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METAL FINISHING

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Painting with Dyes on Anodized Aluminum

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Experimentation with dye colors on anodized aluminum leads to unusual effects by exploring the potentials of the medium and expanding the limits of traditional activity. Wet on wet, dry on wet and wet on dry techniques have been utilized with the multi-colored screening techniques of color anodizing to realize many surprising effects.

Multicolored screening techniques can be extremely difficult, especially when used in conjunction with an over-dye. These same techniques can be used with limited edition graphics. Getting into the area of painting opened up a smorgasbord of possibilities.

Aluminum is becoming more and more popular in creative art circles. It is being used in sculpture where artists cast, cut, weld and manipulate the parts. Many painters use it as a base for oil painting, acrylic painting and alkyd painting. Very rarely has aluminum been used as a medium to create a painting. Possibly this is due to the fact that anodizing is normally used for decorative and protective coatings, and most artists don't have an anodizing facility to make such paintings.

A COLLABORATION

A little over three years ago, the opportunity to collaborate with a superior artistic talent was presented. Using many techniques the artist has catapulted anodized painting to a level of art comparable with oil painting and watercolor. A multimedia approach uses oil dye techniques and water color dye techniques combined with mixed media to create distinctive works of art. Using dyes wet on wet, wet on dry, and dry on wet as well as solid color plates on the background has allowed for many effects that serve the expressive desires of this creative art form.

The special effects of color and surface treatment from the experimentation and exploring of this new medium in the hands of a master have produced qualities that have extended his vision. The collaboration began there and the artist was his own man but the anodiz-

ing and dyeing procedures were under the author's guidance. There was no desire to effect or change the drawing, designing, painting and space organization by the artist. This freed the artist to be himself and to help get the effects that he was trying to achieve.

Some of the work was pure experimentation while others offered an imaginative and sensitive draftsmanship using permanent felt ink pens. The drawings would amplify and speak of the magic of an idea born in the imagination of the artist. Some drawings would play counter melodies visually

and amplify the dynamic color and form visuals that were so natural to the technique.

Still lifes would suggest wet watercolor techniques or the human figure might grow out of background and overpaint dyes would suggest special moods.

One of the limitations of anodizing and dyeing is the natural inability to come up with white, but the artist, who was long a disciple of mixed media, was willing to let the dictates of the media work for him. He was able to use oil paints, acrylic or alkyd pigments



The Rabbi

Produced with wet on wet and wet on dry techniques with approximately 75% oil paint on a polished aluminum panel.



Jewelry Boxes and Earrings

Box with three faces is a six-screen process with over dye. Earrings are anodized twice with screen etching and glass lead technique.

to delineate white or opaque-translucent tones to dramatize a mood or a theme.

As the artist worked, he realized the importance of keeping a clean anodized surface. When the added materials were dried and stable, the entire piece could be put into a bath to seal the dyes in place and to realize the solid anodizing effects. Etching and texturing of areas, reintroducing basic anodizing to make subsequent changes and new dyes became further notes of freedom for the artist.

THE ARTIST'S VIEW

"Having painted all of my adult life, working in many mediums, I have finally found a new medium to express my personal art. Anographics gives more spontaneous freedom, looseness, and variety of color than I had ever imagined possible. I have to keep notes to remember some of the technical procedures used to achieve certain textures and values of color.

"I feel very grateful for the opportunity to work in this great high tech medium. Every time I work there is something new and exciting.

"The finisher's patience was severely tested, teaching what could and could not be done within the medium, which I am just beginning to grasp. I would hope that other artists will take advantage of this new medium and my efforts will encourage interest."

THE WORK

The paintings presented here represent a variety of techniques, a cross section of some of the different ways to use the aluminum anodizing, mixed media and dyes to create aluminum paintings.

The author has dreamed of developing a research center where different artists might come to work in this exciting medium. Production facilities might be used during down time from routine commercial production. The potentials are mind boggling and there is an opportunity for this technique of anodized aluminum painting to become a major art form when artists from all expressive modes, as well as three-dimensional craftsmen come to this medium. A center of activity coupled with the complete facilities of a production anodizing shop is now in the planning stages.

The only limitation is the size of the tanks, in this case up to 3 ft x 8 ft panels were used and in some instances triplicates of panels where large murals or paintings could be formed together to make entire walls.

The artist has also found that the stable base of aluminum has permitted a way of developing a free-form contour, where the painting can be on a configuration other than the square format. It can be cut to a shape that may provide a complementing contour that fits the theme or mode of expression.

Such shapes in canvas or panels of wood or masonite present problems in excess of those for aluminum.

In some of the paintings the use of engraving, etching, or texturing tools has enhanced the surface before the anodizing and painting are done and in other instances texturing tools are made use of in the painting processes.

While the artist has concentrated on the painting of flat surfaces traditional to the painter's art, in the hands of a metalsmith, jeweler, or sculptor, low relief or undulated form may come easily under the hammer or chasing tool or in large-scale repoussé work.

THE FINISHING

Any weight of aluminum may be used for the process. When it is absolutely clean the piece can go into the anodizing bath. This changes the surface of the aluminum and causes anodic oxidation.

At this point the surface should not be touched with the hands because any skin oils or other contaminants may cause a resist and will block out and not take the dye. Indeed, knowing this, the artist may choose to actually induce a block out either on the pure aluminum or over some of the dyed areas so that subsequent painting will not dye those



Landscape

Produced with wet on wet and wet on dry techniques with approximately 20% oil paint.

portions.

The color dyes specially made for this process can be organized in liquid form on a palette or may be used as dry powder and sprinkled on a moist surface to create special effects with brushes or painting tools that are absolutely clean and free of oil or other medium. The work can go on very much as a watercolor might in transparent painting.

As it comes to its completed state, a sealer (nickel acetate) is used. The surface dyes are sealed in for a permanent hold of the color, intensity, tone, value and effect. These colors unsealed would fade in sunlight but once sealed they will last for hundreds of years, like good oils and watercolors — especially out of direct sunlight.

At an earlier stage, if a mixed media is used to gain special effects, it can be done before the seal is done and should more dyes be needed they could be added up to the time of the sealing stage. After sealing, if dyes are used,

the color will not remain permanent.

CONCLUSION

The process described and the experience of more than three years have produced effects unobtainable in any other medium. The qualities presented in the illustrations shown here attest to the richness and variety that can be accomplished in this medium. MF

The Artist

The paintings illustrating a variety of approaches feature the artist **Bert Pumphrey**, who for over 50 years has been one of the foremost painters in the western United States and Mexico. He was a war artist in World War II and has exhibited one-man shows in major museums from the California Palace of the Legion of Honor in San Francisco in 1946 through major exhibitions in California and Mexico, the Virgin Islands and in Europe. His work is in hundreds of private collections.