



Dream Shop in the Woods

Built specifically for woodworking, this shop meets the needs of two busy furniture makers

BY LES CIZEK



The first impression people get when they enter our shop is that it looks more like a gallery than a shop. With artwork, large workspaces, whimsical design details and shining, clean floors, our shop is not like the cozy dens that many woodworkers use. It is, however, an efficient and comfortable place to work. As full-time custom furniture makers, my business partner Harry Van Ornum and I use every square foot of our shop, called Four Sisters Woodworking (inspired by a quirky Victorian photograph).

We've designed the space to be large, open and light-filled because that's the kind of environment we like to work in. Our shop is also the culmination of lessons learned from the poorly made shops we've worked in over the years.

Harry and I have more than 40

years of woodworking experience between us. We started our partnership in 1995 in a leased space in downtown Fort Bragg, Calif. We ran that shop for five years, renting bench space to four other woodworkers. It got to be a very busy place, and Harry and I found we were doing a lot of things other than making furniture. We decided to sell the place and build a perfect shop just for the two of us, leaving the landlord hassle behind.

This new shop is a unique and functional workspace (see the floor plan below). It comes very close to fulfilling our vision of the perfect shop.

Learning from our old shops

Years ago, I had my first shop in Florida in a corner of a storage building that was used primarily to shelter a boat. The space was cramped and dirty

and left little room to work. Next came a garage with an awning that enabled me to move my work outside on good days. Harry also had some very poor shop spaces, the most notable being an unheated space in Minnesota.

The common denominator of all those shops seemed to be that none of them were designed for, or dedicated to, woodworking. We made buildings into woodworking shops rather than designed a shop just for woodworking.

Our ideal shop would have plenty of natural light, easy access for large pieces of lumber and sheet goods to be brought in, appropriate wiring for three-phase and single-phase machines, and finally, a comfortable floor.

As Harry and I sat down to plan our new shop, we knew we

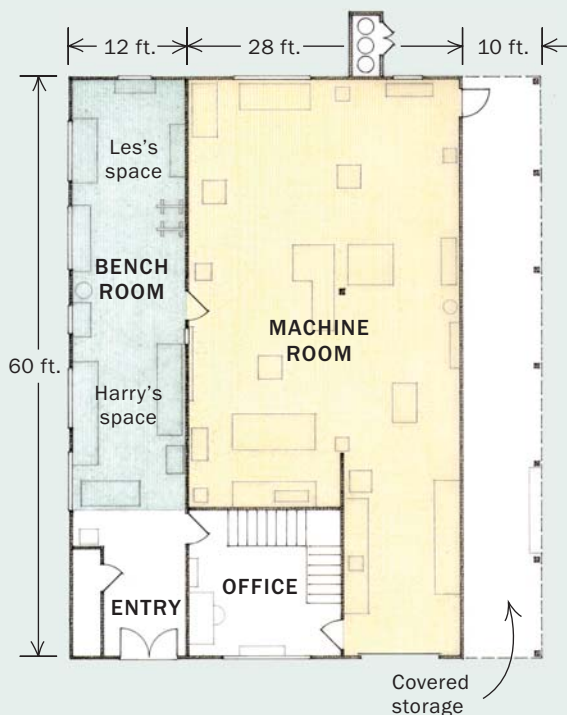
SEPARATE ROOMS FOR BENCH WORK AND MACHINE WORK

Because the furniture makers spend 80% of their time in the bench room, they relegated machine and bench work to separate rooms, giving each partner a quieter place for hand-tool work.

BENCH ROOM



Bench room for two. With high ceilings and lots of light, the bench room is a comfortable place for handwork and finishing.



