

A CUT, DRILLED AND ROUTED SHEET IS READY TO ASSEMBLE.

JEFF EVANS PHOTO

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Imagine that you have a computer and a huge wood-cutting tool that can talk to each other.

Imagine that you can draw a picture of something, such as a bookshelf, so precise that you can see a three-dimensional picture of it and the computer can give you exact measurements of every component of the object.

Imagine that the computer can determine how to cut the pieces from a sheet of plywood in a configuration that will minimize waste and ... OK, OK, you're way ahead of us now, so we'll get to the point. There is such a device, and Yankee Remodeler of New London has one.

"This software can do anything under the sun," says Mike Mahoney shop supervisor.

The device is called an OmniTech Selexx Computer Numerically Controlled Router. It cuts wood, as well as other materials, and makes grooves and drills holes. And it is an amazing thing to watch in action. There is a large, flat surface, called a vacuum table, that holds the sheet of plywood in place. The cutting assembly with its carousel of bits is poised above the wood. Punch in the program and this automobile-sized device goes to work. The cutter moves into position ... BUZZZZZZ ... it moves over here now ... BUZZZZZZ ... it moves over there ... BUZZZZZZ ... until every piece is cut or grooved or drilled.

# COMPUTERIZED CARPENTRY

**YANKEE REMODELER  
BRINGS IN SPACE-AGE  
WOOD-CUTTING TOOL**



THIS COMPUTER-ASSISTED MACHINE MAKES PRECISE CUTS, PRE-DRILLED HOLES AND ROUTINGS AT YANKEE REMODELER.

JEFF EVANS PHOTO



YANKEE REMODELER SHOP SUPERVISOR MIKE MAHONEY TALKS ABOUT SHEEVING PUT TOGETHER FOR A NEW PROJECT. THE NEW LONDON SHOP HAS BEEN USING SOME OF THE LATEST SOFTWARE AND MACHINERY FOR THE DESIGN AND MANUFACTURE OF SHEEVING AND CABINETS. **JEFF EVANS PHOTO**

The various pieces of the bookshelf are lying there ready to be assembled. This device is amazingly efficient in operation and even, somehow, elegant. A voice in the back of your mind is telling you that there isn't anything machines can't do these days.

Put yourself in the shoes of a customer: First you sit down in the Yankee Remodeler offices with designer Robin Mantzaris and describe the job you want done — a large job such as a room remodel, or a small job such as a bookshelf. Mantzaris draws a picture of the room in the computer. Take a look at it and decide, for instance, that you want to change the style of the door. And Mantzaris makes the change.

"With the router we can make molding, countertops — we can make a piece convex or concave, we can make a conical shape," says Mahoney. "The piece will have an accuracy of plus or minus a hundredth of an inch."

Mahoney then puts the data about the room on a UBS key (other technologies are also available), puts the key into the control panel for the

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WITH THE ROUTER WE CAN MAKE MOLDING, COUNTERTOPS — WE CAN MAKE A PIECE CONVEX OR CONCAVE, WE CAN MAKE A CONICAL SHAPE. **THE PIECE WILL HAVE AN ACCURACY OF PLUS OR MINUS A HUNDREDTH OF AN INCH.**

#### JUST THE FACTS

**Name** Yankee Remodeler

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MIKE MAHONEY, SHOP SUPERVISOR AT YANKEE REMODELER OF NEW LONDON, GETS THE NEW OMNITECH SELEX COMPUTER-CONTROLLED ROUTER READY TO RUN. THE COMPUTER-ASSISTED MACHINE TAKES A CUSTOM DESIGN FOR CABINETS OR SHELVES AND MAKES ALL OF THE PRECISE CUTS, PRE-DRILLED HOLES AND ROUTINGS NEEDED FOR THE PRODUCT. JEFF EVANS PHOTO

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router and flips the switch. Piece by piece, all the wood for the project is cut. The router can even cut in a perfect circle. Mahoney has used the device to make window seats, wet bars, entertainment units and all manner of object.

