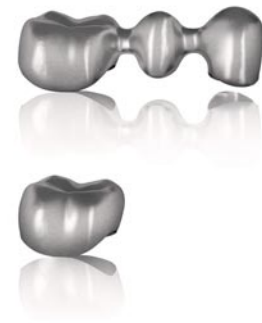


NobelProcera™ Crown and Bridge Base Metal Alloy Cobalt Chromium

FACT SHEET VERSION 1

Overview

- Biocompatible
- Nickel, cadmium and beryllium free alloy
- High strength cement-retained solutions on teeth and abutments
- Excellent retention of fit due to precise marginal contact surface design
- Cost efficient
- Excellent material homogeneity
- Conventional or temporary cementation
- Precision Milled Restoration manufacturing process employing 5-axis milling of a solid Base Metal Alloy Cobalt Chromium monobloc



Material characteristics

Material type:	Dentaurum Rermanium® Star Milling blank (Type 5 according to ISO 22674: 2006)
CTE (25–500°C):	14.1*10 ⁻⁶ [K ⁻¹]
Melting interval:	1320–1420°C
Composition [wt%]:	Co 61±2, Cr 28±2, W 9±1, Si 1.5±1 <1% of the following elements: Fe, Mn, N, Nb
Yield strength (R_{p0.2}):	Min. 500, typical value 635 [MPa]
Elongation:	10%
Elastic modulus (E):	230 [GPa]

Veneering

- All commercially available veneering materials designed for use with cobalt chromium with a CTE of 14.1 can be used.
- For long-term clinical success follow the recommendations and handling instructions of the veneering material manufacturer.
- Our recommended partner for porcelain veneering of NobelProcera Base Metal Alloy Cobalt Chromium Crowns and Bridges is VITA, who have certified VITA VM13 and VITA VMK Master for NobelProcera frameworks.

- VITA recommends sandblasting prior to veneering, with 130 micrometer Al₂O₃ at 3bar pressure and slow cooling after firing.

Additional veneering material recommendations and supporting guidelines are available from VITA on www.vita-zahnfabrik.com

VITA

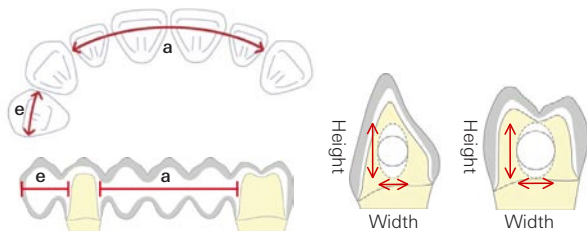


Indications & design features

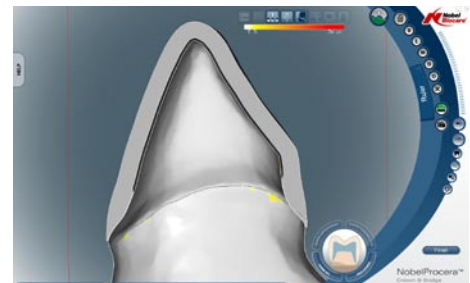
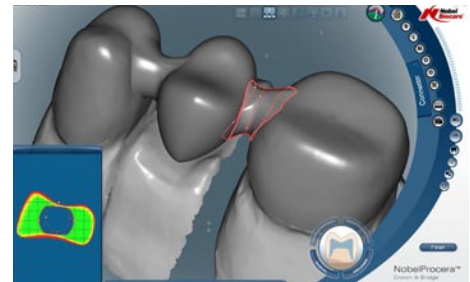
- Crowns and bridges up to 6-units (on teeth and abutments)
- Minimum thickness 0.4 mm
- Any position in the mouth
- The connector dimension of a multi-unit framework depends on the distance between the supporting teeth (see table below). The design is supported by real-time feedback through warning function in the NobelProcera Software
- A modifiable contact surface area to be implemented for long span bridges and short preparations*

*Planned to be launched April 2010

Type – any position	Maximum length a=Arc length [mm] e=Extension length [mm]	Minimum connector and cross section height x width [mm] / area [mm ²]
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



Maximum of one free hanging pontic



Contraindications & design limitations

- Cases with lengths that exceed the maximum limits
- Bridges must be designed to fit into a cylindrical disc with a diameter of 98mm and height of 15mm
- If the crown is not veneered, occlusal contact with other metal constructions/restorations
- More than one cantilever

NobelProcera – guaranteed and certified quality

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



Disclaimer: Base Metal Alloy Cobalt Chromium products are currently under BSI review. Some products may not be regulatory cleared/released for sale in all markets. Please contact the local Nobel Biocare sales office for current product assortment and availability.