

# STRAUMANN® N!CE® ZIRCONIA

The Straumann® Zirconia portfolio.



## ESTHETICS

High color accuracy with built-in shade matching and multi-layered feature designed to deliver natural-looking prosthetic outcomes.



## FLEXIBILITY

Synergies between all digital workflows, Straumann® offer simple outsourcing options on demand.



## HIGH QUALITY

Premium Swiss quality designed for predictable prosthetic outcomes you can trust.



## CONVENIENCE

An ingenious, simple and user-friendly packaging and labelling solution facilitating a seamless full-digital manufacturing workflow.

A wide selection of zirconia  
for all your patient cases.



Centralized  
milling



In-house  
milling



- White
- Monochromatic
- Multilayered
- Bleach shades

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### Translucency

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### Shades

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### Shape

(Height)









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### Flexural strength

(Biaxial ISO 6872)

# STRAUMANN® N!CE® ZIRCONIA. WHERE INNOVATION MEETS ESTHETICS.

Zirconia can be applied to a wide range of indications. It lends itself well to an efficient digital manufacturing workflow. With the introduction of n!ce® Zirconia, Straumann® takes Zirconia to the next level of innovation with a unique portfolio designed to provide an unparalleled range of treatment options that deliver natural, long-lasting results. Our n!ce® discs feature an ingenious, simple and user-friendly packaging and labelling solution facilitating a seamless full-digital manufacturing workflow.

N!CE® ZIRCONIA <sup>LT</sup>	N!CE® ZIRCONIA <sup>HT</sup>	N!CE® ZIRCONIA <sup>XT</sup>	N!CE® ZIRCONIA <sup>GT</sup>
Low Translucency	High Translucency	eXtra high Translucency	Gradient Translucency
			
★★	★★★★	★★★★★	★★★★★
White, L1, L2, M1, M2, I1	White, 16 VITA Classical shades <sup>1</sup> and 3 Bleach shades <sup>2</sup>	White, 6 VITA Classical shades <sup>1</sup> and 2 Bleach shades <sup>2</sup>	16 VITA Classical shades <sup>1</sup> and 3 Bleach shades <sup>2</sup>
			
∅ 98,5 mm discs	∅ 98,5 mm discs	∅ 98,5 mm discs	∅ 98,5 mm discs
12, 14, 16, 18, 20 mm	12, 14, 16, 18, 20, 25, 30 mm	12, 14, 16, 18, 20, 25 mm	12, 14, 16, 18, 20, 22, 25 mm
Very high	Very high	High	High to very high
> 1'200 MPa	> 1'200 MPa	> 600 MPa	Coming soon

# N!CE® ZIRCONIA<sup>LT</sup> AVAILABLE SHADES



→ The n!ce® Zirconia<sup>LT</sup> restorations (through our CARES® centralized milling solution) and n!ce® Zirconia<sup>LT</sup> discs (for in-house milling) are available in 5 low translucency shades (L1, L2, M1, M2 and I1). Additionally, n!ce® Zirconia<sup>LT</sup> discs (for in-house milling) are also available in white.

		DISC HEIGHT				
Shade		12 mm	14 mm	16 mm	18 mm	20 mm
○	White	010.7160	010.7161	010.7162	010.7163	010.7164
○	Mono L1	—	010.7165	010.7166	—	010.7167
○	Mono L2	—	010.7168	010.7169	—	010.7170
○	Mono M1	—	010.7171	010.7172	—	010.7173
○	Mono M2	—	010.7174	010.7175	—	010.7176
○	Mono I1	—	010.7177	010.7178	—	010.7179