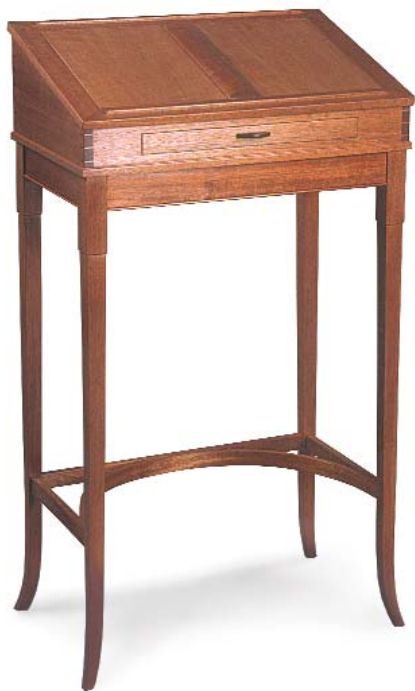
MACHINE ROOM



Efficient layout. Machines are arranged so that wood progresses in logical order from the lumber rack through all of the workstations.

Harry's bench space

Harry Van Ornum's furniture requires a lot of handwork, and he does most of his work at his bench. He keeps frequently used tools nearby, such as clamps, squares and planes. He admits that he has more planes than he uses, but as a collector as well as a user, he sees them as functional art.



Cutting tools in line. On his other bench (across from the planes), Van Ornum keeps his chisels and carving gouges within easy reach.

wanted to build a woodworking space from the ground up.

The building blends with the site

Harry and his wife, Scotty Lyons, own a forested five-acre site about a mile from downtown Fort Bragg, and we decided to build there. We sited the shop to appear as if it were emerging from the woods. Warm and inviting, the building fits naturally into the surrounding redwood forest.

The exterior is typical of Mendocino County barns. The footprint is 60 ft. by 50 ft., which includes a 10-ft. by 60-ft. unenclosed extension on the south side. Harry's wife has a

weaving studio in the upstairs portion of the shop, which is about 650 sq. ft. The basic shell of the building was erected by a contractor who specializes in agricultural and warehouse construction. Harry and I installed the windows and finished the interior, including building the second floor and all of the walls. Harry is also a general contractor, and his skills and knowledge made this work go smoothly.

The unenclosed storage area runs the full length of the building. Eventually, we'd like to enclose this area, but for now it's where we keep rough lumber as well as our panel saw for cutting large sheet materials.

Les's bench space

Cizek's fiery-faced tool cabinet in the background is typical of his finishing style, which frequently incorporates bright colors. His work area has the requisite shaping tools and a workbench.



The shop's exterior is red-wood board and batten, and the roof is steel painted dark green. Sixteen skylights pierce the roof and produce a strong, diffuse light through the interior.

Separating bench and machine rooms

One major influence on our shop's design was the shop at the College of the Redwoods, which we both attended. The shop boasts separate bench and machine rooms. The advantage of this setup is that noise and dust are confined to the bench room, leaving the machine room as a quiet retreat for more intense work. The wall between these rooms has a layer of insulation and sound channel to help keep things quiet. While one of us is working stock in the machine room, the other can be



A temple for tools. Cizek decided that his prized, and much-used, custom Japanese spokeshaves needed to have their own home.

cutting dovetails or drawing in the bench room. Neither disturbs the other.

The 12-ft. by 60-ft. bench room occupies the north side of the building. It is lit by six skylights, five north-facing windows and three metal halide lamps. Because we spend most of our time in the bench room, we



Keeping those small parts organized. Cizek made a library card catalog-style chest for screws, hardware and other items.

tried to make it comfortable with lots of colors, painted wood floors and framed prints on the walls. We have found that being surrounded by color and art influences the creative process in each of us.

Likewise, the number of win-

dows adds to the pleasing atmosphere. Whimsically shaped, recycled windows let in light between the rooms and break the expanse of large, white wall.

The machine room is accessed through a 3½-ft.-wide, two-way swinging door. The floor is a

