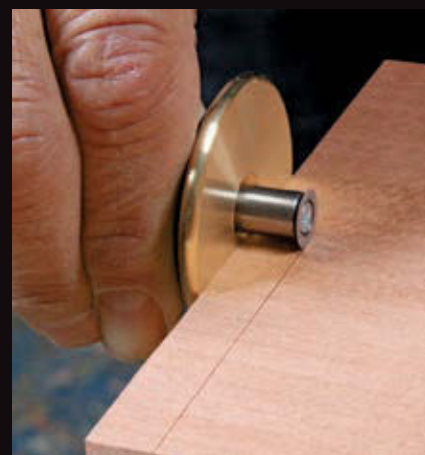


# Hand-Tool Buyer's Guide

Two decades of tool tests reveal the essential kit

BY ASA CHRISTIANA



Whether you're trimming machine-cut tenons for a perfect fit, leveling one surface to another, planing decorative chamfers, or squaring up a router-cut corner, you can count on hand tools to do the job quickly and efficiently. They'll also do it quietly.

Appreciation for the peacefulness and pleasure of handwork has grown markedly in recent years, fueling an explosion of products, from handmade collector's items to excellent factory-made options. But with so many options available, it can

be hard to know where to start. Luckily, *Fine Woodworking* has been conducting real-world tests on the best hand tools for decades now, with the help of a small group of trusted, independent experts.

In this article, I've compiled a list of the tools that came out on top in our tests in each essential hand-tool category. Whether

you're at the beginning of your hand-tool journey, or are looking to make a long-awaited purchase, you can rely on these recommendations to find excellent tools that will soon become trusted friends.

*Asa Christiana is a woodworker, editor, and writer in Portland, Ore.*

**GOOD VALUE**

In addition to presenting the best tools in each category, we've also included, where appropriate, a less expensive option that, while it may not quite measure up to the winners, represents a good value for woodworkers on a tighter budget.

# Measuring and marking

For hand-tool work especially, success starts with accurate layout. There are lots of measuring and marking tools out there, but sliding squares, marking knives, and marking gauges are must-haves. Here are the best we found.

## SQUARES

Phillip C. Lowe tested his two favorite types of squares: the indispensable 12-in. combination square, used for everything from measuring and marking to setting up machines accurately; and the handy 4-in. double square, which fits in your apron pocket and is easier to handle for smaller tasks. After trying out 61 products, he favored Starrett and PEC for both types.

### STARRETT 12 IN., \$100

Head is easy to remove and lock down; well machined, easy to read, and an excellent all-around performer.



### STARRETT 4 IN., \$80

Head is easy to remove, replace, and lock down; narrow blade, at 5/8 in., made it easier to fit into tight places.



### GOOD VALUE PEC 12 IN., \$80

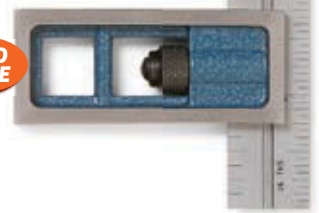
Very good product; nearly identical to more expensive models from McMaster-Carr and Brown & Sharpe.



### PEC 4 IN., \$40

Good fit and feel and comfortable to use; locknut occasionally needed extra tightening.

GOOD VALUE



### HOCK VIOLIN KNIFE, DOUBLE-BEVEL, \$33

Heavy blade stayed solidly on track in all situations.



### BLUE SPRUCE CLASSIC MARKING KNIFE, \$80

Spearpoint blade with a flat back made it a champ at laying out dovetails.

GOOD VALUE



### X-ACTO, NO. 1 PRECISION KNIFE, \$4

Thin, flexible blade was nimble enough to trace delicate inlays.

## MARKING KNIVES

As Steve Latta said in his review, "Marking out with a knife instead of a pencil means that you care about the details. A good marking knife will do a number of things well. It will cut wood fibers cleanly, leaving a narrow, crisply defined line, easily visible and deep enough to anchor a chisel. The blade will fit into tight spaces and the tool will be easy to hold in a pencil-style grip."

## MARKING GAUGES

Marking gauges do one thing very well: mark a line parallel to an edge. To narrow a crowded field, Jeff Miller looked at cutting gauges only—those that use a knife or a sharpened wheel to cut clean lines in any direction—and eliminated pin-style gauges, which tend to tear the wood when used across the grain.



### TITE-MARK, \$90

Has an excellent micro-adjuster. Can be easily and precisely adjusted with one hand.

GOOD VALUE



### VERITAS, STANDARD WHEEL, \$37

An O-ring inside the fence provides just the right amount of friction to hold it where you put it but still allow it to slide, making fine adjustments easy.