# N!CE® ZIRCONIA<sup>LT</sup>

## AVAILABLE INDICATIONS



→ For final restorations

→ For up to full arch

### TOOTH-BASED



Inlay



Onlay



Veneer



Partial crown



Coping



Full-contour crown



Telescopic crown



Bridge/bar framework



Full-contour bridge



Vestibular veneering

### ABUTMENT-BASED (AVAILABLE WITHIN THE CARES® X-STREAM™ SOLUTION)



Coping on Ti-Base



Full-contour crown on Ti-Base



Bridge/bar framework on Ti-Base



Full-contour bridge on Ti-Base



Coping on CAD/CAM abutment



Full-contour crown on CAD/CAM abutment



Bridge/bar framework on CAD/CAM abutments



Full-contour bridge on CAD/CAM abutments

● Recommended indication

● Possible indication

# n!ce® ZIRCONIA<sup>HT</sup>

## AVAILABLE SHADES



- The n!ce® Zirconia<sup>HT</sup> restorations (through our CARES® centralized milling solution) and n!ce® Zirconia<sup>HT</sup> discs (for in-house milling) are available in various Mono & Multi-layered high translucency shades.
- Both, n!ce® Zirconia<sup>HT</sup> Mono and Multi, are available in up to 19 shades: A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, BL1, BL2 (only for Multi) and BL3 (only for Multi). Additionally, n!ce® Zirconia<sup>HT</sup> discs (for in-house milling) are also available in White.

		DISC HEIGHT						
	Shade	12 mm	14 mm	16 mm	18 mm	20 mm	25 mm	30 mm
	White	010.7180	010.7181	010.7182	010.7183	010.7184	010.7185	010.7186
	Mono A1	—	010.7187	010.7188	—	010.7189	010.7190	010.7191
	Mono A2	—	010.7192	010.7193	—	010.7194	010.7195	010.7196
	Mono A3	—	010.7197	010.7198	—	010.7199	010.7200	010.7201
	Mono A3.5	—	010.7202	010.7203	—	010.7204	010.7205	010.7206
	Mono A4	—	010.7207	010.7208	—	010.7209	010.7210	010.7211
	Mono B1	—	010.7212	010.7213	—	010.7214	010.7215	010.7216
	Mono B2	—	010.7217	010.7218	—	010.7219	010.7220	010.7221
	Mono B3	—	010.7222	010.7223	—	010.7224	010.7225	010.7226
	Mono B4	—	010.7227	010.7228	—	010.7229	010.7230	010.7231
	Mono C1	—	010.7232	010.7233	—	010.7234	010.7235	010.7236
	Mono C2	—	010.7237	010.7238	—	010.7239	010.7240	010.7241
	Mono C3	—	010.7242	010.7243	—	010.7244	010.7245	010.7246
	Mono C4	—	010.7247	010.7248	—	010.7249	010.7250	010.7251
	Mono D2	—	010.7252	010.7253	—	010.7254	010.7255	010.7256
	Mono D3	—	010.7257	010.7258	—	010.7259	010.7260	010.7261
	Mono D4	—	010.7262	010.7263	—	010.7264	010.7265	010.7266
	Mono BL1	—	010.7267	010.7268	—	010.7269	010.7270	010.7271
	Multi A1	—	010.7277	010.7278	—	010.7279	010.7280	010.7281
	Multi A2	—	010.7282	010.7283	—	010.7284	010.7285	010.7286
	Multi A3	—	010.7287	010.7288	—	010.7289	010.7290	010.7291
	Multi A3.5	—	010.7292	010.7293	—	010.7294	010.7295	010.7296
	Multi A4	—	010.7297	010.7298	—	010.7299	010.7300	010.7301
	Multi B1	—	010.7302	010.7303	—	010.7304	010.7305	010.7306
	Multi B2	—	010.7307	010.7308	—	010.7309	010.7310	010.7311
	Multi B3	—	010.7312	010.7313	—	010.7314	010.7315	010.7316
	Multi B4	—	010.7317	010.7318	—	010.7319	010.7320	010.7321
	Multi C1	—	010.7322	010.7323	—	010.7324	010.7325	010.7326
	Multi C2	—	010.7327	010.7328	—	010.7329	010.7330	010.7331
	Multi C3	—	010.7332	010.7333	—	010.7334	010.7335	010.7336
	Multi C4	—	010.7337	010.7338	—	010.7339	010.7340	010.7341
	Multi D2	—	010.7342	010.7343	—	010.7344	010.7345	010.7346
	Multi D3	—	010.7347	010.7348	—	010.7349	010.7350	010.7351
	Multi D4	—	010.7352	010.7353	—	010.7354	010.7355	010.7355
	Multi BL1	—	010.7357	010.7358	—	010.7359	010.7360	010.7361
	Multi BL2	—	010.7362	010.7363	—	010.7364	010.7365	010.7366
	Multi BL3	—	010.7553	010.7554	—	010.7555	010.7556	010.7557

