

# Grayway

LEAD STORY

## GROWING INNOVATION

Custom Food & Beverage Equipment in  
High Demand as Competition Heats Up

*page 2*

## WELCOME



Stephen Gray  
Chief Executive Officer

Have you noticed more variety at the grocery store lately? More organic and natural foods? A larger selection of pet foods? If so, you are not imagining things.

With a more vibrant economy, food and beverage producers are investing again—in new technology, equipment and facilities to streamline processes and increase capacity for new products. And equipment manufacturers are busy too, coming up with new and innovative solutions for these customers and their highly specialized needs. This GrayWay discusses the upsurge in equipment investment by food and beverage producers, what's behind this trend and highlights a few examples of food providers that are putting new equipment to the test.

*Gray practices methods  
which protect our environment.*

# EQUIPMENT INVESTMENT ON THE RISE



## INSIDE THIS ISSUE



### GROWING INNOVATION

Custom food & beverage equipment in high demand as competition heats up



### INVESTING IN THE FUTURE

How equipment investments by two U.S. food & beverage producers are paying off



### THE NEW FACE OF MANUFACTURING

A Q&A with CPM Beta Raven's Chad Brenton



### GRAY... WE'RE BUILDING

Wm. Wrigley Jr. Company  
Yorkville, Ill.



# GROWING INNOVATION

## Custom Food & Beverage Equipment in High Demand as Competition Heats Up

A sure sign of a strong and growing economy is new investment by manufacturers in more sophisticated technology and equipment to streamline processes and increase efficiencies and output. The country's food and beverage producers are among those that are taking advantage of a robust U.S. economy, investing more in customized equipment to introduce new products and stay ahead of the competition. This has driven food and beverage equipment manufacturers to ramp up to meet the growing demand for more advanced food processing, production and packaging equipment.

Food Engineering magazine released the results of its annual State of Manufacturing survey late last year, which found that food and beverage producers made increasing productivity through automation a top priority in 2014, edging out other priorities of years past. With more capital to invest in new product development, the ability to deliver high-quality products to market in record time is more important than ever, and yesterday's equipment is just not cutting it for many food and beverage producers.

