



The SUPPORT Arts and Crafts
International Centre of Thailand
(Public Organization)



Artisanal handicraft

Khan Long Hin of Ban Bu



Khan Long Hin (alloy bowl rubbed with stone) is a legacy of making bronze wares that has been passed down from generations to generations. It is made with bronze - copper mixing with tin, and went through stone rubbing process and forging into desirable shape. In the past, bronze was used to make water bowls, knives, spoons, plates and trays. Initially, the containers were decorated with simple patterns. Then, Thai complex designs including

Kranok Raya, Thep Panom, and Maliwan were used because they were popular among buyers.

Khan Long Hin has existed since Ayutthaya period, and became more popular in Rattanakosin period. Because it is difficult to make and has high cultural value, the price is high. The people who used **Khan Long Hin** are consequently noblemen, trades men, and court officials. Normal laymen could not afford to use it.



Characteristics which reflect the local wisdom and artisan expertise

Ban Bu villagers use bronze-copper mixing with tin to make Khan Long Hin. The word “Bu” means forging. It is used with metal works. Sometimes this is called “Bronze Wares”. In the past, people used “Thong Ma Lor” (gold imported from China, made from mixing copper with tin and scraps of Chinese musical instrument e.g. cymbals, gong) to make bowls. Sometimes bronze metal is used as the main material in production.

A container that is forged with bronze is then called “Krueng Bu”. Hammering is the first step. Then a stone ball is used to rub on the container until glossy. That is why it is called “Stone Rubbed Golden Ware” or “Krueng Thong Long Hin”. The sound made by this type of bowl is unique and unlike other metals – that is resonating like a bell. On the surface of the bowl, the hammering marks are visible. This is considered as charming feature of the bowl.

Khan Long Hin of Ban Bu features a strong, sturdy, durable and shiny bowl. The sound made by this type of bowl is resonating. The rice that is put in these bowls does not easily go bad. The water stored in these bowls can stay cold for a long time. These are because of the mixture of proper materials which lead to these special characteristics. The raw materials used are as follows:

Copper is soft, sturdy, flexible. It is a good conductor and good corrosion resistant.

Tin is highly flexible, corrosion-resistant, and good lubricant.

Bronze has a wide variety of characteristics. It is a strong and sturdy metal.

Khan Long Hin has these three types of metal as materials. The bowls cannot have any other metals. If other metals are added e.g. brass, the bowls will not be combined nicely and will break during forging.



Copper



Tin



Blacksmith



Hammering artisan

Khan Long Hin of Ban Bu is all hand-made through out every step to produce highly intricate and valuable products. It is a handicraft that combines various kinds of artisans.

Blacksmith is considered as the most important one, as he is responsible for various processes including melting, spreading, and forging. Thus, the person needs to have experience and expertise in mixing and forging metal. The melting part is of utmost importance because the artisan needs to ensure that no foreign materials are added into the mixed water. Before a person can become a blacksmith, he would have started as assistant (Look Soob) first. Once the person is familiarized with every step, he can then be promoted as a blacksmith.

Hammering artisan requires a lot of effort in hammering the bowl to have even surface without any deformation.

Grinding or filing artisan is required in the past because there was no electricity. It is the process which requires skills and expertise.

Lathing artisan works to flatten the surface of the bowl. It can be done in various manners. Black lathing is lathing the outside of the bowl with black color. White lathing is lathing both inside and outside with gold color.



Grinding or filing artisan



Lathing artisan



Cutting artisan



Hammering the bowl

Cutting artisan. In the past, this step does not exist. However, it is added for refinedness.

Polishing artisan to add beautiful finish.

All the artisans need to work harmoniously in order to produce high quality bowls. Khan Long Hin has manufacturing processes which are different from other metal wares. The mixture needs to have a ratio of tin to copper of 7:2. Other materials cannot be substituted.

Producing Khan Long Hin of Ban Bu is not a simple task due to complicated process. If the artisan in any of the step lacks expertise or experience, the finished product will not be beautiful and have low quality.



Making Process

In the past, there are four steps: forcing, hammering, filing, and grinding. However, currently, other steps are added to create high value of the products.

