

Saggar

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SAGGAR

I had discovered 'saggar' boxes for the first time during my research on celadon glazes in my years as a student. I had seen that in firings using wood, changes in the kiln's atmosphere and residues of metals in bodies transformed into metal oxides and ash formed during combustion lead to undesired results in firings of specially glazing and decors. I had learnt that firings in wood kilns in Korea, Japan and China, boxes creating enclosures when put on top of each other were used to protect the object from undesired organic residues and ashes formed in the kiln.

These boxes made using a special mix are called "saggar boxes", and these boxes, depending on the sizes of objects have a special atmosphere in their enclosed interior. This allows the capturing of different formations in small units different from the general state of the kiln's atmosphere.

In time, the idea of whether actions, such as reduction processing could be controlled better with the aid of saggar boxes directed me towards new techniques to highlight my designs and expression. I have to use these boxes to create special atmospheres.

When I looked at the ceramic fine artists in different countries. I saw artist employing this technique and producing projects by the same method like PATTY WOUTERS, SEBASTIAN BLACKIE, JANE PERRMAN and JILL SOLOMON. In a symposium in 1998, I met MARO KERASSIOTI with whom I had chats on saggar boxes, who told me that she made saggar tests with single firing she abandoned to dry small shapes in a form with closure capability from which she added pieces of wood, plant leaves, table salt or sugar, with a small pinhole at the end, which led to pleasant tests when fired. During the symposium I also formed small shapes and after drying these forms I created



from different clays. I placed pieces of wood and live branch fragments into a spherical form made of shamoto clay at a size I would pile the objects in sprinkling oxides and adding various plant leaves. I closed them, added a little bit of table salt and left them to dry, with a pinhole. After drying, I fired it at 1000 °C. When I broke the shamoto form and looked at the shapes, they offered special images with forms blackened and oxidized at certain places. This application I carried out without much investigation was, in fact, nothing other than the blackening, reduction blackening process. It was ensuring the blackening of the object by minimizing the process of depletion and burning of oxygen in the enclosure or reducing it by metal pieces, metal oxides, metal carbonates or metal sulphates.

The results I got was what I enjoyed seeing. I could achieve a surface different from glazed surfaces. The probability of achieving desired results was controlled much better than the un-controlled surfaces I derived by the raku or blackening techniques. I used saggar boxes for two purposes, one blackening, and the other, reduction. I pile objects, first firing, or glazing of which is done together with materials I want them to react within boxes with covers made of special clay. I complete the process by firing them in an electric kiln at a temperature I set.

Since the results which I could derive from glazed surfaces do not satisfy me, I want to talk about unglazed surfaces. The layers of silicate we apply to surfaces cover the original taste and texture of the materials, and therefore, they always appear to me to be clothing. The inherent expression in the material itself was covered just like a make-up. To depict this state, the pleasantness in nature, I resorted to unglazed surfaces and saggar boxes. I sought ways of carrying the metals we use as colorants (metal oxide, metal carbonates or metal sulphates) to the body in a controlled manner after the first firing which I carried out at a low temperature (to ensure that the chemical process occurs from



with in the body, utilizing pores, before the molecular structure is fully compressed) Here, I captures flexibility through the continuity of chemical reactions. The diversified body which carrying the reactions starts within it, and towards the surface. The material I used for the main body formed the object, and the first firing temperature constitute the first steps for the saggar firings I will carry out. Tests made using terra sigilata firings or sinter firings have shown that the formation on surfaces is extremely important for saggar firings. The absorption qualities of the surface gain significance in the preliminary work.

The frings I made using saggar boxes in electric kilns vary by the degree of maturity of the metarial I used. Saggar boxes, on the other hand vary by the sizes and piling techniuques of the forms I want to use. The atmosphere I want to create, blackening or reduction, even the visual effect on the form, influence the size of the box. I make the box in clindrical form so that the wall thick-ness is not greater than what I wanted. Tightly sitted covers are very important for the isolation of the interior and the exterior. If a saggar box does not appear to be sound after three or four uses, with residues accumulating on the floor and small cracks, the box should be renewed. A box should be used for the metal it was used for. Copper and iron residues(metal residues) deposited in the saggar boxes and factors not included in the testlike salt crystals, sulphates, ect., change the scheduled composition.

If a reduction environment will be created through metals, metal oxides, metal carbonates, salts (derived through mediators like sulphate) for visual effects and colors to be carried to the body, even values should change and it must be ensured that metal oxides penetrate the body as metals. In certain cases, carrying mixes while firing gives clearer results. These linings must be considered to the solutions enriched by necessary chemicals for reactions or as classical linings. The metals used for colors



lead to copper, red copper oxide, green shades, from iron red to shades of brown, from rutile yellow and cobalt blue to sachs, from chromium green and manganese pink to purplish brown. Each material will ring different results to us. The thickness of the wire, the location of the sheet, coarseness of sawdust, the density of the all important for the material are all important for the effect we want to achieve. The material of the main body, the first firing temperature, the existence of lining and chemical composition and placement in the saggar box, the volumetric proportion of organic substances put in and their identities are all important factors to be considered. If we only want smoking, the material we should use are organic ones. Various wood shavings, live and dry leaves and oily seeds are adequate for blackening. To use both of them together is at the personal option of the artist. The effect of each material is not the same. The type of sawdust, whether it is fine or coarse and whether the leaves are live or dry and method of piling are all points to be taken into account.