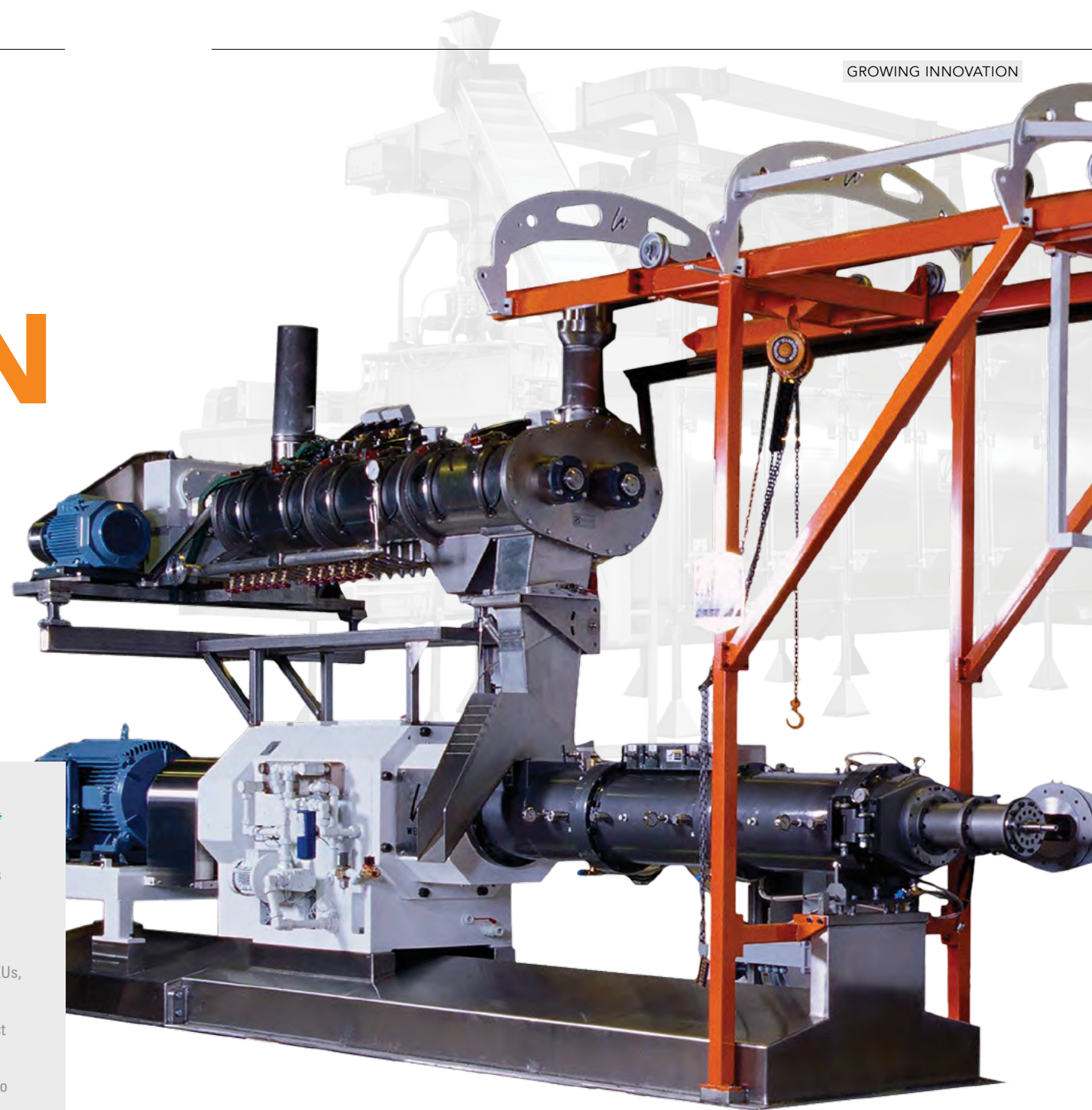
The study clearly showed that producers are, in fact, investing more in equipment, as well as software and professional services. Almost half of respondents—who indicated their budgets for equipment have increased—have seen increases in excess of 25 percent.

### Top 10 trends in food manufacturing\*

1. Shifting consumer demands
2. Automation/robotics
3. Lean manufacturing
4. Expanding product lines, SKUs, variety
5. Economic factors/costs/cost cutting
6. Consumer demand related to production capacity
7. Increased production/output
8. Sustainability
9. OEE
10. Regulations/requirements

*\*Based on the top trends affecting manufacturers over the next five years, as identified by respondents.*

*Source: Food Engineering's 2014 State of Food Manufacturing Survey.*



This Wenger Magnum TX Twin Screw Extruder produces snacks, textured soy, aquatic feeds, companion animal goods and other food ingredients.



And equipment manufacturers are clearly up to the challenge of providing new and innovative solutions for food and beverage producers. Survey respondents cited new, more sophisticated processing and packaging equipment as a key reason throughputs are improving, and noted that equipment suppliers are also making significant investments in research and development of customized equipment to meet their growing and rapidly changing needs.



Stuart Carrico  
technical sales  
engineer,  
Wenger Food &  
Industrial Products

This is certainly true for Wenger Manufacturing, the world's leading supplier of process systems for the food, feed and industrial grain processing industries. According to Stuart Carrico, technical sales engineer for Wenger's Food & Industrial Products Division, the company's Technical Center is used for study and experimentation not only by Wenger, but by its customers for research and development of ingredients, processing configurations, small product runs and basic demonstrations of extruder and dryer processing.

"Wenger believes strongly in our own research and development, and we invest heavily in exploring new extrusion and drying technologies," he said.

And it seems this investment is paying off. Carrico says that in 2014, Wenger experienced its best year in the history of the company.

"Orders were strong in the human food group and the companion animal group," he said. "And, over the past three years, the international aquaculture industry has shown exceptionally strong growth."

