

16-Year-Old Entrepreneur Builds Successful Woodworking Business with CNC Router

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With the help of his Techno CNC router Foster was able to build all sorts of pieces including this motor driven clock.

Richard Foster has been making gifts for his teachers, friends and relatives since elementary school and became so good at it that people began paying him. Like millions of Americans, Richard Foster dreamed of establishing his independence and financial security at an early age by developing his own business based on doing what he loves to do, which is woodworking.

Now 16 years old, Foster faced a series of challenges early on in his career and was able to tackle those challenges and meet the needs of his growing customer base by becoming more efficient and offering quicker turnaround times.

Foster had been using a table saw, drill press, and power router to build all sorts of pieces including a motor driven clock for his tennis coach that consisted of a hand-carved tennis racquet about one foot in diameter.

Shortly thereafter, Foster began to receive numerous orders for racquet clocks. Foster was limited in the number that he could produce, as each one took four to five hours to carve with hand and power tools. Soon orders for golf clocks followed and, the next thing he knew, all of his free time was occupied with making the clocks, which he sold at \$80 each.

"I found that more and more people

wanted to buy the clocks but there wasn't enough time in the day to make them," says Foster. "I was aware of CNC machines, but I knew that they cost a lot of money."

Foster remembered reading an article about Techno's new low cost LC series CNC routing system. The machine provides a number of features that fit Foster's needs. Ball screws are provided on all three axes, offering smooth motion, a high level of accuracy and repeatability, and minimal maintenance. A closed loop servo control system provides higher power, constant position feedback that eliminates the possibility of losing position in the middle of a part.

"The Techno machine seemed to have all the features that I was looking for," says Foster. "Besides cost (\$15,000), it also offers a high level of accuracy, repeatability and minimal maintenance. Techno also provided me with Rhinoceros and Visual Mill software. I was able to set up the machine in my family's garage and I was off and running."

The new router made it possible for Foster to increase his clock output in a fraction of the time.

"I started by defining the geometry for my clocks with the Rhinoceros software," Foster says. "This process required me to fully define the design and ensured that every clock I produced was identical. Then I imported the geometry into Visual Mill, where I defined the motions of the router required to cut out the clock. I then downloaded the resulting G-code program to the CNC router."

Foster then loads a four 1" x 12" pine boards onto the machine at a time, and can cut out one side of 12 tennis clocks in an hour. Foster then turns over the board for the machine to cut out the other half. Each clock is produced exactly like Foster's original computer

model. The accuracy of the clocks is far better than even an experienced woodworker with 12 years experience, like Foster, is able to achieve. Foster then sands, paints and assembles the clocks and they are ready to.

"The new machine has drastically reduced the amount of time required to make each clock," says Foster. "This made it possible to cut the price of each clock in half, allowing the clocks to be more affordable for my customers and also gave me the time to design five new clock options: baseball, soccer, football, hockey, and basketball."

Foster established a company called Time for Sports and looked for new avenues to expand the business - quite a challenge for someone not yet old enough to acquire his own credit card or drive to any business appointments.

Foster's next move was as a sponsor at the Nasdaq-100 Open, a tennis tournament in Key Biscayne, FL. He made 570 clocks to sell at a booth at the event. Foster set new sales records and established an important new marketing channel for his company. He later became a sponsor at the Pilot Pen Tournament in New Haven, CT.

Foster's early entrepreneurial success led to media exposure, including TV appearances on "Warehouse Warriors", "Something to Talk About", and "Senior Moments," and in the *New York Times*, and *Newsday*, all of which has helped drive traffic to his Web site: www.richardfostertimeforsports.com and also helped to increase sales.

"The Techno LC Series has played a major role in helping me to achieve a significant level of with very little overhead," Foster says. "Its capacity and ability to operate on its own provide the potential for our company to introduce new products without any additional capital investment."