Coming in 2024

# N!CE® ZIRCONIA<sup>HT</sup>

## AVAILABLE INDICATIONS



→ For final restorations

→ For up to full arch

### TOOTH-BASED



Inlay



Onlay



Veneer



Partial crown



Coping



Full-contour crown



Telescopic crown



Bridge/bar framework



Full-contour bridge



Vestibular veneering

### ABUTMENT-BASED (AVAILABLE WITHIN THE CARES® X-STREAM™ SOLUTION)



Coping on Ti-Base



Full-contour crown on Ti-Base



Bridge/bar framework on Ti-Base



Full-contour bridge on Ti-Base



Coping on CAD/CAM abutment



Full-contour crown on CAD/CAM abutment



Bridge/bar framework on CAD/CAM abutments



Full-contour bridge on CAD/CAM abutments

● Recommended indication

● Possible indication

# N!CE® ZIRCONIA<sup>XT</sup> AVAILABLE SHADES



→ The n!ce® Zirconia<sup>XT</sup> restorations (through our CARES® centralized milling solution) and n!ce® Zirconia<sup>XT</sup> discs (for in-house milling) are available in 8 Multi-layered eXtra high Translucency shades: A1, A2, A3, A3.5, A4, B1, BL1 and BL2. Additionally, n!ce® Zirconia<sup>XT</sup> discs (for in-house milling) are also available in white.

		DISC HEIGHT					
Shade		12 mm	14 mm	16 mm	18 mm	20 mm	25 mm
○	White	010.7367	010.7368	010.7369	010.7370	010.7371	010.7372
●	Multi A1	—	010.7373	010.7374	—	010.7375	010.7376
●	Multi A2	—	010.7377	010.7378	—	010.7379	010.7380
●	Multi A3	—	010.7381	010.7382	—	010.7383	010.7384
●	Multi A3.5	—	010.7385	010.7386	—	010.7387	010.7388
●	Multi A4	—	010.7389	010.7390	—	010.7391	010.7392
○	Multi B1	—	010.7393	010.7394	—	010.7395	010.7396
○	Multi BL1	—	010.7437	010.7438	—	010.7439	010.7440
○	Multi BL2	—	010.7441	010.7442	—	010.7443	010.7444