# Handplanes

There's an overwhelming array of handplanes on the market, for everything from smoothing boards and trimming joints to shaping moldings. The best come ready to make fluffy shavings, save for a quick sharpening. Sharpening is easy too. Thanks to blades with dead-flat backs, they need only a light polish before you hone the bevel.

## LOW-ANGLE BLOCK PLANES

These planes are effective on both end grain and long grain, more comfortable in the hand, and less prone to chatter than higher-angle, standard block planes, making them the obvious choice if you're buying just one. As Mario Rodriguez pointed out in his review, a block plane's small size makes it easy to control on an assembled piece, say for chamfering a table edge, and well-suited for jobs like removing machine marks from the edges and ends of a board, planing curved edges, and trimming joinery flush.



LIE-NIELSEN NO. 102, \$125

Compact, easy to set up and adjust; no better block plane available for the money.



LIE-NIELSEN NO. 60 1/2, \$165

Adjustable mouth for coarse work or tricky grain; all adjustments smooth and precise; very well-balanced and comfortable to hold.



VERITAS DX60, \$225

Well made and very comfortable, smooth and responsive blade adjustments, adjustable mouth.



VERITAS LOW-ANGLE, \$170

Largest and heaviest of the group; comfortable, with indents for fingers; smooth, precise adjustments, adjustable mouth.

## JACK PLANES

If you can afford only one bench plane to start with, Jeff Miller recommends the versatile jack plane, which handles smoothing, but can also be used for the flattening and straightening tasks often reserved for the longer planes. While the standard versions are easier for beginners to adjust and handle, the bevel-up blade orientation in low-angle jacks (bottom row) lets you alter the cutting angle by resharpening.

LIE-NIELSEN NO. 5, \$350

Very well-machined; back of the blade perfectly flat; chipbreaker seated fully against the blade; frog/mouth adjustments quick and easy.



VERITAS 5 1/4 W, \$257

Great overall fit and finish; Norris-style adjuster was tight and precise; blade was flat, easy to sharpen; screws in plane body prevent lateral blade movement during adjustment.



LIE-NIELSEN NO. 62 LOW-ANGLE JACK PLANE, \$245

Very well machined, flat blade back, flat sole, and square sides; cut very well; blade and mouth adjustments were precise and easy; using hammer for lateral adjustments takes getting used to.



VERITAS LOW-ANGLE JACK PLANE, \$252

Adjustable mouth; Norris-style adjuster was tight and precise; blade was flat, easy to sharpen; screws in plane body prevent lateral blade movement during adjustment.



## SMOOTHING PLANES

As Chris Gochnour said in his test, “Properly tuned and sharpened, a smoothing plane can leave a pristine finish on almost any board. Yet it is still compact enough to be ideal for general planing jobs like fitting and trimming parts.” Because so much rides on the finished surface, quality means everything with this purchase. All three of our recommendations will deliver flawless results, and all allow mouth adjustments without removing the blade, a big plus.



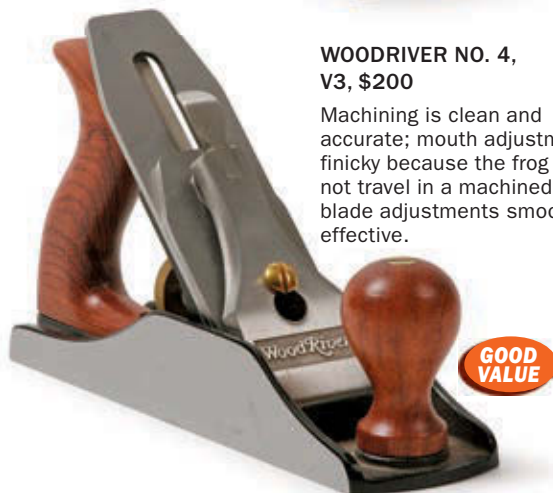
**CLIFTON NO. 4, \$390**

Handled every test with ease; a hefty tool, but perfectly balanced; thick blade holds an edge well and has a stout, two-part chipbreaker; back of blade needed some flattening, a minor inconvenience.



**LIE-NIELSEN NO. 4, BRONZE, \$350**

Well-crafted tool and a fabulous performer; bronze version won't rust and adds nice heft; blade adjustments easy and precise; back of blade perfectly flat.



**WOODRIVER NO. 4, V3, \$200**

Machining is clean and accurate; mouth adjustments finicky because the frog does not travel in a machined slot; blade adjustments smooth and effective.