Carrico says within the last year, Wenger has seen an increase in the demand for customized, highly technical products, like twin screw extruders capable of processing soy and fresh meat inclusion products.

"For many Wenger clients, the extrusion process can include the main piece of processing equipment for determining plant configuration, and for return on the overall investment," he said. "For this reason, interfacing with our clients on a long-term basis is integral to our success. While Wenger systems are based on standard design, each system is customized for the process, and for the customer."

Today's food and beverage producers are also investing heavily in automation. Some 34 percent of *Food Engineering's* survey respondents said their company's budgets for manufacturing automation and control hardware and software increased in 2014 by over 26 percent—double 2013's average increase of 13 percent.

One of the biggest challenges in the food and beverage processing industry, according to the survey, is bottlenecks during the packaging phase, from filling to sealing and cartoning to palletizing. Respondents clearly indicated the need for more sophisticated packaging automation to streamline these processes and improve delivery times. Some 52 percent of survey respondents indicated upgrading packaging equipment as the number one way to improve packaging operations.

As a leading provider of automated material handling systems for plants, warehouses and distribution centers, Westfalia Technologies, Inc. follows trends in the food and beverage industry closely and is keenly aware of the packaging challenges producers face.

**Some 52 percent of survey respondents indicated upgrading packaging equipment as the number one way to improve packaging operations.**



Staci Cretu  
marketing &  
communications  
manager,  
Westfalia

"SKU proliferation is the largest change in food and beverage industry within the last decade," said Staci Cretu, marketing and communications manager for Westfalia, which specializes in combining software development with automated equipment manufacturing. "Due to increased growth in this sector, coupled with the need for distribution centers to be located close to major metropolitan areas where

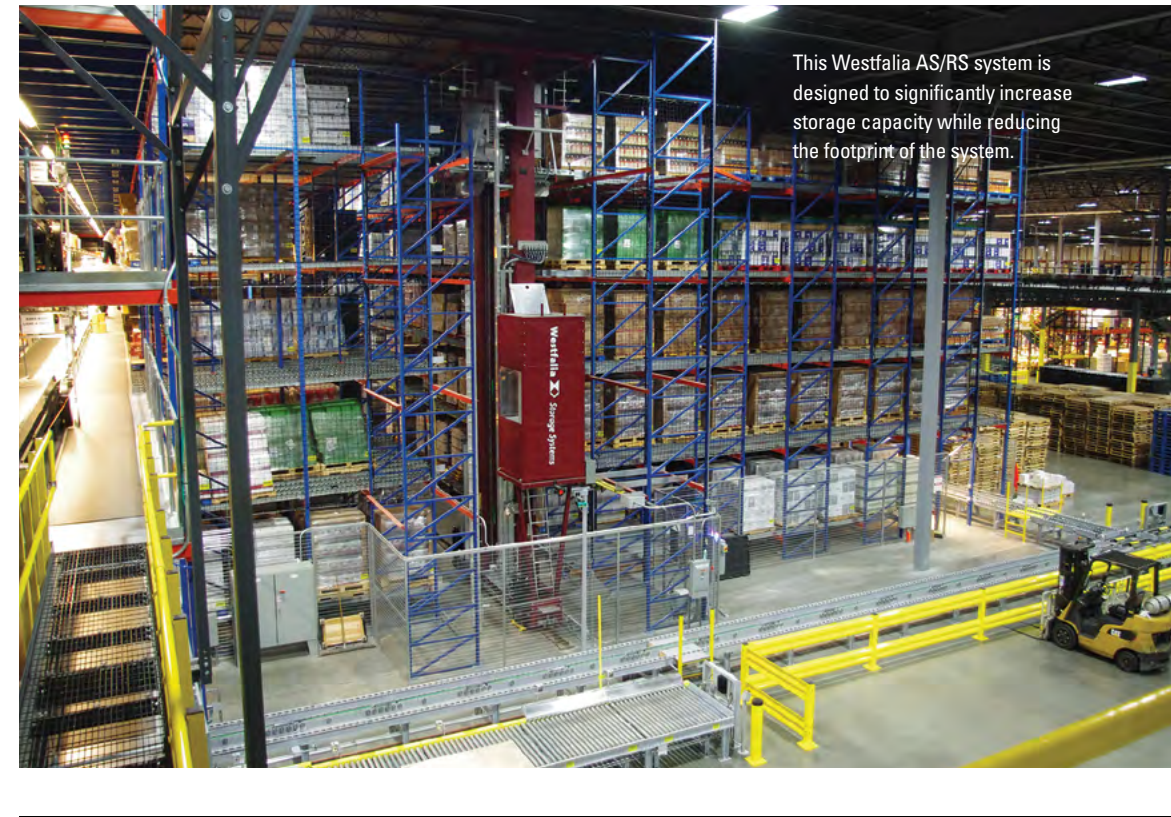
tracts of land are typically scarce and expensive, warehouse footprints have expanded and become more complex. This, in turn, has increased tasks for warehouse staff and has made customer orders more complex—more SKUs must be accounted for; the number of total storage positions has increased; inventory levels have become more dynamic; manual pick areas have grown larger and more complex; and replenishment tasks have placed a bigger burden on warehouses. All of these tasks have increased demand for warehouse automation via automated storage and retrieval systems (AS/RS) to keep ahead of the impacts to our customers' bottom lines."