In the preparation stage, the rice hull ash is mixed with clay to make a crucible. The clay used must be special clay without any contamination called “Din Klang Jai Muang” (downtown clay). After leaving in the sun to dry so that the crucible is ready to be filled with the mixture of tin and copper and put inside a stove. The manufacturing has the following steps:

The first step is forging into shape. The raw materials, tin and copper are mixed in the ratio of 7:2. The mixing ingredients are then poured into a crucible before putting inside a stove and covered by charcoals. The charcoals used must be charcoals made from large trees so that the fire will not crack when burning. In the old days, charcoals from Phan Sat tree are used. At present charcoals from rubber tree.

When mixing tin and copper until they blend well together, the mixture is poured into a supporting board called “Din Ngan” in order to have the mixture become lumps. The slumps are then burned and forged continuously. In the forging process, not just one lump is forged at a time but 5-6 lumps. This is because doing one at a time would cause the bronze lump to break. The important technique is burning the bronze lumps before forging because fire will make bronze become soft that it can be forged into bowl shape.

Forging into a bowl shape, the bronze lump is placed on the steel anvil. An example can be provided so that the artisan can produce the same as desired. An important technique is striking the bronze lumps while still hot in order to get the required shape. The artisan needs to constantly observe bronze metal that it remains red. Once it is no longer hot, it needs to be burned again.



Prepare tin and copper for forging



Mix and forge tin and copper.



Hammering the bowl

The assistant (called Look Soob) must follow the first artisan immediately in the right tempo. It is a requirement that two artisans always work collaboratively following closely with one another.

Once the bronze lump is forged to the shape of a bowl, each bowl is put into fire until red before forging the bowl again. The same method is applied. After done, the bowl is soaked into water in order to preserve the shape.

Step 2 is hammering the bowl. Before doing, the soot needs to be applied all over the bowl in order to make the uneven parts more visible.

The artisan needs to place a bowl on Kalon, a metal bar or stand. Kalon and hammer needs to be placed correspondingly. If misplaced, the bowl will break during hammering. This step is the only step that cannot use modern method to replace in anywhere. Even the tools used have been passed down from the Ayutthaya period.



The hammering artisan must adjust his posture to the Ka Lon. The hammer marks from step 1 are erased until the whole bowl is finished. If the marks still remain, the step needs to be repeated again until all marks disappear that the surface looks even. When done, the soot is applied both on the inside and the outside again so that the surface is blackened before lathing.

Step 3 is grinding to level the rim. “Phamon” (a lathing machine) is used to turn the bowl around to grind the rim of the bowl. Dammar gum and tallow are mixed together before applying on Phamon. When the mixture hardens, it will act as binder between Phamon and the bowl. At present, a motor is used to rotate Phamon instead of using people to pull. When Phamon is turned, a file is used to grind the outer and the inner part so that the surface is smooth. Then, the rim is ground to achieve the same effect.

Step 4 is lathing. A sharp piece of steel is attached to the file in order to lathe the inner side of the bowl to be as thin as possible. Lathing the unsmooth inner surface of the bowl which has been applied with soot until the surface becomes bright gold in color. Then start the polishing process.

After finishing this process, polishing is done by rubbing with stone. The crucible used in Step 1 is broken into pieces. The broken pieces are mixed with a bit of coconut oil that acts a lubricant before putting a piece of cloth underneath. When Phamon is rotating, the stones covered by cloth are used to rub in the inner part of the bowl so that the inner becomes bright gold and does not have any stain left. The ancient people call the bowl “Khan Long Hin” because of this step, which is considered as the last step of the process.

Step 5 is cutting and polishing. The finished bowl in Step 4 is taken for cutting and polishing the inner part so that it is as smooth as possible. Once done, the sand paper attached to the spinner of the motor is used to rub the inner part of the bowl.



Use a lathing machine (Phamon)



Lathing



Cutting

Take extra caution not to put too much weight on the bowl because the thin surface might break. Polish once again to increase glossiness using cloth polishing ball.

Step 6 is carving. This is the new step which is added to create high value of the product. Start by using a piece of steel to draw desirable designs. Popular designs include Kranok Raya, Thep Panom, Maliwan.



