

XZIR WHITE ROCKSOLID · XZIR 4D PRO · X MAX

The Ultimate materials for CAD CAM systems.

Strength where the case needs it,
translucency where the patient sees it
— across the whole indication range.



Xzir White RockSolid

1400 MPA ZIRCONIA

Long-span bridges and frameworks. Shaded to any of 16 shades with colouring liquid.



Xzir 4D Pro

8-LAYER MULTILAYER

Strength and translucency both graded through the disc. Monolithic anterior work.



X max

LITHIUM DISILICATE

Pressable-grade aesthetics from a milled block. Inlays, onlays, veneers, crowns.

HIGH-TRANSLUCENT ZIRCONIA · WHITE BODY

Rocksolid zirconia

Unmatched strength for unbreakable restorations!


1400 MPa

FLEXURAL STRENGTH,
MINIMUM

40%

LIGHT TRANSMITTANCE

INDICATIONS

Coping

Crown

Bridge

Inlay

Onlay

Full arch

SHADING — 16 SHADES FROM ONE DISC

A white body plus colouring liquid, rather than a pre-shaded disc per shade. One stock item covers the full VITA range, and the technician controls the result.

A1	A2	A3	A3.5	A4	B1	B2	B3	B4	C1
C2	C3	C4	D2	D3	D4	D0	T0	IND	+

A1–D4 colouring liquid, 50 ml. D0 dilution and T0 incisal liquids extend translucency control; red, blue and yellow indicators come in 10 ml.

MECHANICAL & OPTICAL

Flexural strength	≥1400 MPa
Light transmittance	40%
CTE (25–500 °C)	10.5 /K
Density, pre-sinter	3.10–3.20 g/cm ³
Density, sintered	6.08–6.10 g/cm ³

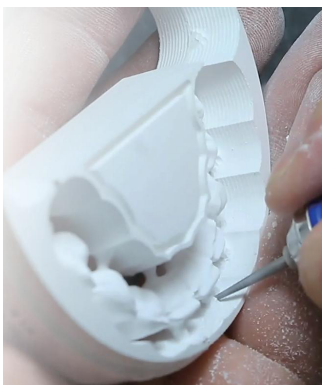
COMPOSITION

ZrO ₂ + HfO ₂ + Y ₂ O ₃	≥99%
Y ₂ O ₃	4.5–6.0%
Al ₂ O ₃	<0.25%

SPAN

No limit

≥1400 MPa is the minimum at every thickness, not a peak figure on the thickest disc. Span becomes a design decision rather than a material one — a single coping and a fourteen-unit arch are milled from the same stock item.



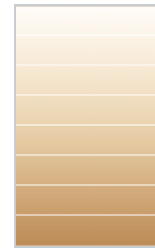
MULTILAYER ZIRCONIA · GRADED STRENGTH

4D Pro Zirconia

Eliminate the need of Ceramic build up



EIGHT LAYERS, TWO GRADIENTS


700 MPa

INCISAL — 57% TRANSLUCENCY

1200 MPa

CERVICAL — 43% TRANSLUCENCY

Shade and strength change together through the thickness — strong where the crown meets the prep, translucent where it meets the light.

INDICATIONS

- Monolithic crowns — anterior and posterior
- Full-arch restorations and long-span bridges
- Bridges and copings
- Inlays, onlays and veneers
- Implant work — full crowns and abutments

SHADES

A1	A2	A3	A3.5	A4	B1	B2	B3	B4	C1
C2	C3	C4	D2	D3	D4	BL1	BL2	BL3	BL4

Pre-shaded — 16 VITA classical shades plus four bleach shades.



MECHANICAL & OPTICAL

Flexural strength	700–1200 MPa
Light transmittance	43–57%
Gradient layers	8
CTE (25–500 °C)	10.0–11.0 /K
Density, pre-sinter	3.10–3.20 g/cm ³
Density, sintered	6.05–6.09 g/cm ³

COMPOSITION

ZrO ₂ + HfO ₂ + Y ₂ O ₃	≥99%
Y ₂ O ₃	4.5–10%

FINISHING

No cutback. No layering.

The gradient is milled, not applied — so the aesthetic result leaves the machine with the restoration. Every indication above is monolithic: mill, sinter, polish. No ceramic build-up, no second firing, no shade drift between the technician's bench and the chair.

GLASS CERAMIC • MILLABLE BLOCK

Pressed-ceramic aesthetics, without the press.



TWO BLOCK FORMATS

18-15-13

SINGLE-UNIT BLOCK, MM

40-15-15

MULTI-UNIT BLOCK, MM

Supplied in HT translucency, shade-coded on the block itself, on a standard mandrel for wet milling. Crystallised and glazed in one firing.