While upgrades to AS/RS systems are important, Cretu says a well-designed, properly maintained system should have a relatively quick return-on-investment (ROI) and a long lifespan.

"A high-tech AS/RS combined with a warehouse execution system (WES) offers companies the ultimate combination: a 20-25+ year lifespan with ROI achieved in five years or less," she said. "Warehouse automation via AS/RS and WES offers companies many years of cost savings and profit potential."

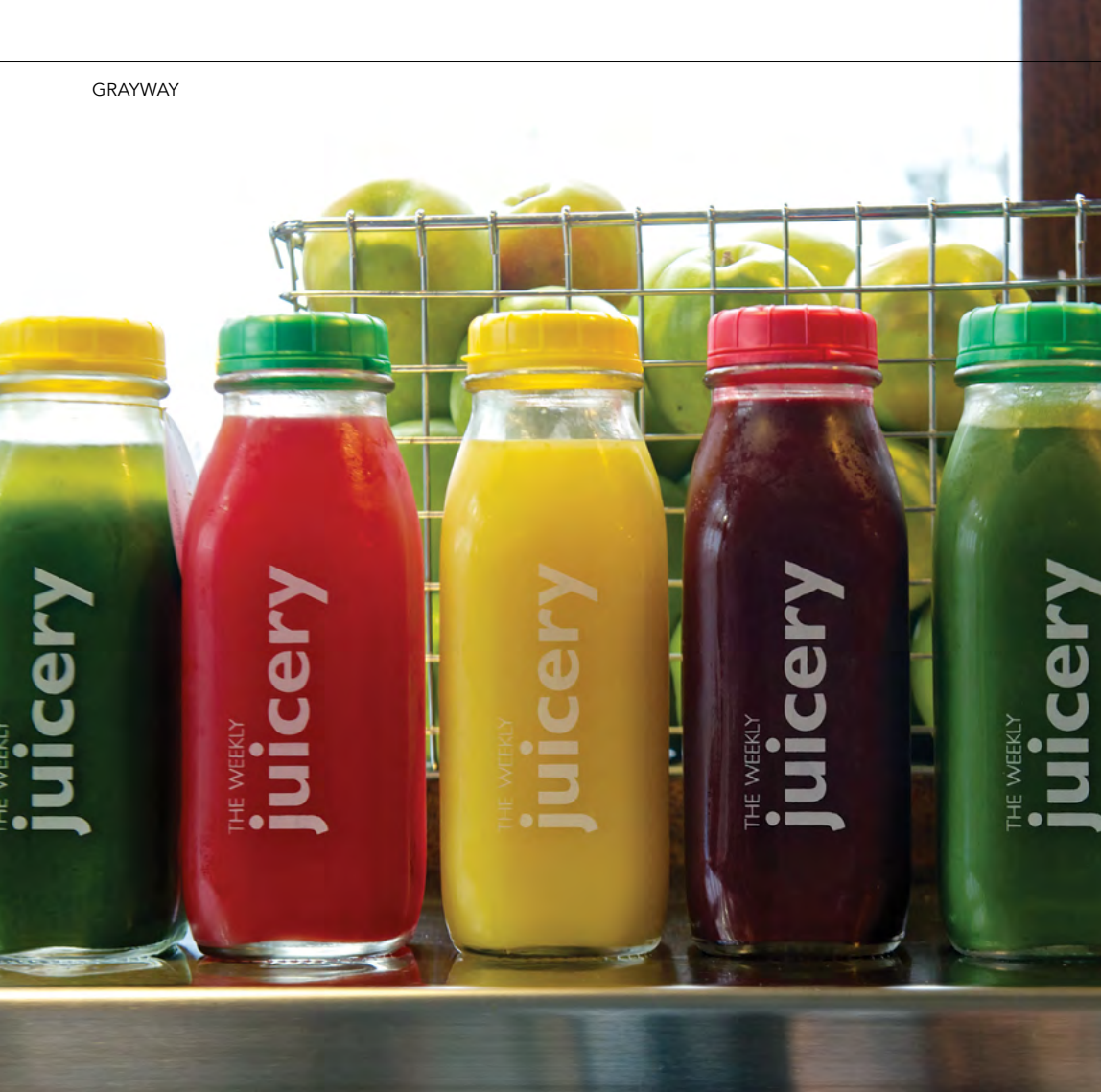
Cretu expects the integration of WES systems to become more and more common as automation becomes more widespread.

