

Design Resource

Bidri-ware - Hyderabad

Silver Wirework

by

Prof. Bibhudutta Baral, Ms. Aruna Kumari. Y.,

Ms. Pragnya G. P. and Ms. Shruti k.

NID, Bengaluru

Source:

<http://www.dsource.in/resource/bidri-ware-hyderabad>



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4. Products
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Introduction

Bidri is an art of inlaying silver or gold on black metal. Bidri ware is well known handicraft of Hyderabad in Andhra Pradesh. 'Bidri craft' is named after the place Bidar in Karnataka, from where it has originated.

The unique artwork is originally gifted by Persian artists. Skilled Bidri artisans from Persia came to Bidar and trained Bidri artisans to create masterpieces for royal families. The eye-catching Mughal motifs are artistically etched without changing the traditional aspect of the craft. Though the craft is very popular in Hyderabad, but the artisans are migrated from Bidar as the majority of marketing and exporting opportunities are more in Hyderabad.

The technique of inlaying silver and gold on steel or copper on a black background involves four steps-melting the alloy, casting the article, engraving and inlaying the design and finally, oxidizing. Though, the major motifs are influenced by Mughal motifs; Geometrical and floral patterns also included in the motifs. The artisan inlays new design but the traditional designs are more in demand. Lepakshi government markets all the products.

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Bidri artisan engaged in mould making process.



Women help in engraving process.

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Artisan meticulously hammering the silver into the grooves.



Floral motifs fitted between curved line patterns.

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Wall decorator inlaid with silver with Charminar motif on it.



Bidri product in peacock form.



Intricately designed floral motifs in blend of silver and golden glitters.

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Tools and Raw Materials

Different types of tools and raw materials used are mentioned below:

Metals:

Zinc- molten alloy and copper are main important raw materials used in Bidri craft making.

File and Buffering Machine:

Different types of buffing blades are used to smoothen the surface of the article.

Copper Sulphate:

It is applied on the casted object to obtain temporary black coating on the article, so that it is easy to sketch the design over dark background.

Chisel:

Used to engrave the design on the article.

Old Soil:

It is mixed with ammonium to give permanent black coating on the article.

Silver Wire:

Used to engrave in the design grooves.

Brass Metal Wire:

Brass metal wire is inlaid to enhance the outer appeal of the product.

Coconut Oil:

once the product is made, coconut oil is applied to deepen the black matt coating.

Bidri fort Mitti:

Bidri fort mitti-clay is boiled and products are dipped in the mitti solution to obtain permanent black color.

Carving Tools:

Carving tools such as chisel, hammer, filers, rasps are used while engraving and inlaying process.

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Soil used in mould making process.



Frames used while casting to make metal objects.

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Zinc and copper are melted in crucible and poured into mould.



Sander stone, compass and other point edged tools.

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Clay is filled in the moulds and kept for casting process.



Furnace used to melt metals.

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Different types of holders and hammers.



Buffing machine.



Bidri fort soil.

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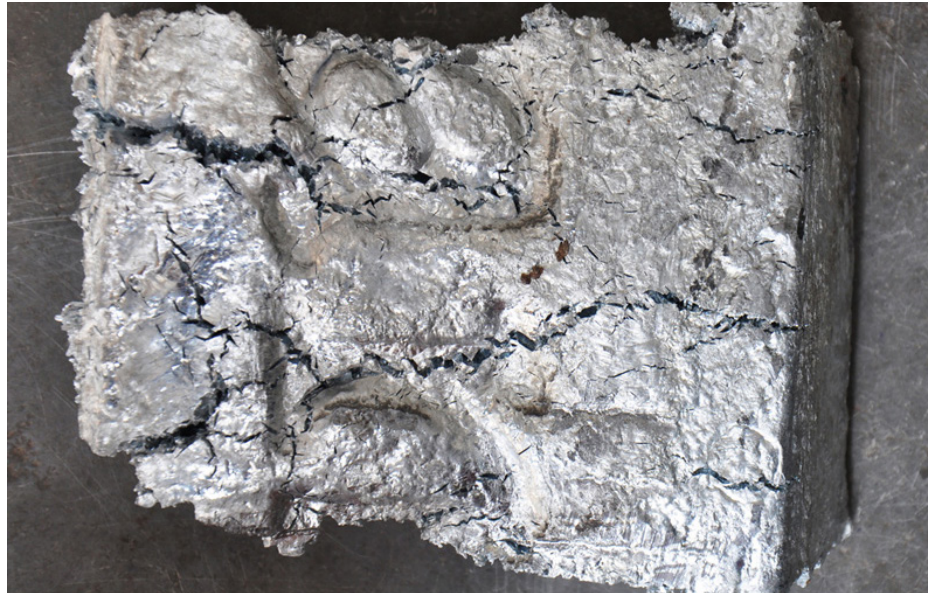
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Zinc metal.



