



FACTORY TOUR

All KING-WERK Steins offered are handcrafted and the process with which some steins are produced has not changed in the last century. Take a tour through the facilities of KING-WERK in Germany. Here you will get a small impression of the amount of work involved and the unique art represented by our steins. Enjoy the tour!

HOW A STEIN IS PRODUCED

1. The Original Model

At the beginning of the manufacturing process artisans create a Model with modeling clay which will be used as template for a mold. It takes a lot of talent to develop such model and the artisans are mastering techniques used for many generations.



2. The Rubber Model

To prevent any damage to the delicate model, the original clay model has to be replicated into a full rubber model which is more durable and flexible enough to allow the development of a gypsum mold.





3. The Gypsum Mold

After the original model is now transformed into a rubber model, this rubber model can be used as a positive to create a gypsum form. The gypsum form is the designed to be used with a centrifuge to produce the steins.



4. The Centrifuge

The previous created gypsum form is now mounted on the centrifuge and filled with clay. The centrifugal forces will force the clay into the mold and a new stein is born.



5. Glazing the stein

After the stein is removed from the gypsum form, craftsmen apply the base coat glaze on the stein. In nearly all instances this is a manual, very labor intensive process.



6. First Firing

After the base coat glaze is applied, the stein will be fired for the first time. The firing oven is heated to 1180 C (2156 F). This first firing is critical as the hardness of the stein is dependent on this firing process.



7a. Decal Application

Many of the steins do carry a color Decal showing a coat of arm or other traditional decors. Those decals are wet applied to the stein and later on, during the second firing bonded to the stein so you can enjoy the decals for many many years.



7b. Hand painting

Many steins are hand painted and hand colored. Every single stein has to be hand painted by craftsmen. The paint (glaze) is applied in accordance with traditions reaching back many generations and techniques used did not change in centuries.





8. Second firing

To assure, that the wet applied decals and the hand applied paint (glaze) securely bonds with the stein, all steins are being fired a second time. The second firing is done at a much lower temperature of 650 C (1202 F) to prevent the structure of the stein to change. Constant temperature are critical to guarantee for secure bond of glaze or decal with the stein.

THE LID

Many times the lid on a beer stein is taken as granted and often it is speculated on how the lid is actually produced and mounted to the stein. Here is how it is done



1. Pouring the lid

Every lid is poured by hand which will guarantee the highest possible quality and result in a sturdy lid which does not bend like some mass produced lids. All lids are poured using 97% pure and lead free pewter.

2. Cooling of the mold

After the mold is filled with pewter, the mold will be gradually cooled down in a water bath. It will take several minutes for the mold and the lid to cool down to a temperature, where it can be handled safely.





3 Opening the mold

After the mold is cooled down, it can be opened carefully and the raw lid will be carefully removed and prepared for the next step.



How the lid is mounted



In the first two steps, a strip heat resistant material will be tied around the handle. Then everything will be covered with a heat resistant putty, which will create a mold for the lid mount.



In the next step liquid pewter is poured into the artificial mold which will build a seamless connection between the lid and the handle.



Final Touch Up

After the pewter is cooled down, the hinges will be smoothen using a router to produce a nice even look.

Polishing

Last but not least the lid and stem will be polished to give it a nice glossy shine.





We hoped you enjoyed our little factory tour. All of the KING beer steins are produced in this or similar process. Every stein is a unique handcrafted item and as such one of the most valuable items MADE IN GERMANY.