

Design Resource

Jaipur Stone Carving

The Skillful Crafts in Stone

by

Prof. Bibhudutta Baral, Ms. Anisha Crasto and Ms.

Anushree Kumar

NID, Bengaluru

Source:

<http://www.dsource.in/resource/jaipur-stone-carving>



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Introduction

Rajasthan, the land famous for its Great Indian Desert and the oldest mountain ranges, Aravali, has been a huge deposit of rocks of all types. It is the home for variety of rocks like marble, granite, quartzite, slates, soap stone etc. Since ages the land has been a paradise for skillful stone carvers. The main centers for rich stone deposits are Jaipur, Jaisalmar, Udaipur, Jodhpur, Mount Abu, Makrana, Kota etc.

Every place has some special variety of stone and therefore places are even named after them. For e.g. Jaipur is called as Pink city due to the availability of Pink sand stone. Jaisalmar as yellow city as it has yellow sand stone and due to the huge deposits of white marble in the Udaipur belt it is called as white city.

The land of valorous Rajputs is not simply famed for its fearless warriors and their heroic sacrifices but also for its marvelous forts and palaces made out of stone. The magnificently carved places and forts of Rajasthan narrate the story of stone art and the immense skills of the local artisans. These intricate carving can also be seen in havelis and other common domestic buildings across the state.

The major stone carving centers in Rajasthan are Jaipur, Alwar, Jaisalmar, Jodhpur, Udaipur, Sikar, Sawai Madhopur, Sikhandra and Bharatpur.

Khazane Walon Ka Rasta in Jaipur is considered as one of the main centers for stone carving and stone inlay work in the city. The place, filled with the sound of constant hammering and drilling is situated in the walled city near Ajmeri Gate and houses one of the country's highly skilled stone carvers. Stone carving has always been a major occupation among the people of Jaipur making it one of the best forms of art and crafts. Beautiful designs of sandstone and marble carvings can be seen in the city palaces, Tripolia Gate, Jantar Manter, Hawa Mahal etc.



The figure of a bird is being shaped by an artisan.

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The rough-cut on stone is given with a pointed tool.



The final product is smoothened and polished.



Beautifully carved idols of gods and goddesses.



The craftsman at his shop-cum-workplace.

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Inlay works done on an old stone product.



The stone is aesthetically carved and transformed into beautiful goddess.

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People and Place

People:

Artisans from various communities come across to practice this ancient craft. Earlier a large number of Muslim communities were involved only in carving intricate patterns on the fort and palaces whereas the sculpting was done by the Brahmins due to their religious significance. The Brahmins were regarded as the progenies of Atri Rishi. They were believed to be blessed to sculpt fine idols of god and goddess. Today artisans from all communities Hindu, Muslim, Sikh, Baniya and Kumawat work together as a community and help in growing this craft. Still the majority of artisans engaged in producing the idols belong to Sharma and Prajapati cast. Other cast people are involved in other work. There are around four to five thousand stone carvers dwelling in these lanes. These artisan groups apart from practicing the craft also have a welfare society where they contribute a part of their income which goes in the education, health and other social activities of the society.

Place:

Rajasthan has a very old history of stone carving. The state is filled with number of places having huge deposits of rocks. The major region for rock deposits are Makrana, Mount Abu, Amba Ji, Kota, Bidasar, Jodhpur, Jaisalmar, Udaipur, Jaipur, Sikandra, Alwar, etc. These places have high quality rocks which are famous all over the world. Makrana is the main centre for quarrying all types of marbles and it is also renowned for producing the finest and the whitest quality of marble. These regions are also full of proficient stone carvers and clusters. The Maharaja of Jaipur Sawai Jai Singh gave place to some of the highly skilled artisans in the walled city. This place was called as Silawaton ka Mohalla. Later with the increase in number of the artisans the lanes expanded and now the hub of stone carvers is called as Khazane Walon Ka Rasta. Apart from this the artisans have also spread in other parts around the city due to lack of place and increasing health problems caused by the stone dust.



The final products displayed in the shop.



The master craftsman working on stone carving in his shop.