"The future of warehouse automation will involve increased modernization of existing systems, while also trying new approaches. An AS/RS can last a lifetime with the proper maintenance so it's about expanding on the core backbone of your product and enhancing it to stand the test of time. WES systems provide another level of automated data visibility to many warehouses that they did not have before."



This Westfalia AS/RS system is designed to significantly increase storage capacity while reducing the footprint of the system.





# INVESTING IN THE FUTURE

How Equipment Investments by Two U.S. Food & Beverage Producers are Paying Off

“Being able to make that purchase has been a game-changer for our company and has allowed us to grow.” — Kimmye Bohannon



Kimmye Bohannon  
founder,  
*The Weekly Juicery*

**THERE MAY NOT BE anything more satisfying to innovators in the food and beverage industry than to see consumers respond positively to a new food or beverage product. To be sure, it’s a good problem to have, but when the demand for new products begins to outpace supply, increasing output is critical for continued success.**

When Kimmye Bohannon began making and selling raw, unpasteurized juices out of her home kitchen three years ago in Lexington, Ky., she had no idea how quickly the demand for her juices would grow. Weekly door-to-door deliveries soon turned to a storefront juice bar appropriately named The Weekly Juicery, with subsequent locations opening in Louisville and Cincinnati. Since her juices contain no preservatives to maintain shelf life, it was important that she choose a juicing method that would extend the freshness of her products and meet her customers’ delivery times.

Bohannon chose to invest in cold press juicers because this method maintains shelf life for much longer than blender-type juicers, from which juice must be served almost immediately. But, at that time, cold press juicer options proved to be very limited. In fact, there was only one available on the market, and it was designed for low-volume residential use.

“We juice every night, all night, and had ten or 12 of them running here to meet the demand of our business,” Bohannon said. “But, because they are designed for residential use, we found we were spending too much money repairing them from overuse, and knew it was time to find a new option.”

As luck would have it, two companies out of California began making larger cold presses that were just what The Weekly Juicery needed to keep up with demand. But these juicers were out of the young company’s price range, so Bohannon would have to find a way to pay for one.

