




simply natural • simply you

A large, open oyster shell is shown against a light blue background. The shell is white and iridescent, with a pearl visible inside. The text "Why a NEW restorative material?" is overlaid on the shell in a bold, white, sans-serif font.

**Why a NEW
restorative
material?**

Simpler for you. We have learned what you, the dentist, expects from a new filling material. You simply want the best possible treatment for your patients and this means natural aesthetics, durability, and easy handling.

We have combined organic and inorganic structures (similar to industrial ceramics) to form Ceram·X™ – a new restorative material.

Create natural aesthetics the simple way

- 2 shading systems with a minimum number of shades to meet all patient profiles
- i- Shade for easy shade identification using the VITA¹ reference
- One material for both anterior and posterior restorations

Experience the unique handling

- A non-sticky, no-slump paste, proven by a handling evaluation², performed in private practices and university.
- A long working time of up to 180 seconds

Provide the superior durability of nano-ceramic technology

- High fracture toughness like dentine



More natural for your patients.

The biggest demands of patients today are natural aesthetics and a highly biocompatible restorative material. Due to the fact that Ceram·X™ contains chroma corresponding to natural tooth substances and is based on a unique shading concept, it closely replicates natural tooth colour.

Patients will enjoy natural aesthetics and biocompatibility

- Natural appearance
- Smooth and easy to polish
- Significant reduction of monomer leakage

Talk easily to patients using the Ceram·X™ Patient Advisor

- Discuss treatment alternatives with your patient easily using the Patient Advisor

¹ VITA is the registered trademark of VITA Zahnfabrik Rauter GmbH & Co. KG

² Handling evaluation with a blind-test system for stickiness, slumping, layering ability, and polishing for anterior teeth, Clinical Investigation Class V, at the University of Bologna and handling evaluation in context with a clinical Field Study.



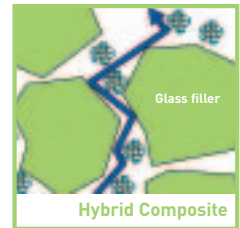
We have **CREATED**
a new solution –
more advanced
but more natural.

Nano-ceramic technology.

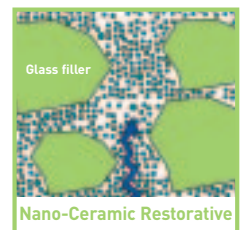
Nano-technology was first used in dentistry in Prime & Bond® NT by Dentsply in 1997, since we have worked constantly to develop new innovations. In 2003, Dentsply combined nano-technology with methacrylate-modified polysiloxane, a component of technical ceramics. The result was nano-ceramic technology – a unique process by which we modify the matrix of a restorative material.

This new organic-inorganic hybrid resin contains nano-particles 2–3 nm in size, resulting in more efficient cross-linkage and reduced monomer leakage. The inorganic siloxane component provides strength, making nano-ceramics resistant to crack propagation.