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Shop of Mr. Deepar Sharma - one of the stone carver.



Narrow lanes in Khazanewalon Ka Rasta.



Various stone carvers' shop in the lane.



One of the prominent stone carving artisans in Jaipur.

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Shop-cum-workshop of stone carving.



Teenagers from carver's family engaged in selling and making of stone products.

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Tools and Materials

• Tools:

The tools required for carving are few and simple and were initially custom made by the blacksmiths in Alwar. Today these tools are easily available in market. Following are the tools used in the process:

Hatodi (Hammer):

The hammers of different sizes are used for different purposes. They are used to hit the chisel for carving. The wooden head hammer is used for soft strokes to get fine details. The ones with big metal heads are used for initial removing of the stone. Later small head hammers are used for detailed and intricate works/ motifs.

Chheni (Chisel):

An iron tool with sharp and flat-edge is used initially for removing unwanted material to get a rough outline on the stone. Two types of chisel; flat and round headed are used for specific purposes. Round chisel is used for minute or detailed work- usually for carving ornaments, face, eyes etc.

Drills:

Artisans use a lot of machine tools to get fine details and also to decrease the time to make the product. Drills are used to carve out fine folding of the garments and other facial expressions. Mainly sophisticated machine tools are used, as they are durable and safe.

Planer:

This is used for smoothening the rough edges, whenever required.

Files:

Stone filers are used to file the surfaces. These files come in various grades of roughness.

Buffing Machine:

This is used for finally smoothening/ polishing the surface. It has rings of stitched cloths of different grades of fineness.

Aari (Saw):

This is used for cutting the stone slabs into the required sizes.

Lathe Machine:

These are huge machines used to make circular, cylindrical or hemispherical stone products.

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Prakaar (Compass):

Compass is used for making marks on the stone surface.

Scale:

A Scale is used for measuring and marking.

Right Angle:

This is used to make perfect angles on the stone for making cuboids or cube.

Brush:

Brush is used for cleaning the stone powder which collects on the outer surface of the statue while carving out details.

Blower:

This is used to blow away the stone dust from the statue especially from those parts where the brush cannot reach or when dust collects on the inner parts of the statue.

Pencil or Markers:

Pencils and markers are used to sketch rough outlines on the stone before the chiseling process starts.

Rubber Pipe:

This is used to supply water to the stone and machine while the drilling work takes place. Water helps in preventing the dust to fly.

• Raw Materials:

Jaipur is the center of marble carving in the state. The raw materials used in stone carving are as follows:

Safed Pathar (White Marble):

Marble is the main raw material and is available in many shades and qualities across Rajasthan. Ajmer, Jaipur, Jodhpur, Bikaner and Udaipur represent the hub of marble in the state. The finest quality marble in the country is mined at Makrana. They are mined in the form of big boulders. The quality of the marble is defined by its whiteness and density. The less porous marble is more superior in quality and hence more expensive. Since the best of the marbles are exported so the artisans have moved to other options. They use a super white stone procured from Vietnam. This stone is imported to Rajasthan and then the artisans buy it from big suppliers/sellers. The rate starts from 1 lakh/ton and increase with the fineness and quality. Artisans buy marble from Alwar, Makrana or Ambaji.

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Varak (Silver and Gold Foil):

Varak is used for applying on the idols. Jewelries and borders of cloth are ornamented with real or artificial Varak. This is applied with the help of chemicals.

Acrylic or Oil Paints:

Chemical colors are used to paint floral patterns on the products as a substitute to gold, silver and other precious stones.

Precious stones:

A lot of colorful precious stones are used for inlay work. These stones are cut and the inlay work is done by the artisans themselves.

Regmaal (Sandpaper):

Sand paper is used for smoothening/polishing the rough surface in order to give the final touches to the carved pieces.

Wax Polish:

Once the product is made it is polished with wax. Marble is a porous stone therefore to prevent it from absorbing any liquid it is polished with wax.

Araldite:

Araldite is used to stick the broken pieces together. It is available easily in the market.

