SSL Postings

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Although you do not often hear about growth in domestic manufacturing here in the United States, the solid-state lighting industry is steadily growing and establishing a manufacturing presence here at home. Solid-

state lighting was not only born of U.S. ingenuity and R&D, but is riding the crest of a worldwide trend toward greater energy efficiency. This offers a golden opportunity for U.S. manufacturing to take a significant role in SSL. From time to time, these Postings will focus on SSL companies manufacturing here in the U.S., a series we call "SSL in America." This is not intended to endorse or promote any of the companies, but rather to describe advances in energy-efficient solid-state lighting. The activities you'll read about here are consistent with the <u>U.S. Department of Energy (DOE)</u> <u>white paper</u> "Keeping Manufacturing in the United States," which grew out of DOE's 2010 SSL Manufacturing R&D Workshop.

Spotlight on Next Lighting

Headquartered in San Francisco, Next Lighting is a manufacturer of LED replacement lamps and their dimmable drivers. According to chief technology officer Steve Paolini, the company got its start when one of its founders, who owned some commercial real estate, wanted to "go green" and replaced the fluorescent lamps with LED products. That was back in 2009, and he was so disappointed with the poor quality of those LED products that he decided to make some good ones himself. Next Lighting was born that same year, and what followed was a great deal of R&D, tooling, testing, and piloting. But in January of this year the company began selling its first product a – LED lamp intended to replace a 4' fluorescent tube that users can pop into the fixture and replace the ballast with the driver.

Next Lighting does all of its manufacturing here in the U.S., in the Bay Area, except for the driver electronics, which are outsourced from overseas – albeit from a U.S.-based company that has a foreign plant. The injection molding is done in Union City, CA, but the bulk of the manufacturing – including the sonic welding, skilled labor, and surface-mount technology is – done in nearby Scotts Valley. Steve explains that Next Lighting believes its products should be made where they're sold, and its primary market is in North America. The company just began selling in Mexico and plans to start selling in Canada soon, with Central and South America on tap for the near future. But Steve stressed that Next Lighting's U.S. manufacturing facilities will service all of those regions. He notes that the company plans to one day start selling to Europe and Asia, in which case it will probably set up manufacturing operations in those two places, but there are no plans to curtail the U.S. manufacturing – which is expected to continue to expand.

Steve says that one of the advantages of manufacturing here in the U.S. is that it makes for close proximity between the designers and the manufacturers, which not only speeds up feedback and response time but also helps cash flow by reducing the time during which valuable inventory is tied up in the transport phase. Intellectual property (IP) protection is also an important factor, as the company is reluctant to expose its innovative products to foreign competitors who might not respect IP rights. One of the issues Next Lighting faced early on in manufacturing in the U.S. was the fact that the infrastructure to support manufacturing has eroded somewhat over the past few decades. Still, Steve says, the Bay Area has proved to be a good place to set up shop, as Silicon Valley has a good supply of industrial talent and reasonably robust infrastructure.

Steve emphasizes the importance of government agencies as potential customers – particularly for manufacturers of LED replacement lamps, because the fluorescent lamps those products are intended to replace are so common in government buildings. He notes that in many instances government agencies in this country – from federal, to state, to local – require or prefer products that are U.S.-made.

Steve says that Next Lighting employs about 20 people in the U.S. in all, but the company just began selling products on the market, so that's likely to expand. Plus there's a considerable ripple effect, because Next Lighting tries hard to buy from U.S.-based suppliers.

Next Lighting is among a number of companies that are working to create and strengthen a solid-state lighting manufacturing base here in the U.S. This will not only help bring significant energy savings through more efficient lighting products, but will benefit our economy by adding jobs at multiple levels of the supply chain.

As always, if you have questions or comments, you can reach us at <u>postings@lightingfacts.com</u>.