

From Bisco **TESCERA™ ATL™**
AQUA, THERMAL, LIGHT INDIRECT COMPOSITE RESTORATIVE SYSTEM



Miracles happen...

with unique composites and the only curing
system that pressurizes uncured composite
prior to light and heat cure under water.



Bringing Science to the Art of Dentistry™

U.S. Patent: 6,386,865 and patent pending

"The TESCERA Indirect Composite System allows me to give my patients a restoration that blends into their dentition."

Daniel H. Ward, DDS

The TESCERA ATL curing unit:

- ï **Combined heat, light and pressure under water**
 - Enhanced physical properties
 - Saves time
 - No bulky, expensive nitrogen tank needed
- ï **Oxygen-free environment**
 - Creates optimal surface properties by preventing the formation of the oxygen inhibited layer there by leading to a hard, smooth, shiny surface
- ï **Composite inlays, onlays, crowns and bridges**
 - Versatility of use
 - Ability to cure multiple restorations at once
- ï **All incremental composite layers are pressurized before light curing which leads to...**
 - Less porosity throughout the restoration



TESCERA™ ATL™
AQUA, THERMAL, LIGHT INDIRECT COMPOSITE RESTORATIVE SYSTEM



"Patients appreciate that we're using the latest technology based on proven, time-tested science."

Dr. Rita Schneemilch

Dental Professionals Will Appreciate:

- ï **Natural-looking aesthetics with enhanced fluorescence - blends into dentition**
- ï **Unlike porcelain, TESCERA does not abrade, wear or destroy the opposing natural dentition**
- ï **High-gloss finish resists staining, wear and color change**
- ï **Patented design eliminates porosities**
- ï **TESCERA composites have over 15 years of history as direct composite restorative material**
- ï **7 years of indirect composite clinical testing**
- ï **Proven successful in thousands of clinical cases**
- ï **Customize each restoration with unlimited shading and characterization**



Tests prove that pressure prior to curing eliminates porosities producing long-term wear and flawless restorations. Easy-to-use, the TESCERA ATL allows the technician to build up incremental layers under pressure and light to prevent delamination and keep the restoration free of voids. In the final cure, the oxygen-free environment creates a high-gloss surface that resists staining.

When processed in the TESCERA ATL, TESCERA composite materials allow for the creation of beautiful, natural-looking restorations with unsurpassed strength and durability.

Unlimited shading and characterization

The high-strength TESCERA Indirect Composite Restorative System is versatile and complete, from the first base layer to the polishing paste and glaze.

Over 60 fluorescing Composite Syringes:

- Opaque, low-shrink Dentin shades (VITA®*)
- Translucent, polishable Body shades (VITA)
- Incisal shades
- Flowables
- Color Modifiers
- Characterization Stains
- Intense Chroma composites
- Specialized "Root Dentin" shades



PLUS- Die Separator, Glaze, Reinforcement Fibers, non-stick Sculpting Resin, Polishing Paste, Oxygen Scavenger Capsules and other accessories.

The TESCERA ATL Processing Unit

Most other indirect composite systems create pressure and eliminate unnecessary oxygen using nitrogen or argon: effective, but bulky, inconvenient and relatively expensive.

However, the TESCERA ATL unit uses water! Two specialized cups (one for pressure/light and one for water/pressure/light/heat) are used in the "smart" base unit. In the final cure, water and a unit-dose oxygen scavenger capsule produce a very hard, glossy surface. The TESCERA ATL unit features pre-programmed cycles to eliminate guesswork, and reduce processing errors, the learning curve and training time.