Geru (Red Soil):

This is used for marking on the marble while finishing. Once the product is finished it is rubbed and washed off.



Marble is the basic raw material.



Waste pieces of marbles are sold to construction companies.

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Hataudi (Hammer) used for hammering.



Right angle.



Different sizes of bids used in the drilling machine.



The divider Prakaar is used for scaling.

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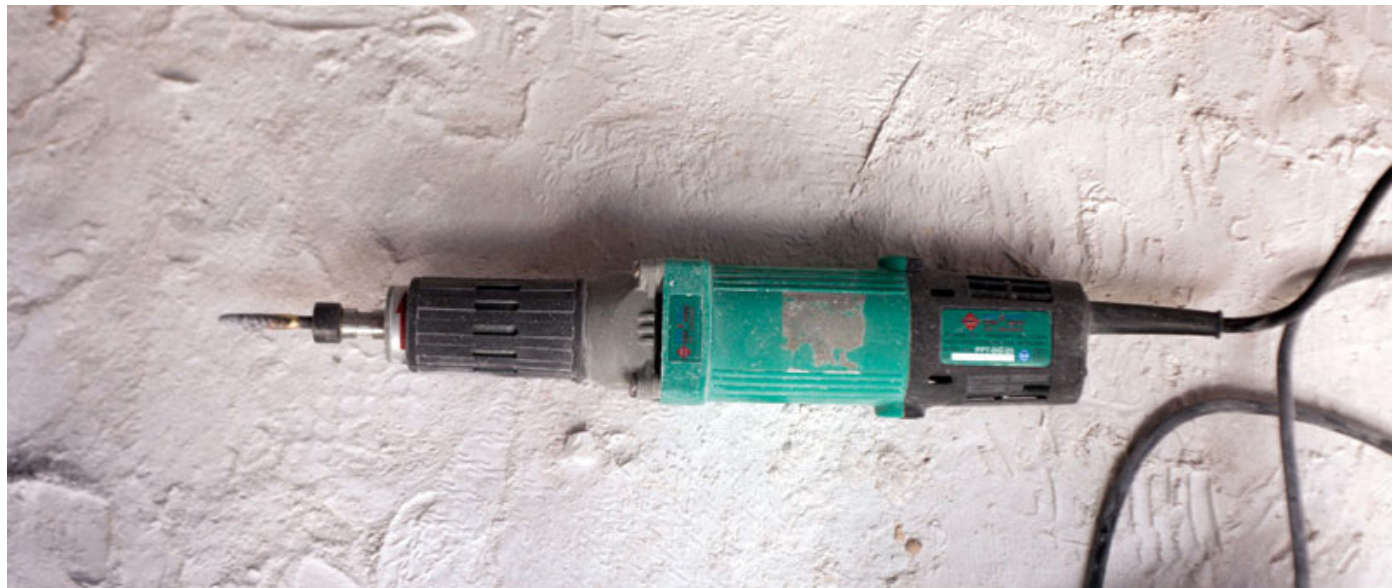
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Batti, used for rubbing and finishing the surface.



A small stool for artisan to sit on it while working.



Drilling machine.

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River bed stone for finishing the product.



Different types of stone used in carving and inlay work.



Paints are used for painting the eyes and garments of the idols.

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Making Process

Jaipur is the main center for stone carving, especially for marble inlay work. The process of making stone sculptures or products can be categorized into following steps:

- Marking
- Cutting
- Finishing
- Cladding
- Inlay
- Polishing

1. Marking:

After purchasing a fine quality marble from the quarries, it is brought to the workplace/workshop and cut into desired size/s. To make the figure, a vertical line is drawn along the axis and then a two dimensional outline of the proposed design is drawn on the rough boulder, using a marker, a scale, right angle and compass wherever required. This is a rough hand drawn sketch in order to get an idea of the proportions and locations. During the process of cutting by stone-cutting machines water is supplied constantly so that the dust settles down.

