

Big, Bold & Fast Surface Decoration

by **Carl Ford**, 11/07/2018

Here are some Surface Decoration techniques that I learned from Clay Foster in a recent class with John Jordan and Clay Foster.

The class was at the Tennessee Tech Appalachian Center for Crafts near Nashville Tennessee. In June of 2018.



Make a Sample / Test Piece

For all of the techniques below I STRONG recommend you make a sample / test piece BEFORE you attempt to make a finished project.

Use a scrap of the SAME wood as your finished project.

I like to make 3" x 5" samples. Something, big enough so I can see what things will look like. Big enough to write on the back how I created the sample.

Carved, Painted and Inked

This demo shows how to use "Block Printing Ink" over any carved and/or woodburned and colored decoration to quickly create an eye popping work of art. See the piece on the left in above photo.



- Start with any shape form you like. Plate, bowl, vase, hollow form, etc. Sand to 220 grit (or beyond if that floats your boat).

Avoid open grain woods like Ash and Oak. Maple is good. Cherry carves easier than Maple but is more expensive. All of the wood is going to get covered with paint or ink so using something cheap like poplar wood is tempting. However, poplar does not carve cleanly with power tool burrs. Thus it is not a good choice.

- Carve and/or burn lines into the work using your favorite tool. See "Carved Lines and "Burned Lines" sections below.
- Color the lines with Milk Paint or Acrylic Paint. Milk paint is easier to sand off in the next step. The objective here is to get the color into the lines. i.e. below the top surface. Any paint that gets onto the top surface is a don't care. It will be sanded off in the next step.

White lines with a black ink is just one of many good color combinations. See "Good Paint Colors" section below.

- Sand the top surface smooth. It must be smooth to allow the ink to be rolled on in the next step. Sand to 220 grit.

You DO NOT need to remove all of the paint from the top surface if you are using black ink! The black ink will over power any other color. Avoid sanding any color out of the lines or the edges of the lines!

- Color the top surface with Block Printing Ink. Everyone uses "Speedball" brand ink. It comes in 2.5 oz tubes from local art store or www.dickblick.com. Water soluble ink is easier to deal with than oil. Look for "Speedball 3500 - Black water soluble ink".



Chalk

- The secret here is to use a SOFT Rubber Brayer (aka roller) to roll the ink onto JUST the surface. The ink must be VERY EVENLY and VERY THINLY spread out on the brayer BEFORE you apply it to the work. Squeeze a dab of ink out onto any old GLOSSY magazine or catalog page. Work the ink back and forth for several minutes with the brayer to get it spread out VERY EVENLY and VERY THINLY. Then and only then apply it to the work.

Brayers come in 2", 3", 4" and 6" wide versions. Most people use a 4" wide brayer for block printing. A 2" wide one works better on round woodturnings. www.dickblick.com #40104-1002. Look on line and buy local! Get a SOFT Rubber Brayer. Avoid the hard Acrylic Brayers.



- Wait overnight for the ink to dry.
- You don't need a top coat finish. The ink and milk paint or acrylic paint are tough enough. However, I don't like the very flat ink finish. I spray on a rattle can matte, gloss or satin finish. See "Rattle Can Finishes" below.

[Burned and Filled with Colored Modeling Paste](#)

This demo shows how to fill the grain with a colored filler. Its similar to using Liming Wax but the filler can be ANY COLOR and it is not a "wax". The filler will harden up and you can put a final top coat of finish over the filler because it is not "wax".

- Start with any shape form you like. Sand to 220 grit.

Open grain woods like Ash or Oak work best with this technique. The grain is to tight in Poplar, Maple and Cherry.

- Use a propane torch to burn (scorch) the wood completely black. This will open up the grain in the wood. The softer summer wood will burn out more than the harder winter wood.

Note: Another option here is to use "Black India Ink" or "Fiebing's USMC Black Leather Dye". However, they do not work as well. Because they will not open up the grain.

- Use a wire brush to remove all the soot from the surface of the wood.
- Seal the entire piece with 2 coats of Krylon Matte Finish 1311. See "Rattle Can Finishes" section below.
- Mix up some Colored Modeling Paste

Purchase Liquitex brand "Modeling Paste" from your local art store or www.dickblick.com #00618-3115. And some Golden brand "3580 Acrylic Retarder" www.dickblick.com #00628-0004. And some acrylic paint to color the modeling paste. Like Golden brand "1147 Diarylide Yellow" in a 2oz tube www.dickblick.com #00620-4493. Look on line and buy local!

- Use a popsicle stick to mix a big dab of modeling paste with a dab of color and a little acrylic retarder.

