge profile (0.2 mm).	Guarantees a seamless, flush adaptation into the sulcus tissue, preventing plaque-retentive ledges.

Precision Polishing – Smooth, Safe, Natural

Every MiniZir™ crown undergoes a multi-stage polishing process to achieve an ultra-smooth, high-gloss finish

Why Polishing Matters

A highly polished crown resists plaque buildup, stays cleaner, and is gentler on opposing teeth.

It also looks more natural, with a smooth, lifelike shine that blends seamlessly with adjacent teeth.

Smooth margins reduce gum irritation and help maintain healthy tissue around the crown.



Structural Change Through Polishing

During polishing, the outer layer of the zirconia is compressed and refined at a microscopic level.

This eliminates surface irregularities, closes micro-pores, and creates a dense, glass-like surface.

The result is not only a brilliant shine but also a stronger, more wear-resistant surface that resists staining and maintains its integrity over time.

Gentle on Opposing Teeth

Despite its exceptional strength, the highly polished surface of MiniZir™ is remarkably gentle on opposing natural teeth.

The smooth, friction-reducing finish minimizes abrasive wear, protecting the developing occlusion and preserving the child's natural enamel.

Internal Surface for Superior Retention

The internal surface is sandblasted to create a micro-rough texture.

This significantly increases the surface area for cement adhesion, ensuring a strong, durable bond between the crown and the prepared tooth.

MiniZir™ – Polished for Performance. Engineered for Retention



Clinical Handling & Preparation Protocols

To maximize the mechanical advantages of the 3Y-TZP crystal structure, adherence to the following conservative preparation guidelines is recommended

Tooth Preparation

Incisal / Occlusal Reduction:

Achieve a uniform 0.6 mm reduction using a fine diamond bur to ensure adequate clearance without jeopardizing pulp vitality.

Axial Reduction:

Create a 0.5 mm uniform reduction with a 1.5° to 2.5° taper to optimize the crown's self-seating geometry.

Margin Design:

Establish a distinct feather-edge margin at or slightly below the gingival crest to accommodate the 0.2 mm tapered cervical profile.

Try-In and Decontamination

Following try-in, saliva contamination must be completely removed to preserve optimal cement adhesion.

Clean the internal surfaces thoroughly using a specialized zirconium oxide cleaning paste or

a 5% sodium hypochlorite solution,

followed by a thorough water rinse and oil-free air drying.

Biocompatibility & Tissue Integration

Gingival Health:

The ultra-smooth, polished monolithic surface of MiniZir™ minimizes bacterial adhesion and plaque accumulation compared to traditional stainless steel crowns (SSCs) or strip crowns.

Low Wear on Antagonists:

Despite a high flexural strength of $\geq 1,200$ MPa, the microstructural density ensures that when properly Polished, the material exhibits minimal abrasive wear on opposing natural primary teeth.

Hypoallergenic Material:

100% biocompatible, medical-grade zirconia eliminates concerns regarding metal allergies or chemical leaching in the oral environment.



Mini-Tryins

Color Coded Sizing System

Size (0)



Size (1)



Size (2)



Size (3)



Size (4)



Size (5)





Try-In Kit – Precision Before Final Placement

To simplify clinical workflow and ensure accurate fit before final cementation, we offer a dedicated Try-In Kit manufactured from a safe, temporary dental material designed exclusively for intraoral trial placement.
Safe Temporary Material

All try-in crowns are fabricated from high-quality temporary dental material, fully approved for short-term intraoral use. The material is completely safe, non-irritating, and gentle on the child's delicate gingival tissues – giving the clinician complete freedom to verify size and fit without concern.

Color-Coded Sizing System

For instant, error-free size identification, we have developed a simple visual coding system. Each size is assigned a distinct color, eliminating the need to read small markings or numbers during the try-in procedure.

Size	Color
0	Red
1	Blue
2	Green
3	Grey
4	Yellow
5	Orange

This intuitive system allows the clinician to quickly select and confirm the correct size, reducing chair time and streamlining the entire seating process.

Why Use Try-In Crowns?

Accurate size verification before final crown placement

Prevents waste of final zirconia crowns

Saves chair time with instant color recognition

Safe and comfortable for the child during trial fitting

Available Formats

Complete Kit – containing all sizes (Zero to 5)

Individual Refill Packs – for each size separately

Autoclavable – Safe for Repeated Use

All try-in crowns are fully autoclavable, allowing for safe, sterile reuse across multiple patients.

This not only ensures strict infection control compliance but also makes the kit a cost-effective, long-term investment for any pediatric practice.

Sizing, Selection & Ordering Information

MiniZir™ crowns are engineered to match the natural anatomy of primary dentition with highly precise, reproducible sizing kits.

Anatomical Accuracy:

Available in dedicated shapes for upper/lower, left/right primary molars and incisors.

Sizing System:

Offered in a comprehensive range of sizes per quadrant to ensure a precise, drop-in fit with minimal chairside modification

Kit Formats:

Available in Professional Starter Kits

(containing a complete matrix of standard sizes)

and Individual Refill Packs





Warranty & Free Exchange Policy

"We trust our crowns. And we trust you. Exchange anytime - no fees, no hassle."

1. Manufacturing Warranty

MiniZir™ crowns are fully warranted against manufacturing defects, including internal voids or cracks visible before use, structural lamination or delamination, and incorrect morphology (such as a mismatched marked tooth type).

Remedy: A free replacement crown will be shipped within 2 business days.

2. Free Size Exchange Policy

To ensure a perfect fit with zero stress for your clinic, clinicians may exchange any MiniZir™ crown for a different size at any time, for any reason.

Zero Restocking Fees

No Time Limit

No Questions Asked

3. Exclusions

This policy does not cover crowns damaged by improper clinical preparation (e.g., forced seating, excessive grinding), improper cementation protocols, or crowns lost by the clinic or patient.

White Stone

Advanced Dental Materials



Our Vision

From **Egypt** to the **World**

At MiniZir, our Vision is to become a globally trusted name in pediatric zirconia crowns.

By delivering Premium quality, continuous innovation, and beautiful smiles, we aim to touch the lives of children around the world.



Egypt



Make Your Order

www.minizircrowns.com



Buy 10
Get 2 Free



Buy 20
Get 6 Free



Buy 50
Get 25 Free



Add 12 more
Get 2 FREE

Progress to next offer (12 crowns)



Upper Arch — Maxillary

A		B		C		D	
L	R	L	R	L	R	L	R
0 : - + 0 - + : - + 0 - + : - + 0 - + : - + 0 - +							
1 : - + 0 - + : - + 0 - + : - + 0 - + : - + 0 - +							
2 : - + 0 - + : - + 0 - + : - + 0 - + : - + 0 - +							
3 : - + 0 - + : - + 0 - + : - + 0 - + : - + 0 - +							
4 : - + 0 - + : - + 0 - + : - + 0 - + : - + 0 - +							
5 : - + 0 - + : - + 0 - + : - + 0 - + : - + 0 - +							



Total Crowns 0

Paid Crowns 0

TOTAL PRICE

0 EGP

 Checkout

× Clear All

Design
Your
Kit



MiniZirTM

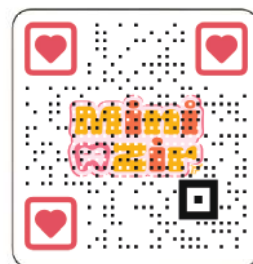
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