

Art of Painting to Decorate the Surface of Metal Crafts in the “Wastraloka” Creative Industry

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Abstract—The Indonesian creative industry has compete in global competition. Unique and quality are the basic keys of many people's favorite. One of the creative industries that have its uniqueness and quality is "Wastraloka" Klaten. The uniqueness of its products is wood and can painted with ancient batik motifs and typical Indonesian landmarks. painting on canvas is common, but when painting on wood and can media needs special treatment. Treatment is needed so that the painting is corrosion resistant. Needed base paint as a corrosion prevention material, namely Plincoat. The stages of painting on metal are as follows: 1) metal cleaning; 2) basic painting with plincoat; 3) sketching; 4) coloring sketch with thin strokes on the main object (positive) and its background (negative); 5) refinement of paintings by making main lines / contours and making detailed entries or forms; 6) making irradiation (spot light), affirmation, and determination of dark light; and 7) applying a protective coating with transparent / varnish paint.

Keywords: *unique, Wastraloka, batik motifs, metal painting*

I. INTRODUCTION

The development of creative industry in Indonesia is very rapid and has become one of the business breakthroughs that can compete in global competition. The uniqueness of the product design and the quality assurance of the materials prompt the creative industry products much-preferred by many people both domestically and abroad.

One of the creative industries that have its uniqueness is "Wastraloka" which is located at Jl. Ki Ageng Gribig Km 2.5, Klaten, Central Java. The business field of UKM Wastraloka produces various woods and cans painted with ancient batik motifs and typical Indonesian landmarks. The main materials of wood and cans come from the waste of furniture industry, used cans, and new cans designed by themselves with various shapes and functions. The products offered by UKM Wastraloka are traditional and classic batik motifs made on wood and cans in various forms such as tissue boxes, cutting boards,

teapot sets, cracker cans, trays, post boxes, ashtrays, and others.

Wastraloka has participated in creative industry exhibitions both at national and international levels several times.

II. LITERATURE REVIEW

A. Painting

Painting is indeed a familiar term defined as the process of expressing heart and feelings in this case, the artists [1]. In painting, an artist intentionally creates a painting as a symbolic expression that is a message to have psychological effects on the audience or those who have seen it [2]. These psychological effects are more on communicating inner experiences presented beautifully or interestingly so that they are pleasant to the audience [2]. Therefore, the product of this painting certainly gives a beautiful impression to the audience and the forms that are presented give the impression of pleasure in the sense of a form that can frame the feeling of beauty and satisfied [3]. Painting, when viewed from the aspect of function, will give the impression of beauty on the wall/room, besides being a personal expression of the artist and give the benefit to outsiders as well as a means of communication.

The paintings are certainly very popular when the media used are two-dimensional and made of canvas, linen, or paper. Even paintings can also use other media, such as glass, silk, walls (murals), fiberboards, wooden boards, textile fabrics, cardboards, and even metal. Each painting medium has different properties. For example, canvas, the canvas is the most widely used painting medium. There are various characters on the canvas surface, smooth to very rough surfaces. These surfaces provide a variety of diverse brush technique capabilities. On the rough surface canvas, the scumbling technique is used, which is to brush on the part of the rough surface that sticks out. Then, what if the painting is used to decorate an object of art/craft (lampshade, tray, jar) with various types of metal?

Each painting material/media has different characters, so different treatments are required, especially metals that have corrosion properties (metal destruction due to chemical reactions between metals and substances in their environment to form unwanted compounds). Metal corrosion includes rust on iron, fading color in silver, and the appearance of a greenish color in copper. Several treatments are required to prevent and maintain the durability and to prepare for painting on metal media to achieve optimal (visually) decking quality. This paper aims to describe the technique of decorating the surface (painting) on metal arts/crafts materials that are carried out in a Wastraloka creative industry.