The secret here is you need to add some acrylic retarder so the modeling paste will not dry to fast. Before you have a chance to wipe off the excess. However, if you add to much retarder then the modeling paste will never dry.

I mix things up in a PAPER 4oz Ice Cream Cups that I purchased from "Frozen Dessert Supplies" on Amazon. PAPER coffee cups also work.

Note: Liquitex brand Modeling Paste dries harder than Golden brand Modeling Paste. Thus, Liquitex is better than Golden for this application.

For most things I use the "Fluid Acrylic" viscosity of Golden brand paints in 1 oz bottles. It is thicker than Transparent or Opaque Airbrush Acrylics and thinner than "Heavy Body Acrylics" that come in old fashion paint tubes. Fluid Acrylic is like thick Maple Syrup.



Chalk

Eraser

However, I use tubes of "Heavy Body Acrylics" to color "Modeling Paste" when I have a tube. Otherwise, I have to use lots of a "Fluid Acrylic" paint to change the modeling paste to a nice deep rich color (not a pale washed out color).

- Apply the Colored Modeling Paste to your piece using your finger with small swirling motions.

Work fast and in small areas! Wipe off any excess as you go with a paper towel. A damp (but not wet) paper towel may help. Wipe across the grain. Not with the grain. You can also use a damp (but not wet) little piece of sponge.

- Wait overnight for the modeling paste to dry.
- You may or may not need a top coat finish. The Krylon Matte finish is a finish and the modeling paste is tough stuff. I may or may not spray on a rattle can matte, gloss or satin finish. See "Rattle Can Finishes" below.

Carved and Filled with Colored Modeling Paste

This technique is basically the same as the above. Except. We fill carved and/or burned lines with Colored Modeling Paste rather than burning out the grain with a torch.

- Start with any shape form you like. Sand to 220 grit.

Any species of wood works. Maple is good. Beware of open grain woods like Ash and Oak. When the open grain gets filled in addition to carved and woodburned lines then things often get to busy. All of your carved lines get lost in the open grain or vice versa.

- Carve and/or burn lines into the work using your favorite tool. See "Carved Lines and "Burned Lines" sections below.
- Color the top surface of your piece or leave it natural. You can use stain, milk paint, or acrylic paints. What ever you like. However, the surface needs to be relatively smooth and flat when you are done. Otherwise, wiping off the excess modeling paste is going to be a real pain.
- Seal the entire piece with 2 coats of Krylon Matte Finish 1311. See "Rattle Can Finishes" section below. This is really important. You need a smooth water repellent surface.

- Now do the same as above with modeling paste. See "Burned and Filled with Colored Modeling Paste" section above. However, just fill the carved lines with the modeling paste. This is easier said than done.

Fingers just make a big mess. An artist palette knife makes the job easier. Something like a "Liquitex Small Painting Knife No. 1". Good quality artist knives are just the right flex and thus easier to use. You can put the paint into the lines with the side of the knife and then scrap off most of the excess. Follow up with a damp paper towel and/or sponge to get the excess off.

- You may need to do this in more than one step and/or coat. Allow things to dry over night between coats. All the circular lines in one step and all the radial lines in another step. This will make it easier not to wipe off the stuff you want to leave when you are wiping off the excess in the same direction.



Chalk

Eraser

Fill with Sanded Tile Grout

Anything you can fill with Modeling Paste can also be filled with Sanded Tile Grout. The grout creates a finished piece with a more primitive feel.

- Start with any shape form you like. Sand to 220 grit.

Butternut wood works really well for this technique if you want to carve it and then burn it with a torch. However, Butternut is NOT cheap. Butternut works well because it is a little (but not a lot) open grain. If you carve lines in Butternut and then burn it with a torch to open up the grain. It looks good.

- Carve and/or burn lines into the work using your favorite tool. See “Carved Lines” and “Burned Lines” sections below.

Beware! You may need to carve extra deep to avoid losing detail when the piece is burned in the next step.

- Then use a propane torch to burn (scorch) the wood completely black.
- Use a wire brush to remove all the soot from the surface of the wood.
- To seal or not to seal? If you don't seal the surface then the tile grout in next step, will turn the surface a nice gray. However, wiping the excess tile grout off will be tough. If you do seal, then you get less gray. How much less depends on how much you seal.

I normally seal with ONE coat of Krylon Matte Finish 1311. See “Rattle Can Finishes” section below.

- Purchase some Sanded Grout from your local big box hardware store. It comes in 10 lbs bags for around \$30. Any brand works. Colors vary by brand.

I like TEC brand “949 Silverado Sanded Grout” from Lowe's. It creates nice light gray lines and gives the entire surface a nice gray hue.

