See Me CNC 3D printing face shields for hospitals

BY SARA BARKER
sbarker@kpcmedia.com

LIGONIER — Though he insists he’s not trying to be different, Steve Wygant is definitely doing something unique.

Wygant, the owner of See Me CNC in Ligonier, is being called upon by hospitals to supply them with his design of face shields, increasing their stock of personal protective equipment. He noticed a slump in sales last week because of coronavirus. So, while talking to friends about what he could do in this slower time, one suggested it.

Why not look at what you can do for medical suppliers?

Bouncing the idea off of a couple of other colleagues, some of whom work closely with medical personnel, Wygant warmed up to possibly making supplies to alleviate the strain of the coronavirus pandemic.

He landed on this: make face shields, but tweak the design to make production faster.

So, this past weekend, Wygant designed his version of a plastic headband for a face shield, working into the wee hours on Sunday.

“For me, it took me just a few hours to get everything laid up Sunday,” Wygant said.

Here’s how his design works: you pop a plastic sheet onto the headband. Then, you tie two rubber bands together, and attach either end to hooks on either side of the headband.

Then, you’re ready to strap the rubber band behind your head, secure the plastic band on your forehead and get to work.

Since he’s designed the face shields this past weekend, a hospital chain in South Bend has looked to Wygant to supply it with face shields.

“They’re part of a health network that has hundreds of thousands on backorder,” Wygant said.

And in just a few days from design to production, Wygant and See Me CNC are ready to step up to the plate.

“It looks like we will be molding in the morning,” he said Tuesday afternoon.

Manufacturing medical equipment like this isn’t new to Wygant. In fact, when he started his business back in 1996, he was heavily focused on medical manufacturing.

“I understand a lot of the requirements,” Wygant said. “If they wanted to sterilize them, it’s possible to do that.”

Wygant’s design is not the first face shield to be 3D printed, and the plastic sheet to go over the face is actually not of his own design — only the black band is.

But, what’s different about his is how he’s designed it to be made through injection molding, a fast way to make the parts.

So fast, in fact, that See Me CNC will be able to make one face shield every 10 seconds, as opposed to every 30-40 minutes with traditional manufacturing techniques.

Another unique piece of Wygant’s design is that it’s open source, meaning anyone with a 3D printer can download the instructions for his design and print their own, free of charge.

“The license is ‘Whatever you want to do with our design,’” Wygant wrote in a file attached to the code.

Wygant isn’t worried about providing his code to others taking away his business. He sees the demand to great for face shields right now that he couldn’t possibly make enough to supply hospitals worldwide.

“There’s no way we can make the demand,” Wygant said.

And through production at See Me CNC, Wygant said he and his handful of employees are practicing social distancing and being extra careful with shipments coming in.