B. Techniques, Tools, Materials, and Stages of Painting on Metal Media with Acrylic Paint

As explained earlier that painting on metal media is certainly different and it requires special tools, materials, and procedures. Before discussing painting techniques on metal media, it is necessary to know the types/techniques in painting. There are several techniques in painting, namely: aquarel technique, plaque technique, spray technique, pointillist technique, tempera technique, wet technique, dry technique. Some of these techniques can be explained simply as follows: the aquarel technique is a technique of painting using watercolors or called aquarels which uses a thin wash of color that makes the results of the painting transparent; plaque technique, namely the technique of painting using watercolors, oil paints or acrylic paints, using thick strokes and thick compositions that give a more colorful impression to the work it produces; spray technique is a technique of painting using a way to spray paint on the media, resulting on smoother and strong visual painting, such as graffiti; Pointilis technique is a technique of painting using dots; the tempera technique, which is a painting technique that uses egg yolk on paint for its adhesive, usually used in wood, canvas and wall media; Wet technique is a technique of painting using a way of diluting an oil painting tool using oil paint or linseed oil, after being diluted it will only be applied to canvas or the like; dry technique, namely the technique of painting using oil paint without using the painting oil; and mixed painting techniques are painting techniques from a combination of wet and dry techniques [4].

By understanding some of the techniques in painting briefly, as well as restrictions on acrylic paint materials and metal media, this paper is more focused on painting with plaque techniques. The plaque technique is continued in three-dimensional media because it has angles and space that can only be reached with a brush. Spray technique is certainly not recommended because the technique is only suitable for flat and broad media, and difficult to reach hidden spaces and fields (on three-dimensional objects). Next, the following is an explanation of techniques,

tools, materials, and stages of plaque painting on metal craft media with acrylic paint.

1) Painting tools on metal media

As with painting in other media, tools are needed when drawing a sketch and detailed drawings (work). So in this case, it is required a pencil or the like as a tool in these stages. As for the pencils that can be used are 0.5 mechanical pencils or ordinary pencils with type H thickness / black carbon type and type B.

The next tool is a brush. The brush is the main tool in creating paintings. The brushes have various sizes according to the desired. There are several types of brushes, namely: round brush, flat brush, bright brush, angle brush, fan brush, mop brush, and rigger brush.

- a. This round brush is generally used by watercolorists. This is due to its flexibility and agrodynamics. One of the favorite watercolor painting tools has a round shape. This shape makes it easy to draw thick and thin lines. This round brush is also suitable for use when painting on large canvas media.
- b. Flat brushes have a ferrule that is flat, straight, and generally slightly flat and square. However, sometimes there is also a rectangular shape. The line produced by the flat brush is very good when used to make straight contours. This type of painting tool is generally used to paint edge areas, especially small ones. That way, the results will not widen like the results of the round brush. The results of the line from the flat brush are very good when it will make a straight contour. This type of flat paint brush is generally used to paint edge areas, especially small ones.
- c. Bright brushes are almost the same as flat brushes, except for shorter bristles (which means that this brush is only capable of loading less paint than flat brushes), also adding springs as well as more control and pressure for scratches than flat brushes.
- d. Angel brushes are diagonal-shaped brushes and are more similar to round brushes. Because it is quite flexible, the shape of this brush has become one of the most commonly used watercolor painting tools. This one type of brush is widely used for sharper results.
- e. A fan brush is a type of brush that has a broad shape resembling a fan. Fan brushes are used to make leaf effects. The use of this type of brush will more easily form leaves with a more pronounced effect.
- f. Mop brush is a painting brush made from sheep's hair or squirrel's hair. This type of brush has soft bristles. Usually used to paint in a large area, can also be used to color the basis of a painting.
- g. A rigger brush is a brush that has a pointed tip. It can be used to draw something that requires high

detail. The rigger brush can be used to make thin lines.

The next piece of equipment is a pallet. Palette is a tool to mix the desired paints. There are two types of pallets namely oil paint palette and water paint palette. The use of tools at this stage is a watercolor palette made of plastic which has a concave-shaped shape that serves to collect the results of a mixture of water and paint.

2) *Material in Painting on Metal Media*

In painting, of course, materials are as the main capital. The main material in this painting is acrylic paint. Acrylic media are media or painting materials that contain polymers of ester polymers, so they have very strong adhesion to other media, and the diluent standard used is water. Acrylic paint used in the making of this work is acrylic paint brands "Talens" and "Maries" because it has good quality and bright colors [2].

In painting acrylic media, other supporting media are needed, namely water. Water is used as a water-based acrylic paint thinner. To maintain the color quality the writer uses clean water as a thinner. Aside from being a water thinner, it is also used to wash brushes [5].

As explained, the nature of metal media that is easily corroded, especially if exposed directly to water-based materials, it will reduce the quality. As a basic material whose function is to limit the reaction of water with metals, a basic coating material in the form of plincoate is needed. The plincoat functions as a basis to prevent rust on the underside of metal surfaces and metal structures.

