

SSL Postings

U.S. DEPARTMENT OF ENERGY

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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 also 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, the Postings focus on SSL companies manufacturing here in the U.S., in a series called “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.S. Department of Energy (DOE) white paper [“Prospects for U.S.-Based Manufacturing in the SSL Industry.”](#)

Spotlight on Orion Energy Systems, Inc.

Orion Energy Systems, Inc., is a luminaire manufacturer that’s focused on retrofits. The company got its start in 1996 making fluorescent products and came out with its first LED product — a cold-storage high-bay luminaire — in 2010. According to CEO John Scribante, in 2012 and early 2013 Orion began doubling down on the introduction of LED products, which now account for more than 80% of the company’s revenue, with the rest taken up by linear fluorescent high-bay luminaires. The majority of Orion’s LED products are high-bay luminaires, but there are also troffer retrofit kits in the mix, as well as linear conversion strips.

Orion does most of its manufacturing at its headquarters in Manitowoc, Wisconsin, which is located on the shores of Lake Michigan about an hour-and-a-half north of Milwaukee. All of the assembly is done there, as well as all of the roll-forming and almost all of the coating. Some of the metal fabrication (bending and shaping) is also done there, with the rest outsourced to local companies along with the extrusion; and some customer service and accounting is done there as well. The drivers, chips, and circuit boards are imported, as is an insignificant percentage of the company’s products — stray items such as exit signs that Orion doesn’t produce.

In 2013, Orion purchased Harris Lighting, a Jacksonville, Florida-based manufacturer of fluorescent and LED luminaires (many of which for applications Orion didn’t cover); they relocated all of that manufacturing to Manitowoc while keeping the Jacksonville facility, now focused on product development, sales, and some field services. A third Orion location, in Chicago, is home to the company’s R&D efforts — John explains that it’s hard to find R&D staff in a small manufacturing town — as well as accounting, finance, procurement, and sales. And he relates that because the bulk of Orion’s customers are located in the southeastern U.S., the company is able to cut freight costs significantly by

using a third-party logistics facility in Augusta, Georgia, which kits up the products and gets them to the job sites.

John cites a number of advantages Orion derives from manufacturing in the U.S. One stems from the fact that return on investment is critical in the building-retrofit market. He explains that this makes it especially important to be able to control the quality and design in order to make sure product efficacy is as high as possible (the most efficacious of Orion's products, he says, are high-bay luminaires that get more than 200 lm/W).

John points out that manufacturing domestically also enables the company to control all of its own engineering and designs, allowing it to tweak those designs when necessary and run the models before production. As a result, development cycles from concept to delivery take only about four months, and shipping is usually within a week of receipt of an order — extremely important in the retrofit market. This also enables Orion to react quickly to the rapid changes that are taking place in SSL technology and cuts down on the amount of inventory that becomes obsolete before it's sold.

Still another advantage of domestic manufacturing, John notes, is that it makes it easier to protect trade secrets and intellectual property, both of which are important to Orion. What's more, he says, the quality of the workforce is very high here in the U.S., and, in addition, being able to meet the Buy America provisions of the American Recovery and Reinvestment Act confers a distinct marketing advantage with many of the company's customers.

Orion 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 postings@akoyaonline.com.