Micro-Crack Propagation

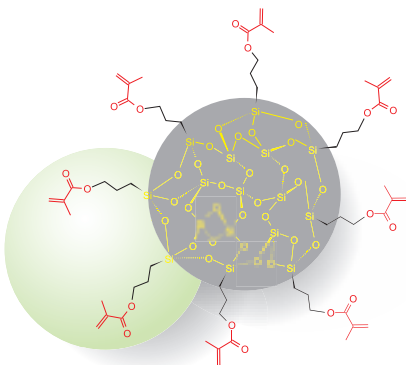


Reduced Micro-Crack Propagation

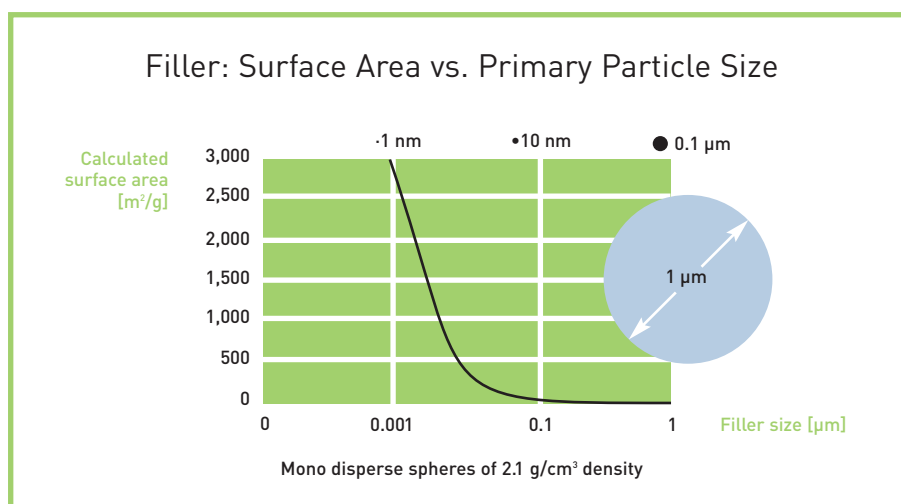


Key benefits of nano-ceramic technology:

- Ideal Handling – the non-sticky material also contains an innovative proprietary inhibitor system which provides extended working time, up to 180 seconds.
 - High-fracture toughness – outstanding resistance to crack propagation, resulting in superior durability.
 - Excellent biocompatibility – resin content is reduced to 12%, resulting in significantly reduced monomer leakage.

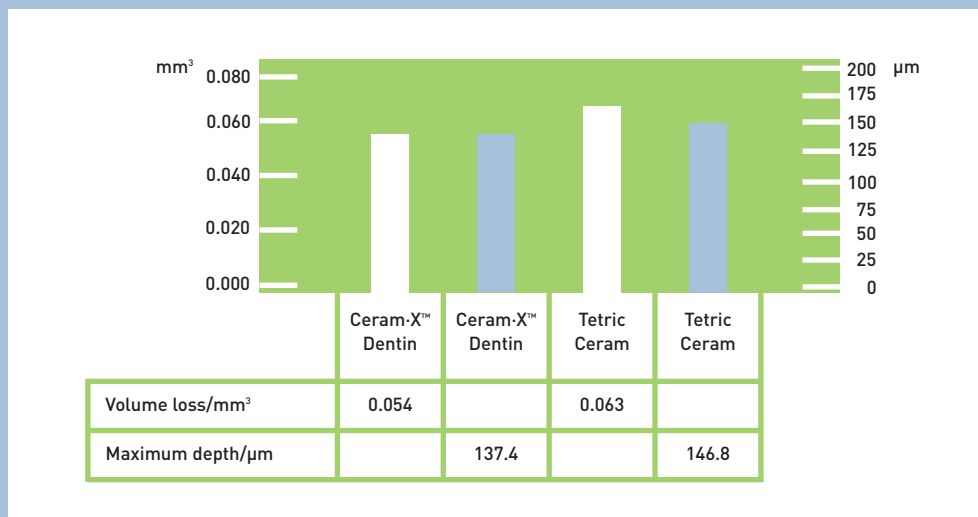


Nanofiller ~10 nm



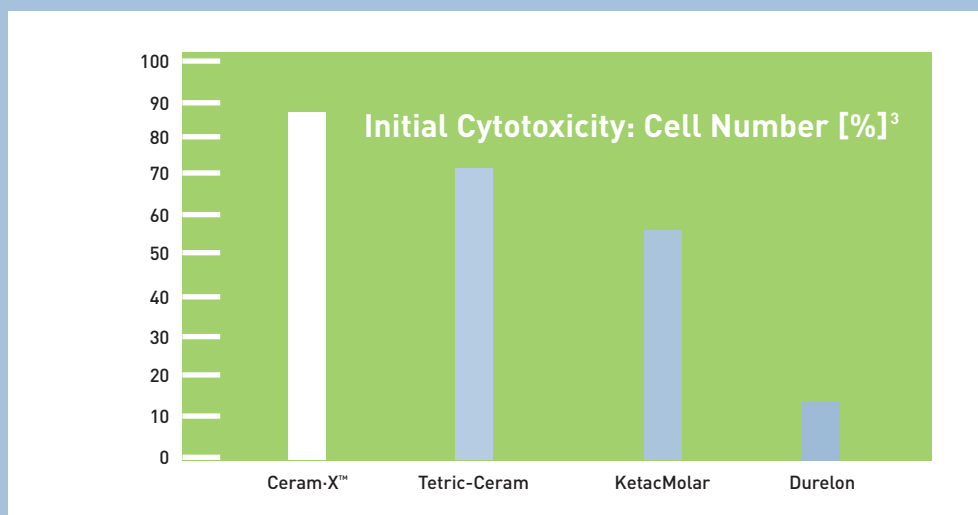
Proven performance. More than 40 leading experts in restorative dentistry from the world's leading universities guided us in the development of Ceram-X™. Extensive studies, both internal and external, were conducted to confirm the effectiveness and durability of the restorative.

