Senior project engineer Edwin Comparini downloads software changes to a high-speed picker robot at JLS, a York County company that designs and builds robotic food-handling systems.

PHOTO/AMY SPANGLER

RISE OF THE
A metal and plastic arm reaches in, grabs several sausages, places them on a packaging tray and, within a fraction of a second, darts back to the conveyor belt just before the next sausages pass by.

The robotic arm snatches those sausages, places them in a tray and off to the grocery store they go for backyard grilling.

Those robots helping to get sausages from the factory to the grocery store are made by companies such as York County-based JLS Automation.

In October, the U.S. Patent and Trademark Office awarded JLS its first patent on a robotic automation system that can bend and shape meats and cheeses during the packaging process, which gives the items a more aesthetic presentation as well as helps to fit them better on trays, JLS President Craig Souser said.

Robotics is just one way that technology can improve the manufacturing process, whether that’s upping the speed and efficiency in making hot dogs and tortillas or finding flaws in semi-conductors and solar panels.

While Springettsbury Township-based JLS’s designs are custom to the needs of client manufacturers, the robotics used in the food industry are similar to those used in making high-tech electronics, he said. And the goal is the same: a better, faster process.

“It’s not all that unfamiliar,” Souser said.

Many more companies are adopting robotics to up their game against the competition, including foreign competition, where more manual labor is involved in production.

“Because it's robotics, we're typically taking the human element out,” Souser said, “or selling to companies where they have a machine and they’re just looking to upgrade.”

The largest segment of industrial robotics — 60 percent — caters to automobile manufacturers, providing the computer-controlled, mechanical arms piecing together all the gadgetry, safety and comfort that goes into cars and trucks, said Bob Doyle, a spokesman for the Michigan-based Robotics Industries Association, a trade group for...
robotics makers.
Over the past nine months, robotics companies shipped 17,645 robots worth $1.1 billion, or a 14.6 percent increase in the number of units, according to the association. Orders of 15,731 robots were down 3.9 percent from the same time a year ago.
That's mainly because orders from automakers dropped 22 percent compared with 2012, according to the association. The auto industry placed much larger orders last year as part of their upgrade cycles for new model cars, Doyle said.
The automotive sector order decrease isn’t an indicator of the industry as a whole.
"The non-automotive segment is growing quite well, " Doyle said. During those nine months, all other sectors saw double-digit percentage growth in sales activity, including food and consumer goods, where robotics orders increased 33.6 percent from 2012 numbers, Doyle said. The largest increase was in the pharmaceutical and biomedical sector, with a 40.2 percent order increase.
Orders for robots in the semi-conductor and electronics segment increased 35.7 percent, and robot orders for plastic and rubber production increased 36.4 percent.
The association declined to provide a more specific breakdown of orders, shipments and size of each smaller robotics segment.
"Robotics is just starting to be accepted in these areas, " Doyle said. In total, an estimated 232,000 industrial robots work in American manufacturing and more arrive every day, according to the association.
That's a decent robotics landscape for companies such as JLS to grow a business in, but that doesn't mean it's easy.
"I think there's some hesitation on the capital-spending front, " Souser said. "And some of that filters over to the food manufacturers. "
Rise of the robots
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... The rumors continue to swirl that California-based tech giant Apple Inc. will place its latest repair and distribution facility in a 200,000-square-foot Carlisle-area warehouse.
The facility at 700 Allen Road in South Middleton Township will employ about 400 people repairing Apple products for East Coast customers, said Jonathan Bowser, CEO of the Cumberland Area Economic Development Corp., who cited unnamed sources close to the deal.
Apple did not return calls and emails from the Business Journal seeking confirmation.
The prospect of Apple landing in Carlisle might not fall far from the tree. After all, Central Pennsylvania is one of the largest logistical hubs on the East Coast and important enough for Apple competitor Seattle-based tech and online retail giant Amazon.com to place three warehouses here.
This reminds me of driving down a stretch of road and seeing every fast food restaurant lined up in a pretty little row. If McDonald's does the research that says a stretch of road gets enough traffic to be good business, it won't take long for every other restaurant and gas station chain to join them.
Central Pennsylvania is that stretch of highway when it comes to logistical operations.
And proximity to a good chunk of the U.S. population in the nation's largest cities makes it ideal for the likes of Amazon, Procter & Gamble Co., and yes, even Apple, Bowser said.
If the lack of confirmation draws your suspicions to the surface, Bowser said keep in mind that P&G's warehouse was a well-kept secret until the deal was finalized.
—Nov. 1
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