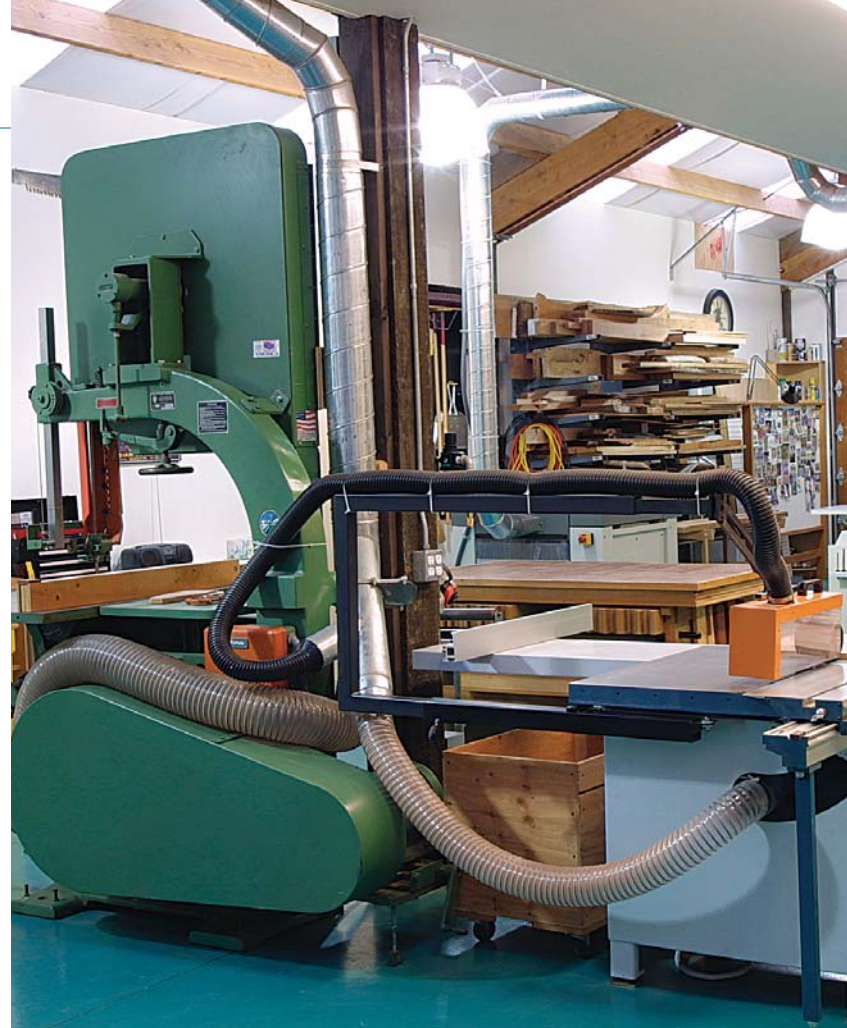
The machine room

Rough lumber enters here. The lumber rack is close to the chopsaw. The jointer and planer are stationed just beyond.