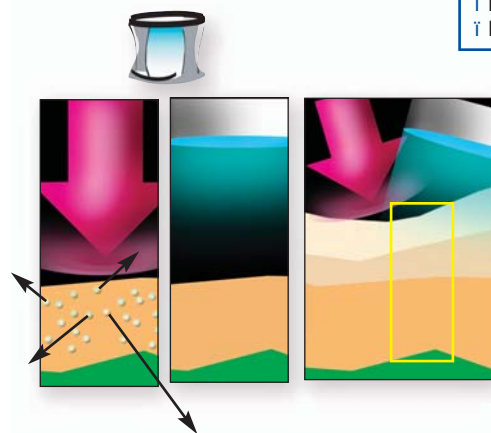
* VITA is a registered trademark of VITA ZAHNFABRIK H. Rauter GmbH & Co. KG Germany

How Restorations Are Processed

TESCERA ATL

The system applies pressure *prior* to light curing at each stage. This forces out porosities and voids, so that the final restoration is dense and void-free.

Final cure:
 † Pressure † Light
 † Heat † Under water



TESCERA Dentin composite is a low shrinking (less than 1.5%) fluorescing opacous hybrid material that yields excellent marginal integrity and fit.

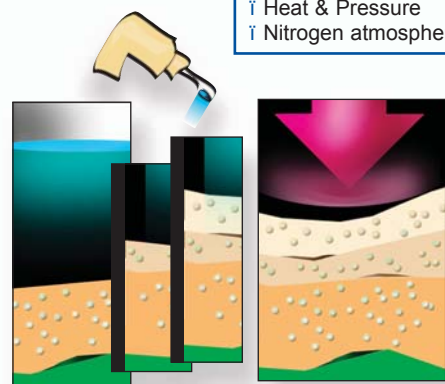
TESCERA Body and Incisal composites are fluorescing reinforced microfill (microhybrid) materials that maintain brilliant luster and superior wear properties.

Approximately 16 minutes to complete

A Competitive System

Light curing each stage (without pressure) locks in porosities & voids that remain even after final pressure and heat curing.

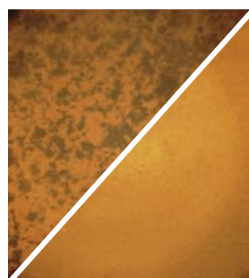
Final cure:
 † Heat & Pressure
 † Nitrogen atmosphere



Approximately 21 minutes to complete

Bubbles were artificially incorporated into composite to demonstrate the ability to eliminate porosities by curing with TESCERA ATL.

(Upper left) Porosities remain with conventional curing technique. Porosities can lead to premature restoration breakdown.



(Lower right) Composite cured in the TESCERA ATL shows elimination of porosities for optimal appearance and strength.

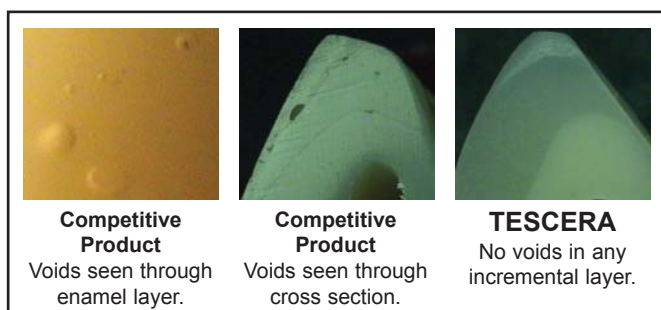
TESCERA Physical Properties

Test	Dentin	Body	Incisal
Diametral Tensile Strength	56MPa	64MPa	60MPa
Compressive Strength	379MPa	395MPa	357MPa
Flexural Strength	142MPa	156MPa	152MPa
Elastic Modulus	14.8GPa	9.1GPa	9.1GPa
Volumetric Shrinkage	1.4%	NA*	NA*
Wear Testing of Incisal (100,000 cycles, ceramic ball)			
Attrition			9.5µm
Abrasion			4.0µm

* NA refers to not applicable

Abrasion Testing of Incisal (100,000 cycles, polished enamel**)	
TESCERA Incisal	12.9µm
belleGlass™* Enamel	20.6µm
Evaluation conducted at Oregon Health & Science University by Jack L. Farracane, PhD	
* belleGlass is not a trademark of BISCO, Inc.	