“We have contracts with local growers and, because of this, the Kentucky Agriculture Development Board offered us a grant to pay for a new cold press,” Bohannon said. “A capital purchase like that would have been inaccessible to us. Being able to make that purchase has been a game-changer for our company and has allowed us to grow.”



Cooper's Hawk Restaurants purchased a new wine glass polisher to increase efficiency during the cleaning and polishing process.



Tim McEnery  
founder,  
Cooper's Hawk

Another food and beverage producer who has utilized grant money as a way to invest in new, more sophisticated equipment is [Cooper's Hawk Winery and Restaurants](#), which operates restaurants in seven states and produces some 350,000 cases of its exclusive wines each year.

"Our biggest challenge is finding and developing the right people, which is why efficiency and productivity in the winery and restaurant business is absolutely critical," said [Tim McEnery](#), founder and CEO of Cooper's Hawk.

Beyond investing in new turbo chef ovens for its restaurants, Cooper's Hawk has purchased a new wine glass polishing machine and a state-of-the-art wine bottling recycling machine. Because of its potential to reduce the company's environmental impact, the state of Illinois provided Cooper's Hawk with the funding to develop the customized wine bottle recycling machine, the only one of its kind in the U.S.

"We wanted to find out how we could recycle our wine bottles but discovered that, in the wine business, nobody was doing that," said McEnery. "So, we looked to the bottled water industry and found a company in Milan, Italy that we worked with on the design and the specifications of the machine. We were dealing with the third generation of this company, so the technology has actually been around for quite some time, we just haven't been using it in the U.S."

Last year alone, Cooper's Hawk saved over 215 tons of glass from landfills and one of every five bottles was reused again for upcoming vintages.

"If you can figure out a simpler, more efficient way to do something, it's worth its weight in gold, and we're willing to pay for that."

# THE NEW FACE OF MANUFACTURING

A Q&A with [CPM Beta Raven's Chad Brenton](#)



**What is most rewarding about working in the food processing equipment industry?**

With the population as big as it is, it takes a massive industry and infrastructure to feed people in our country and across the globe. I really don't think the average person even thinks about it—they just know there will always be what they need at the grocery store. It is rewarding to know that, by being in the food industry, I am helping to keep those products in stores, and am ensuring they are safe to consume.

**What advice do you have for those pursuing jobs in this industry?**

[Automation](#) is a lot more than PLCs and HMIs now. Most systems are integrated into complex Ethernet networks that may even span into other locations. Separate processes may not be "islands" anymore. A processing facility may need to communicate to the distribution facility to receive order demands or inventory levels. Someone looking to enter this field should be learning basic knowledge of network communications and database functionality. You don't need to be an expert, but you should have a basic knowledge of how a system works.

**Tell us about your position with CPM Beta Raven.**

[CPM Beta Raven](#) is a full-service systems integrator that has been providing automated solutions to many industries for over 40 years. In my position as controls system engineer, I am responsible for programming PLCs (programmable logic controllers), HMIs (human machine interfaces), as well as project management. I am also responsible for the commissioning of the projects assigned to me.

**Why did you choose the field of engineering?**

I chose engineering because I wanted to feel like my work made a difference in society.





GRAY... WE'RE BUILDING

## WM. WRIGLEY JR. COMPANY YORKVILLE, ILL.

Gray Construction was selected by Wrigley to build an expansion to its Yorkville, Ill. campus where its Skittles brand of hard candy will be produced. The nearly 150,000 s.f. plant represents a \$50 million investment by the company and will add 75 new manufacturing jobs. This marks the first time since 2008 that production capacity for Skittles has expanded. The plant is expected to begin making Skittles by 2016.

Skittles are made at six facilities around the world, including one in Waco, Texas.

The Yorkville plant currently employs 300 people and makes Wrigley's Juicy Fruit, Doublemint and Life Savers brand products.



10 Quality Street  
Lexington, KY 40507-1450, USA  
T 859.281.5000

Alabama, California, Kentucky,  
North Carolina and Tokyo, Japan

[www.gray.com](http://www.gray.com)