- Use a popsicle stick to mix a small amount of Sanded Grout in a 4oz Ice Cream Cup or Coffee Cup. Just add water to the dry powered until you get a nice peanut butter consistency. Make it a little on the watery side, rather than to dry.

There are no secrets here. Its just a nice low tech solution that works good.

- Apply the Tile Grout to your piece using your finger with small swirling motions. Wipe off any excess as you go with a paper towel. It is pretty easy and forgiving. Just work it (add more and wipe it off) until you get a look you like.
- You don't need to add any top coat finish. BEWARE! Any top coat will turn the nice gray surface to almost black! The filled lines will stay silver but any flat surface will turn black. If you want to add a top coat finish see “Rattle Can Finishes” below.

Note: You can use Un-Sanded Grout rather than Sanded Grout if you want. However, it does not work as well. It's like coating your piece in clay. Wiping off the Un-Sanded Grout to remove the excess can be a real problem. When you use Sanded Grout the sand sits on the surface while the fine grout goes into any open grain. The sand only goes into the carved groves and really helps fill the groves. Thus, Sanded Grout is the like the best of both worlds.

You can also get other colors of Sanded Grout. There is a big range but they are all pretty subdued rather than nice vivid colors. You can get white tile grout and color it with Mixol Tints (www.mixol.com). However, it takes a lot of Mixol to over come the base white color. You have to live with washed out pastel shades of colors. Deep rich colors are not possible.



Mud Mask and Burn with Torch

Now for something completely different. This technique creates patches (lines, circles or what ever) of un burned natural wood surrounded by wood burned black.

- Start with any shape form you like. Sand to 220 grit.

Cherry wood works best. Maple is ok. Avoid open grain woods like Ash and Oak.

- To seal or not to seal? Sealing the wood screws up the burning in the next step. But, it makes getting the mud off easier. I recommend mechanically burnishing the wood rather than chemically sealing it.

Sand to 220 grit. Then buff the wood on the lathe with the lathe running really fast. First buff with fine synthetic steel wool then buff with a towel. I like to use a "Blue Huck Surgical Towel". You can get them on Amazon.

- Get ready to use mud or clay slip to mask off any areas that you DO NOT want to burn with a torch. Clay slip works better than mud.

You can make y

our own mud. Get some fine dirt and mix it with water until it is a thick ketchup consistency. You need fine clay like dirt. You may need to grind it up in a coffee grinder. I recommend using your wife's best coffee grinder!

Or get some clay slip from your local potter. Or make your own by adding water to Pottery Clay from Amazon. You may need to add some FINE sand to the clay slip to make it thicker.

If you are making clay slip from clay then here are few tips that will make it easier to get it smooth, no lumps. Roll the clay out into a thin sheet with a kitchen roller. Use your wifes best kitchen roller! Break it up into small pieces and add it to water. Then add some white vinegar. The vinegar makes it easier to get it smooth. Look on the web for more tips and tricks.

Note: UnSanded Tile Grout also works. However, it will quickly harden up in your mustard squeeze bottle in the next step. It will ruin your bottle or be really hard to get out.

- Load the mud or clay slip into a good old fashion diner style mustard squeeze bottle. See photo on right. Get a bottle with a wide mouth!
- Squeeze the mud or clay slip onto your piece to cover up (mask off) any places you don't want to burn with a torch in the next step.
- Let dry a bit. How much? You have to experiment. The idea here is you don't want the mask to run while you are burning.

You can skip this step if you want. When you hit the mud or clay slip with the torch in the next step it will dry almost instantly.

- Use a propane torch to burn (scorch) the wood completely black or almost black. The mud or clay slip will dry up and crack when you burn.

After the mask dries out you can go back over the area with the torch tilted in all possible directions to burn up close to the mask. **HOEVER**, if you do to much here then the torch will sneak under the mask and screw things up.

- Use a wire brush to remove all the soot from the surface of the wood. Try to keep the mud or clay in place until **AFTER** you are done wire brushing to keep the soot out of non burned wood grain.
- Knock off the dried and cracked mud or clay slip. Use a putty knife or what ever.
- Lightly sand the non burned areas.
- Apply a top coat finish. See "Rattle Can Finishes" below.



Eraser

Chalk

Carved Lines

All prices below are on 11/9/2018.

I have a set of hand powered Pfeil wood carving gouges that I don't use much. I like to power carve using a Dremel style rotary tool or Ryobi reciprocating tool. Or burn / brand with a "Burner From Hell", Graeme Priddle style battery charger.