2. Cutting:

Once the marking and outline is carved, the artisan with the help of hammer, chisel and drills extracts/bring-out the final figure by removing the unwanted material. Initially flat big chisels are used to scrap off the stone and get a rough shape of the desired figure. After that again a second level of sketching is done to mark the detailing. The process of making outline goes on as the craftsman goes along carving. Small fine chisel and drills are used for chiseling and drilling to give fine detailing and final shape to the object. The process of carving starts by giving shape to the body and then other parts like face, fingers and nails. Further minute details are carved out after completing the whole sculpture. If some piece of stone breaks while carving it is stuck with using araldite. While scraping, the stone dust get collected on the object and then it is cleaned either by brush or with the help of a blower. The dust from Makrana marble is less harmful to health as compared to the one from Alwar since it is less fine. A little precaution in eating habits helps in preventing the impurities to harm. Artisans eat jagery with ghee which helps in removing off the dust inhaled.

3. Finishing:

After carving out the whole figure sandpaper of 80, 120, 00 numbers are used to smoothen the rough parts of the statue. A mixture of Geru and water is applied on the marble sculpture, basically to define the regions on which finishing is pending. Finally the finishing is done using buffing machine.

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4. Cladding:

Further, the product if necessary goes through the process of cladding. Artisans use different materials to achieve the desired result depending on the demand. Initially gold and silver cladding was done on the idols but now with the increase in the rates of gold and silver artisans have shifted to low cost options like painting, using a combination of acrylic colors and oil paints. Cladding is done by pasting very fine foils (Varak) of silver and gold on the places to be highlighted like jewelry and borders of the cloth, with the help of chemicals.

5. Inlay:

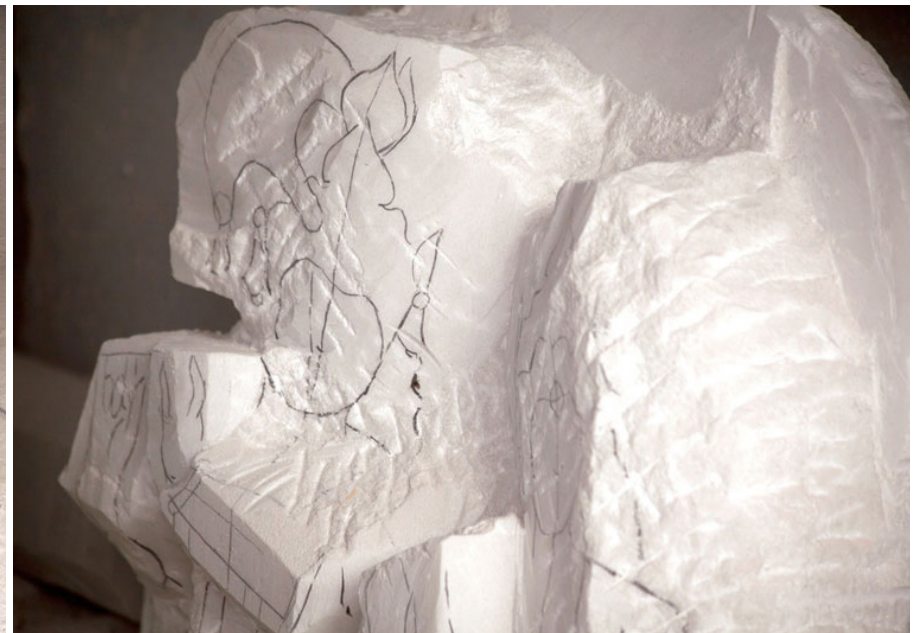
The process of inlay is also carried where ever required. Craftsmen inlay finely cut precious and semi-precious stones in products, with high dexterity. These stones are cut at home by the women in the family and sometimes by the men.

6. Polishing:

In the end, the polishing is done depending on the nature of the product. The whole process of carving is conducted with immense care as a slightest crack can cause the idol useless for worship. An average idol of four feet can take around 20 – 30 days to complete. The processes are mainly conducted by the men, while the women are rarely involved in the finishing part.



Cutting machine is used to cut big stone blocks.



The rough outlines are drawn on the surface of the stone.

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The detail/intricate carving work is being done using sharp edged chisel.