High Wear Resistance*



The wear abrasion study conducted under simulated conditions of the Leinfelder method suggests that Ceram-X™ is suitable for restoration of posterior teeth.

Excellent Biocompatibility with Reduced Monomer Leakage



Nano-ceramic technology significantly reduces the amount of conventional monomers used in the composite. Therefore, the cell compatibility (L 929-Proliferation) immediately after placement of the material is much better than with other materials.

* M. Latta, Omaha, Nebraska, USA.

³ Cytotoxicity test, A. Schedle, University of Vienna.
Ketac Molar is a trademark of 3M Espe AG.

Proven Clinical Efficacy

Six-month Report Shows 100 % Retention

Clinical investigation of class V restorations at the University of Bologna, Italy.

100 Ceram-X™ Restorations in 50 Patients				
Restorative Parameter	Ceram-X™ [%]			
	alpha	bravo	charlie	delta
Retention	100	0	0	0
Marg. Crevice	100	0	0	0
Marg. Discolor.	100	0	0	0
Post-op Sensitivity	100	0	0	0
Color Match	100	0	0	0

The six-month results of this longitudinal study on the restoration of caries free cervical lesions show excellent clinical performance of Ceram-X™ according to the Ryge criteria. In a blind-test handling evaluation, the University of Bologna also confirmed the outstanding handling characteristics of Ceram-X™ in comparison to two other restorative materials. The evaluation measured stickiness, slumping, layering ability, and polishability.

Six-month Report Shows no Failure

Clinical investigation of class I and II restorations at the University of Freiburg, Germany.

38 Ceram-X™ Restorations in 38 Patients (plus 38 controls: Syntac, Tetric)						
Restorative Parameter	Ceram-X™ [%]				Tetric [%]	
	alpha	bravo	charlie	delta	alpha	bravo
Retention	100	0	0	0	100	0
Marg. Integrity	94.7	5.3	0	0	92.1	7.9
Marg. Discolor.	94.7	5.3	0	0	94.7	5.3
Post-op Sensitivity	97.4	2.6	0	0	100	0
Color Match	97.4	2.6	0	0	100	0

1 rest. = 2.6 % 2 rest. = 5.2 % 3 rest. = 7.9 %

The six-month results from this controlled longitudinal study show that Ceram-X™ performed satisfactorily according to ADA criteria.



EXPERIENCE
a new kind of
simplicity with
our unique
shading system.

Ceram·X™ makes it easier than ever to achieve natural aesthetics. Our two separate shading systems provide a minimal number of shades in comparison to other systems – yet they cover the full VITA¹ range and may be used to match different patient profiles.

Ceram·X™ mono Single Translucency

System. Our universal composite, Ceram·X™ mono, offers 7 shades of medium translucency which cover the full VITA¹ range. By keeping shade numbers to a minimum, we help you to simplify working procedures.



Ceram·X™ mono: Medium translucency shades

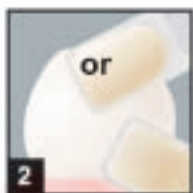
Indications: Universal composite, ideal for posterior, class III and class V



1 Use the VITA¹ Shade Guide and iShade (iShade)



By using the **i-shade** label on the backside of your shade guide, you can easily identify which mono shade corresponds to each VITA¹ shade.



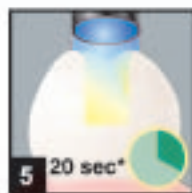
2 ... or the Ceram·X Shadeguide



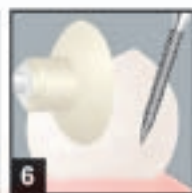
3 Select adhesive, please consult directions



4 Place further increments

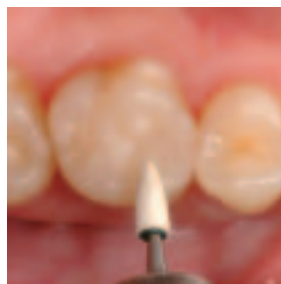


5 Light-cure
*Light output ≥ 500 mW/cm² only



6 Shape and contour, finish and polish

Before



After

Photography by Dr. Jürgen Manhart.



SEE
outstanding
results.

