More U.S. firms open factories in Mexico

Finding advantages in manufacturing closer to home, they shift production from China

BY SHAN LI

TIJUANA—In an industrial park five miles east of downtown Tijuana, Ariel Ceja toils in a white room bustling with assembly workers hunched over blue tables.

San Diego-based 3D Robotics moved into this once-vacant spot in June, producing affordable drones and electronic parts destined for customers in the United States and around the world.

It is just one of many American companies streaming to Mexico to open high-tech factories in a reversal of the outsourcing trend in years past. Called nearshoring, businesses are moving production to Mexico, Canada and other nearby countries to take advantage of their proximity to the U.S.

"Recently I have been seeing more American companies bringing production here," said Ceja, who started working for 3D Robotics a month ago. During the1990s, "there were more Asian companies coming in, Japanese, Korean, but that has changed."

It's not just in Tijuana. Manufacturing plants are also opening in Mexican cities such as Guadalajara and Mexico City, bringing a wave of new jobs to a country recovering from the economic downturn and still fighting constant drug violence.

From 2009 to 2012, foreign investment in Mexico jumped more than 50% to $7.4 billion, and exports from foreign-owned factories also grew 50% to $196 billion, according to one industry group that tracks maquiladoras, or assembly plants in Mexico that are owned by foreign companies. After plunging during the economic recession, employment also has jumped 25% to more than 2 million. According to an economic study from South/East San Diego, the maquiladora industry is one of Tijuana's biggest employers, behind businesses linked to its border crossing.

"Sometime in the last year, we reached a crossover point where it became cheaper to make a lot of goods in Mexico than in China," said Hal Sirkin, a senior partner at Boston Consulting Group. "A lot of American companies are looking or moving."

The global recession and its aftermath led companies to rethink their supply chain. Faced with rising wages in China and high oil prices, many are reconsidering the appeal of manufacturing close to home, especially small and medium-size businesses without the bargaining clout of Apple and Wal-Mart.

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3D ROBOTICS makes drones and parts for tech enthusiasts at a factory in Tijuana. Above, Oceas Verona Orocio inspects the latest model

Those businesses are finding a skilled workforce for high-tech manufacturing in Mexico. The country has doubled the number of postsecondary public schools, many devoted to science and technology. Former President Felipe Calderon last year bragged that Mexico was graduating 130,000 technicians and engineers a year, more than Germany or Canada.

The educated labor pool has attracted the car industry. Mexico has gained at least 100,000 auto-related jobs since 2010, according to a Brookings Institution report. Nissan, Honda, General Motors and Ford have all announced plans to expand in coming years.

3D Robotics, which makes drones and parts priced up to $730 for civilians and tech enthusiasts, is among the start-ups drawn to Mexico's low costs and proximity to the U.S. The company once manufactured its drones and kits in Southern California and China.

But Chief Executive Chris Anderson said making products overseas was a lengthy process that meant waiting for months for merchandise to come on ships. Chinese factories also required bulk orders that tied up a lot of the company's capital and prevented engineers from innovating quickly, which is vital in a tech sector such as drones.

"We decided it didn't make sense at our scale and pace of innovation to ramp up in China," Anderson said.

Instead, the company looked south.

3D's first Mexico factory in 2011 was in the three-bedroom Tijuana apartment of general manager Guillermo Romero, who spent the first months of the test run in Mexico soldering parts and assembling drones in his living room along with one employee.

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GENERAL MANAGER Guillermo Romero flies a remote-controlled drone outside 3D Robotics' factory in Tijuana. "Mexico is very flexible. You can start projects here and grow them," he said.

Sales of drones assembled in Mexico quickly grew after Romero got the hang of putting them together, and 3D moved into its first manufacturing space last year.

The last of the manufacturing equipment was trucked to Tijuana this spring, when the company moved to its current 12,000-square-foot facility. American engineers in San Diego design drones that are crafted almost completely by about 60 assembly workers in Tijuana.

A walk through the cavernous warehouse that houses the factory shows 3D's quick expansion. On the second floor, a newly completed call center opened about a month ago, bringing customer service in-house for the first time. Inside the assembly room, workers solder circuit boards, attach plastic arms and test the flying machines.

"Mexico is very flexible. You can start projects here and grow them," Romero said. "It's very good for startups."

For California companies, Mexico can be an especially attractive bet, analysts say. The ability to order in small batches means that designs can be changed quickly and production can be revved up and slowed down in a matter of days instead of months.

That can be invaluable during the holidays, as San Bernardino-based Cannon Safe learned.

On Black Friday in 2008, the safe manufacturing company received a panicked call from a major retailer that had drastically slimmed down its inventory in response the financial crash, President Aaron Baker said. But shoppers were scooping up their safes, prompting the chain to issue thousands of rain checks that it had to quickly honor.

Cannon's Mexico facility was able to increase production and deliver new merchandise within four days, compared with weeks or months if the safes had come from China, Baker said. "That was our 'aha' moment."

Today, about 60% of the company's safes are made in Mexico, nearly double the production levels five years ago. Meanwhile, its China production has dropped by half, Baker said.

Although wages are higher in Mexico than in China, the relative ease of doing business and proximity can bring costs on par or even lower. Companies find that they don't lose valuable time waiting for shipments. Deliveries can also be routed to another port or simply brought by truck when problems crop up, such as the eight-day strike that paralyzed the ports of Los Angeles and Long Beach last winter.

Companies looking to bring production closer to home rank Mexico as their No. 1 choice, according to a survey from consulting firm Alix Partners.

The tipping point may have come last year when manufacturing costs in Mexico, when adjusted for productivity, dropped below those in China, according to a Boston Consulting Group report. Within two years, the average cost of production in Mexico will be 6% below China and as much as 30% lower than countries such as Japan and Germany.

"Companies are bringing back parts of manufacturing to Mexico. They are saying, 'We want our manufacturing process close to our engineers, we want our inventory next to our customers so it's easier to ship,'" said Joe Mazza, a partner at advisory and accounting firm McGladrey in Los Angeles. "There are also many companies in China that are not exiting China, but reducing their manufacturing and bringing some to Mexico."

Despite these challenges, more U.S. companies will consider locating factories in Mexico in the coming years, analysts said.

"This is the return of manufacturing in Mexico," said Scott Stanley, senior vice president of NAPS, which aids companies setting up factories in Mexico. "Every month it seems like there are more and more companies moving. There is no sign of that trend slowing down."