Coming in 2024





# N!CE® ZIRCONIA<sup>XT</sup>

## AVAILABLE INDICATIONS



- For final restorations
- For up to 3-unit restorations

### TOOTH-BASED



Inlay



Onlay



Veneer



Partial crown



Coping



Full-contour crown



Telescopic crown



Bridge/bar framework



Full-contour bridge



Vestibular veneering

### ABUTMENT-BASED (AVAILABLE WITHIN THE CARES® X-STREAM™ SOLUTION)



Coping on Ti-Base



Full-contour crown on Ti-Base



Bridge/bar framework on Ti-Base



Full-contour bridge on Ti-Base



Coping on CAD/CAM abutment



Full-contour crown on CAD/CAM abutment



Bridge/bar framework on CAD/CAM abutments



Full-contour bridge on CAD/CAM abutments

- Recommended indication
- Possible indication

# n!ce® ZIRCONIA<sup>GT</sup>

## AVAILABLE SHADES



- The n!ce® Zirconia<sup>GT</sup> restorations (through our CARES® centralized milling solution) and n!ce® Zirconia<sup>GT</sup> discs (for in-house milling) are available in 19 Multi-layered High to eXtra high Translucency shades: A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3, D4, BL1, BL2 and BL3.
- n!ce® Zirconia<sup>GT</sup> is our latest generation of multi-layered zirconia disc. It combines the strength and application range of n!ce® Zirconia<sup>HT</sup> with the translucency and esthetics of n!ce® Zirconia<sup>XT</sup>. This all-rounder material covers all indications up to full arch with outstanding natural esthetics.

		DISC HEIGHT					
Shade		14 mm	16 mm	18 mm	20 mm	22 mm	25 mm
Coming in 2024	Multi A1	010.7445	010.7446	010.7447	010.7448	010.7449	010.7450
	Multi A2	010.7451	010.7452	010.7453	010.7454	010.7455	010.7456
	Multi A3	010.7457	010.7458	010.7459	010.7460	010.7461	010.7462
	Multi A3.5	010.7463	010.7464	010.7465	010.7466	010.7467	010.7468
	Multi A4	010.7469	010.7470	010.7471	010.7472	010.7473	010.7474
	Multi B1	010.7475	010.7476	010.7477	010.7478	010.7479	010.7480
	Multi B2	010.7481	010.7482	010.7483	010.7484	010.7485	010.7486
	Multi B3	010.7487	010.7488	010.7489	010.7490	010.7491	010.7492
	Multi B4	010.7493	010.7494	010.7495	010.7496	010.7497	010.7498
	Multi C1	010.7499	010.7500	010.7501	010.7502	010.7503	010.7504
	Multi C2	010.7505	010.7506	010.7507	010.7508	010.7509	010.7510
	Multi C3	010.7511	010.7512	010.7513	010.7514	010.7515	010.7516
	Multi C4	010.7517	010.7518	010.7519	010.7520	010.7521	010.7522
	Multi D2	010.7523	010.7524	010.7525	010.7526	010.7527	010.7528
	Multi D3	010.7529	010.7530	010.7531	010.7532	010.7533	010.7534
	Multi D4	010.7535	010.7536	010.7537	010.7538	010.7539	010.7540
	Multi BL1	010.7541	010.7542	010.7543	010.7544	010.7545	010.7546
	Multi BL2	010.7547	010.7548	010.7549	010.7550	010.7551	010.7552
	Multi BL3	010.7558	010.7559	010.7560	010.7561	010.7562	010.7563

# N!CE® ZIRCONIA<sup>GT</sup>

## AVAILABLE INDICATIONS



- For final restorations
- For up to 3-unit restorations

### TOOTH-BASED



Inlay



Onlay



Veneer



Partial crown



Coping



Full-contour crown



Telescopic crown



Bridge/bar framework



Full-contour bridge



Vestibular veneering

### ABUTMENT-BASED (AVAILABLE WITHIN THE CARES® X-STREAM™ SOLUTION)



Coping on Ti-Base



Full-contour crown on Ti-Base



Bridge/bar framework on Ti-Base



Full-contour bridge on Ti-Base



Coping on CAD/CAM abutment



Full-contour crown on CAD/CAM abutment



Bridge/bar framework on CAD/CAM abutments



Full-contour bridge on CAD/CAM abutments

- Recommended indication
- Possible indication

# WORKFLOW

STEPS	OPTIONS
Nesting	Position the multi-layered restoration in the desired disc shade transition
Milling	Only for in-house milling
Dying	Only for in-house milling and restorations milled from white discs
Sintering*	Only for in-house milling
Finishing	Staining & glazing, layering
Cementing	Adhesive, conventional

