

West Suffolk Woodturning Club

Focus on Airbrushing

by Tic Challis

The very first example of airbrushing is about 17,000 years old, in the Lascaux caves in France created by blowing pigment with some sort of pipe. The first airbrush as we would understand it was invented in 1893 by Charles Burdick. And they have not really changed much in the intervening years though there are many makes and price ranges. From un-named airbrushes for around £20 to say an Iwata for around £300-400. Some of the best-known makes are Iwata, Paasche and Badger.

Airbrushing is used in a whole range of ways, in the early days mostly for photo re-touching as the airbrush has no stroke marks making it brilliant at emulating photographs.

It has been used in advertising, automobile art and model painting. It is used in makeup, street art, graffiti, record covers, comic covers and nail art. Like most things the digital age has taken over what seems like control of the airbrush by the use of software but it is still a versatile and well used tool.

Airbrushing is about the balance between the compressor, airbrush and the type of paint you are using.

Some of the cheaper machines only come with one sized needle and nozzle and rubber parts which some types of paint can corrode. More expensive tools will have all metal parts and more inter-changeable tips allowing for a greater range of paints to be used and effects to be achieved.

There are gravity feed or suction cups for paint. These make little difference. The important thing about the airbrush itself is the trigger.

You can get fixed trigger with no control but the most common type is the duel action where it is down for air and back for paint.

Compressors can be piston driven or diaphragm. The best ones have air storage tanks, so they are not running all the time. They just maintain the pressure which on most compressors you can adjust.

The flow of the paint is a balance between the nozzle size, air pressure, density of the paint and the distance from the surface

The airbrush is most often used in two ways: Free hand or with the use of masks.

Masks are classed in two categories: A hard mask which is attached to the surface and gives a harsh line or a soft mask which is held off the surface and gives a softer effect. Positive masks, you spray the area inside the mask and with negative masks, the area being masked is protected from the paint. Creating an image takes quite a bit of careful planning. It is a very technical way of painting.

Frisk is a low tack clear film often used with airbrushing. I also 'Blu tack' found objects to the surface, torn paper or cut tissue paper, leaves. Really the possibilities are almost endless.

I have a collection of things that I spray through including net curtains and commercially bought stencils.

Paints come in two main types. There are dyes and pigments carried in some sort of medium. It is worth knowing what type your paint is and how to remove it as leaving any paint inside the airbrush will gum up the workings. Also dye type paints stain things whilst the pigment carriers dry on top. With wood this matters if you wish to see the grain or not.

Anything with the consistency of single cream or less is good for an airbrush. Anything with a large size pigments will clog up the nozzle or be too heavy. Sometimes using a larger nozzle might help with this but the flow can still be impeded and a bit splattery!

I use mostly acrylic ink. This is a paint made by Daler Rowney. It is a new type of paint sitting between an ink and an acrylic. It is water based and ideal for the airbrush. It can be airbrushed or painted by hand using a brush. Comparing the two ways of painting is interesting. The airbrush does not penetrate as deep into the wood and the hand painted effect is much thicker and richer in colour. With the airbrush it will take a few coats to achieve the same depth of colour. As an artist paint it also has a permanence rating i.e. how long the colour will last..

You can water down these paints but it will reduce their lightfastness and vibrancy of the colour.

Also never add water directly to your paint jar as this can make the paint go off literally and it will smell.

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Using the airbrush - Like any tool you need to practise. If you have in mind an airbrushed finish for your turned masterpiece, there is little point spending hours on your woodturning skills only to 'practise' your airbrushing on the prized object. It is perhaps best to get the hang of the tool on paper. It will be much cheaper, quicker and less messy!

To start using the airbrush you need to:

1. bring on the air
2. start moving the airbrush and gradually bring on the paint.
3. To stop you go off the paint and leave on the air while still moving.

It takes a bit of experimenting to get the balance right. Try moving closer to the surface using less air or more, less paint moving away from the surface. Honestly just play about for a bit to get used to the machine. Once you feel you have got the hang of the movement of the controls, here are some basic exercises you could start with:

1. Vertical and horizontal lines. In this exercise we are looking for consistency in your lines. Get a blank sheet of paper then draw a series of vertical lines up or down the page. It is better to do a mix of both, but they need to be evenly spaced and have the same thickness and consistency. Once you have done the vertical lines move to the horizontal lines. Take your time and if a line goes wrong work out why. The aim is to end up with a grid covering your page.

