1) Introduction

- a) Coloring agenda:
 - i) Coloring Resources
 - ii) Coloring Materials
 - iii) Application Tools and Accessories
 - iv) Wood Selection and Color
 - v) Don Derry coloring technique

2) Coloring Resources

- a) Books about sanding: Nagyszalanczy
- b) Books about wood painting
- c) Books about color theory
- d) Color wheel
- e) Web resources
- f) Magazines:
 - i) Wood Worker West issue
 - ii) Fine Woodworking
- g) Product guides like Liquitex acrylic paint books: The Acrylic Book
- h) Books about finishing: Bob Flexner; Jeff Jewitt; Michael Dresdner

3) Coloring Materials

- a) Natural color of wood
- b) Stains
- c) Inks
- d) Markers -
- e) Metal leaf
- f) Colored waxes
- g) Acrylic paints and associated materials
- h) Aniline dyes

4) Application Tools and Accessories

- a) Rags
- b) Paper towels
- c) Brushes
- d) Craft sticks
- e) Spray can
- f) Air brush
- g) Spray gun



5) Wood Selection and Color

- a) Consider grain of wood
 - i) Side grain
 - ii) End grain
 - iii) Figure
 - iv) Burl
- b) Consider color of wood
 - i) Natural color
 - ii) Bleached wood



6) Don Derry Coloring Technique

- a) Sanding:
 - i) Don't sand to too high a grit. 180 is actually just fine for this. Sanding to a finer grit will burnish the surface and it pushes sanding dust into the pours, hiding defects that need to be found.
 - ii) Don't sand too fast. You need an even scratch pattern, consistent over the entire surface. Maintain the speed so grain pattern is even.
 - iii) Use very soft sanding pads to achieve this surface.
 - iv) Eliminate perceptible radial lines.



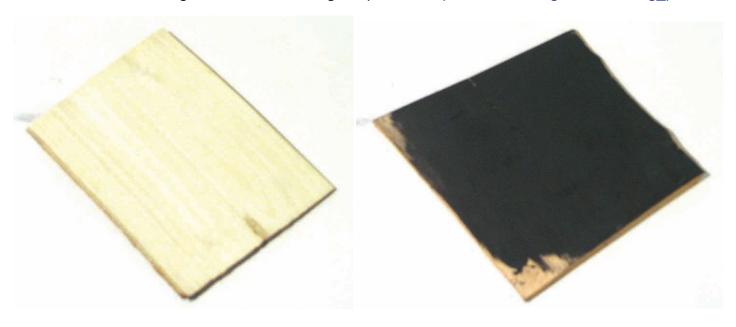




b) Coloring:

i) Sealer coat the piece with a spray of lacquer, but don't soak the piece. The goal is to seal the surface but leave the strong grain line pours open for pigment.

Magnashield Gloss is a good product http://hoodfinishing.com/finishing.prod.htm



- ii) Pigment rubbed into open grain woods. Force it into the open grain. A little goes a long way.
- iii) After dry, sand off the pigment down to lacquer layer. The goal is to remove the surface pigment and the surface lacquer without pulling the pigment out of the pours. 180 grit is appropriate.



iv) Dye recommendations: Use water-based dyes for best color fastness. Alcohol dyes will work in this protocol, but will likely fade too easily. Only use Water base Dye. Metal Acid dye is even better but the color selection is limited at this time. Many good Aniline and Acid based dyes can be found at: http://finishsupply.com/index.html

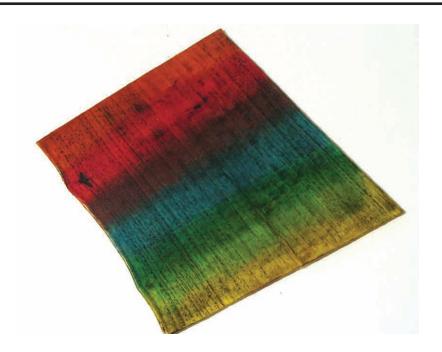
- v) Rags or air brush application will work. Rags tend to saturate the wood. Airbrush provides better control.
- vi) Mixing color:
 - (1) When mixing dyes, use hot distilled water for best results.
 - (2) Mix the dyes very strongly concentrated for best coloring.
 - (3) Consider storing unused colors in small squeeze bottles. They make inserting dye into the gun and removing dye from it easier.
- vii) Typically, use one color as a base for the entire piece. Lighter colors first will generally give a better result. They can be darkened if desired. Dark colors can never be lightened.





c) Finishing:

- Use two coats of vinyl sanding sealer from the paint store on top of the dye;
 especially larger items. On the bigger stuff the vinyl sealer is more flexible and will help the top coat not to crack over time.
- ii) Spray lacquers for about five coats. Sand to level surface after three coats or so. Do not sand through lacquer. Use 400 600 grit. Want a dead-flat surface no divots.
- iii) Defects and cracks can be filled with super glue. Once the glue hardens, file off to level down to the lacquer. Then sand to blend.
- iv) Use Lacquer as the top coat.
- v) Sand to level the surface removing all shiny dimples.



d) Polishing:

- i) Macguire's Medium Cut Cleaner #1
- ii) Macguire's Fine Cut Cleaner #2
- iii) Macguire's Swirl Remover #9
- iv) Macguire's Show Car Glaze #7





e) Additional Tips:

- i) If you decide that you need to add color after the lacquer starts, use pigments thinned into lacquer to add color on top of the clear lacquer. This is called glazing by fine arts painters. Use the same industrial pigments from the paint store to tint the lacquer. You can air brush tinted or opaque lacquers between any of the top coats to add highlights or shadowing. Glazing will add allot of flexibility to the process and will increase your color choices also.
- ii) Alcohol can be used to wipe the surface between lacquer coats for cleaning, if needed.
- iii) Airbrush cleaning:
 - (1) Airbrush full of dye,
 - a. Clean dye out with water
 - b. Clean water out with alcohol
 - c. Clean alcohol out with lag thinner
 - d. Airbrush is now ready to spray lacquer
 - (2) Airbrush full of lacquer
 - a. Clean lacquer out with lacquer thinner
 - b. Clean lacquer thinner out with alcohol
 - c. Clean alcohol out with water
 - d. Airbrush is now ready to spray dye
- iv) You can use any available lacquer. The difference is that Magnashield has 40% solid content and most lacquer is only 14% solids. This means that one coat of MS is like putting on 3 coats of lacquer. Lacquer also cracks much easier if to many coats are applied. Lacquer also takes longer to cure because it has so much higher thinner to solids ratio. Go ahead and experiment with what you find locally it will work fine but it will take three times longer to build the coats and over time it may deteriorate faster. Each top coat of Magnashield needs to cure for at least 24 hours. Consider 48 hours. Lacquer will feel hard and cured with less than 48 hours but it may continue to slowly cure until after six months to a year. It might shrink back into the open grain and will not look glass-like any more.