Background and Story of Khan Long Hin of Ban Bu

Ban Bu Community is a small community by southern part of Bangkok Noi canal, from the area behind Thonburi train station to Wat Suwannaram or Wat Thong in Sirirat sub-district, Bangkok Noi district, Bangkok. The area has a historic significance which has combined various arts, cultures, handicrafts, architectures, and local wisdoms.

Ban Bu is named after the career of most people in the community, that is, making (“Bu”) metal containers. Over a hundred families live within the community. A documentary evidence from King Rama III period indicates that during the Burmese-Siamese War, the ancestors of the people in the community migrated to settle here. King Rama I tried to establish a new city similar to Ayutthaya. To revive the morale of general morale of the people because of the defeat, people in various communities tried to carry on their previous careers.

For example, casting community casted Buddha image, Kao Mao community made Kao Mao (pounded unripe rice) and Kala Mae (Thai toffee cake), bael community made dried bael or bael in syrup. At present, only Ban Bu community survives. They have moved to outside the moat which is the area by Bangkok Noi canal today. In the past, they lived on rafts before living in houses as seen nowadays.

Initially, every household is in the business of making Khan Long Hin. Consequently, the word “Bu” is used to call this community as “Ban Bu”. The artisans work freely at home or in a large factory called Ban Gong Si. In the past, there were such 6-7 factories. The work is divided into manufacturing steps and skills. Men usually do the molding, flattening, and forging which are considered as laborious works that require high expertise. Women usually do designing, filing, and lathing which require delicacy. The process today still preserves all the steps in the past. At present, there is only one factory which carries on the production of Khan Long Hin – Jiam Sang Sajja Bronze Factory.





Development of Khan Long Hin Works: Past to Present

Khan Long Hin has a special characteristic that when used in storing food, it will not smell and that there will be no contamination on the food. Other metals such as brass, some poisonous contamination might pass onto the food. In the old days, Khan Long Hin was often used to store drink or non-heated food.

In the past, Khan Long Hin was often used as bowl to wash face, carrying holy water and drinking water. At present, the manufacturing is extended to more variety of shapes so that they can be used more in everyday life and according to the requirement of the consumers including salad bowl, fruit bowl, cake tray, coffee set, tea set, bowl, tray, and plate. Designs are added to add more value to the products as well as make them more interesting.

Cleaning can be done using any type of cleaning materials. Important thing to note is when finish using the product, it should be cleaned right away so that the product remains new. If it is intended to put cooked rice for offering, the cooked rice needs to be cooled down first before putting in the bowl, or else the rice would stick to the bowl and create stains.





Preservation and Succession of the Local Wisdom of Khan Long Hin Production

Khan Long Hin of Ban Bu was registered as Thailand National Intangible Cultural Heritage under metal wares, ancient artisans by Department of Cultural Promotion, Ministry of Culture on 14 December B.E. 2555. This was done with the objective of “encouraging people to realize the values of cultural heritage, to admire the local wisdom of ancestors as well as identify of ethnic groups across Thailand so that people are proud and accept the cultural difference” (Announcement of 70 Cultural Heritages of B.E. 2555). The government agencies have direct responsibility in the preservation, protection, promotion, and succession of national legacy of wisdom.

The local wisdom of Khan Long Hin of Ban Bu has been passed down from generations to generations for over 200 years. In the past everyday objects from foreign countries are not popular in Thailand, as Thai people preferred using Thai products. Moreover, at that time, there were not many imported items from abroad. As a result, golden wares rubbed with stone were popular with both Thai and foreigners.



At present, only Ban Bu community still carries on the production of Khan Long Hin which a legacy that has been passed down from generations to generations.

Golden wares rubbed with stone from Ban Bu under the leadership of Ms. Metta Selanont have been developed to better respond to customer needs. Consequently the products are made as souvenirs for the travelers and exported to other markets such as Europe, Asia, and United States. The artisans of Ban Bu are very proud that they are part of the living legacy and help pass down the local wisdom of their ancestors which reflect cultural identity and Thai way of life to the later generations.



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