Artisan engaged in carving the stone.



The idol is carved with the help of hathudi (hammer) and chisel.

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The rough surface is smoothed by using the cutting machine.



The outer surface is smoothed by using chheni (chisel).



The craftsman is giving the finishing touch to the product.

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Mixture of geru and water is applied on the product to mark/polish the finishing areas.



Sharp edged chisel is used to give detailing.



The extra stone is removed with the help of small files.



Water is constantly put on the product while scrubbing.

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The final product is polished well after washing.



The rough-cut is given with a heavy pointed tool to knock off the bigger lumps.



Few stone products are also made on lathe machine.

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Products

Stone carving in India was not only confined to architectural building and idols but also went ahead and found place in products for domestic use. All these products speak highly about the imagination and skill of the crafts-person.

Apart from carving beautiful idols of gods and goddesses such as that of Shiva, Radha-Krishna, Hanuman, Ganesha, Ram-Sita etc., artisans make products to be used in office, home and kitchen. They make simple and elegant forms like pen holders, paper weights, bookracks, card holders, ash trays, napkin holder, spoon holders, toothpick holders, storage jars, coaters, dinner sets, chaklas and belans, cups, saucers, serving trays, candle-stands, photo frames, mirror frames, usher bowls, soap dish, soap dispenser, incense stick holders, flower pots, jewelry boxes etc.

Games like chess; which are sold as souvenirs, are also made by these craftsmen. The highly skilled artisans make floating animals like duck, tortoise and frog which can float on water without sinking. They are hollow from inside and made in two parts which is joined later.

The innovation in the products also follows in the decorative architectural products. Artisans make beautiful jaali's, plates, pillars, name plates, partitions, railings, lightings, doorways, gates, tiles etc. They also make garden furniture's like, benches, garden lamps, pedestals, figures of animals and birds. Every product showcases the intricate and proficient carving done by the artisan.



Attractively carved floating ducks.

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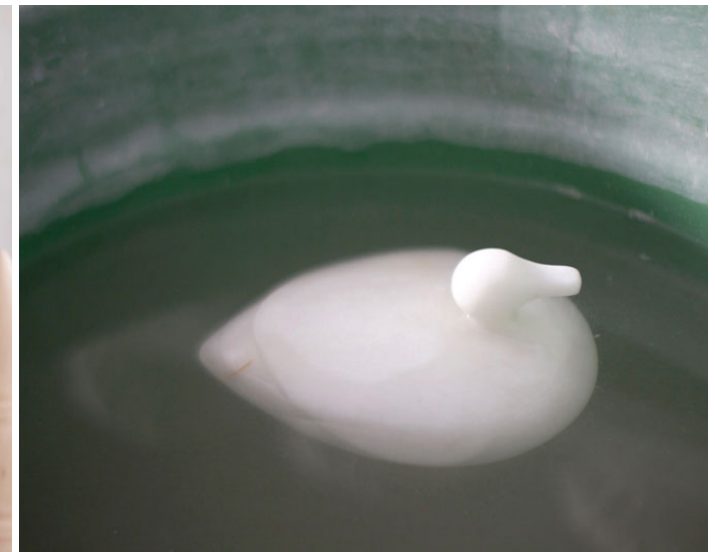
Beautifully carved idol of Lord Radha and Krishna.



The attractive pillar heads.



Kalash used in temple tops.



A stone carved duck floating in water.

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Idols of lord Shiva.



The stone is carved into beautiful idols of gods and goddesses.



Intricate forms of animals carved in stone.

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Artisans got inspiration by the nature around and started sculpting life like images on various kinds of stone, for forts, palaces, temples etc. Religious themes were also carved in stone fitting to the imagination and world-view of people. In Jaipur, pure white marble from Makrana is used for carving out statues of gods and goddesses. The artisans also make animal and human figures. All these products are well ornamented and beautifully designed. A lot of emphasis is given on detailing and elegance. The designs are mainly inspired from the geometrical forms, tessellation, flowers, leaves, animals etc. The jaali's are especially made using geometrical motifs or floral patterns.



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