Ceram·X™ duo Double Translucency System.

For patients with higher aesthetic demands, Ceram·X™ duo mimics nature by restoring the tooth with both dentine and enamel shades. This natural shading system enables you to utilize various combinations of 8 shades in order to meet specific patient needs.

Natural shading system:



- Replace dentine with dentine-like opacity and high chroma
- Replace enamel with enamel-like translucency



Indications: Universal, ideal for areas with high visibility



1 Use the VITA¹ Shade Guide and iShade¹ 2001



2 ... or the Ceram·X™ Shadefingers



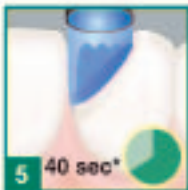
By using the i-shade label on the backside of your shade guide, you can easily identify which duo shade corresponds to each VITA¹ shade.



3 Select adhesive, please consult directions



4 Restore dentin core with duo dentin shade



5 40 sec* Light-cure dentin layer *Light output ≥ 500 mW/cm² only



6 Restore enamel layer with duo enamel shade



7 10 sec* Light-cure enamel layer *Light output ≥ 500 mW/cm² only

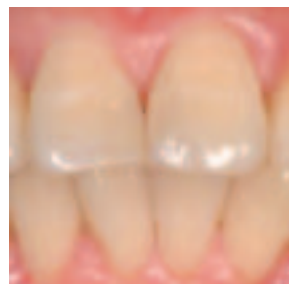


8 Shape and contour



9 Finish and polish with Enhance™ and PoGo™

Before



After

Photography by Dr. Jürgen Manhart.

The Ceram-X™ Package.

Customize Ceram-X™ to fit your practice – the material is available in both compule and easy-twist syringe. You may choose between self-etching or total-etching bonding systems.

The Ceram-X™ Package includes:

Simplicity with CIS (Colour Identification System)

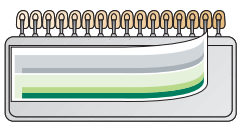
The Ceram-X™ Package is organised using 3 different compule colours:

- Ceram-X™ mono – light grey colour
- Ceram-X™ duo/dentine – dark green
- Ceram-X™ duo/enamel – teal green
- 8 different cap colours reflect the intensity of chroma in each shade



Shade guides.

All colours are identified by i-shade labels, with references to corresponding shades of the VITA¹ Guide. A shade guide with actual Ceram-X material is also provided for accurate shade reference.



Stick i-shade label to Shade Guide

Apply Ceram-X™ mono shade according to recipe:

	A1	A2	A3	A3.5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
mono	M1	M2	M5	M6	M7	M1	M2	M6	M6	M3	M4	M4	M7	M3	M5	M4

Apply Ceram-X™ duo dentin and enamel shade according to recipe:

	A1	A2	A3	A3.5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
duo	E2 D1	E2 D2	E2 D3	E3 D3	E3 D4	E1 D1	E1 D2	E3 D3	E3 D3	E2 D2	E1 D3	E2 D3	E2 D4	E2 D2	E2 D3	E1 D3

User-friendly tray.

A special shade identification label may be placed directly on the tray.



A sturdy, translucent tray is ideal for use in the dental practice.

Additional compartments are available for accessories (applicator tips, etc.).