INDICATIONS

Inlay

Onlay

Veneer

Full crown

FINISHING BEFORE CRYSTALLISATION

- **Separate carefully.** Use the correct trimming tool to cut the restoration from the support pin — the wrong tool causes fissures near the margin.
- **Polish first, then fire.** Low speed, light force, one direction only.
- **Don't dwell.** Localised heating from over-polishing one area causes cracks.
- **Check the fit** on the model or in the mouth before firing, and confirm occlusal and proximal contacts.
- **Respect minimum thickness** for the indication.

GLAZING AND SUPPORT

- **Low-temperature glaze only** — below 840 °C.
- **Brush the paste evenly.** Too thick on the occlusal surface dulls the result; too thin leaves it flat.
- **Support on pyrocotton** or equivalent sintering material during crystallisation.
- **Clean between firings.** Ultrasonic bath, then dry with oil-free air before a second crystallisation.



CHAIRSIDE

One appointment

Scan → design → wet mill → adjust → crystallise and glaze → seat. A single-unit block mills in 25–30 minutes on a chairside wet mill such as X mill Wet, so the patient leaves with the definitive restoration — no temporary, no second visit, no impression sent out.

SINTERING & CRYSTALLISATION

Every programme, on one page.

ZIRCONIA — SINTERING

Xzir White RockSolid		1530 °C
Peak range	1500–1550 °C	
Ambient → 1000 °C	3 °C/min	
1000 °C → peak	5 °C/min	
Hold at peak	Per furnace programme	
Cooling to 200 °C	–15 °C/min	
Below 200 °C	Natural	

Xzir 4D Pro		1500 °C
Peak range	1480–1530 °C	
Ambient → 1000 °C	3 °C/min, then 6 °C/min	
1000 °C → peak	5 °C/min	
Hold at peak	Per furnace programme	
Cooling to 200 °C	–15 °C/min	
Below 200 °C	Natural	

X MAX — CRYSTALLISATION

Two-stage		RECOMMENDED
Starting temperature	400 °C	
Drying time	6 min	
Stage 1 — heating rate	60 °C/min	
Stage 1 — hold	820 °C for 10 s	
Stage 2 — heating rate	30 °C/min	
Stage 2 — hold	840 °C for 7 min	
Furnace temperature	700 °C	
Vacuum	550/820 → 820/840 °C	

One-stage		ALTERNATIVE
Starting temperature	400 °C	
Drying time	30 s	
Heating rate	40 °C/min	
Hold	840 °C for 7 min	
Furnace temperature	700 °C	
Vacuum	550 → 840 °C	

01

Scan

Model or intraoral.

02

Design

Nest in your CAD.

03

Mill

Dry for zirconia, wet for glass ceramic.

04

Adjust

Separate, polish, check fit.

05

Fire

Sinter or crystallise and glaze.

STOCK LIST

What to order, and what it fits.

MATERIAL	SHADES	PROCESSING	FORMAT
Xzir Disc	All Vita 3D Classic shades	Dry	ø98 mm
X max Block	All Vita 3D Classic shades	Wet	C14 & B40

Open CAD/CAM

Standard ø98 mm holders, including the X mill T-shaped holder.



Xzir White RockSolid

One ø98 mm disc per sleeve, single grade and thickness, lot-coded.



Xzir 4D Pro

One ø98 mm eight-layer disc, gradient verified per lot.



X max

Shade-sorted blocks, C14 or B40, certificate inside.

COLOURING LIQUID — HOW TO SHADE

- **Soak one minute** in the target shade, then remove with plastic tweezers and rinse inside and out.
- **Dry under infrared** — 30 minutes for a single or consecutive crown under 2 mm, 60 minutes or more for a bridge or thicker unit. Keep the surface below 100 °C.
- **Go lighter on thick units.** Above 3 mm, soaking time affects the result far more; choose a lighter shade.
- **Don't overlap** restorations in the bath, and keep the cup covered so evaporation doesn't darken the liquid.

STORING THE LIQUID

- **Store separately** at room temperature, 20 ± 5 °C.
- **Refrigerate** if your room temperature swings, and bring the bottle out half an hour before use.
- **Composition** — deionised water, polyethylene glycol, barium nitrate.

Shade liquids supplied in 50 ml bottles across A1–D4; indicator liquids in 10 ml.



The material and the machine, from one supplier.

Our discs and blocks are cut on our own machines before they ship, so the milling strategies, holder geometry and sintering programmes arrive already matched. Buy the pair and there are no parameters left to guess — and one number to call when a case goes wrong.

MATERIALS



XZIR WHITE ROCKSOLID



XZIR 4D PRO



X MAX

MACHINES



X MILL DRY



X MILL WET

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