

Problem Solved At Phillips Precision

No project is too small for growing Boylston job shop

By Matthew L. Brown
Worcester Business Journal Staff Writer

Today



About 12 years ago, Steve and Catherine Phillips' lives were about to change.

They were both working for large companies, Steve at Bose Corp. in Framingham and Catherine at Digital Equipment Corp., but the ever-present whisper in their ears about running their own business had grown to a howl. Adding to the pressure was the fact that Digital was laying people off and Steve wasn't having a lot of fun at Bose.

Napkin Designs

So, they leased 2,200 square feet of space just off Route 140 in Boylston and started Phillips Precision Inc. Phillips Precision is a type of machine shop known as a prototype shop. It's small, and very high tech and engineering driven. Its customers are often companies with a problem or problems to solve.

"We get napkin sketches, where an engineer will say, 'This is what we need, these are my thoughts...' and we'll render it in 3D and machine it," Steve said.

Most of the time, though, engineers send Phillips a prepared 3D rendering, "and we can be machining it in minutes."

Catherine explained that being a young company has helped Phillips embrace technology and some relatively new school practices as it has grown. From 2,200 square feet, Phillips grew to 5,500 square feet. In February, the company built a brand new, 9,000-square-foot facility just up the road from where it got its start.

Steve, a machinist by trade, says he feels lucky to have experienced the trade from its old school roots. His father owned his own machine shop, and Steve worked there from the time he was just a boy. In 2003, Phillips bought his dad's business.

To say Phillips' new facility is lean is an understatement. Phillips worked with the Massachusetts Manufacturing Extension Partnership on the design and layout of the facility. The old machines from the elder Phillips' shop are along one wall under an exhaust fan so their honorable dirtiness doesn't have any effect on the new machines. Those newer machines are arranged in a way that keeps work flowing smoothly. Tools are color-coded to match places where they're to be put away in a neat and orderly fashion. The whole place is spotless. Cleanliness and order make for a safe shop.

There's also room in the new place for growth.

"We have the capacity to double our staff in this building, and we'd love to do that," Catherine said. Catherine participated in the Inner City Entrepreneurs (ICE) program, and walked away with a solid, three-year growth plan.

Needless to say, a lot is expected of the folks who work at Phillips. Each machinist is responsible for programming and setting up his own machine by PC. The PCs used to control Phillips'

machines are wireless and run off an on-site server, which helps cut down on clutter. Old school machine shops generally employ dedicated programmers and the machinists are left to just run the machines.

"Everybody here can kind of think on their feet," Steve said.

And it shows. Phillips can machine anything from plastic to Titanium.

I also want to mention that Steve Phillips is the inventor of one of the most simply ingenious things I've ever seen. It's called the Pitbull Clamp, a clamp designed to hold work as it's being machined. The clamp is tightened by hand yet holds onto work with such force that it can withstand high-speed machining.

The clamp also holds work from below, so it's never in the way of the machine. In machinist language, the clamp "allows you to get the most amount of parts into your work envelope and gives you more access to parts and you can work faster," Steve said.

In reporter speak: It holds stuff really tight so you can work more quickly.

Got news for our Industrial Strength column? Contact Managing Editor Matthew L. Brown at [http://mbrown@wbjournal.com](mailto:mbrown@wbjournal.com).