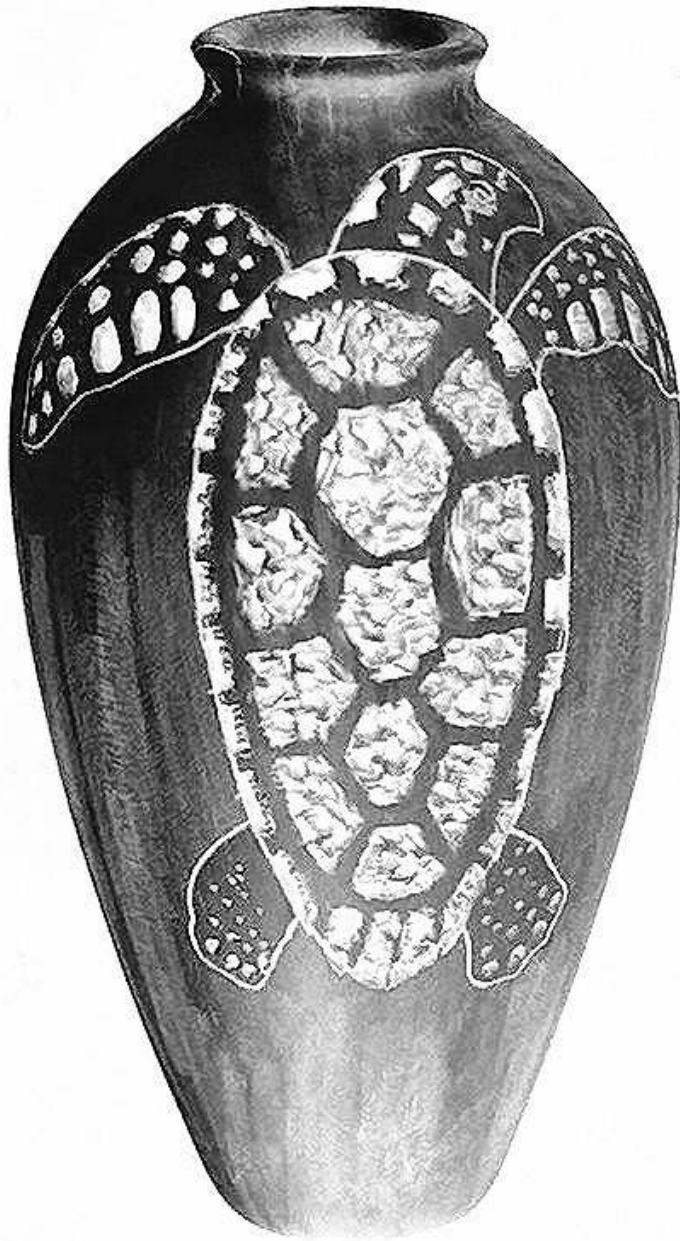


# Holey Smokes

Pyrography



Piercing

by Ed Karch

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## Pyrography and Piercing for Wood Turners

By Ed Karch

A turned piece of good form made in some plain vanilla wood is the perfect candidate for surface enhancement with pyrography and/or piercing.

### PYROGRAPHY

#### History

The word "pyrography" was given to art that had an element of fire in its inception. It is a contraction of two Greek words: "pyro," meaning heat or fire, and "graphics," meaning expression with lines. It has been around since Neanderthal days. The writing with char on the wall meets the criteria of "pyrography," since fire was necessary to create the char, and the drawing on the wall was "an expression with lines." Early tattoos were done with charred bone charcoal hammered in with a thorn. After the discovery of metals, the technique of heating tools to mark wood and leather was developed.

African styles and techniques still use small knife shaped tools heated in forced air forge. Using this technique temperature is very hard to judge. Victorian era poker work where this technique was also used, can be very intricate and artistic.

Since the harnessing of electricity hot wires were used leading to modern self contained pens with many tip choices.

### STYLES for Turners

#### Color Corral

Pyro style used by Art Liestman and Andi Wolfe is secondary to form and color. They use mostly linear sharp cuts at high heat to separate colors and keep them corralled. This linear style is also used for decorative accents.

#### Branding

Form is still important with pyro taking on a story telling role in the works of Graeme Priddle with symbology of the Southern Pacific and Molly Winton using Native American symbols. This branding is done with very hot wire burners. It is a primitive style in high demand and well collected. Most turners use a very hot tool in this branding style with little shading.