** Simulates approximately 1 year



The TESCERA difference

- † Void-free restorations from top to bottom.
- † Eliminates porosity and the oxygen inhibited layer by:
 - Pressurizing the increments before light curing
 - Submerging the final cure in hot pressurized water (60 PSI, 130°C) for 10-12 minutes.

Porosity... the Achilles Heel of any restoration

When composites are manipulated, air bubbles are created and trapped inside or, even worse, near the surface and margins. This can affect restorative function, durability and appearance. It can even require repairs or remakes. The TESCERA system eliminates porosity in each step, ensuring a successful, long-lasting restoration.

Improved productivity

This virtually foolproof process can save about 25% of your processing and finishing time compared to competitive systems. By working with leading dental laboratories, BISCO's research team developed this semi-automated processing sequence that eliminates voids from start-to-finish and the prevention of an oxygen inhibited layer after final cure.

Unsurpassed physical properties

Unlike ceramics, TESCERA composites will not destroy the opposing natural dentition. They have been formulated to withstand tensile and compressive stresses, abrasion and attrition. The reinforced microfilled (microhybrid) Body and Incisal materials resist staining and color change. TESCERA fabricated restorations have been proven in thousands of clinical cases spanning 7 years.



Before

Dentistry by: Stephen D. Poss, DDS



After

Restoration courtesy of: Ray Foster, Las Vegas Esthetics



Before

Restorations courtesy of: Ray Foster, Las Vegas Esthetics



After



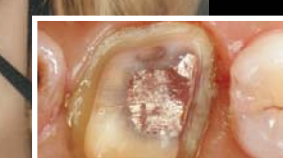
Before

Dentistry by: Daniel H. Ward, DDS



After

Restorations courtesy of: ROE Dental Lab



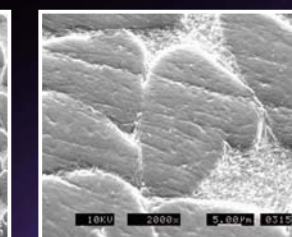
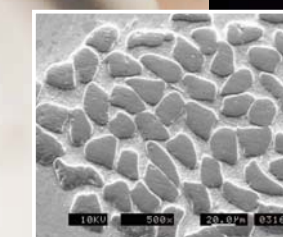
Before

Dentistry by: John J. Drakovich, DDS



After

Restoration courtesy of: Albert Tassi Dental Studio



SEM 500x and 2000x
 Cross section showing interface between TESCERA composite and TESCERA reinforcement fiber.

TESCERA ATL MASTER KIT T-10100KN
1 ATL Unit & Accessories, 2 Organizers with all TESCERA Composites (2.5g ea.) and Characterization Materials (1.5g ea.), Thin and Dense Fiber Reinforcement Material and Scissors, Ancillary Products, Instructions/MSDS

TESCERA ATL T-33010K
1 ATL Unit & Accessories

TESCERA COMPOSITE ORGANIZER KIT T-10100KN
2 Organizers with all TESCERA Composites (2.5g ea.) and Characterization Materials (1.5g ea.), Thin and Dense Fiber Reinforcement Material and Scissors, Ancillary Products, Instructions/MSDS

TESCERA ATL ACCESSORIES
1 Light Cup with Stacking Cups T-33011P
1 Heat Cup with Basket T-33012P
1 Heat Cup Basket T-1811P
1 Bag of Reflection Beads T-1812P
1 Power Cord T-1813P
1 Replacement Lamp (300 Watt, 120V AC)) T-1814P
1 Connection Hose T-1815P
1 Set of 3 Light Cup Stacking Cups T-1816P
2 Replacement Fuses (250V (5.0A)) T-1818P

TESCERA DENTIN SINGLE SYRINGE (2.5g)

