NobelProcera™ Crown and Bridge Titanium

FACT SHEET VERSION 1

Overview

– Biocompatible high strength cement-retained solutions on teeth and implants
– A new marginal contact surface design resulting in an improved retention of fit
– Light in weight
– Cost effective
– Radiotranslucent
– Conventional or temporary cementation
– High quality industrial production process using 5-axis milling on a solid monobloc of titanium

Material characteristics

Alloy type:	Biocompatible Titanium according to ASTM F136
CTE (25-500C):	CTE 10.16
Melting point:	1640 °C
Composition:	Titanium-6Aluminum-4Vanadium (Ti6Al4V). Nitrogen ≤ 0.05%, Carbon ≤ 0.08%, Hydrogen ≤ 0.015%, Iron ≤ 0.30%, Oxygen ≤ 0.25%, Aluminum ≤ 6.50%, Vanadium ≤ 4.50%. Titanium = balance.
Tensile strength:	860 MPa
Yield strength:	795 MPa
Elongation:	10%

Veneering

– All commercially available veneering materials designed for use with titanium with a CTE of 10.16 can be used
– A veneering material option is VITAVM®9, who recommend sandblasting prior to veneering, 130 micrometer, normal cooling

Additional veneering material recommendations and supporting guidelines are available.

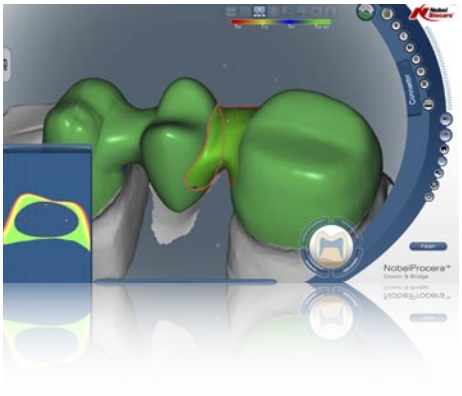
Additional information

NobelProcera Crown and Bridge Titanium solutions are milled from a solid monobloc of alloyed Titanium (Ti6Al4V), which is more applicable for bridges with small connectors. This differs from NobelProcera Implant Bridges which are milled from Grade 2 Titanium.

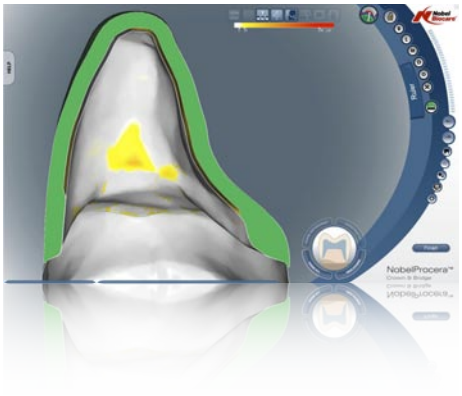
Indications

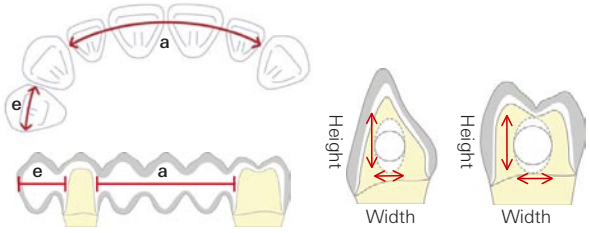
– Crowns and bridges up to 14-units
– Minimum thickness 0.4 mm
– Any position in the mouth
– The connector dimension of a multi-unit framework depends on the distance between the supporting teeth (see table below)
– Design is supported by realtime feedback through warning function in the NobelProcera Software
– A modifiable contact surface area to be implemented for long span bridges and short preparations*

*Planned to be launched Q1 2010



Type – any position	**Maximum length** a=Arc length [mm] e=Extension length [mm]	**Minimum connector and cross section** height × width [mm] / area [mm²]
Free hanging arc	a ≤ 21.0	3.0 × 2.5 / 6.0
Free hanging arc	21.0 < a ≤ 35.0	4.0 × 3.0 / 9.4
Extension	e ≤ 10.0	4.0 × 3.0 / 9.4





Contraindications

– Cases with lengths that exceed the maximum limits
– Bridges must be designed to fit into a block of 80 mm × 80 mm × 30 mm (length × width × height)

NobelProcera – guaranteed and certified quality

NobelProcera products on teeth and implants are guaranteed for five years; the NobelProcera Product Warranty only covers the NobelProcera products and does not include any additional costs. NobelProcera also provides certificates of material authenticity.