May 5, 2014

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 DOE white paper “Keeping Manufacturing in the United States,” which grew out of DOE's 2010 SSL Manufacturing R&D Workshop.

Spotlight on USAI Lighting

USAI Lighting is a manufacturer of high-end architectural luminaires. The company is based in picturesque New Windsor, NY, on the banks of the Hudson River about an hour north of New York City. Although the majority of USAI's products are LED, the company also produces halogen, CFL, and metal halide luminaires – a legacy of its life before SSL. That life began more than three decades ago, when USAI was founded by Eugene Littman, the father of current president Bonnie Littman (and himself the son of one of the early manufacturers of fluorescent lighting). Its first products were small-aperture halogen MR16 luminaires, which the company still produces – but things have changed a lot since then.

When Bonnie and her brother David Littman took over the company in 2007, they immediately started the SSL R&D ball rolling, and the following year USAI came out with its first LED products: a family of downlights, accent lights, and adjustable wallwashers. Since then, the company's LED offerings have grown into the hundreds, including nine that have been recognized by the Next Generation Luminaires™ Solid-State Lighting Design Competition. The goal, says Bonnie, is to successfully replicate the performance and features of traditional lighting.

USAI designs and manufactures its sources as well as its fixtures – not only the light engines, but also the optics and thermal management. All of the assembly,
and about half of the fabrication, is done in New Windsor, with the rest of the fabrication done by the companies whose components are incorporated into USAI's products. The company employs more than 200 people at its New Windsor facility – in the full range of positions one would expect, covering everything from support, to production, to operations, to engineering and testing, to quality control, to finance, to sales, to management.

While USAI still produces traditional lighting, Bonnie says its focus is very much on SSL, and no R&D is done in any other technology. One benefit of manufacturing domestically, she says, is that the majority of the customers are here, which means that products can be produced within a matter of days or weeks rather than considerably longer, as would be the case if the manufacturing were done overseas. Bonnie explains that because of the kinds of products it makes, plus the fact that they're offered in a wide variety of size, output, color temperature, and configuration options, USAI has to be both quick and flexible in its manufacturing.

She notes that although the products are sold through distributors, they're specified by architects, lighting designers, engineers, and others – who work closely with USAI. In that regard, Bonnie says, the company's location is especially advantageous, being just an hour away from the Big Apple, which is a talent magnet for many of the top people in those professions.

On the flip side, she notes, labor costs are higher here than they are overseas. Plus USAI sells internationally and thus has to comply with codes and standards for other countries as well as for the U.S. To better serve its U.S. customers, USAI has plans to open a distribution facility on the West Coast, and is also working on expanding its New Windsor facility to better take advantage of the tremendous opportunity SSL offers.

USAI 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 postings@akoyaonline.com.