Also a very important tool is metal sandpaper. This tool serves to smooth the metal surface. Usually, the sandpaper on the back has the number listed, the number ranges from number 1 to 3000, to indicate the level of smoothness of the sandpaper, number 1 is rough sandpaper, and sandpaper 3000 is super sandpaper must. the smaller the number the more coarse so is the reverse.

As a cover that protects the paint layer is needed a protective material in the form of varnish. Varnishes are clear unpigmented coatings. The term varnish is used for clear liquid groups having a viscosity of 2-3 poise, which when applied will form a thin film layer that is dry and glossy (glossy film). The drying process of varnishes can be through evaporation from solvents, oxidation with air, and polymerization of several elements contained in the varnish. The final result of varnish is a transparent film layer that shows the texture of the coated material. The varnish is used to coat the surface of the finished painting so that the color of the painting is not easily dull and not easily damaged if scratched. The varnish used is the varnish brand of "Mowilex" water-based wood stain [5].

3) *Process / Stages in Painting on Metal Media*

Indeed the stages in painting with metal media are not much different from canvas, or other solid media. However, there are slightly different points like the material. As previously explained that metals have corrosion properties.

First, the most important thing in initiating painting on metal media is making initial preparations. The initial preparation is to clean the metal. This cleaning is intended to remove residual particles that can cause undesired effects. At this stage, a solvent such as acetone can be used. It will dry quickly and leave a clean surface. If necessary, use a rust cleaner beforehand to clean the surface rust. The next preparation is to prevent the reaction of the metal with water, by doing a basic painting with a basic coating paint called Plincoat. This coating serves as a basis for preventing rust on the underside of metal surfaces and metal structures [6].

Second, after the media has been coated, it is time to start painting. The initial stage in painting is sketching a picture. The sketch is an initial drawing/draft painting that was created using a pencil. The sketch consists of basic lines which will later be completed into a perfect painting. After completing the sketch, the next step is to prepare the acrylic paint mixture. But there are things that need to be considered with regard to acrylic paint, namely: acrylic paint has a very fast drying nature, so it needs to be considered in making dough; the state of the pallet should always be wet, so it can be done by occasionally spraying water on the palette during painting; always maintain the density of water. It should be noted in making the acrylic dough, one of which is to mix acrylic that has come out of the tube with no more than 20% by volume of water (compared to the volume of paint). A mixture of water or other minerals with an amount of more than 20% can damage the binding material in the paint which allows the paint to stick to the surface and cause the paint to peel later on.

As an initial step in painting, it can be started by coloring sketches with thin strokes on the main object (positive) and background (negative). This stage of background painting starts with painting from medium colors, followed by the darkest colors, then the brightest colors. Next, the background color needs to be added. for solid colors, just add shadows and points of light. But if the background is patterned and detailed, it can be done by adding texture.

The next is perfecting the painting by making the main lines/contours on the main object with the next large medium brush, then proceed with making a filling or detailed shapes using a smaller brush as desired. In making the contour it will be helped to use a solid color, and use a thinner color for details. The

next stage is to make spotlight, affirmation, and determination of dark light.

There are things to consider in making colors brighter or darker, for example, the basic color of green, but want to make it brighter; or have a thin fuchsia/magenta color, but want to make it darker. The use of acrylic paint can make the paint color brighter by adding white and becoming darker by adding black (<https://id.wikihow.com/Painting-with-Cat-Acrylic>).

The end of this painting activity is to give a final solution by providing a protective layer of the painting with transparent paint in the form of varnish. The final result of varnish is a transparent film layer that shows the texture of the coated material. This varnish coating aims to coat the surface of the finished painting so that the color of the painting is not easily dull and not easily damaged if scratched.



Fig. 1. Painting on metal crafts

III. CONCLUSIONS

One of the methods used in the Wastraloka creative industry is to give a touch of painting to metal media using plaque techniques with acrylic paint. In the aspect of tools and materials used, it is almost the same as painting on canvas or other media. The difference is the need for initial preparation by extra cleaning on metal surfaces and coating the metal surface with a base paint (plain coat). It is intended to prevent the acrylic paint to not directly adhere to the metal which results in accelerating the corrosion of the metal. The stages of the painting are generally preceded by sketching, giving a background color, and continuing to give color to the main object, object details, giving light, affirmation, and dark light. The final finishing as a protective paint can be done by applying a layer of varnish with the same base. High-quality products will be produced if the stages from preparation to finishing are carried out correctly, diligently, and thoroughly.

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