

### **KILNS**

A kiln is a fire place or chamber where green Ware and un fired clay is exposed to high temperatures of dry heat to transform it from Green Ware to terracotta and possibly glazing.

Or

A kiln is a spacial oven or furnace used for firing ceramic pottery. There are several types of kilns used for firing dry clay and are only defereciated by the ways in which they function but all these kilns burn brikes, bake and burn sculpture and pottery. However they vary in size, fuel use and temperature change.

These kilns include;

1. Wooden kilns
2. Cock kilns
3. Electric kilns
4. Saw-dust kilns
5. Bon fire kilns
6. Coal kilns
7. Gas kilns
8. Oil kilns.

### **The most used kilns**

1. Bon fire kilns.

It is the most simplest type of kiln with a shallow pit lined straws and twigs into which pots are pots are placed during firing.

The top is covered with wood and grass and then fired.

It is locally used in Africa in almost all parts.

## 2. Gas kilns

They have refractory boxes in which the ceramic pieces are placed. This

Refractory boxes are called muffles or a sagger.

It also has chimneys to allow air and heat to circulate everywhere.

The muffle does not only protect Wares but also helps flames from combustion and removing impurities.

## 3. Electric kiln

These kilns use electricity and inside they are insulated bricks. The temperature of the electric kiln is regulated to the levels you want since it is controlled by a switch.

## MARQUETTE

Marquette is a 3D translation of a sketch.

Or it is a sketch model on which a sculpture art work is built.

It can be produced from material within easy reach of the sculpture surrounding  
e.g

- \* Clay
- \* Sticks
- \* Plant fibres
- \* Soap
- \* Sponge
- \* Stones
- \* Wires

- \* Sawdust or any other inspiration.

The advantage of using a marquette is that it gives a sculpture freedom of expression with various obtained materials using considerable amount of ideas.

### **AN AMARTURE**

This is the inner framework of a sculpture.

Or

This is the inner frame of a sculpture that is well engineered so that there is a core of solidly and support to the whole sculpture.

It's function is to support the working materials e.g

- \* Clay
- \* Wood
- \* Fibre grass
- \* Plastics
- \* Grass
- \* Straws and other available material for making sculpture artwork

The armature opparates as a skeleton. Some sculptures us material like;

- \* Sticks
- \* Brass rods.
- \* A mesh
- \* Strapping wire
- \* Aluminum

\* Steel

And any other material that can be shaped to form a desirable shape

## **CASTING**

Is a process of pressing and squeezing clay into mould to form a desirable shape.

A mould is a reverse form of a cast. It uses a hollow space to reproduce a resembling shape of the original using liquified substance that will later harden to form a required shape.

It is sometimes called molten matter.

## **TYPES OF MOULDS**

### **1. SLIP MOULDS.**

This is the mould where slip casting as a technique is used. It involves pouring slip into a porous mould often made from plaster of Paris. The mould absorbs liquid and deposits a solid material at the mould walls. It should be tied well to avoid falling a part .

### **2. GALATING MOULD (GLUE MOULD).**

This type of mould is not very strong but is good for reproducing small and highly detailed sculptures art works .Creative sculptures who make sculptures / art work with Gallatin mould use glue, water and glycerine.

### **3. PIECE MOULD.**

This a negative mould made with several pieces / sections. It is constructed separate halves and where necessary a mould created can again be re assembled for another cast reproduction.

### **4. PRESS MOULD.**

On press mould , the action and the process is done by pressing ty proto type of the exact sculpture artwork into a wet lamp of clay or a similar materials by applying pressure on it . Such casts are normally flat and lying on a slab .

## 5.WASTE MOULD .

It is a negative mould this has to be broken up at destroyed or wasted in order to remove or release the positive cast contained within the interior.

The advantage of using the waste mould is that it elliminates fine lines that results when apiece mould is used.It can be used in very many other art fields like pottery , jewellery and other multimedia crafts.

## **SCULPTURE FROM WOOD .**

two types of wood available for sculpture i.e

There are

**HARDWOOD**

It is a type y wood which is considered to come from decideou trees like muvule ,musizi, mahogany e.t.c.

