Process Instructions for KERA®NH
Non-precious-dental cast alloy on nickel base, Type 3

CE 0434

KERA®NH is a beryllium- and iron-free chrome/nickel alloy.
The strong oxide provides optimum metal/ceramic bonding.

KERA®NH is suitable for open flame melting, as well as for high frequency casting.

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

Modulation:
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.

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

Casting:
KERA®NH is melted in a ceramic crucible. Clean any old cast alloy before melting new alloy.
Please do not use graphite inserts!

Flame melting: With acetylene/oxygen. The instructions of the manufacturer are to be followed.
A carefully adjusted flame prevents overheating of the alloy.

High frequency: Do not use fluxing agents. When the last cast ingots have slumped,
start the casting procedure approximately 2 seconds after disappearance of the shade.

The units are finished using normal tungsten carbides and aluminium-oxide stones. The minimum thickness of the finished units should be 0,2 - 0,3 mm.

After the cast, let the muffle cool down to room temperature. Do not chill with cold water!

Porcelain:
An oxide burning is not necessary. If it is decided to have an oxide burning, degas for 5 minutes at 980°C in air (no vacuum). Then blast frames with 110 my aluminum oxide and clean as usual with distilled water, ultrasonic or steam cleaner. Perform wash- and opaque burning according to ceramic processing instructions. **Never put a non-precious dental alloy into a prickling bath!**

Wash and opaquerer blazes need to be performed according to the ceramics process instructions. All blazes opaquer need to cool down for a long period. Please note the WAK (coefficient of expansion) of the used ceramic mass. After the burning process it is advisable, to remove the piece of work from the firing material carrier only when the read head disappeared.

Soldering:
Customary solders trade may be used for **KERA®NH.** It is also suitable for laser welding (Kera®LA-con from Eisenbacher). **KERA®NH** parts should not be soldered with gold or palladium.

Cleaning:
KERA®NH should be cleaned in ultrasonic bath or with steam cleaner. While working with different alloys we always suggest, to use the same grinding instruments to prevent soiling.

Recommendation for single-use:
We do not recommend the reuse of the sprue cone since the characteristics of the alloy can be changed negatively.

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.

Safety information:
Metal dusts are dangerous to health. Therefore we suggest to wear a respiratory mask and to exhaust when finalizing and sand blasting. Recommendation: filter FFP2

Our information and recommendations are based on the present scientific and technical knowledge and are to our knowledge and experiences to be seen as correct. The present version replaces all former indications.

For any further questions please contact us by fax or mail
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