- The \$15 **WEN 2307 Basic 1 Amp Rotary Tool** from Amazon is a good cheap replacement for a Dremel. I have one and I just ordered another. So, I won't have to change burrs. I don't expect them to last forever. You get what you pay for. They are made with cheap plastic gears, etc.
- They stopped making **Ryobi DC500 Detail Carver** a long time ago. They may still be available on Ebay. I would not pay more than \$50 on Ebay. The Ryobi DC501 on Amazon for \$100 is suppose to be good.
- Use the **Flex-Cut Power Detail Gouges** on Amazon for \$38 in reciprocating power carvers. The Ryobi gouges are junk.
- The \$320 **Automach Power Carver** is good for big jobs. You need "Automach Adapters" on Amazon to use Flex-Cut gouges in Automach. However the gouges that come with Automach are good. Not junk like Ryobi gouges.
- Any Propane Torch will work. I have a **Bernzomatic TS7000** that I really like. You just push the red button and it self ignites. No matches, etc necessary. It also has a little knob that adjusts the amount of gas. It also allows you turn the gas completely off when you are not using the torch.

Bernzomatic no longer makes the TS7000. It has been replaced by the TS8000 that burns propane or map gas.

Beware! Bernzomatic makes several torches that all look similar. They don't all have the self igniter feature. Most do not have the little knob that adjusts the amount of gas. Only the TS8000 has the knob. The TS4000 is good but does not have the knob.



Note: For more info on pattern layout and tools see my "Power Carving Textures" blog entry. <http://carlford.info/blog/2017/01/power-carving-textures/>

Burned Lines

Graeme Priddle style battery charger and tips are available from John Jordan (www.johnjordanwoodturning.com). They are NOT cheap. However, I decided that getting a basic set of Priddle branding tips was worth the money to get good shapes made by a master.

If I was going to make my own wood burner, I would NOT open up a battery charger and add a Graeme Priddle style light dimmer. Light dimmers suck! Just a small turn on the light dimmer switches can jump the current/heat a huge amount and melt off a burning tip in seconds!

I would purchase a Superior Electric "Powerstat" on Ebay. Then plug the battery charger into the Powerstat. The power stat has a big rheostat and knob that allow very find adjustment of heat.



Chalk

Eraser

Powerstats come in different packages. The type 116 Powerstats come in a nice round blue case that is safe to touch. They are big bucks new. But reasonable, around \$80 on Ebay. They get a lot cheaper after you melt off your favorite burning tip because you are trying to make due with a stupid light dimmer!

Powerstats come in many different amp ratings. You **ONLY** need something with a 5 amp rating. 3 amps may be enough. I would go with anything on Ebay with a 5 to 10 amp rating.

Note: A 100/15/2 amp (DC output) or "what ever" battery charger never draws more than 3 amps on the 110 volt input. Think about it. If it drew 100 amps or even just 15 amps you would never be able to plug it into a 110 volt AC outlet via an extension cord to charge your car battery. Also, you could never use a light dimmer switch to control it like Priddle does!

Another option is to mount the dimmer and a on/off light switch in a SEPARATE 4" electrical handy box. There is a good write up on this on "Woodturner's Resource" web site under "DIY Graeme Priddle Style Wood Vaporizer System". <http://www.woodturnersresource.com/extras/projects/priddle/WoodBurner.html>

I really like the NEW Priddle handle design with the 1/8" rod that goes all the way thru the handle and the vent holes in the handle. I would copy this design from the photo. It solves all the problems I and other people have had with handles over heating.



Use a 1/8" brazing rod (brass) or RG45 copper coated steel welding rod from local welding supply or [www.mcmaster.com #7972A208](http://www.mcmaster.com/#7972A208). 3/4" PVC pipe. Splices with screws on BOTH ends of the 1/8" rod. Cut the splices out of a Touch-Safe Terminal Blocks ([www.mcmaster.com #7618K658](http://www.mcmaster.com/#7618K658)). Cover the PVC pipe with blue mesh sleeve ([www.mcmaster.com #5969K22](http://www.mcmaster.com/#5969K22)). Cut the spring clamps off of the battery charger output cord. Then attach the handle directly to the battery charger output cord.

For more on conventional woodburners see my "Woodburners & Pyrography" blog entry. <http://carlford.info/blog/2013/04/woodburners-pyrography/>

Good Paint Colors

- **Good "Old-Fashioned Milk Paint" brand colors** are Marigold Yellow, Tavern Green, and Snow White.

Federal Blue is ok but not good.

Salem Red tends to be to pink and Barn Red is to dark. Add 20% Barn Red to Salem Red to make an ok red.