They are known to produce dark coloured high quality crafts with good polishes that have good resistance against wood barowing insects and weather. they are heavy and abit harder to work and curve.

## **\*SOFTWOOD.**

This is a type of wood which is considered to be soft and is dried from caniferous trees like musymbya, eucalyptus, pine etc.

It is easier to curve into a sculpture artwork. It is lighi in weight and produces naturaly light colored sculptures.

Wood is among the frequently used materials to make sculpture by majority African sculptures. However a sculpture needs to site a best wood to produce the best sculpture.

The process of producing a sculpture from wood is called seasoning ( preparing wood for sculpture,).

Note.

Dried and seasoned wood has less potential of cracking thus recommended for making a sculpture.

The tools used in producing wooden sculptures include;

- \* Hand saw
- \* Hack saw
- \* Mallet
- \* U-gauge
- \* V-gauge
- \* S-gauge
- \* Rasp file
- \* Sand paper
- \* Panga
- \* Axe
- \* Chizzel

Etc

The finished sculpture can be preserved by polishing their sculpture with hot wax, oil, kiwi, shoe polish, paste etc.

#### THE PROCESS OF PREPARING WOOD FOR SCULPTURE (SEASONING)

- \* Site the type of wood ( hard wood/soft wood)
- \* Cut down the sited wood/ trees
- \* Split the trees into desirable logs.

- \* Leave the logs to dry for 2-3 days by a process called seasoning
- \* Remove the tree bark from the logs
- \* Start the process of carving using tools like chizzel, gauge etc.
- \* Once the curving is done, when the sculpture is finished by sand papering/ vanishing to beautiful it.
- \* The sculpture I'd ready for exhibition.

### **STONE SCULPTURE**

Stone is an abundant material just like wood. It can be obtained easily from the environment around us and it exists in very many types and size with the most precious stone known as marble.

Stone is used at the time of construction especially sculpture artwork. It can be used to make sculpture artwork by carving e.g marble, soap stone and other local types. It is commonly used by kiss tribe found on the highlands of Nyanza in Western kenya, soap stone is also sometimes called steafite. It is easily cut/ carved by a knife and it is fairly permanent for indoors to prevent exposure to wear and tear.

The available tools used for carving stone include;

- \* Rubber mallet
- \* A riffler
- \* Hammer
- \* Chizel
- \* Dust masks
- " Having protectors
- \* Gloves etc.

- \* Pic axe

## **WELDING SCULPTURE**

Welding is the method of joining metal pieces or parts together to produce a sculpture. This process is done by using electricity or bottled portable oxyacetylene welding gases.

During welding you should wear dark eyed glasses to protect eyes from extreme bright light caused by welding fires.

Welding and soldering can be learnt by self observation but safety should be taken.

The materials mostly used in welding are;

- \* Metal ( steel)
- \* Hammer
- \* Cutter etc

## **FINISHING A SCULPTURE**

Without doubt, sculpture artwork can be created from found object, natural artificial. These are basically materials picked from the surrounding environment.

The sculpture therefore can be finished in the FF ways.

- \* Some sculptures can be finished by polishing
- \* Painting
- \* Chazeling
- \* Sanding ( sand papering)
- \* Burning



Some sculptures can be finished by displaying them on a protruding pedestal to give them a bright look or a view.

This normally provides a bottom support support to the finished artwork.

### ***Revision questions***

1. Explain in order the process of preparing clay for sculpture. from excavation to exhibition.
- 2.a. Define the term casting
  - b. Explain five types of moulds
3. Explain for major classifications of sculpture.
- 4.a. Give five elements and two principles of art as used in sculpture.
  - b. How can the above elements be employed ;
    - i. In a 3D sculpture design
    - ii. In a decorative sculpture piece.

## **POTTERY.**

Pottery is the art of making domestic earthenware from clay.  
Pottery is an acquired skill of making earthenware like;

- \* Jugs
- \* Dishes
- \* Plates
- \* Cups
- \* Pots
- \* Vases
- \* Bowels