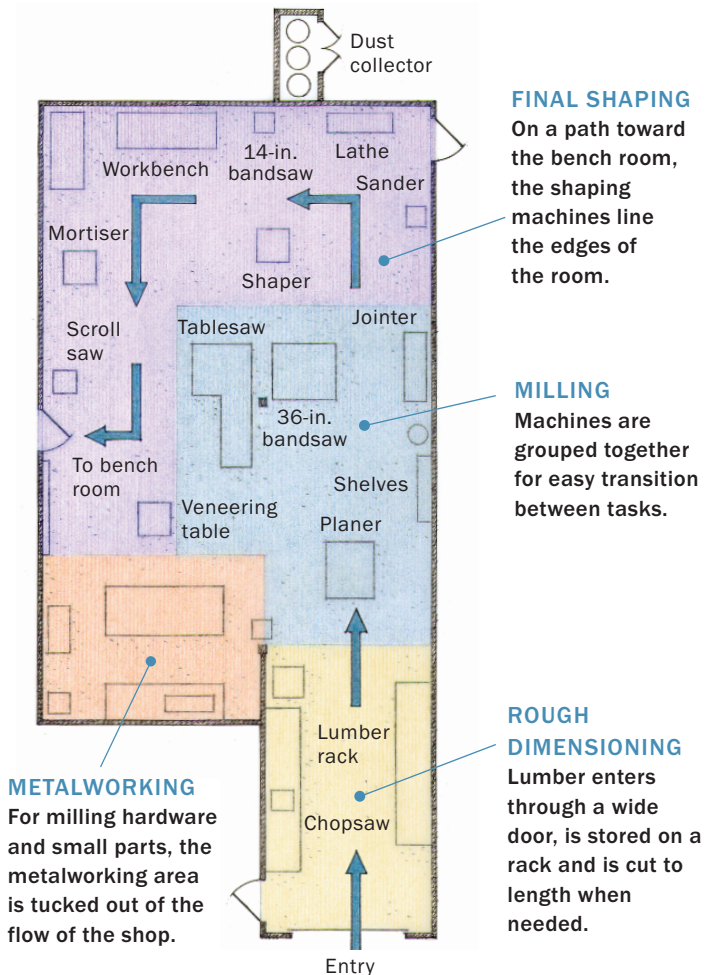


WORKSHOP ZONES

Each operation has a zone within the shop at Four Sisters Woodworking. Lumber enters through the large garage-style door and then makes its way through milling, shaping and eventually to the bench room for handwork and finishing.



Dust collection for large machines. The 36-in. bandsaw and sliding tablesaw are grouped together so that they can share a duct for efficient dust collection.



FINAL SHAPING

On a path toward the bench room, the shaping machines line the edges of the room.

MILLING

Machines are grouped together for easy transition between tasks.

ROUGH DIMENSIONING

Lumber enters through a wide door, is stored on a rack and is cut to length when needed.

METALWORKING

For milling hardware and small parts, the metalworking area is tucked out of the flow of the shop.

concrete slab painted with a durable epoxy paint. We left plenty of room around each machine to make the movement of stock easier. The machine room is lit by a combination of fluorescent lights and 10 skylights. With the skylights, we don't have to turn on the fluorescents until the evening.

Here on the north coast of California, summertime highs reach only the 60s and winters can be cold and damp. So we installed radiant heat under the floor in the bench room and placed forced-air propane heaters in the machine room.

How the shop works

In the machine room, we designed our shop around the flow of rough lumber to finished furniture. On the right side of the shop through a

large garage door, we unload our lumber to the storage rack. We currently have a small lumber-storage rack where we keep a collection of furniture-grade wood (we keep a large cache in a barn at Harry's house). From there, we can take the lumber directly to the planer for milling. The jointer and large bandsaw are beyond the planer for further dimensioning. Next to the bandsaw, we have a sliding tablesaw for sheet goods and other uses. On the perimeter, we've located the shaping tools, such as a lathe, shaper and sanding machines, because they are used primarily with smaller pieces and don't require the room needed for manipulating large lumber. But we've left plenty of space between machines so that we can move around easily.



Harry and I do a lot of veneering, so we set up the bandsaw, jointer and veneering table for this process. We placed the jointer next to the large bandsaw because while we're cutting veneers, we often like to joint a face in order to get a clean cut.

We also have a metalworking area where we mill custom parts and hardware. We tucked this part of the shop into a corner of the machine room so that metal filings are kept away from lumber.

Our central dust-collection system is a three-phase, 7½-hp unit. We routed the ducting to each machine. The dust collector is outside the shop on the east side so as to keep the noise away.

Each of our bench spaces reflects our personal interests. I use a wide variety of finishes, including aniline dyes, so my tool cabinet has a fiery red face. I also have a cabinet full of my most-used finishing

supplies and I am able to get to what I need easily. In addition, I have the hand tools that I require, but not much more. I do have a special set of Japanese spokeshaves that were custom made. To honor them as well as their maker, I built a small wall-hung pagoda that houses them.

While one of us is working stock in the machine room, the other can be cutting dovetails or drawing in the bench room. Neither disturbs the other.

Harry is a collector and user of old tools, so around his bench he has a variety of classic, old planes. He also is an accomplished carver; therefore, his gouges and chisels are laid out in a line for easy access.

