Wood Carving Tools

Woodcarving can be as simple or as complex as the project requires or as the carver cares to make it. An amazing amount of work can be done on small basswood or butternut carvings with just a chip-carving knife or an X-Acto knife. Add a few gouges and your range of carving possibilities increases.

Power carving tools such as a flexible-shaft Foredom tool can help speed up the carving process and produce effects that you cannot get with hand tools. Large power tools, such as a band saw, belt sander, drill press, and chain saw, fill out the woodcarver's shop.

(Note: **The Sculpture Studio** does **not** sell tools. See links below for tool catalogs.)

Knives and Chisels for Wood Carving

Chip Carving Knife

Probably the first tool a wood carver start with is a knife. Its primary use is for whittling and chip carving. The blade is about 1 1/2" long, and has a handle designed to fit comfortably in the hand. Like gouges, it should be made of high carbon steel that will hold an edge for a long time, but not be too brittle.

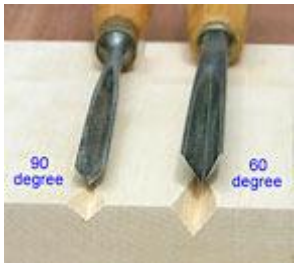
Carpenter's Chisels

These chisels have a flat edge (#1 sweep). They are not usually used for sculpture, because the edge of a flat chisel tends to dig into the wood, twisting and plunging the tool deeper on one side than the carver may have desired. They can give a crude, unschooled look that may be desirable on some types of sculpture, like Outsider Art.

U-Gouges

Gouges are the work horses of wood carving. U-gouges are designated by the width of the cutting edge (in inches or millimeters), the *sweep,* or amount of curvature of the cutting edge(an arbitrarily assigned number), and the shape of the shaft (straight, bent, spoon, or back bent).

Gouges can be purchased with these characteristics:
-in widths form 2mm (1/16") to 60mm (2 3/8")
-in sweeps from #2 (a barely perceptible curve) to #11 (a very deep, half round curve)
-in straight, bent, spoon, and back-bent shafts.



V-Gouges

V-gouges are designated by the width between the top edge tips and the angle of the vee bottom edge.

Gouges can be purchased with these characteristics:
-in widths form 2mm to 30mm
-in 60 degree (#12 sweep) and 90 degree (#13 sweep)

Bent and Spoon Gouges

These specialty gouges are used to get into inaccessible spots on a carving that a straight gouge can't reach.

Bent Gouge: the entire length of he shaft is curved.

Spoon Gouge: the final 1 1/2" of the shaft is deeply bent in a spoon shape.

Back-bent gouge: a spoon gouge with the curve reversed so the cutting edge s convex instead of concave.

Skewed Chisel

A skewed chisel's cutting edge is angled back from the leading edge at a 45 degree angle.

Palm Tools

Most of he above tool shapes can be purchased as smaller palm tools.

A chip carving knife and an assortment of palm gouges are all the is needed for creating small carvings in basswood or other soft woods.

Mallet

The traditional mallet for carving is cylindrically shaped and made from a heavy, dense hardwood.

I prefer using a rubber mallet. While it doesn't have the driving power of wood mallet, it is less noisy, and easier on the chisel handles, and has some spring that brings the head back up for the next swing.

Power Carving

Foredom Flexible Shaft Tool

Foredom tools have a motor (1/8 -14 HP depending on the model), and run at up to 20,000 RPM. A flexible shaft extends

from the motor to a hand piece that holds a wide variety of burs used for cutting and texturing wood. Its variable-speed capability is operated by a foot controlled pedal.

The Foredom tool is an invaluable tool that can speed up carving. It reaches into small places that chisels can't go, models wood with almost disregard for the grain direction, makes sanding quick and easy, and allows the creation of textures that can not be made in any other way.

Burs and Accessories

A wide variety of burs are available to fit the several different styles and sizes of Foredom hand pieces. Burs that may have been intended for other purposes can be used for woodcarving, such as single cut and double cut carbide burs (intended for metal work).

Burs with needle-sharp points of tungsten carbide and burs coated with industrial diamonds can be used for texturing wood. Drill bits can placed in the adjustable chuck hand piece for drilling holes.

Small sanding discs and drums are also available for sanding and finishing.

Woodworking Machinery

Band Saw

A band saw has a long, thin blade welded into a loop. An electric motor powers the blade around two large wheels.

The band saw is the woodcarver's most often used large power tool. It quickly cuts off scrap wood, saving you the work of removing it by hand.

To cut out a small carving, trace a pattern of the subject's front view and side view onto the block of wood. Cut out the side view. Save the two end pieces and put everything back together again.

Next cut out the front view. Now that most of the scrap wood has been removed, begin rounding out the carving with chisels.

Drill Press

The drill press is another invaluable shop tool. It drills precise holes, but other attachments can be added, such as a sanding drum.

Belt Sander

A belt sander is another tool that comes in handy for doing so many things that come up during a carving project. Once you have one, it seems indispensable.

Planer and Joiner

The planer and joiner are used to surface wood, giving boards flat sides. If you plan to laminate boards into larger blocks for carving, flat surfaces are necessary.

These tools are nice to have, but I worked for years without them. I just had to pay more to have my wood supplier mill the boards when I purchased them.

Chain Saw

A chain saw is a very useful tool to rough out logs for large carvings. For shop use, I prefer an electric model.