

Manufacturing American Efficiency

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Lighting consumes 46 percent of U.S. energy in commercial businesses. And energy costs are rising. Fluorescent technology is being phased out. CFL technology has environmentally harmful side effects. Many believe that LED (light-emitting diode) technology is the answer. Considered efficiency powerhouses because of their high luminous efficiency, LED bulbs have quickly become the standard for commercial, residential, and industrial applications.

Look at any list of lighting manufacturers, and you'll see that the majority of today's LED solutions are not produced in America. And for the first five years of doing business, that was true for [NEUTEX Advanced Energy Group](#) [2] (dba NEUTEX Lighting) as well. Headquartered in Houston, TX, NEUTEX has become one of a list of companies that have recently moved operations to the U.S. from overseas. Today, the company is developing its Houston presence as it positions itself as a leading manufacturer of LED lighting.

"You really need to think outside the box to make things happen," says John Higgins, president and CEO of NEUTEX, "and we're firm believers in the LED business."

Building A Middle Class

It was a typical quality control check at the company's Shanghai facility that led Higgins to notice a new store was being built nearby. After learning it was a typical middle class American store - "not a Wal-Mart and not a Louis Vuitton," says Higgins - he and colleagues began to wonder if costs were starting to go up to the point that they were helping to develop the middle class of China. Upon further inspection, they realized that "we had five people doing the job of one in the states," says Higgins. And all of the work in that China factory was done by hand—no automation, which affected both the production output and quality.

"We had quality control issues," Higgins says, and he adds that the language barrier made "actually trying to get things done" difficult. "We found ourselves traveling ten times more than we should have to travel than if we were doing it in-house." Manufacturing anything abroad, he says, is difficult because he lost the ability to walk to the production floor and "see what's going on" - whether the wrong color LED is being put in or something else is being done incorrectly on the assembly line. The company had also noticed that when NEUTEX management would go to visit their factories, production would go up. "We'd leave, production would go down," Higgins says. Another long distance cost of manufacturing abroad, says Higgins, is

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paid by the four employees who are in the office at 2:00 a.m. in order to communicate with the facilities in a different time zone. “Those trends, no matter how small you think they are, over time they start to cost you a lot of money,” he says.

So Higgins and a team at NEUTEX sat down and considered the company’s costs of manufacturing abroad, but also the advantages. The team re-spec’d every single part, he says, to be sure any decision to relocate manufacturing was a wise one. “In a world economy, we cannot be arrogant enough to say ‘I can do everything here better than anybody else can do,’” he explains. “In a world economy, you still have to develop partners all over the world.” With worldwide partners including Finland, Macedonia, Taiwan, China, and Mexico, Higgins stresses the importance of valuing a world economy. “I get parts from all those people,” he says, “and they’re very good parts. That’s what they do – they make parts. So I don’t have to be in that process of controlling their part – I want to be able to control my fixture.”

But Higgins says simply, that his “American pride kicked in” too. “We did realize that we were killing the middle class in the United States by not exploring the options of what we really could do here,” he explains, “while building a middle class in another country.” He decided that the company would produce its core products “here,” in the United States, and that prime location turned out to be Houston, TX – a city that was not at the top of the list when Higgins started his “whirlwind” tour of the U.S. to find a prime spot.

Houston Made Sense

“I went on the whirlwind tour,” Higgins says, “visiting cities and listening to mayors and economic development companies and what they had to offer.” He met with the Greater Houston Partnership in Houston—an organization with the goal of building economic prosperity in the region—where one member instructed Higgins to simply make a list of his ideal city. Money and tax abatements aside, Higgins and the NEUTEX team were to decide what their ideal American manufacturing base needed to have. “So we made the list of what we wanted,” Higgins says. “We wanted colleges and universities that would work with us and that were technologically savvy. We wanted the availability to a city that would welcome us with open arms and a city that could use the products we’re manufacturing. We needed a diversified city that had both skilled and unskilled labor. We needed a port at least semi-close by. We needed a good rail system. We needed good highways that were in good shape for trucking. And we needed warehousing and trucking space. Another very important thing to us was credibility and accessibility. We wanted to have access to high ranking CEOs, CFOs, people in industries that our lights will make sense for.

“I was looking at that list,” Higgins adds, “we just described our home.”

After realizing their ideal city was the one where their headquarters were already located, the team laid out the rest of the package—how much cities were offering in incentives and how many reports the company would have to complete before the move. “And we decided that we were already here.