The router is American-designed, Taiwanese-built and American-distributed. The programmer is Mexican. Yankee Remodeler purchased the software in mid-2004 and learned how to operate it before buying the router. The speed of the machine is stunning. In Mahoney's demonstration, during which the router cut the parts for a bookshelf, the job would have taken a carpenter using a table saw some four or five hours. The machine did the job in seven minutes. While it might take a carpenter four or five days to cut the pieces for a cabinet, the OmniTech can do the job in

around four hours.

"It's like digging with a shovel versus a back hoe," says Mahoney.

Needless to say, the OmniTech router has sharply boosted Yankee Remodeler's productivity: "The increased productivity has helped us stabilize pricing," points out co-owner Karl Bagwell.

The router's vacuum table deserves special mention. There are small holes in the surface by which the router creates such a powerful suction that the surface holds not a single board in place, but two boards, stacked one on top of the other! On the bottom is what the crew calls a spoiler board, providing a cushion between the table and the board being cut. On top of the spoiler board is the board that will be cut. The suction created by the machine is so powerful that it penetrates the spoiler board and actually holds the top board

firmly in place.

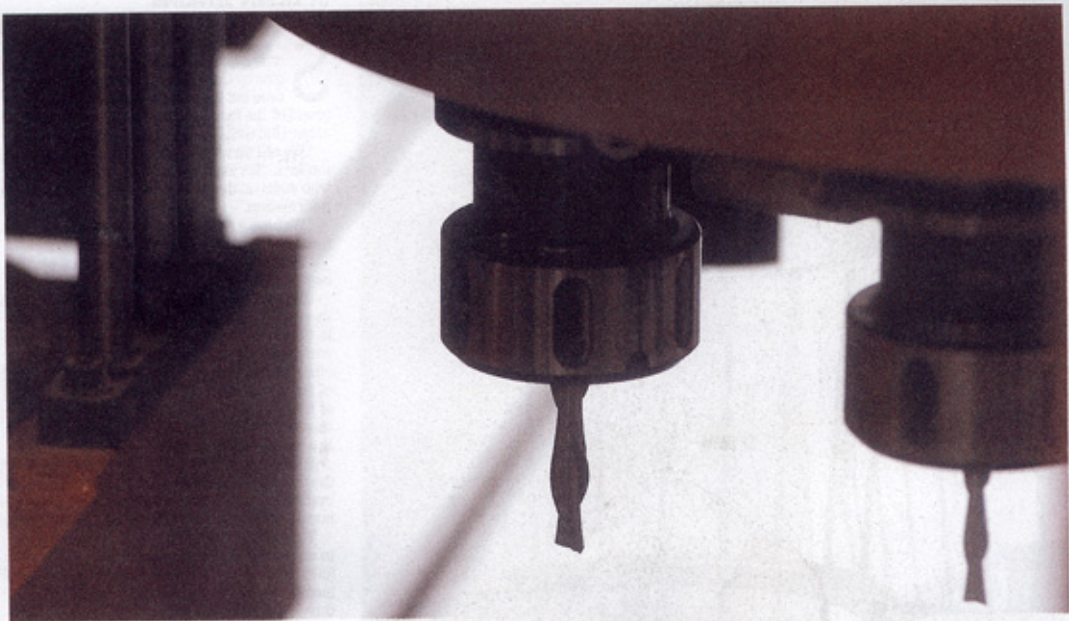
"Zero tolerance — no wiggling in that board that's being cut," Mahoney points out.

Mahoney starts assembling the pieces of the bookshelf. "Everything fits perfectly," he says.

Cabinetmakers Doug Stewart and Andrew Riquier work with Mahoney in the shop, supporting the company's field crews (altogether there is a staff of 34). Investing in an expensive device like the router is a big move for a company, which has to be sure there will be enough work to keep the device fairly busy; fortunately, there is no shortage of work to be done.

Mahoney says he doesn't miss the old days, when the work was slow and he had to lug heavy boards from one machine to another.

"I'm always looking to learn something different," he says. "It's fun."



ROUTING BITS ON A NEW MACHINE AT YANKEE REMODELER IN NEW LONDON WAIT FOR THE NEXT JOB. JEFF EVANS PHOTO