CHAPTER 12 - Choice of paint brush

In the growing era of modern society in Saurashtra region the choice of paintbrush has become much tougher because of variety of brands and products in that different mixing of elements of various sizes and quality which only an expert can identify. So while shopping for the paintbrush there are 4 things that the customer should keep in mind for getting a better quality of product.

The average retail outlets and Hardware stores keep of paint brush with variety of sizes, shapes, type of bristles and prices according to the budget of the customers for picking the right quantity of paint in them.

12.1 - Type of bristles

There are basically two types of bristles also known as elements that is natural bristles and the synthetic once known as filaments. Natural bristles are the type of bristles which are made from the hair of animals such as pig or Hog particularly for the Saurashtra paint market. The synthetic hairs known as filaments are made from the polyester searches pet or PBT or the mixture of both by extrusion process. The oil based acrylic paints that are observed to be long lasting effect on the surface is off the walls uses the natural bristles to apply them while the water based Paints and emulsions prefers filaments for the application. The reason for this difference is that when the latex paint generally known as the water based Paints applied using natural bristles will absorb the water quickly and thus it will lose its stiffness which will make difficult for the painter to spread the paint on the walls.

There are also some types of synthetic brushes which are used to apply for both Paints including latex and alkyd but are made from different combinations of filaments of high quality.

12.2 - Size of brush

Ranging from 1 inch to 5 inches brush comes in various widths as comfortable to the painters in the Saurashtra market. The painter always matches the weight of the
brush as per the surface to be painted. For obvious reasons the wider brushes are used at lengthy applications but it is recommended by the painters to choose narrow size of brush then the surface so that the case of overlap can be avoided. Say for example if we want to paint 4 inch wide corners off the walls then 2.5 to 3 inches are advisable so that it can easily cover the surface as well as a case of drip paint can generally be avoided.

12.3 - Shape of brush
Most of the paint brushes available in the Saurashtra market are considered to be square cut brushes generally available in various sizes which are convenient to the painters of Saurashtra so that easy control for holding and laying the brush on to any surface vertically and horizontally can be performed. For many reasons square cut brushes are not recommended in the corners and on narrow surfaces because they do not provide much control while painting the smaller areas. It would be advisable to use sash brush which has angle cut on the edges and can be turned easily according to the parameter of the surface.

12.4 - Brush tips
The filaments with proper flagging or split ends are preferred by the Saurashtra paint market with the reason followed at the original hair of the animals such as pig head naturally flag hairs and have split ends by which the Painters are comfortable and where using for years. The advantages of this type of hair is that it can run smoothly on the surfaces and can spread evenly for various applications. The professional Painters like The tipped Brush which provide better control and are affordable do the owners which can be easily available from the market of wholesalers and through which the paint can be applied precisely on the surfaces.

12.5 - Physical examination
The brush can be judged visually by the experts of the market which can judge the performance of any paint brush by filling the bristles inserted in it and the shape of the brush in which it is designed depending on the purpose of it.

12.6 - Styles offered
Different brush companies provide different names to their quality of brushes according to the applications for which they feel it will be best suited. For example in
order to paint the trim of the windows sash brush are used for most of the applications. It is designed at the extreme level of being narrow from one side and trim cuts made for the accurate painting with thin handles and precise use of filaments for rubbing against door or Windows.

The angular brushes of same quality are trimmed at different angles which usually wide and thick shape are containing longer filaments and sizeable handles which offers greater accuracy and line control to apply quickly on large surfaces.

The performance of the brush is also affected by the shape of the tips of the filaments in which different ways are followed by different manufacturers. For example brush can be flat or dome shaped or chiseled shape across the top and are also tipped and flagged to give finishing effect on the surfaces.

**Dimensions**

The measurements on which the quality of the brush is dependent are

- Width of the brush
- Thickness of the brush
- The length to which it is trimmed

Width of the brush is considered to be the measuring scale of the brush maker and it is measured precisely at the ferrule. The second criteria which is the thickness of the brush is considered to be most important factor to be kept in mind for the brush maker while preparing the brush because it determines the pickup of the paints in the brush and how smooth it will work on the surface. The trim length is also major dimension of the paint brush it is measured from the top of the ferrule to the tip of the brush. This also depends from market to market of Saurashtra region because some customers main demand the length of the trim brush to be same as the width. It is according to the convenience of the Painters of different regions and applications that which brush they will choose depending on the criteria they have decided.

