



NATURALDENT
zubotehnički laboratorij

Non-metal products Certification/

Certifikat za bezmetalne radove

Sukladnosti korištenih procedura i materijala s vodećim svjetskim standardima

Compliance of used procedures and materials with leading world standards

The Naturaldent dental laboratory adheres to strict ISO quality control standards during its production processes and used materials. We are ISO 9001:2008 certified by DNV (Det Norske Veritas), the same company that certified Boeing, British Petroleum, NASA, etc.

Naturaldent zubotehnički laboratorij pridržava se striktnih ISO standarda kontrole kvalitete za vrijeme proizvodnih procesa i u korištenim materijalima. Mi smo ISO 9001:2008 certificirani od strane DNV-a (Det Norske Veritas), tvrtke koja je certificirala Boeing, British Petroleum, NASA...

The product for which this certificate is issued is certified to be created from the finest materials from renowned manufacturers. The manufacturer guarantees that the materials were produced under strict control and according to all standards applicable for the stated product.

Proizvod za koji je ovaj certifikat izdan garantirano je proizveden od kvalitetnih materijala renomiranih proizvođača. Proizvođač garantira da su materijali proizvedeni pod strogom kontrolom i u skladu sa svim standardima primjenjivim na navedeni proizvod.

Product/Proizvod: e.max press crown / e.max press krunica

Manufacturer/Proizvođač: Ivoclar Vivadent AG
Bendererstrasse 2, 9494 Schaan, Principality of Liechtenstein

Material/Materijal: IPS e.max press ingot LOT number: R43506

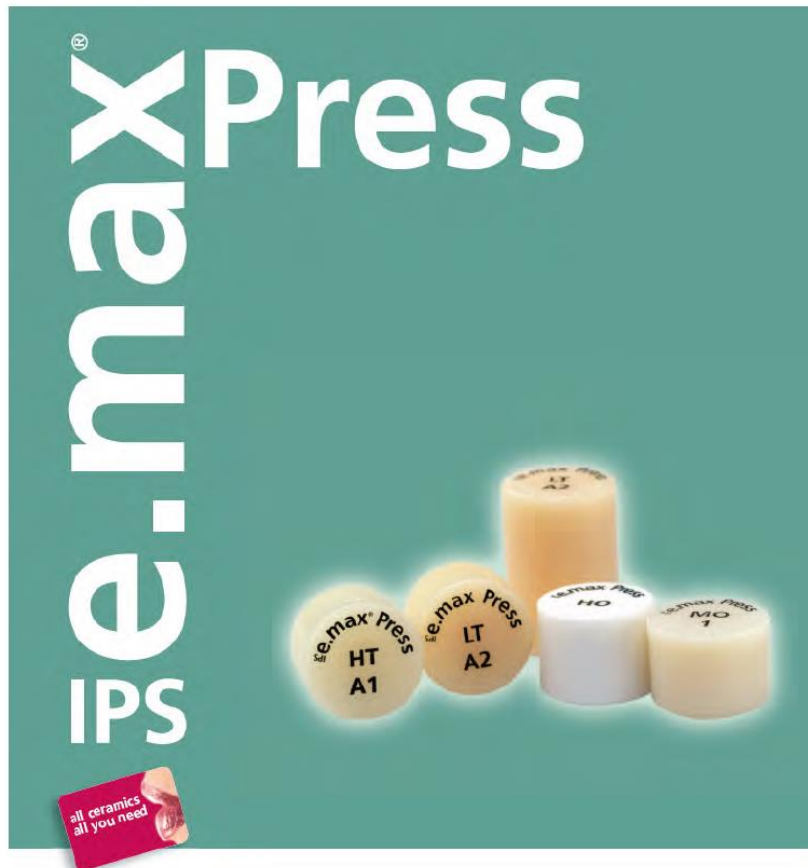
Date of production/Datum proizvodnje: _____, 2015

Naturaldent quality control/kontrola kvalitete: _____

PATIENT NAME/IME PACIJENTA: _____

Dental clinic/ Stomatološka ordinacija: _____

IPS e.max[®] Press



Scientific Documentation



IPS e.max Press are pressable ingots (Fig. 1) consisting of lithium disilicate glass-ceramic (LS_2) in different degrees of opacity (HT, LT, MO, HO).

The ingots are suitable for the fabrication of frameworks or fully anatomical (and partially reduced) restorations.

Fig. 1: IPS e.max Press ingots

These ingots have been developed on the basis of a lithium silicate glass-ceramic (Fig. 2). Due to the use of new technologies and optimized processing parameters, the formation of defects in the bulk of the ingot is avoided.

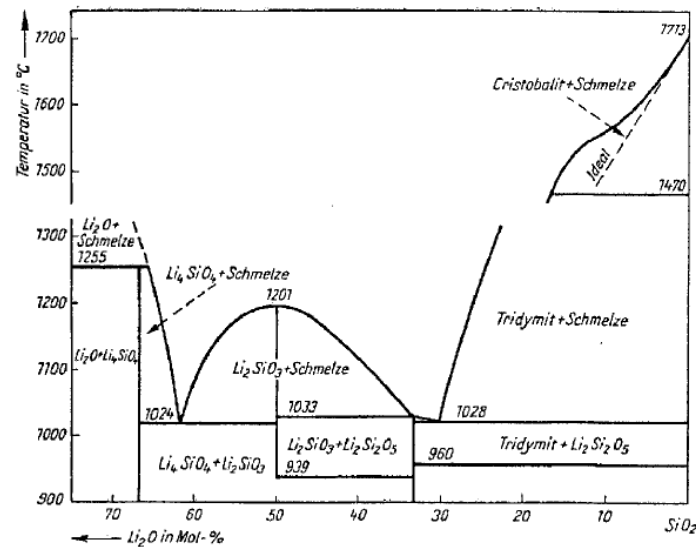


Fig. 2: Materials system SiO₂-Li₂O [1]

As lithium disilicate glass-ceramic (LS_2) and zirconium oxide (IPS e.max ZirCAD) feature a very similar coefficient of thermal expansion, the same layering ceramic (IPS e.max Ceram) can be used in conjunction with all the components of the IPS e.max system.

IPS e.max Press is processed in the dental laboratory using the well-known lost-wax technique. This technique is distinguished for providing a high accuracy of fit.

IPS e.max Press

Pressable ceramic ingot

Standard composition:

(in % by weight)

| | |
|-----------------------------------|---------|
| SiO ₂ | 57 – 80 |
| Li ₂ O | 11 – 19 |
| K ₂ O | 0 – 13 |
| P ₂ O ₅ | 0 – 11 |
| ZrO ₂ | 0 – 8 |
| ZnO | 0 – 8 |
| other oxides and ceramic pigments | 0 – 10 |

Physical properties:

In accordance with:

ISO 6872 Dental ceramic

ISO 9693 Metal-ceramic dental restorative systems

| | |
|---|---|
| Flexural strength (biaxial) | 400 ± 40 MPa |
| Chemical solubility | 40 ± 10 µg/cm ² |
| Coefficient of thermal expansion (100 – 400 °C) | 10.15 ± 0.4 10 ⁻⁶ K ⁻¹ |
| Coefficient of thermal expansion (100 – 500 °C) | 10.55 ± 0.35 10 ⁻⁶ K ⁻¹ |