2. Quick dots. This is an exercise in speed and accuracy. The idea is to move quickly and randomly about your grid blowing dots in the grid pattern. Too fast or the incorrect angle and you will miss your target. Too much air or paint results in a splodge rather than dot and not enough, it will not show up at all.

3. Daggers. On a fresh page draw a line. You can either start thin and get fatter or start fat and get thinner. This is about air flow, distance from the work and fine control. You could reduce the air or the paint, get closer or further away from the surface or a mix of these. Any way that you feel most comfortable to get the result you are after. This exercise is surprisingly difficult to master. You have to have repeatability. It is no use getting it right once, then moving on. Take your time. Work out what is best for you. Yell at it a bit!!! Have tea!!

4. Controlled dots. In the space on the same page, make controlled larger dots. This is done by starting far away and gradually getting closer whilst reducing the air and paint until the nozzle is nearly touching the paper. Some dots, do in reverse, starting close and moving back. Too much paint or air and you get a splurge of paint.

5. The amoeba squiggly. On a fresh page draw a random squiggly shape joining both ends. Once this is done follow the shape inside and outside keeping the two lines separate and the line thickness and the separation constant.

Once you have done all these exercises you will start to understand how the tool works.

It is also worth playing with masks to see what effects can be achieved. With a mask you start over the covered area and angle the spray away from the edge otherwise the paint can get under the edge. If you have cut out a shape and are painting inside, again start around the edge and work your way inwards. Frisk is very handy in that if you keep the backing, it can be used a few times but be careful, as each time it is used, its tackiness is reduced and it can fly off at bad times.

So now we can move on to turned objects the first thing to realise is that when working on a 3-D object you are constantly having to adjust the angle of the airbrush to keep the correct presentation to the work. This means having the work at the right angle and height. It is very important. Personally, I find the lathe is too low and too upright. I prefer to work at a slightly slanted-back angle and higher.

A couple of ways this can be achieved: I keep the spigot on my work or hot glue onto a waste block then screw this part to a table easel or full easel. These are readily available and not too expensive to buy.

If it is something like a vase, I have a lazy Suzan I use. I raise the height by placing blocks of wood beneath it until it is at a comfortable height to work at. I still screw the piece to the surface (nothing worse than spinning it too fast and the work flying off!!). It is worth experimenting to find what suits you best.

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I also turn practice bits of wood and use them for experimentation:

1. How will the paint react to this sort of wood?
2. Would this colour combo look good on the wood?
3. How do I achieve this certain effect?

Once you have covered the surface just take photos and make notes. Then? Turn away and try something else. No point wasting hour and good wood.

Sealing the wood before is an interesting point. It depends. It will stop the paint from sinking in. It can subtly change the colour of the wood and the paint. It is worth noting that sanding sealer is cellulose based. If using acrylics this becomes important. The two materials react to each other but only if you get the order wrong.

Acrylic over cellulose is good.

Cellulose over acrylic is very, very bad ... It will blister and crack.

Finishing the work. I tend to use spray lacquers. Painting by hand can lift the paint, so apply a few light coats and then key it back with very fine grit paper and a few more coats.

I use gloss lacquer with colour as it makes the colours pop, seem brighter and more vibrant.

Cleaning the airbrush. Once you've finished with the airbrush clean it as soon as you can, the longer you leave it the harder it will be, this can be done in a few ways.

You can buy cans of special airbrush cleaner that you blast through the gun.

I add water to the airbrush and blow it through until it comes out clean. If you are using an alcohol-based dye, white spirit can be used but can corrode parts of the machine, so be sure to dry it thoroughly and wash through after with water.

I then dismantle the airbrush carefully, and on a tray, (this stops the pieces from rolling off!) I clean each piece with warm soapy water. Kitchen towel and cotton buds can be handy too.

I then leave it for a few hours somewhere warm to let the remaining water dry away before I put the airbrush together.

There are lots of books you can use to learn how to airbrush. Hundreds in fact. For example, 'The Complete Airbrush', 'Airbrush Techniques', to name two that I have.

One of my favourite air brush artists is Rodney Matthews from the record covers of the 70s and I brought in one of his books Countdown to the Millennium.

There are lots of magazines as well. I used to have 'Airbrush Art' and 'Airbrush International' though sadly these have both gone under. Though 'Kustom Action' is still going but it is focussed more on the custom vehicle scene, include pin striping techniques, welding and metal engraving as well. (Very interesting stuff to be honest but more skulls than is sensible).

Hope you enjoy playing with the airbrush.



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All Images by Tic Challis