\* Find more information on page 14

# CHEMICAL COMPOSITION

ELEMENTS	WEIGHT IN %		
	n!ce® Zirconia <sup>LT</sup> (Low Translucency)	n!ce® Zirconia <sup>HT</sup> (High Translucency)	n!ce® Zirconia <sup>XT</sup> (eXtra high Translucency)
ZrO <sub>2</sub>	88–95 %	87–95 %	85–93 %
Y <sub>2</sub> O <sub>3</sub>	4–6 %	5–8 %	7–10 %
HfO <sub>2</sub>	≤ 5.0 %	≤ 5.0 %	≤ 5.0 %
Al <sub>2</sub> O <sub>3</sub>	≤ 0.5 %	≤ 0.5 %	≤ 0.5 %
Other oxides**	≤ 2.0 %	≤ 2.0 %	≤ 2.0 %
Co <sub>3</sub> O <sub>4</sub>	≤ 0.1 %	≤ 0.1 %	≤ 0.1 %

\*\* Other oxides: SiO<sub>2</sub>, Fe<sub>2</sub>O<sub>3</sub>, Na<sub>2</sub>O, TiO<sub>2</sub>, CaO, MgO, K<sub>2</sub>O, Er<sub>2</sub>O<sub>3</sub>, MnO<sub>2</sub>

# PHYSICAL PROPERTIES

PROPERTIES	VALUE		
	n!ce® Zirconia <sup>LT</sup> (Low Translucency)	n!ce® Zirconia <sup>HT</sup> (High Translucency)	n!ce® Zirconia <sup>XT</sup> (eXtra high Translucency)
Flexural strength [MPa]***	> 1'200	> 1'200	> 600
Density [g/cm <sup>3</sup> ]	≥ 6.05	≥ 6.05	≥ 6.05
CTE [10 <sup>-6</sup> K <sup>-1</sup> ]	10.5 ± 0.5	10.5 ± 0.5	10.5 ± 0.5

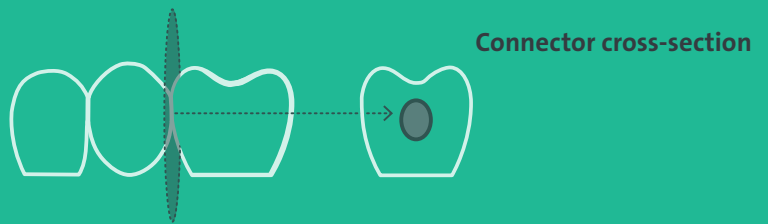
\*\*\* Biaxial (ISO 6872)

# PREPARATION GUIDELINES

- The preparation shall not have angles or sharp edges
- The shoulder preparation shall be with rounded inner edges and/or chamfer

# PHYSICAL PROPERTIES

	NICE® ZIRCONIA <sup>LT</sup>	NICE® ZIRCONIA <sup>HT</sup>	NICE® ZIRCONIA <sup>XT</sup>
Wall thickness <sup>3</sup>	≥ 0.5 mm	≥ 0.5 mm	≥ 0.8 mm
Wall thickness <sup>4</sup>	≥ 0.3 mm	≥ 0.3 mm	≥ 0.5 mm
Wall thickness <sup>5</sup>	≥ 0.4 mm	≥ 0.4 mm	≥ 0.5 mm
Pontics in the anterior region	≤ 4	≤ 4	≤ 1
Pontics in the posterior region	≤ 2	≤ 2	≤ 1
Connector cross-section for anterior teeth	≥ 7 mm <sup>2</sup>	≥ 7 mm <sup>2</sup>	≥ 12 mm <sup>2</sup>
Connector cross-section for posterior teeth	≥ 9 mm <sup>2</sup>	≥ 9 mm <sup>2</sup>	≥ 14 mm <sup>2</sup>



# STERILIZATION

- For restorations bonded to abutments before being placed in the patient's mouth, the product must be sterilized before use. Sterilization according to the following parameters or per instructions for use of the abutment if different.