## PLANES FOR TUNING TENONS

Gochnour looked at both shoulder planes and rabbet block planes, the two types of specialty planes he uses for fine-tuning tenons off the tablesaw. While some woodworkers use the shoulder plane on tenon cheeks as well as on shoulders, many turn to the wider rabbet block plane to shave thin, precise layers off the cheeks. Both tools excel at cutting into corners, but used in tandem they fit traditional tenons to perfection.



**VERITAS LARGE SHOULDER PLANE, \$255**

Flawless tool; very comfortable to grip with one hand or two; blade lapped dead flat; mouth easy to adjust.

**LIE-NIELSEN RABBET BLOCK PLANE, \$175**

Cut quality is good; square, full-width blade cuts rabbets on both sides; depth adjuster tended to shift blade laterally, so you must be careful.



**VERITAS SKEW BLOCK PLANE, \$240**

Cut quality is excellent; easy to set up; comfortable to hold; there's a learning curve associated with sharpening angled blade; buy version that suits your favored hand.

# Handsaws

Every woodworker needs a good handsaw or two to make quick, precise cuts on parts that power tools can't easily handle. Dovetail saws are essential for their namesake joint, but they do a lot more. All-purpose backsaws, useful for a range of joinery, are even more versatile than dovetail saws. Then there's the coping saw, which excels at handling curves. And Japanese saws, which cut on the pull stroke, deliver speed, accuracy, and a thin kerf.

## ALL-PURPOSE BACKSAWS

Also known as carcass saws, these larger joinery saws can do it all, making them a great first handsaw for beginners, and a big-joinery specialist for those with a dovetail saw already. These are Western-style saws, which cut on the push stroke, with a thick spine down the back for stiffness. Of his four favorites, Gochnour said, "They were sharpened extremely well, so they started easily, cut fast, and tracked perfectly. They also performed well on both rip- and crosscuts."



**BAD AXE 12-IN. HYBRID SAW, \$245 AND UP, DEPENDING ON OPTIONS**

Not fastest, but ripped and crosscut equally well; starts smoothly; most comfortable handle.



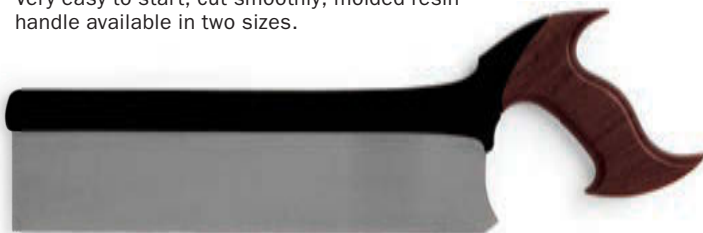
**LIE-NIELSEN TAPERED CARCASS SAW, \$140**

Longest saw; thin kerf; fast ripping and crosscutting.



**ROB COSMAN PROFESSIONAL LARGE TENON SAW, \$300-\$350, DEPENDING ON HANDLE**

Very easy to start; cut smoothly; molded resin handle available in two sizes.



**VERITAS CROSSCUT CARCASS SAW, \$90**

Ripped fast and tracked well during ripcuts; crosscuts quick too; started smoothly; very good saw and fantastic value.

**DOZUKI "Z" SAW, \$40**

Best crosscut performer, also rips adequately.

**GOOD VALUE**

**GYOKUCHO DOVETAIL SAW, 240MM, NO. 311, \$54**

Made dovetail cuts extremely well at an affordable price; replaceable blade.

**GOOD VALUE**



**DELUXE 240MM RIP DOZUKI SAW, \$100**

Best saw for dovetailing; performed superbly.

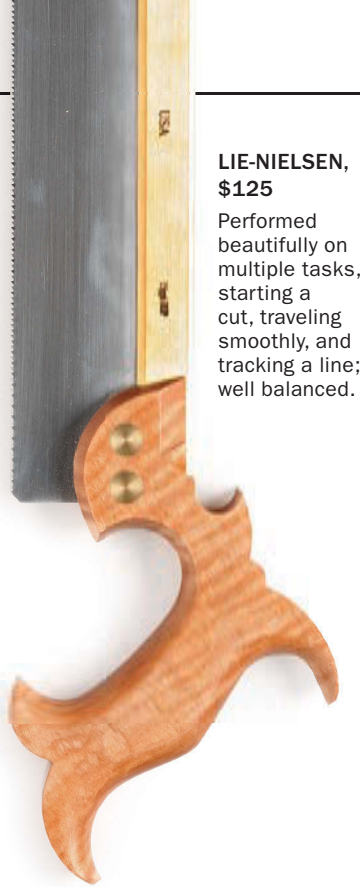
## JAPANESE-STYLE SAWS

A fair number of woodworkers prefer Japanese-style handsaws, which cut on the pull stroke. They start much easier than push saws, cut faster, and very seldom bind. And they are much less expensive than Western saws. While most can't be resharpened, when their hardened, razor-sharp teeth finally dull after years of use, it won't cost you much to replace them—just the blade, or the whole saw. Charles Durfee recommends that if you only want to cut dovetails, then buy a ripsaw. For both ripping and crosscutting, the Dozuki "Z" crosscut saw is the best buy.