Copper wire.

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Making Process

Melting the Alloy:

Each Bidri pieces cast separately from ordinary soil made malleable with castor oil and resin. Processed 95% Zinc and 5% copper metal is melted at a temperature of 800F. The molten metal alloy is poured in to the mold formed. The mold is allowed to cool and the object is removed. The surface of a newly cast piece is rough, so it is made smooth with filing and buffering.

Casting the Article:

The article is then rubbed with copper sulphate solution to obtain temporary black coating on which the designs are etched. All the designs are drawn free hand on the matt black surface with the sharp metal tool called stylus.

Engraving and inlaying the design:

Bidri ware is firmly fixed on a waxed stone to hold it in a way to engrave the designs on the article. The artisan uses small chisels to engrave the design. Pure silver is converted into fine flat wires and hammered or inlaid carefully into these chiseled grooves. Silver metal sheets also inlaid if the design motif dimensions are wide.

Geometrical designs are created with silver wire. Wherein, the floral arabesques and intricate leaf patterns are designed with silver metal sheet. After the inlaid work is complete the article is rigorously filed to obtain smoother surface.

Oxidizing:

In this stage bidri item is ready for the final step, to make the surface permanently black so that the silver inlay design will stand out in bright contrast against the dark background. A particular type of soil found in the inner depths of ruins in building particularly brought from Bidri fort, which are three hundred years old and where neither sunlight nor rain has fallen from many years. This soil when mixed with ammonium chloride and water produces a very special solution. This solution is boiled at an accurate temperature and the bidri article is dipped in this solution. The solution has a special oxidizing property which when reacted with the alloy, darkens the body of product but has no effect on the inlaid silver wires. The article is then rinsed off in normal water leaving the silver shining against the black surface. Finally oil is rubbed on the piece to deepen the black matt coating.

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The alloy, raw material is melted.



Boric powder is sprinkled on the clay filled mould.

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The frame is placed on the metal



The frame is filled with clay and stamped on it.

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The mould is ready for the casting process.



Melted metal is poured into the mould.



The casted metal product is removed and buffed.



Copper sulphate is applied to temporary black colour.

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Temporary blackening helps to draw the designs.



The design to be engraved is drawn on the surface.

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Surface of article is engraved with chisel.



Brass metal wire is interposed into the grooves to enhance the outer look of design.

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Then the silver wire or sheet is embedded on the design patterns using hammer and chisel.



The inserted silver is properly aligned by hammering.



The inlaid product is ready for buffing process.



Buffing is done to make the surface smooth.

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Bidri Matti (soil) is boiled at high temperature.



The bidri product is added to the boiling solution.

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Bidri Matti is used to polish the article, which enables permanent black color –a characteristic of bidri ware.



The final product is rubbed with coconut oil to enhance the black color.

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Products

Bidri ware is a unique traditional art form made with mixture of zinc and copper, which is magically turned into deep dark black color at the end of the process. Sophisticated design motifs are inlaid to create glittering white contrast over black background. The traditional Bidri products are symbol of royal life, aesthetically adorns living spaces. Products such as hookah, shehnai – flower vase are created with Mughal motifs and star motifs, surai-type of vase in different shape and motif, ugaldaan, boxes, zalabchi, muqaba or round containers with dome-shaped lids, flower vases. Images of animals like elephant, horse camel are created. Birds like peacock, swan also include in the products.

Themes:

Many of Bidri themes are inspired by Mughal motifs presented in geometrical and flower patterns. Bidri creations have traditional name according to style of creation.

Inlaying methods tarkashi done using silver wires. Flower and petal motifs are created with silver sheet is called taihnishan. Mehatabi kaam, reversal of surfaces where the design is cut out in sheet metal and is inlaid. Embossed design is said as Munnavat kari. Verses from the Quran in Arabic script are also include in the themes.



Bidri plate with fish motifs.



Bowl in flower motifs with contrast gold glittering border.

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Table clock is one of the recent innovations.



Decorative Bell designed with poppy plants and flowers in Taihnishan work.

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Range of Bidri products such as plates, bowl, jewelry box, bangles and clock.



Bangles in Bidri artwork.

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A flower vase with unique design.



Knife-inspired by Mughals life style.

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Traditional jewel box with outstanding star motif pattern.

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Swan in simple design motifs.

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