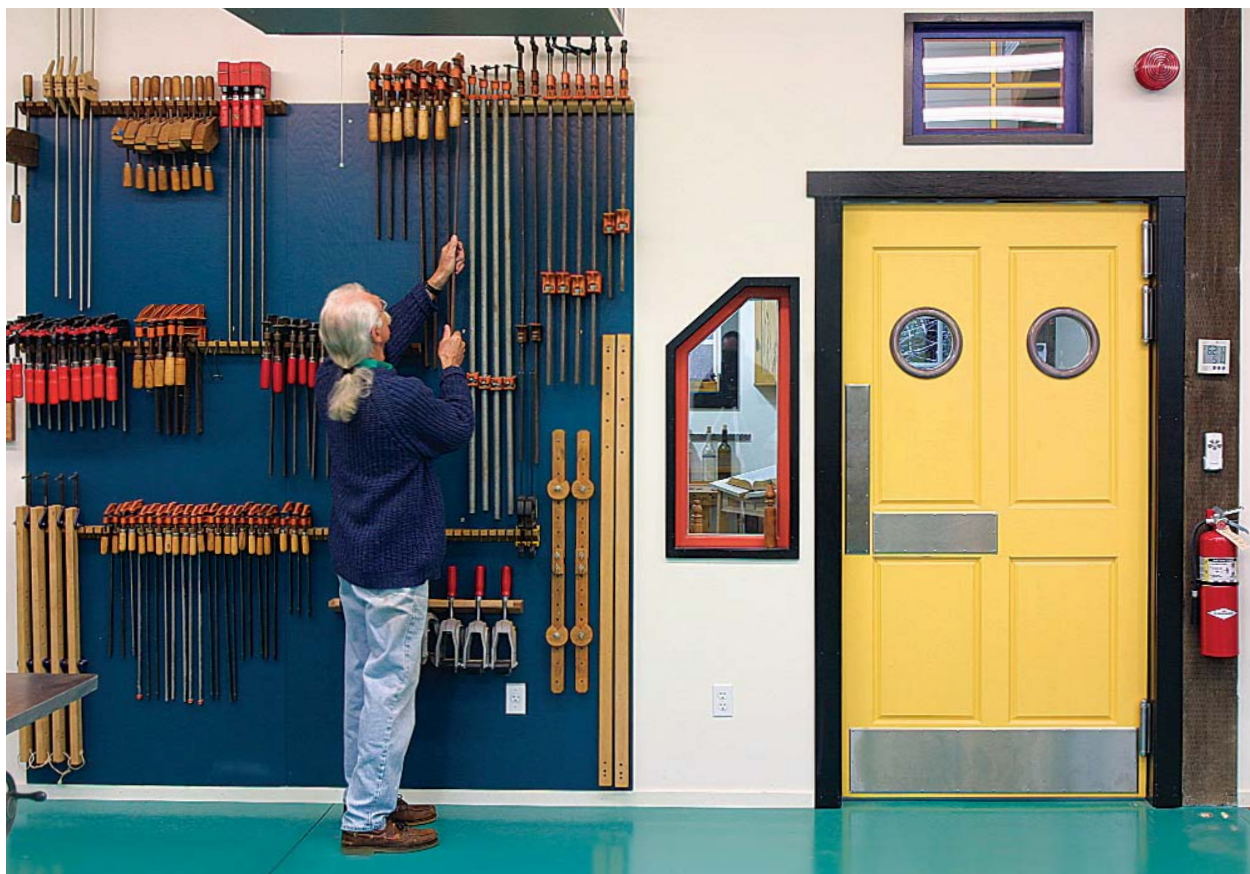
In addition to the natural and artificial light overhead, we installed spotlights at our work areas. We do all of our finishing at our benches. Because we use

mostly rub-on finishes, we have no need for a spray booth, and the bench room is adequate for this work.

For the most part, this shop fulfills our dreams. While we wouldn't say that it has changed our furniture, a pleasant shop does make it easier to create quality work. In fact, we believe

that our design of a large, open and light-filled space reflects the philosophy of our shop motto: *Sat cito, si sat bene* (Soon enough, if done well). If we were to start over, the only thing we'd change, believe it or not, is to make the shop larger. □

Les Cizek builds custom furniture in Fort Bragg, Calif. His wife, Norma Watkins, assisted with the article.



A colorful clamp rack. The colors throughout the shop brighten the environment. The clamp rack also provides a reliable spot for storing essential tools. Portholes in the swinging door help avoid head-on collisions.