- **Good "Speedball" ink brand colors** are 3500- Black, 3412 - Dark Yellow, 3411 - Light Red, and 3404 - Green.
- **Good "Golden" brand acrylic paint colors** are Diarylide Yellow, Pyrrole Red, Quinacridone Magenta, Green Gold, Cerulean Blue Chromium, Phthalo Green (Yellow Shade), Titanium White, Iridescent Bright Gold (Fine), Iridescent Pearl (Fine)

For most things I use "Fluid Acrylic" viscosity of Golden brand paints in 1 oz bottles. It is thicker than Transparent or Opaque Airbrush Acrylics and thinner than "Heavy Body Acrylics" that come in old fashion paint tubes. Fluid Acrylic is like thick Maple Syrup.

However, I use tubes of "Heavy Body Acrylics" to color "Modeling Paste" when I have a tube. Otherwise, I have to use lots of a "Fluid Acrylic" paint to change the modeling paste to a nice deep rich color (not a pale washed out color).

I do not use the NEW Golden "High Flow" Acrylics. They may be good. I don't know. I am sticking with what I already have.

For more info on acrylic paints see my "Painting On The Lathe For Dummies" handout at http://www.carlford.info/pages/demos_classes/painting_for_dummies/Painting_For_Dummies.pdf



Chalk

Eraser

Note: I am not a big fan of the color blue. I am an autumn colors person. Red, yellow and oranges. I feel they go better with tan to brown wood tones. The colors I recommend above, reflect this. Its hard for me to find a shade of blue, I like.

Rattle Can Finishes

I use the following spray on rattle can finishes.

• **Krylon Matte Finish 1311**

The name of the finish is "Matte". Matte is not the gloss. The finish is on the flat side of matte in my opinion. After the finish dries, you can burnish (rub) the finish with a paper towel or cloth. You can buff it up to a semi gloss or even gloss.

This finish is John Jordan favorite. The only thing he uses.

It drives me crazy. Because it blushes (turns white) if you spray it on to heavy (or look at it the wrong way). You have to put it on in thin coats. If it blushes, wait for it to dry then hit it again. The blush MAY (no guarantees) go away. On the good side. It dries really fast.

So why do I use it? Because 2 coats of this matte finish works great as a sealer. Better than sanding sealer. It forms a TOUGH matte (but not flat) surface that water beads up on. You can EASILY wipe things off this finish. It works great with the Modeling Paste technique above and under Tile Grout.

• **Minwax Fast Drying Polyurethane**

This has been my go to finish for a long time. I now mostly use Gloss. If I don't like the Gloss finish I knock it down a little with fine synthetic steel wool. However, if I don't want a gloss finish to get down into carved lines on a piece then I have to Semi-Gloss.

I have LEARNED to like the Minwax brand because I can get FRESH cans from local stores.

I use this mostly over natural wood. I some times use it over milk or acrylic paint. It adds a yellow cast that I like on natural wood. I am slowing switching to Mohawk Water Clear Acrylic over paint.

• **Mohawk Water Clear Acrylic M102**

I like this finish because it goes on a little thick out of the spray can. It almost never drips! 1 coat and you are done! It looks great. It is a little thicker than Minwax Poly. It is like 10 coats of lacquer in 1 coat.

I don't like gloss. But, Gloss sells! So, I am now using gloss. M102-0426 Gloss may look a little to plastic for some people. I just got some M102-0427 Satin and M102-0428 Flat that I am going to try.

This finish drives me crazy because it clogs up the spay nozzle. To overcome this, I take the spray nozzle after each usage and store it in a jar of lacquer thinner.

Mohawk is professional stuff. It is hard to get hold off. If you purchase directly from Mohawk they charge a \$10 service fee on top of shipping fee for any orders under \$80. \$10 to put a few can in a box? Err.....!!!

• **Rust-Oleum Crystal Clear Enamel**

It is sort of like Mohawk Water Clear Acrylic. I don't like it as much. It is a little to thick. However, you can get it locally, no problems.

• **Beware of Lacquer!!!**

Lacquer melts Acrylic Paint!!! So using it as a top coat over the above techniques may be a disaster!

Nothing touches Milk Paint. Milk Paint is like concrete. Thus you can use lacquer over milk paint.

I wash my hands in lacquer at the end of each day. I can't smell it. I am not afraid of it! But, it is not a finish I like. I like INSTANT gratification. More than 2 coats of anything is OUT OF THE QUESTION for me. Thus, lacquer is not my finish!

I like people to be able to pick up and use my work. Thus, lacquer is not my finish! Poly and Acrylic are tough and just shed water and take abuse.