**BAD AXE  
STILETTO,  
\$250-\$350,  
DEPENDENT ON  
OPTIONS**

Cuts with ease, accuracy, and speed; amazing overall.



**LIE-NIELSEN,  
\$125**

Performed beautifully on multiple tasks, starting a cut, traveling smoothly, and tracking a line; well balanced.



**SKELTON, \$320**

Excelled at every task in both oak and cherry, from beginning the kerf to tracking a line quickly; company offers custom handle sizes.

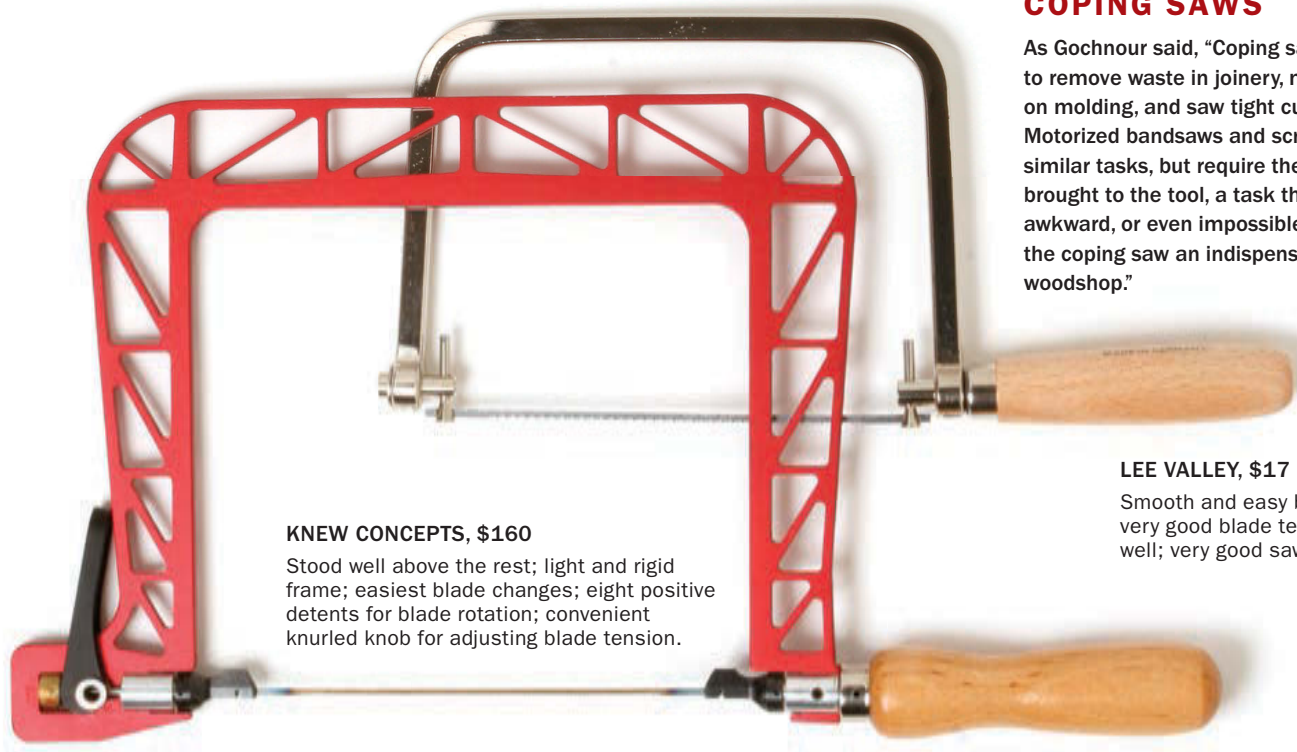


**VERITAS  
STANDARD, \$76**

Best value; cut extremely smoothly; quite maneuverable; composite spine saves weight.

**WESTERN-STYLE DOVETAIL SAWS**

When Gochnour tested these Western-style dovetail specialists, he invited seven skilled friends to help him narrow a wide field of saws to those that work well for all sorts of people. They are available at prices for every budget. While precise dovetail cuts were a great test for these tools, all four of his favorites will do a lot more than dovetails, from trimming parts to length to cutting quick, accurate miters.