Ceram-X™ Package content

Order No.	Compules (0.25 g)	
607.01.310	<p>Ceram-X™ duo Starter Kit (Compule) 40 compules (7x shade D2, D3, E3, E2, 3x shades D1, D4, DB, E1) 6 compules of X-Flow, 3 of each shade A2, O-A3 2 stickers for tray organisation and i-shade label 1 duo shade guide original material Picture DFU (duo), text DFU, clinical guide 1x compule gun, dappen dish, applicator tips (50) 1x translucent tray, outerbox, tray cover</p>	
607.01.320	<p>Ceram-X™ mono Starter Kit (Compule) 40 compules (8x shades mono M2, M5, M6; 4x mono M1, M3, M4, M7) 6 compules of X-Flow, 3 of each shade A2, O-A3 2 stickers for tray organisation and i-shade label 1 mono shade guide of original material Picture DFU (mono), text DFU, clinical guide 1x compule gun, dappen dish, applicator tips (50) 1x translucent tray, outerbox, tray cover</p>	
607.01.321 607.01.322 607.01.323 607.01.324 607.01.325 607.01.326 607.01.327	<p>Compules Refills (20 x 0.25 g each) Ceram-X™ mono refill M1 (A1, B1) Ceram-X™ mono refill M2 (A2, B2) Ceram-X™ mono refill M3 (C1, D2) Ceram-X™ mono refill M4 (C2, C3, D4) Ceram-X™ mono refill M5 (A3, D3) Ceram-X™ mono refill M6 (A3.5, B3, B4) Ceram-X™ mono refill M7 (A4, C4)</p>	
607.01.301 607.01.302 607.01.303 607.01.304 607.01.305 607.01.307 607.01.308 607.01.309	<p>Ceram-X™ duo dentine D1 (A1, B1) Ceram-X™ duo dentine D2 (A2, B2, C1, D2) Ceram-X™ duo dentine D3 (A3, A3.5, B3, B4, C2, C3, D3, D4) Ceram-X™ duo dentine D4 (A4, C4) Ceram-X™ duo dentine DB-Bleach Ceram-X™ duo enamel E1 (B1, B2, C2, D4) Ceram-X™ duo enamel E2 (A1, A2, A3, C1, C3, C4, D2, D3) Ceram-X™ duo enamel E3 (A3.5, A4, B3, B4)</p>	
	Syringe (3 g)	
607.01.350	<p>Ceram-X™ duo Starter Kit (Syringe) 7 syringes shades D1, D2, D3, D4, E1, E2, E3 2 stickers for tray organisation 1 duo shade guide original material 2 shade guide stickers Picture DFU (duo), text DFU, clinical guide 1x tray, dappen dish, applicator tips (50)</p>	
607.01.360	<p>Ceram-X™ mono Starter Kit (Syringe) 7 syringes shades M1, M2, M3, M4, M5, M6, M7 2 shade guide stickers 2 stickers for tray organisation 1 mono shade guide original material DFUs (text, picture-mono), clinical guide 1x tray, dappen dish, applicator tips (50)</p>	
607.01.361 607.01.362 607.01.363 607.01.364 607.01.365 607.01.366 607.01.367	<p>Ceram-X™ Syringe Refill (3 g) Ceram-X™ mono refill M1 (A1, B1) Ceram-X™ mono refill M2 (A2, B2) Ceram-X™ mono refill M3 (C1, D2) Ceram-X™ mono refill M4 (C2, C3, D4) Ceram-X™ mono refill M5 (A3, D3) Ceram-X™ mono refill M6 (A3.5, B3, B4) Ceram-X™ mono refill M7 (A4, C4)</p>	
607.01.351 607.01.352 607.01.353 607.01.354 607.01.355 607.01.357 607.01.358 607.01.359	<p>Ceram-X™ duo dentine D1 (A1, B1) Ceram-X™ duo dentine D2 (A2, B2, C1, D2) Ceram-X™ duo dentine D3 (A3, A3.5, B3, B4, C2, C3, D3, D4) Ceram-X™ duo dentine D4 (A4, C4) Ceram-X™ duo dentine DB-Bleach Ceram-X™ duo enamel E1 (B1, B2, C2, D4) Ceram-X™ duo enamel E2 (A1, A2, A3, C1, C3, C4, D2, D3) Ceram-X™ duo enamel E3 (A3.5, A4, B3, B4)</p>	

Support for your dental practice.

Ceram·X™ even makes patient consultation simpler. With the Ceram·X™ Patient Advisor, a new discussion tool for dentists, you're able to provide patients with full information and reassurance regarding different restorative alternatives. The Patient Advisor is available as an in-office display.

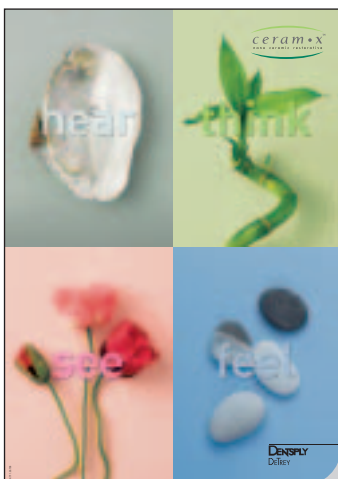
Additional materials are also provided for your practice, including:



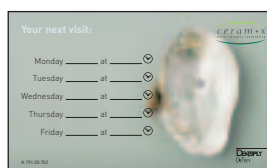
Patient Advisor



**Notepaper block
Mousepads**



Posters for the waiting room



Appointment Cards