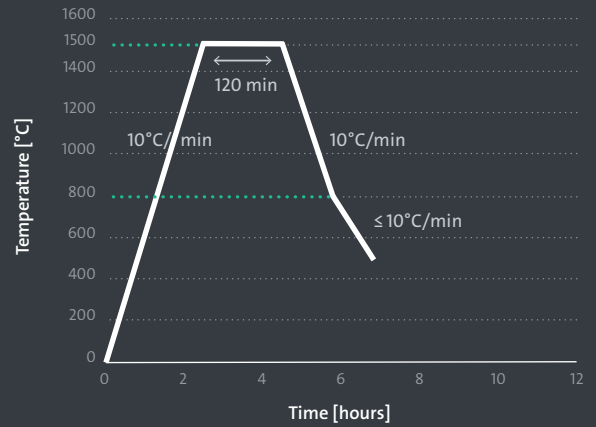
METHOD	CONDITIONS	DRYING TIME
Moist Heat (Autoclave)	134°C	Local practice
Fractionated Vacuum	273°F for 3 min	

# FASTER SINTERING CURVE

- For all restorations, especially smaller ones
- For larger restoration with a sintering frame  
(for restoration with a sintering core, please use the regular sintering curve)

## SINTERING PARAMETERS

Heat rate	10°C/min
Ending temperature	1500°C
Holding time	120 min
Cooling rate	10°C/min
Ending temperature	800°C
Cooling rate (natural cooling)	≤10°C/min

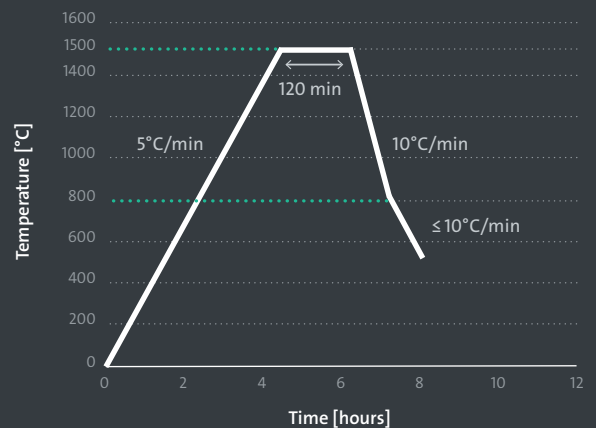


# REGULAR SINTERING CURVE

- For all restorations
- For larger restorations with a sintering core
- For restorations with a pronounced curvature (e.g. anterior bridges)

## SINTERING PARAMETERS

Heat rate	5°C/min
Ending temperature	1500°C
Holding time	120 min
Cooling rate	10°C/min
Ending temperature	800°C
Cooling rate (natural cooling)	≤10°C/min



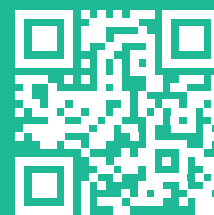


# STRAUMANN® NICE® ZIRCONIA – NATURAL, LONG-LASTING RESULTS.



## REFERENCES

1 nice® is available in all 16 VITA shades (A1, A2, A3, A3.5, A4, B1, B2, B3, B4, C1, C2, C3, C4, D2, D3 and D4), nice® Zirconia<sup>XT</sup> is available in following six VITA shades (A1, A2, A3, A3.5, A4 and B1). 2 nice® Zirconia is available up to three Bleach shades (BL1, BL2 and BL3). 3 The minimum wall thickness stated here complies with the Straumann® restoration thickness guidelines and the terms of the Straumann® Guarantee. 4 The minimum wall thickness stated here is technically possible but becomes the responsibility of the customer and is not covered by the Straumann® Guarantee. 5 The minimum wall thickness stated here concerns crowns cemented to Ti-Bases and is technically possible but becomes the responsibility of the customer and is not covered by the Straumann® Guarantee.



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