**12.7 - Mixture of filaments**

The quality of the brush for the actual work depends on the mixture of the filaments, their type, length and packed on the label.

According to the brush maker the highest quality of Brush can be attained by two methods only, the first is either feeling it with 100% of tapered synthetic filaments and the second is 100% of natural bristles of hog. Many different qualities can be
achieved by mixing different filaments of low quality such as leveled filaments, hollow filaments, and lower quality of animal bristles such as cows, ox or horses hairs. It is difficult for many brush makers to differentiate between original bristles and duplicity in the market of Saurashtra region but the general criteria for recognizing the hog bristles is that they are usually black or white and are differentiated in terms of not much of glossy look, tips are always flag, and the surface containing the length of the bristle are irregular. Whereas the synthetic filaments on the other hand appear to be more glossier and can be of any shapes, colours and treatment in the tips can be provided.

12.8 - Brush head
If looking carefully on the brush head the finishing quality is determined by having uniform Lee straight edge of the brush used for accurate painting in the corners and can evenly spread the paint on the surfaces in a straight line.
If the filaments fixed on the outer surfaces are likely to create an opening at the tip in the brush head leans towards outside then it can be understood that the position of the plug or ferrule is inappropriate.

12.9 - Styles of the handles
In the Saurashtra market house paint brush the availability of handles in wide variety of sizes, quality and shapes. According to the application to be performed by the brush the style of the handle is chosen for the correct technique by the brush maker. For the corner painting works the accuracy and position of the handles becomes very essential because it is the only substance to control the brush and over spreading can be avoided. For the large surfaces of painting heavy brush handles are used for easy comfort and minimizing the efforts to rub again and again on the surface.
For the Saurashtra market of brush most of the brush makers prefers wooden handles with appropriate quality which are sold with or without lacquer painting on them for better grip. Low quality of Brush handles also have its own market in the small cities and rural areas where brush adjust considered as a tool to spread the paint.

12.10 - Filament test
The filament pullout strength test is done in order to avoid the shedding of filaments
from the ferrule due to poor retention of filaments. If the filaments loses out during painting the surfaces it gets stick on the walls or is left on the paint can which can disturb the quality of work of the painters in Saurashtra region. The examine can also be done manually by pulling out the bundle of filaments from the brush gently and see that if any of this filament gets detached from the ferrule.

The type of the epoxy in the ferrule, shape of the filaments, the ratio of filling filaments in the brush, also provides a criteria for securing the filaments inside the brush. It is also important to buy appropriate quality of adhesives during the making of brush so that it can support the materials that are being attached with the filaments.

The base of the filaments is kept securely by inserting a metal ferrule in the base of the brush head.

12.10.1 - Stiffness of the brush

Stiffness which is related to the hardness directly affects to the work of the Painters on which they are reliable. Due to the stiffness of the brush they will attend to lay more paint on the surfaces and smooth strokes can be applied which can help the Painters to work easily. The expert brush makers can be tested every time when the design the brush the stiffness should remain same for every single brush.

12.11 - Shape of ferrules

According to the market of Saurashtra region and convenient of the Painters relating to the application of the brush different shapes of the ferrules are designed according to the style of the brush which can be rectangular, square or which rounded ends but generally high quality of Brush makers uses ferrules made up of copper or stainless steel which can work on Harsh conditions and environment for longer period. Due to the water soluble Paints or cleaning of the brush when comes in contact with the ferrules they should be motor resistance and protective from being rust. This is done because if the ferrule when comes in contact with water leaves it colour then it can get mixed with the paint and can interfere the job of the Painters.

12.12 - Importance of plug

The positioning of the filaments in the brush and to hold them tightly in the ferrule after creating a reserved for the Paints to enter from the middle of the brush a plug plays important role for all these functions. It also helps the Paints to replenish the
brush tips during painting the surfaces. This helps the brush filaments to accommodate open space in order to hold extra paint. The blocks can be made of cardboard, plastic or wood, but generally in Saurashtra market the brush makers cannot afford plastic plugs so that either cardboard or wooden plugs are used for most of the areas. Generally wooden plugs are more durable and most of the professional brush makers use them commonly in order to reduce the quantity of the filaments to be filled in the brush and so the overall cost of the breast can be reduced.