



Name of student: Dustin Watson

Year in school: Recently graduated from Shiloh High School in Hume, Ill.

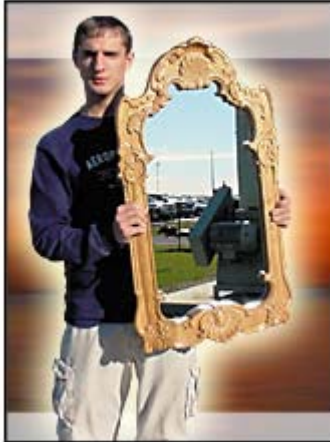
Woodworking Background:

Dustin Watson has taken all the industrial technology classes taught by Mark Smith from 8th grade through his four years in high school including: Industrial Education Orientation, Introduction to AutoCAD, Introduction to Manufacturing, Manufacturing 1, Manufacturing 2, Industrial Production 1 and Industrial Production 2. Watson's interest in woodworking was piqued by an uncle who loves woodworking.

Latest Woodworking Project:

One of the projects completed in the Manufacturing 2 class was a French provincial carved mirror frame. According to Watson, this project is unique for a high school program. When Shiloh High School was in the process of purchasing a Thermwood CNC Router, instructor, Mark Smith asked David Hildebrandt of Thermwood if they would give Shiloh High School the program they created to make a CNC carved mirror frame because the project requires progressive fixturing and a specialized sanding process.

Watson began the mirror frame by gluing together red oak material to exact specifications. This is important due to the fact that the mirror frame is held in place for machining by a vacuum/mechanical fixture. He then ran the mirror frame through a surfacing sander on a special jig created to prepare the front and back surfaces for the vacuum/mechanical fixture.



The mirror frame was placed on the CNC router upside down to cut the excess material from the outside contour of the frame, and cut the pocket for the mirror, which doubles as a pocket for the mechanical portion of the fixture. A total of six different tools removes the excess material from the inside contour of the frame, the excess from the surface of the frame, and cuts all the details of the frame design.

Watson then sanded the outside and inside edges with an oscillating spindle sander. The surface of the frame was sanded using rag sandpaper with a drill. Three coats of precatalyzed lacquer were applied and a 1/8-in. mirror was affixed to the backside.

Watson created a French Provincial carved mirror frame using red oak.

Career Goal After Graduation:

"The Industrial Technology Program looked like something I would enjoy because I like working with my hands and working with computers," says Watson. "I was interested in creating and repairing things. Now that I am out of high school, I work in a manufacturing facility that makes residential windows, and I have started my own company called Watson Computer Repair, that repairs and creates custom computers."

Why Dustin Watson was chosen

Dustin helped build and install four kitchen cabinet jobs over the past two years in production class. He participated in the designing stage, creation of the cutlist, manufacturing of the cabinets, and the installation in the customers' home.

A good work ethic, being on time, if not early, a sense of pride in his work, respect for those over him, and an eagerness and willingness to learn make Watson an ideal student.

"Without a doubt, Dustin was an asset to my program and will be difficult to replace," says Smith. "Dustin's passion is in woodworking and computers. This is a combination that could take him anywhere in life."

Industrial Technology Program

The program at Shiloh High School has joined with WoodLINKS USA.

According to Mark Smith, industrial technology instructor, "our motto for our Industrial Technology program is 'Linking Education with Industry,'" he says. "This is not just a motto; it is how we set up our program."

Shiloh High School's Industrial Technology program offers three levels of AutoCAD, three levels of manufacturing, two levels of production and one level of MasterCAM. Students who advance to the upper level of AutoCAD spend their class time learning and working for the school district, local businesses and contractors producing architectural drawings and shop drawings.

The CAD/CAM classes teach machine code and MasterCAM generated code as well as the basics of CNC machine operations. All of the classes previously mentioned prepare the student for the program's production class.

The program has also grown to include the summer months during which four to five students design and build items the school needs, such as podiums, moveable shelf systems, cabinets, storage units, and make general repairs. **WD**

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