shop design

Hand-tool shop saves space

BY JOHN NESSET

ost passionate woodworkers imagine themselves in a spacious shop full of the best hand and power tools. In this age of apartment living and tight budgets, however, the reality is often limited space and funds. Yet there's no reason for those conditions to restrict a serious woodworker. In the tightest of quarters and with a limited budget, you still can indulge a passion for woodworking.

For eight years, I worked wood first in the corner of a dingy basement, then



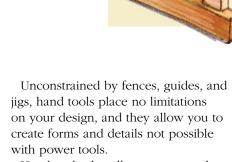
in an apartment dining room, and lastly in a 9-ft. by 12-ft. four-season porch. I turned out a respectable body of work during that time—some of it winning awards—and I

did it all with hand tools. I even resawed and thicknessed lumber by hand.

For less than the cost of a cabinet saw, you can equip your shop with a set of hand tools versatile enough to build whatever you design. And you'll make very little noise and fine dust, meaning you can work almost anywhere.

Work wood without constraint

Power tools are more efficient at some tasks, like dimensioning lumber, but hand tools outshine them where it counts: creativity and craftsmanship.



Hand tools also allow you to work more precisely with less fuss. To cut a tight dovetail, for example, you need only cut and pare to your layout lines. There's no time wasted fiddling with bit depths and jig setup.

But precision isn't necessary everywhere. A set of legs should be the same length, but the individuality given to each by handwork lends them charm and character. You know they were made by a craftsman.

A serious bench is the center of a handtool-based workshop. It needs to withstand the punishment you'll give it when planing,

cutting, and chopping mortises or dovetails. Look for a solid top with dogholes for

clamping, a rigid base that resists racking,

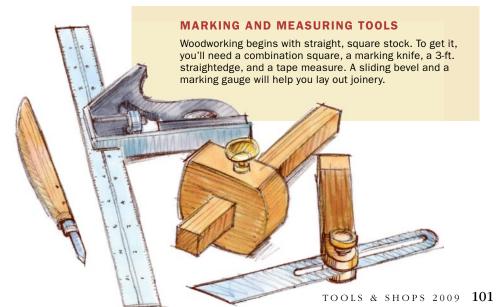
and two woodworking vises.

WORKBENCH

Workbench is foundation of the shop

The starting point of any serious woodshop, especially one where hand tools dominate, is a workbench. My first bench was a rickety table—not easy to use. So one of my first projects was a proper bench with a face vise and tail vise.

A workbench makes everything else possible. It's where you plane boards, cut and chop joinery, and assemble your



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projects. Without a strong bench, you really can't work effectively.

A bench for a small shop must be compact, but it can still be rigid and heavy. If you have to, weight it down with cinder blocks or sandbags.

The hand tools you need

You don't need a large collection of hand tools to build furniture. I worked for a long time with a set that fit on a shelf 6 ft. long and 1 ft. wide.

You can't build furniture if you don't have square stock and can't measure parts, so begin with measuring and marking tools. You'll need a combination square, a marking knife, a marking gauge, a sliding bevel, a 3-ft. straightedge, and a tape measure.

Handplanes can be used to joint, shape, trim joinery, and smooth surfaces. Start with a No. 5 jack plane. It's lighter than a No. 7 jointer and longer than a No. 4 smoother, but it can do the job of both. A low-angle block plane will let you trim joinery and end grain, and chamfer edges.

You'll need a backsaw or dozuki depending on your preference for cutting on the push stroke or pull stroke, and a set of bench chisels and a mallet to chop out waste and clean up joints.

Two more things to remember: Your tools will be worthless if they're not

sharp, so get a set of sharpening stones. And your projects won't come together without a basic set of clamps.

Bowsaw for grunt work

The biggest challenge in a hand-tool shop is ripping and resawing lumber. A 27-in. bowsaw can handle both jobs. I have used one since my earliest days in woodworking.

Of course, ripping and resawing by hand takes time and effort. An alternative is to take your stock to a friend, colleague, or commercial shop with the necessary machines. Or, if you have the space and budget, buy a good bandsaw. Its small footprint will fit into a tight shop, though it will throw off fine dust.

BOWSAW BEFORE BANDSAW

A 27-in. bowsaw makes ripping and resawing manageable in a hand-tool shop (the blade is pivoted so the frame clears the work). Its teeth should be filed for rip cutting. If you'd rather not expend the energy to rip and resaw by hand, get a good-quality bandsaw. Keep in mind, however, that bandsaws are expensive, noisy, and messy.

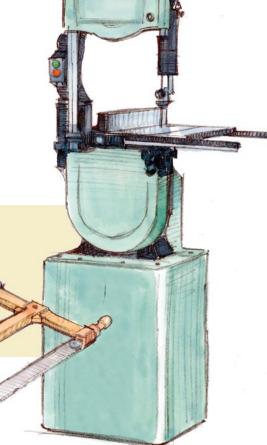


Photo: staff; drawings: Stephen Hutchings

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