IPS e.max® CAD Crown by NobelProcera™

FACT SHEET VERSION 1

Overview

– High-strength lithium disilicate glass ceramic (LS_2)
– For full-contour cement-retained crowns
– Optimal esthetics with a wide range of shades (16 A-D, 4 Bleach BL Shades in LT translucency)
– Efficient characterization and crystallization process
– Layering with IPS e.max Ceram for high-end solutions
– Both conventional and adhesive cementation possible
– Individual computer-aided design in NobelProcera Software for optimal esthetics and functionality

Material characteristics

Composition:	SiO_2, Li_2O, K_2O, MgO, Al_2O_3, P_2O_5 and other oxides.
Flexural strength (biaxial)*:	360 MPa
Fracture toughness:	2.25 MPa $m^{0.5}$
Modulus of elasticity:	95 GPa
Vickers hardness :	5800 MPa
Chemical solubility*:	40 µg/cm^2
Crystallization temperature:	840–850°C/1544–1562°F
CTE (100–400°C):	10.2 [10^{-6} /K]
CTE (100–500°C):	10.5 [10^{-6} /K]

*According to ISO 6872

Characterization/Veneering

– IPS e.max CAD Crystall./Glaze, Shades and Stains for the staining technique on the *non-crystallized* restoration. All necessary materials to finish the non-crystallized restoration are combined in the IPS e.max CAD Crystallization Kit.
– IPS e.max Ceram (nano-fluor-apatite glass ceramic) for the staining, cut-back and layering technique on the *crystallized* restoration

Additional supporting guidelines are available from Ivoclar Vivadent on www.ivoclarvivadent.com

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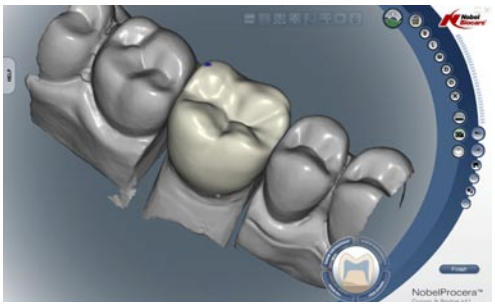
Additional information

– IPS e.max CAD is milled and processed in a crystalline, intermediate state, when it shows its typical “blue” color.
– Non-crystallized restoration is finished with suitable grinding instruments. Grind the occlusal surface to smooth out the surface structure created by the CAD/CAM procedure. Clean the restoration with ultrasound or blast with steam jet – Do not blast the restorations with Al_2O_3 or glass polishing beads.
– During crystallization firing in a regular ceramic furnace (i.e. Programat P500) the restoration reaches its final physical properties (strength of 360 MPa) and the corresponding optical properties (translucency, tooth color)



Indications and design features

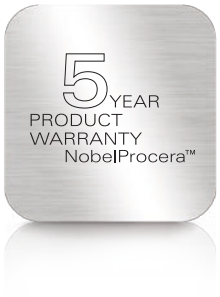
– Full-contour crowns in the anterior and posterior region
– Implant superstructures for single-tooth restorations (anterior and posterior region)

Contraindications and design limitations

– Fully veneered molar crowns
– Very deep subgingival preparations
– Patients with substantially reduced residual dentition
– Bruxism
– Any other use not listed in the indications

NobelProcera™ – certified quality

IPS e.max® CAD Crowns by NobelProcera are guaranteed for five years after shipping date; the NobelProcera Product Warranty covers the NobelProcera products and does not include any additional costs. NobelProcera also provides certificates of material authenticity.



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