A1	T-11011P	B4	T-11024P
A2	T-11012P	C1	T-11031P
A3	T-11013P	C2	T-11032P
A3.5	T-110135P	C3	T-11033P
A4	T-11014P	C4	T-11034P
B1	T-11021P	D2	T-11042P
B2	T-11022P	D3	T-11043P
B3	T-11023P	D4	T-11044P

TESCERA BODY SINGLE SYRINGE (2.5g)

B3	T-12023P	C4	T-12034P
B4	T-12024P	D4	T-12044P

TESCERA BODY SINGLE SYRINGE (4g)

A1	T-12011P	B2	T-12022P
A2	T-12012P	C1	T-12031P
A3	T-12013P	C2	T-12032P
A3.5	T-120135P	C3	T-12033P
A4	T-12014P	D2	T-12042P
B1	T-12021P	D3	T-12043P

TESCERA INCISAL SINGLE SYRINGE (2.5g)

Blue	T-130BLP	Yellow	T-130YLP
Gray	T-130GRP	Neutral	T-130NTP
Pink	T-130PKP		

TESCERA INCISAL SINGLE SYRINGE (4g)

Clear	T-130CLP	Super Trans.	T-130STP
Frost	T-130FRP		

TESCERAFLO™ SINGLE SYRINGE (1.5g)

A2-Opaque	T-21012OP	A2	T-21012P
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TESCERA CHARACTERIZATION STAIN SINGLE SYRINGE (1.5g)

Red/Brown	T-14012P	Pink	T-14017P
White	T-14014P	Blue	T-14018P
Orange	T-14015P	Gray	T-14019P
Yellow	T-14016P		

TESCERA COLOR MODIFIER SINGLE SYRINGE (2.5g)

Blue	T-15003P	Orange	T-15008P
Gray	T-15004P	Brown	T-15009P
Dark Pink	T-15006P	Yellow	T-15010P
Pink	T-15007P		

TESCERA ROOT DENTIN SINGLE SYRINGE (2.5g)

Rust	T-16005P	Mustard	T-16011P
Brown	T-16009P		

TESCERA CHROMA SINGLE SYRINGE (2.5g)

A	T-17012P	C	T-17032P
B	T-17022P	D	T-17042P

TESCERA FIBER REINFORCEMENT MATERIAL

1 Strip Triaxial Thin (2.1mm x 150mm)	T-1807P
1 Strip Triaxial Dense (2.5mm x 150mm)	T-1808P
Fiber Reinforcement Scissors	T-1817P

ANCILLARY PRODUCTS

TESCERA Die Separator (10g)	T-1801P
TESCERA Sculpting Resin (6ml)	T-1802P
TESCERA Polishing Paste (3g)	T-1803P
TESCERA Glazing Resin (14g)	T-1804P
TESCERA Oxygen Scavenger Capsules (100)	T-1805P
Contact Lubricant (0.3oz)	T-1820P
Air Filter	T-1823P
19 Gauge Disposable Syringe Tips (25)	X-80615N
Brush Handle (White)	X-80212R
Brush Tips (100)	X-80222R

TWINZ™ VPS Impression Material, QUICK-DIE™ and VIP™ Junior Halogen Curing Light Are Also Available from BISCO.



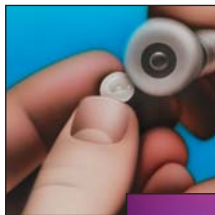
Simple, familiar procedure

- Prep the die as usual.

- Apply a thin layer of TESCERA Dentin composite and cure in the light cup*.



- Apply TESCERA Body and cure in the light cup. Apply TESCERA Incisal and cure in the light cup*.



- Remove your restoration from the die and place it under water in the heat cup* for final cure.

- Finish, polish and/or glaze.



Restorations courtesy of Ray Foster, Las Vegas Esthetics
Restorations by Dan Boskocevic: Albert Tassi Dental Studio

* All TESCERA cups are designed and patent protected to pressurize prior to start of the light or heat cycle.

The TESCERA ATL. Exclusively from BISCO



Bringing Science to the Art of Dentistry™

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MC-2207LTC