**KNEW CONCEPTS, \$160**

Stood well above the rest; light and rigid frame; easiest blade changes; eight positive detents for blade rotation; convenient knurled knob for adjusting blade tension.

**COPING SAWS**

As Gochnour said, "Coping saws can be used to remove waste in joinery, make cope cuts on molding, and saw tight curves of all kinds. Motorized bandsaws and scrollsaws perform similar tasks, but require the workpiece to be brought to the tool, a task that can be difficult, awkward, or even impossible...This makes the coping saw an indispensable tool in the woodshop."

**LEE VALLEY, \$17**



Smooth and easy blade rotation; very good blade tension; cuts very well; very good saw overall.

## Bench chisels

This general-purpose tool is suitable for a broad range of tasks, including dovetailing and mortise-and-tenoning, paring pegs flush, installing hinges, chamfering edges, and even cleaning up glue squeeze-out. They can be driven with a mallet, or used two-handed for controlled paring cuts, and work equally well with hard or soft wood. Popular sizes start at ¼ in., so that's where our prices start too.



### LIE-NIELSEN BEVEL-EDGE CHISELS, FROM \$55

Almost flawless out of the box; back was lapped flat and nearly polished; beveled edges tapered precisely; tool's size and feel make it the ideal bench chisel; A2 blade's durability was middle of the pack, but the ergonomics prevailed.

### NAREX CLASSIC BEVEL-EDGE CHISELS, FROM \$14

Easy to grasp whether chopping with one hand or paring with two; back of chrome manganese blade was flat and edges beveled sufficiently for dovetailing; cutting edge held up quite well.

### MATSUMURA BLUE STEEL BENCH CHISEL, FROM \$73

Blue-steel chisel is finely crafted and set to go out of the box; end of handle creates a comfortable pad for your hand; blade held an edge with the best, and is slightly longer than other Japanese blades; moderately priced for such a high-quality chisel.

### GRIZZLY JAPANESE CHISELS, FROM \$20

Diamond in the rough; back was slightly concave along length, but lapped out without much trouble; end of handle must be mushroomed over to set hook—plan on 30 minutes for this task; performed admirably and edge held up nicely; a real bargain.

### STANLEY SWEETHEART SOCKET CHISELS, FROM \$33

Precisely machined with clean beveled edges; some backs needed extra work to flatten and you'll need to lightly hammer handles into sockets; short length gives nimble, fingertip control; edge retention is very good; well-made, great form, great value.



### VERITAS BENCH CHISELS, FROM \$72

Flawless out of the box; blades stout with bevels that extend all the way to tip; backs lapped dead flat; handles comfy to grasp and won't roll off bench; very solid feel under mallet blows; edge easy to sharpen and held up well; on par with the best.

# Sharpening

For a hand tool to perform well, it has to be sharp. A set of waterstones and a honing guide make it fast and simple to get razor sharp and back to work.

## WATERSTONES

As Gochnour said in his test, “there’s no doubt in my mind that waterstones are the best choice for honing chisels and handplane blades. They produce a fine polish quickly, and are more durable and less expensive (in the long run) than sandpaper.” Prices are based on the 800- or 1,000-grit stone, and go up for finer grits.



### OHISHI, FROM \$55

Stones cut very fast; very hard so they remain flat for a long time, and don’t need to be soaked in water.



### NANIWA PROFESSIONAL (WAS CHOSERA), FROM \$74

Smoothest cutting action; create nice slurry with use; easiest to flatten.



### SHAPTON GLASSSTONE, FROM \$54

Performed great; didn’t cut quite as quickly as other winners but dished the least; very hard—blades occasionally chattered across surface.

## HONING GUIDES

We finish with yet another tool test from Gochnour. “While some may prefer to sharpen freehand, I’m a big proponent of honing guides, and I recommend one for anyone looking to get sharp edges,” Gochnour said. There are excellent honing guides for all budgets.



### LIE-NIELSEN, \$125 PLUS \$25-\$35 FOR ACCESSORY JAWS

Machined to tight tolerances; held blades tight and square; easy to use; narrow chisels pose problems with squareness; accessory jaws for narrow and skewed blades.



### VERITAS MK. II DELUXE, \$125

Did an excellent job sharpening every type of blade; comfortable to use and easy to set up; clamping blades square takes some care.



### GENERIC SIDE-CLAMPING GUIDE, \$15

Comfortable to hold, easy to set up, and performed basic tasks well; nice job honing straight and cambered plane irons, and also spokeshave blade; struggles to hold chisels level—be mindful where you apply pressure in use.

