

Alabaster Sculpture Workshops

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Abstract

Working, carving and polishing alabaster is a highly creative and rewarding activity. Children of all ages delight in being able to take a small rough piece of stone and within one to two hours have shaped and polished a magical shape. Spheres, ovoids, tori, even mobius bands can be easily made with just a hand drill, hand saw, rasps, rifflers and four grades of wet and dry abrasive paper. Alabaster is a soft and easily available material which can be shaped quickly thus keeping the students' attention. Patterns and templates in card can be prepared beforehand for marking out onto the alabaster. This workshop will give teachers and artists alike the opportunity to experience the skills required to work with alabaster and discuss the way the artist creates alabaster sculpture using mathematical forms.

Introduction

As a sculptor in stone I have found alabaster to be a particularly suitable stone for making geometric and mathematical shapes. Its tactile polished and translucent surface lends itself to displaying such forms. Recently I have been running workshops where children and students of all ages can turn rough pieces of alabaster rock into carefully shaped and smoothed abstract shapes. The materials and tools are all easily obtainable and of low cost. The experience of working with alabaster in this way gives the students confidence and pride in their work and achievements. For older students their eyes are opened to the work of sculptors like Brancusi, Moore and Hepworth.

Alabaster



Alabaster is a crystalline form of the mineral gypsum (calcium sulphate) and is slightly water soluble. Geologically it is called an evaporite (like rock salt) which was formed millions of years ago as lakes evaporated leaving soluble materials like gypsum on the lake bed. The stone is dense but relatively soft (Mohs hardness 1.5 – 2) and easily worked. Alabaster takes a fine polish and is translucent. In its pure form it is white but often has veins or clouds of pink, orange, grey and brown. Historically in Britain, alabaster was quarried extensively in Nottinghamshire, Staffordshire and Derbyshire. The stone is no longer quarried commercially for masonry or carving

but limited supplies are still available. Small outcrops occur on the north Somerset and Cardiff area coastal cliffs. Periodic rock falls release small boulders which can be found on the beach. I collect most of my alabaster from North Somerset beaches of Watchet and Blue Anchor Bay.

Tools and Equipment

The following tools and equipment are necessary to make small scale alabaster carvings and sculpture:

- a) 22" medium tooth wood saw, tenon saw, hacksaw blade with handle, tile saw and coping saw
- b) hand drill or small rechargeable drill with a range of metal drill bits 2-12mm diameter
- c) compass for marking circles
- d) range of flat and rounded rasps and rifflers
- e) wet and dry abrasive paper (140, 400, 1000, 2000 & 2500 grade grit)
- f) beeswax polish and polishing cloths

The process of making a sculpture or carving is as follows: Select a suitable piece or boulder of alabaster. Assess the best way to use of the size and shape of the block. Make a saw cut near to the edge of the block to create a flat surface which can act as a stable base. Resting the block on its flat surface now make other saw cuts as necessary to obtain the initial dimensions of your chosen carving. The design can now be drawn onto the stone in pencil (4H – 6H). Holes or openings can be drilled out as required. Large holes can be achieved by drilling a series of closely spaced small holes around the perimeter and connecting the holes using a tile saw or coping saw. Once the piece is roughed out in this way rasps and then rifflers are used to shape and model the surface to the desired form. When the form is correct the surface can be smoothed and polished by working methodically through grades of wet and dry paper and regularly rinsing the surface of the alabaster with water. 2500 grade will give a good polish and an additional shine can be achieved using beeswax .

Workshop and Classroom Activity

Children are naturally creative so there is usually no problem with abundant ideas which can be further stimulated by drawings and photographs of beautiful mathematical shapes and geometric forms in nature. Pierced discs, tori and doughnut shapes are good first exercises as are circles, ovals and ellipses. Templates of suitable shapes in card prepared beforehand can be useful for marking out the stone. Realization of more complex shapes for advanced students like mobius bands, and borromean rings may benefit from clay models being made first to understand the structure of the design. Simple shapes can be completed in one to two hours whereas the more complex forms can take up to 16 hours. The artist will demonstrate templates, carving, shaping and polishing techniques to conference delegates who will have the opportunity during the workshop to try out the tools and techniques on small pieces of alabaster and discuss the artist's approach to sculpture.



Exhibition and Display

There are two main ways of exhibiting and displaying the finished work: If the piece has a hole in it, a cord can be attached so it can be hung on a board or from a small beam. Of course many students take great pride in hanging their finished work around their necks as a pendant. Alternatively the finished works can be displayed on a piece of black velvet cloth, which acts as a perfect contrasting backdrop for highlighting the alabaster creations.