



Murata's FG Unload Part Sorter stacks separated parts that can be instantly transferred to the next process.

purchase decision.”

“Customers don’t have to make a huge capital equipment investment up front,” explains Rick Dorman, western regional sales manager for Murata Machinery USA Inc., one of the two companies that got Phoenix back on track. “The ability to purchase equipment incrementally gives customers the fluidity to change direction in response to market conditions and they aren’t out all that money. We want customers to be able to tailor equipment to their individual requirements versus a cookie cutter approach.”

Charlotte, North Carolina-based Murata develops machine tool technology, automated material handling systems, clean room automation and textile machinery. Phoenix added a Murata Load/Unload Tower system and a Murata Unload Part Sorting system to its turret punch press in February 2015.

Riding the wave

“Automation is the wave of now and the future,” says Markowich. “Hands-off part picking and sorting saves an incredible amount of man-hours, which allows us to move personnel into other areas of the shop, such as at the end of the production line to meet sales demand.” The system’s safety features also play a “huge role by reducing the amount of heavy lifting employees have to do,” he adds.

Before Phoenix Manufacturing could run the first component with its newly automated punch press, its existing software package created a hiccup.

“We had our ups and downs out of the gate with software,” says Markowich. “It’s a critical component because the software is what ultimately determines machine output. We turned to Murata

Piece by piece

Flexible equipment, automation and the right software helps manufacturer reduce steps, reallocate resources and speed up response time

‘**N**ow you’re cooking with gas’ is a catchphrase we’ve all heard and one that dates back to the 1930s when the natural gas industry first introduced gas-fueled stoves. The idiom quickly evolved to mean doing something exactly right. When a software problem temporarily stalled production for Phoenix Manufacturing Inc., two companies joined to supply the “gas” it needed to get going again.

“Sales volume increases were driving greater demand for sheet metal,” says Phoenix Manufacturing Director of Operations Adam Markowich. “We needed to raise throughput capacity.”

Based in Phoenix, the company designs, manufactures and distributes

evaporative cooling systems for commercial and residential building projects. Its substrate for these parts are plain and chemical-treated galvanized steel in multiple gauges.

“We started with a Murata M2558T CNC servomotor-driven turret punch press in 2013 with an eye toward automation down the road. The flexibility to add components to the punch press on our time table is really what influenced our

Striker Systems’ software, combined with Murata-built automated material handling equipment, helps Phoenix Manufacturing to run a lights-out operation.



Punching

for a recommendation. They pointed us to Striker Systems.”

The White House, Tennessee company specializes in the development of sheet metal nesting and CAD/CAM software for CNC punching and profile cutting machines.

Like Murata, Striker Systems’ design approach is flexible. Its standard Striker CAD/CAM software product provides a foundational structure that permits fast response times and custom solutions. “It was a complex implementation,” says Vice-President of Sales Michael Boggs of the Phoenix job. “We had supported Murata automation systems before, each requiring some level of customization. We were familiar with the equipment. The automation system at Phoenix had not yet run successfully so we knew we had our work cut out for us.”

Typically, once automation software is installed, subsequent service is ultimately dependent on a company’s development arm which is often based in Asia or Europe. Many of today’s software companies according to Boggs were birthed by the cutting industry. “Striker Systems developed its earliest software products specifically around punching technology,” he explains. “We’re one of just a few software companies with this extensive history in punching. And we’re not coordinating with a home office overseas. Our development and support staff is headquartered in Tennessee.”

Striker Systems developed and installed a software solution in April 2015 just six weeks after it landed the job. A technician on-site programmed the Load/Unload Tower and Unload Part Sorting systems to get Phoenix up and running. “The first thing they wanted to do was operate the equipment,” Boggs says. “It picked up a part and relocated it to the right place. There was an audible, collective sigh of relief from the Phoenix staff.”

“Without Striker Systems I’m not sure where we would be,” Markowich says. “Certainly we would be a few months behind where we currently sit. We now have an uptime of 80 percent and we are four weeks ahead of our production schedule.”

Lights out

The Striker Systems software gives Phoenix operators the ability to make



Driven by Striker System’s software, Murata’s servomotor-driven turret punch, Load/Unload Tower and Part Sorting system put Phoenix four weeks ahead of schedule.

changes on the fly during production. “There is not a software product on the market that is going to punch a part the way you want 100 percent of the time,” Markowich notes. However, if the operator punches a part and needs to make an adjustment, he or she can easily interact with the Striker Systems software to make that modification in real time. “In addition, parts can be nested for optimal throughput.”

The new Murata automation components allow Phoenix to run lights out but the company is discovering other benefits as well. The manufacturer was able to combine multiple hard tool operations into one on the Murata punch press. “We would have multiple setups and operation sequences to process the same part we can now produce with the Murata in one operation,” Markowich explains. “This frees up machines and reduces setup time in other areas of the shop.”

The equipment also supports the manufacturer’s efforts to become more flexible. “We want to move away from a static production schedule and deliver product in shorter lead times,” he says.

“Murata’s support is unmatched and their technology approach is allowing us to provide the versatility that our customer base now requires,” Markowich says. “What was unresolved with one software company over a period of months, Striker Systems was able to step in and seamlessly implement a solution in a timely manner. It was a win-win all the way around.”



Automation and software support Phoenix’s goal to deliver product with shorter lead times.

Phoenix Manufacturing Inc.,
Phoenix, 602/437-1034, www.evap-cool.com.

Murata Machinery USA Inc., Char-
lotte, North Carolina, 800/428-8469,
www.muratec-usa.com.

Striker Systems, White House, Ten-
nessee, 800/950-7862,
www.strikersystems.com.