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THE ART OF MODEL CRAFTING: UTILIZING A SPECTRUM OF PAINT MEDIUMS

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ABSTRACT

This article provides a comprehensive exploration of the utilization of various paint types in the creation and enhancement of models. It meticulously examines the diverse range of painting mediums, from acrylics to watercolors, and their application in the craft of model making. Through a blend of practical experimentation and theoretical insights, the article delves into the unique characteristics, advantages, and techniques associated with each paint type. Furthermore, it offers a detailed analysis of how different paints interact with various model materials, elucidating the nuances and effects on texture, durability, and overall aesthetic appeal. By emphasizing the artistic and technical aspects, this article serves as a valuable resource for hobbyists, artists, and enthusiasts seeking to broaden their understanding of painting mediums in the context of model construction. Overall, it presents an in-depth exploration of the creative possibilities and practical considerations inherent in utilizing diverse paint types to elevate and innovate in the realm of model making.

KEYWORDS

Model Making, painting mediums, acrylic paint, watercolor techniques, model construction, artistic innovation, texture and appearance, material interactions, craftsmanship, aesthetic enhancement, diverse paint types, creative techniques, hobbyist insights, model design, painting applications.

Introduction

Model making stands at the intersection of artistic expression and technical precision, requiring a meticulous approach that incorporates a range of creative techniques and materials. Among the myriad elements influencing a model's visual appeal and craftsmanship, the choice of paint type plays a pivotal role. This article embarks on a journey through the diverse world of painting mediums in the context of model construction, exploring how various paints contribute to the aesthetic and structural qualities of the final creation.

In the realm of model making, the selection of paint extends beyond mere color choice; it encompasses the texture, durability, and overall presentation of the model. Each paint type, whether acrylics, watercolors, or others, brings distinct characteristics that interact uniquely with different model materials. Understanding and harnessing these properties unleash a realm of creative possibilities, influencing not only the visual aspects but also the tactile and structural integrity of the models.

This exploration aims to delve into the nuanced intricacies of each painting medium, offering insights into their application techniques, advantages, and potential limitations within the realm of model making. By unraveling the interplay between paints and various model materials, this article seeks to provide a comprehensive guide for enthusiasts and artisans alike, offering a deeper understanding of how different paint types can elevate the artistry and craftsmanship of model construction.
Throughout this article, we'll navigate the diverse array of painting mediums, dissect their unique attributes, and illustrate their transformative effects on models. From the vibrant hues of acrylics to the ethereal translucence of watercolors, each paint type opens avenues for innovation, enabling artisans to infuse their creations with distinct visual and textural nuances.

Materials and Methods

Models can be created using pencil types, watercolor paints, gouache when creating new types. Any paint consists of at least the main paint, color and color components. When creating models using watercolor paints, we will focus on information about paints.

Watercolor- color is one of the most subtle means of image representation. Since ancient times, watercolor has attracted many artists with its elegance and brightness of colors. Watercolor is a Latin word meaning "paints diluted with water". Watercolor mainly consists of gum arabic (gummiarabic), glycerin and colored watercolors, giving a dreamy soft color gamut. Watercolor paints are drawn on paper using water and oil pencils of different thicknesses. When creating tonal colors, watercolor paints are created as a result of repeated use. When using watercolor paints, the colors are light. The color of the resulting paint is reminiscent of silk fabric.

Figure 1. Watercolor paints

Watercolor contains coloring matter (finely ground powder of plants or minerals) and cherry glue, glycerin and a little honey as a binding agent. All these are easily soluble in water, so they are diluted by adding water to the paint.
White color is not used in watercolor. It will be replaced by the white paper itself. The paper should be white, sufficiently thick and have a rough surface.
If it is too smooth, the colors will not lie sufficiently on the surface.

In the process of painting the images of things and objects, one goes from the general to the specific or vice versa from the specific to the general, and finally the work ends with rounding. In modeling, oil paints are used only in supporting roles. The solvent for oil paints is white spirit or turpentine. However, there are subtleties unknown to many models, but well known to artists.

The colorful base of oil paints is oil. When working with very diluted paint, the oil is washed away by the solvent much faster than the pigment. Therefore, when working with an oil cleaner, it spreads very well, absorbs well into small cracks, fills the lines of the panels. After the oil is washed away, after 15-20 minutes or after 20-30 dips of the brush in the mixture, only the solvent and color composition remain on the palette. Such a suspension has poor dispersibility, it breaks into pieces, and it must be constantly stirred. Oil-free washing surface is collected in such local pieces, it is not uniform. Therefore, when working with oil, you should always have a drop or two of linseed oil in the mixture. Linseed oil is also useful for improving flow when working with enamel, so it's worth buying sometime. A small bottle of 75 ml is enough for many years.

When working with a dry brush, the addition of linseed oil to the paint increases the gloss, but also significantly increases the drying time. Enamel paints (the word "enamel" cannot be used, strictly speaking, this is another type of coating), acrylic varnish is used as a base, not oil. Enamel paints provide a durable coating with excellent hiding power, but are resistant to various oils and various non-polar hydrocarbons. Therefore, the enamel coating should be covered with the final varnish. It takes a long time to dry the enamels - 4-6 hours, but the fully dried coating is resistant to water and alcohols of usual concentration, including acrylic solvents. Absolutized alcohols and dehydrating agents dissolve the enamel coating, so care must be taken. Acetone in normal concentrations has almost no effect on the dried coating, but with pressure it can remove the surface layer.

Gouache- is a water-based, opaque liquid used for flat color application. Although the composition is different, gouache and acrylic paints have similar characteristics.

Figure 2. Gouache paints

Gouache paint is the exact opposite of watercolor paint, it does not give a clear, resonant color. As the colors absorb the light, the paper underneath is not visible or noticeable. Its composition is the same as that of watercolor - it consists of paint powder and its binders. But they are mixed with special wood glue in moderate proportions [4].

Another important aspect of gouache paint is its use mixed with white paint. Therefore, its colors are not very loud. Brushes are also specially selected for applying paint, and it is desirable that they are not too soft, but a little rougher. It is good that the surface on which the image is processed, that is, paper or cardboard, is also not smooth. Its surface should be treated with an adhesive coating (primer) as much as possible. Then it will be possible to apply gouache paint on its surface.

Figure 3. Pictures made using paints.

Gouache is a water-based, quick-drying paint that is often used in graphic work, decorations, posters, and partial paintings. The difficulty in creating images with it is that the paint is dark when applied, and lightens after drying. If this aspect is not taken into account, it will be more difficult to maintain harmony between colors. For this purpose, each applied main color is prepared separately in special containers, and then the image is processed by mixing some other additives [3].

Figure 4. A mixture of colors

When using colors, it is advisable to smear the prepared mixture on a piece of paper, and then apply it, in order to always check and know how the colors are found [1].
When we use gouache, we must also use the brushes correctly [5]. Mix well the rags on the polytras, take the main colors and apply the secondary colors to soften the color and create the second soft color.

Figure 5. Creating images using paints

When we use gouache, it is fine to create paints without mixing water, for example: we take a piece of paper and apply a certain amount of paint to it with a brush, it is fine to apply paint to the paper, we can also apply it to the polisher. when working with it, a dark and beautiful color comes out. When we put water on the paper and paint it with gouache, the color gets a little darker with water, but it keeps its condition.

Figure 5. Models made using paints

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