

# How Do You MAKE ...

## GRAIN PAINTING WITH DYE

For some time now I've been using a mixture of aniline dye and water-based sealer to do a wood graining technique that has been quite successful. The nice thing about this paint technique is how real it looks, even from very close up, and it is perfect for a small theatre we have here at school. My summer work is sometimes in an outdoor venue where the average audience seat is around 150 feet away, and this sort of grain painting wouldn't be as effective there. For such a large space it is really better to use a "big" technique like a finger brush or a cut-up poly brush to give a bolder, perhaps even cartoon-like appearance to the wood texture.



THIS PRODUCTION OF THE THREE MUSKETEERS WAS IN A HUGE OUTDOOR VENUE, SO THE PAINTING TECHNIQUES HAD TO BE REALLY LARGE IN ORDER FOR THE AUDIENCE TO SEE THEM. PAINTING WITH DYES IS A MUCH MORE SUBTLE TECHNIQUE.

These instructions assume that the reader has had enough experience in painting faux finishes to understand certain nuances, but just about anyone can follow the instructions and have a successful outcome if they are willing to experiment a little along the way. Of course I have no idea what effect you need for any particular project and it is likely that you will need to adapt the process to your situation. Experimentation is key!

Another reason not to use aniline dye outdoors is that the dye color fades rapidly when exposed to UV light. Fading takes several years to occur indoors, but I can only imagine how fast it would happen out in direct sunlight. Over time the finish lightens and the undercoat paint color starts to dominate. No doubt a UV inhibitor would help that, but it is not something I've tried personally. The fading is not that great a problem indoors, except perhaps if you are planning on running *The Mousetrap* for several decades.

This technique is similar to FEV, or French Enamel Varnish. The basic idea of a glaze of that sort is to provide a subtle color wash that can be applied to the surface of an object to impart a textural feel as the colorant puddles up in corners and crevices. Dyes come in extraordinarily bright colors. It is really a quite wonderful effect, but the technique has gotten

a bad reputation in recent years because of the poisonous nature of the compounds involved. As the reader may already know, traditional FEV glazes are made of dye, alcohol, and shellac. They have been used in furniture finishing for a very long time. There are numerous ways of mixing dye with different chemicals, and many of them are known to be toxic, but this technique uses just water and a clear sealer to do the job. Aniline dyes are especially troublesome if the powder form is inhaled while mixing it into a liquid, so you should avoid that at by wearing a respirator. A number of different theatrical suppliers sell aniline dye.



A RESPIRATOR SEALS VERY TIGHTLY TO YOUR FACE AND WILL FILTER OUT VERY SMALL PARTICLES. THE DUST MASK AT RIGHT IS NOT NEARLY AS EFFECTIVE

The technique I am suggesting here uses aniline dye mixed with a clear gloss sealer like Rosco Gloss. The exact manufacturer of the product doesn't really matter, but it does need to be a gloss rather than flat sealer. I have even tried this with water-based polyurethane, but it is much easier to use a more viscous substance like the latex sealer.

It is important that the surface of what you are painting be as smooth as possible. A rough texture will keep the dye from going on smoothly. Wood should be sanded down somewhat before using latex painter's caulk on any big cracks and the end grain of any overlapping plywood pieces. You can paint over the caulk immediately with no drying time, and it is much easier to fill inside corners with caulk than with anything else. Seal the wood itself with elastomeric, or Jacksan, or whatever sealer you would prefer. Recently I've been experimenting with a liberal coat of gesso which makes an excellent surface and is quick-drying. If your woodwork is made up of lots of small pieces of wood put together, the caulk and any one of these sealers will do a great job of making the surface seem more homogeneous.



USE A GUN TO PUT CAULK INTO THE CORNERS LIKE THIS



THEN USE YOUR FINGERTIP TO SMOOTH IT OUT AS NECESSARY



NEATLY APPLY THE CAULK WITH THE GUN BY TRIMMING THE SPOUT AT A SMALL ANGLE, AND USE PATIENCE SQUEEZING IT INTO THE CORNERS

An essential part of the process is to use a base coat of solid color underneath, which is only logical since the dye mixture is really just a glaze. It is easier to apply the glaze if the base coat is also slick, so use a glossy paint for that as well. The color you choose depends on what sort of wood you want to imitate. My favorite is a very warm cherry variety achieved by using a really bright orange base coat with a dark dye like burnt sienna or even Van Dyke. The bright undercoat gives the finished product an inner glow that I find appealing. To make something like the painting in the photo, use the closest hue to a true orange that you can get. Or pick out a yellower shade for something more like oak. It will seem horribly bright but of course it gets toned down later. The worst thing about this step is listening to everyone's comments like "Is that what color that's going to be?" There isn't anything too special about applying the base coat of orange; it just needs to be good and solid. A redder undercoat and Van Dyke dye will make something more like mahogany. Experiment to find the qualities you need.

Making the dye glaze is fairly straightforward, other than taking precaution not to inhale any of the aniline dye powder. For a while I was able to buy a premixed version of the water-soluble dye from Belen, which was probably safer. Unfortunately, my supplier went out of business so now it is back to the old powdered variety. Actually, it is best to use as strong a mixture as possible



THIS CLOSE-UP SHOWS A SECTION OF A PANEL DOOR PAINTED WITH A BRIGHT ORANGE UNDERCOAT, AND A VAN DYKE BROWN GLAZE.



