

## instructions for use & technical data CopraBond K

### technical data

<b>product:</b>	<b>CopraBond K</b>
<b>product type:</b>	non precious blank on CoCr base - type 4
<b>product shape:</b>	metal discs in different diameter and thickness
<b>CE-mark:</b>	<b>CE 0483</b>
<b>applied standards:</b>	DIN EN ISO 22674:2006, type 4 manufacturing and testing according to DIN EN ISO 13485 / DIN EN ISO 9001:2000 annex V medical products guideline 93/42/EWG
<b>veneer porcelain:</b>	all standard veneering porcelains with a thermal coefficient rate of 13,9-14,9 for non precious chrome cobalt alloys.
<b>composition:</b>	<b>Co</b> 61,0% <b>Cr</b> 28,0% <b>W</b> 8,5% <b>Mn</b> 0,25% <b>Fe</b> <0,5% <b>Si</b> 1,65% <b>C</b> <0,1
<b>density:</b>	8,3g / cm <sup>3</sup>
<b>vickers hardness:</b>	285 HV 10
<b>modul of elasticity:</b>	190.000 MPa ( N/mm <sup>-2</sup> )
<b>thermal coefficient rate:</b>	14,1 µm/K ( 20 - 600°C )
<b>fracture strain:</b>	10%

### description

CopraBond K is a nickel- and beryllium free chrome-cobalt blank, specially designed for CAD/CAM applications. The material is very homogenous and lends itself to machining extremely good - either by milling or laser welding.

### instructions for use:

#### **removal of frameworks:**

Cut out, fettle and smoothen the surfaces of milled frameworks with carbide burs or separating discs.

#### **veneering with porcelain:**

An oxidation firing is not necessary, if desired, please fire for 10 minutes at 980 °C without vacuum. Sandblast the frameworks with 110µ aluminium oxide and steam clean them afterwards. Please follow the instructions for use of your chosen veneering porcelain manufacturer.

#### **soldering:**

We recommend a chrome cobalt soldering metal for soldering. CopraBond K frames should not be soldered with gold or palladium solders. CopraBond K is easy to weld with a dental laser.

#### **cleaning:**

Please clean framework made from CopraBond K by steam cleaning or in distilled water by using an ultrasonic unit.

#### **polishing:**

Remove oxides after firing by blasting with gloss pearls. Finish with rubber stones and polishing paste.