Process Instructions for Kera C®
Non-precious-dental alloy

Kera C® is a nickel- and beryllium-free chrome/cobalt alloy.
The strong oxide provides optimum metal/ceramic bonding.

Kera C® is suitable for open melting, as well as for the high frequency casting process.

Kera C® One of the remarkable features is the high corrosion resistance.
The composition has been well established for many years

Model:
To guarantee a good casting of the alloy, the wall thickness of the units should be no less than 0,5 mm.
The sprues are attached as usual. It is beneficial to attach a "lost head" as a suction reservoir for solid full cast crown and bridge parts.

Investing:
We suggest Kera-Vest (phosphate-bonded investment) from Eisenbacher Dentalwaren ED GmbH for dental alloy **Kera C®.**
A preheating temperature of 900°C has here proved to be good.

Cast:
Kera C® should be melted in a ceramic crucible. Clean any old cast alloy before melting new alloy.
Do not use graphite inserts!

Flame melting: With propane/oxygen or acetylene/oxygen follow the machine manufacturers instructions.
A neutral adjusted flame prevents overheating of the alloy. Do not use fluxing agent. When the cast ingots have slumped and the melting becomes easier due to the flame pressure, start the casting procedure. It is important, that the oxide skin **does not** burst, as otherwise components of the alloy may get lost.

High frequency Start casting cycle, when the last cast cube has slimped and the last "shadow" ran over the ingot.
With HF-melting, just as with open flame casting, the oxide skin **should not be allowed to burst!**

The reuse of cast metal is not recommended, as important ingredients for the metal/ceramic bonding will evaporate through the melting of the alloy. During repeated re-melting these components decrease and a sufficient metal/ceramic bonding can no longer be guaranteed. The units are finished using normal tungsten carbides and aluminium-oxide stones recommended for non-precious alloy. The minimum thickness of the finished unit should be 0,2 - 0,3 mm.

Porcelain:
Degas for 10 minutes at 980°C in air (no vacuum). Blast frame with 250 my aluminum oxide and clean as usual with distilled water, ultrasonic or steam cleaner. **Never put a non-precious-alloy into a pickling bath.**
Wash- and opaque firing is according to the porcelain firing instructions. All firings without opaque must be slow cooled.

Soldering:
For soldering we recommend the Eisenbacher cobalt-based solder. Never solder Kera C®-parts using gold- or palladium-solders. **Kera C®** is also suitable for **laser welding.**

Cleaning:
Kera C® should be cleaned in ultrasonic bath or with a steam cleaner.

Guarantee:
All recommendations are based on our own experiences. The user is responsible for correct use and processing. If nevertheless the claim for compensation should be asserted, this is only related to the value of goods that have been delivered.

While working with different alloys we always suggest the use of the same grinding instruments to prevent cross-contamination.