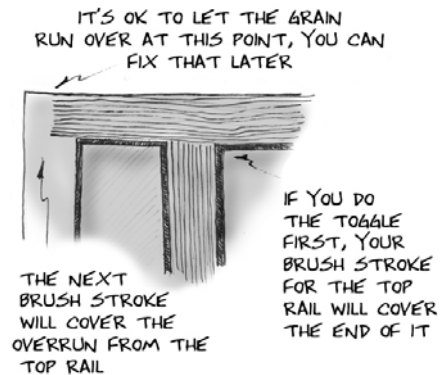
and it is easier to get that by mixing it yourself anyway. I wear an actual respirator (not just a dust mask) and mix as strong a solution as possible of the appropriate dye color. Conventional wisdom says to use alcohol to mix the dye, and that is important if using shellac like for an FEV. I have tried using alcohol, alcohol and water, and just water, and for this technique it doesn't seem to matter a whole lot. The dye will dissolve in room temperature tap water, and since it will be later mixed with a water-based sealer, you might as well just use the water. If the dye solution is too weak add more dye. If the dye doesn't completely dissolve, add more water. Since I've not personally tried all possible dyes from all possible manufacturers I can't say that just water works for all dyes, but it has for every one that I've tried.

Be sure to make up the dye mixture separately first, and then add that liquid to the sealer. It is hard to say exactly what proportions of dye and sealer to go for in the same way that it is difficult to describe how much salt should go into the stew. Of course most any sealer is milky white in the can so you will probably have a funky dark tan color when the two parts come together. Try a bit of the mixture on a test piece to see how you like the colors and then adjust the amounts. This is one of those things that looks radically different when it dries, so you will need to practice a bit to get the hang of it. A half-gallon is a huge batch, and should easily do

the wood trim for an entire show, but be sure to make enough because it will be hard to match colors later on.

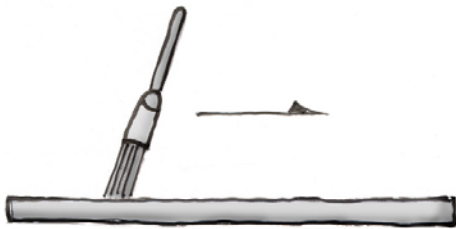


Proper graining technique with the brush is extremely important. Plan ahead which direction the grain should be going on the piece you are coating. Sometimes the actual painting surface is just one big smooth piece and you will need to make it look like it is made up of stiles, rails, and panels. On a "real" door the stiles run all the way top to bottom and the rails are set inside them. It is easier to do the rails first, overrunning the sides, and then dragging the brush all the way top to bottom to make the continuous grain pattern of the stiles. This technique works best on dimensional parts, and isn't really meant for a situation where you will need to add highlights and shadows. It will work great on a stamped-out Masonite panel door like the one in my example.



Quite often, the dye glaze will tend to bead up on the surface of the undercoat after a couple of minutes. In dry air this happens really fast, especially on a warm day. It is very important not to let it stay that way. Working quickly, smooth the glaze back out into a proper wood grain pattern. It takes a bit of practice to catch the glaze at just the right moment for this to happen satisfactorily. Too soon, and the glaze will just

bead up again. Too late, and you will create a gummy, unpleasant-looking surface. (Sometimes this can be a good thing if you want the surface to look like alligatored old black shellac.) The thickness of the sealer used to make the glaze and the saturation of the dye in the sealer are determining factors in how fast the glaze will bead up. Again, if you've not done this before it will take a bit of practice to get it right. Use long, straight strokes to make a smooth grain pattern. An older brush with stiff bristles will make a stronger grain pattern, especially if you let the glaze dry almost to the point of being too late to work and then re-stroke with the brush at the last moment. A softer brush used sooner in the process will create a smoother texture.



MAKE LONG, STRAIGHT BRUSH STROKES  
TO GET THE BEST EFFECT

After finishing the graining, I like to use the same glaze mixture to spatter on a few dark flecks like worm-holes. Make sure to use a reasonably thinned solution so that the spatter dots are as small as possible for a more realistic appearance. After allowing the dye to dry very thoroughly, apply another coat of the clear gloss sealer to the finished product in order to stabilize the dye and keep it from getting rubbed off. The finish coat of sealer also helps to brighten up and “sell” the appearance of the wood finish.

Steps in doing the work.

1. Prepare the surface of the substrate by sanding and filling cracks with latex caulk.
2. Use a coating of sealer to create a homogeneous surface.
3. Mix the aniline dye with water, making the solution much stronger than for ordinary painting.
4. Mix the dye solution into the sealer.
5. Use an old brush for bolder grain, smooth for finer grain.
6. Use long, straight strokes to create a realistic grain pattern.
7. Create a good “end of the board” appearance by doing the intersecting part first and the overlapping board second.
8. Lightly spatter to add extra texture and the appearance of worm holes.
9. Use a final coat of clear sealer to stabilize and brighten the end product.