## **Shading**

John Noffsinger often uses the turning as canvas for the display of his pyrographic art. This done using all levels of gentle to moderate heat producing gradual shading often combined with color.

## **Negative**

A related style I call negative pyrography is where the entire article is charred, with the design either carved later or protected using a mud resist. Clay Foster has produced several fine pieces using this technique.

## **PYRO DESIGN**

### **Freehand**

Can't draw? You used to when you were a kid. Take a drawing class.

Draw a simple sketch directly on the turning.

### **Clipart**

There are plenty available: internet downloads, clipart books, magazines, books, etc. but be aware of copyright restrictions.

### **Photo**

scan prints or directly print digital photos.

### **Transfer Methods**

Scan pattern

Use solvent or heat from an iron on Xerox patterns. Moisten wood and place inkjet pattern on damp wood.

Use graphite transfer sheets under pattern and trace pattern.

Blacken back of pattern with drawing charcoal and trace.

Place the pattern under a piece of glass or Lucite. Use masking tape of about a 2" width and tape on the glass or Lucite over the pattern. Trace your pattern onto the tape. Remove the tape and then position on your wood. You can then burn over the pattern right through the masking tape. After completion remove the tape and refine.

## **PYROGRAPHY TOOLS**

**Pyrography Units** need to be at least 100 watts for branding.

The best buy is the Burnmaster from Wood Carvers Supply with either one socket or two. The two allows two pen hookups with switch access.

**Pens** Mastercraft pens are from the same supplier. They are more expensive but are heavy duty. Razortip pens from Treeline have more patterns and are less expensive.

### **Other equipment**

A brush is used to knock off excess char.

An eraser for removing sketch marks.

A scraper is the eraser for burn mistakes

Get a small fan if you produce lots of smoke.

Use a carving vice to hold the piece or use a carpet square to work on.

Denim cut from old blue jeans.

Denim will remove the carbon residue without dulling, scratching, or breaking your wood burning tips.

### **TECHNIQUE**

**Color Corral**, hot enough to cauterize wood fibers without excess char, even depth, clean joints. Needs sharp pen.

**Brand**, even pressure clean place and lift, same density of each brand.

**Shade** fine work attention to exact lines and joins. Darkness is determined by speed not pressure.

**Negative** even scorch not too deep. Clean resist lines.

Burn at the lowest possible setting to achieve the effect you want, you can always go over it again if it's too light. The effect of building up faintly burnt lines is much more dramatic than a deep groove burned nearly through your project.

### **Piercing**

History goes back to burning holes with fire then at a later period piercing with hot irons. Modern wood piercing began with high speed air turbine tools. The master of this craft is J. Paul Fennell with a style that has evolved into intricate carving. Andi Wolf has evolved from pierced to fully carved. Malcolm (Mac) Ray does bands of piercing on plain vessels.

Piercing can add a play of light that can change a piece from static to dynamic. Working piercing and pyrography together can produce a unique style. Pyrography can be used as an outline for piercing or integrated with

piercing. There are many opportunities for evolving design in the combination of the two techniques.

## **DESIGN**

Pattern can be either light or dark.

A dark interior with random piercing works well.

Negative space can be used as a color in the design.

### **Balance**

Should it be all or partial application and where should it be.

Some possibilities are a banded neck, banded middle, banded edge like lace.

The piece may have carving and/or pierce above and pyrography below.

Reverse this and the piece might look heavy and awkward.

## **PIERCING TOOLS**

High speed air turbine tools run at 400,000 rpm

Air demand is 40-60 psi and 2 cfm@40 psi.

Dremel and flexshaft tools max out at below 40,000 rpm and wont pierce cleanly.

## **References:**

### Tools

Powercrafter <http://www.powercrafter.biz>

Colwood (<http://www.woodburning.com>) burners

Razertip (<http://www.razertip.com/razertip.htm>) pens, burners

Treeline (<http://www.treelineusa.com>) pens

Wood Carvers Supply (<http://www.woodcarverssupply.com>)

Burnmaster units

Detailmaster pens

Turtle Craft (gourd art) <http://www.turtlefeathers.com/index.html>

### Training

<http://www.freeartschool.com/creativ.html>

<http://sawdustconnection.com/Pyrography101.htm>

### Supplies

Transfer paper- Michaels, Plaza Art, Treeline, Wood Carvers Supply

Compressed charcoal sticks- Michaels, Plaza Art