SSL Postings

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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>DOE white paper</u> "Keeping Manufacturing in the United States," which grew out of DOE's 2010 SSL Manufacturing R&D Workshop.

Spotlight on Noribachi

Noribachi is a manufacturer of LED lighting for high-output commercial and industrial applications. The company is based in Hawthorne, CA, just two miles from Los Angeles Airport and a 20-minute drive from Disneyland. Noribachi does all of its manufacturing in Hawthorne, in a single facility that also houses the company's headquarters. About 55 employees work there—most of them engineers, but also manufacturing and production staff, quality control folks, account managers, and a marketing team.

Noribachi started in 2008 as a company looking to work in the area of energy efficiency and, after a period of extensive R&D, decided in 2010 to focus entirely on LED lighting technology. The following year, Noribachi moved from Albuquerque, NM, where it was located at the time, to its present facility in Hawthorne, because it was easier to find engineering talent in the Los Angeles area, which is much bigger than Albuquerque. Chief Operating Office Esther M. Santos says the company is growing so rapidly that it's already looking for larger facilities in the Los Angeles area.

She describes Noribachi as being essentially an engineering house that specializes in LED lighting. Esther says all of the company's products are custommade to the specifications of its customers, who have different requirements for the type of housing, lumen output, CRI, CCT, beam angle, sensors, etc. She notes

that these customers usually want to have the finished products in hand in less than four weeks, so Noribachi accommodates them each time, despite the considerable complexity involved. That kind of speed, Esther observes, wouldn't be possible if the manufacturing operations were carried out overseas, and it gives the company a considerable advantage over its competitors.

In addition, she says, it allows Noribachi to keep virtually no product inventory in stock, since each job is made to order. This in turn saves the company not only on inventory cost, but also on warehouse space. It also minimizes the risk of being stuck with unsellable merchandise that's been rendered obsolete by the continued rapid development of SSL technology—no small advantage, Esther notes. Another advantage of manufacturing domestically, she says, is getting to know all of the employees and help them develop, which helps keep them happy and morale high. As for labor rates being higher here in the U.S., Esther says labor is not a big part of Noribachi's costs.

She explains that although Noribachi is a custom manufacturer, it doesn't make the housing or the LEDs, but it makes everything else. The company places the LEDs—most of which come from U.S. companies—on its own light engines, which it puts into the fixtures. Esther notes that Noribachi prefers to do as much as possible in-house, in order to have better control over the manufacturing process. For example, she says, the company uses airplane-grade aluminum for its heatsinks, which requires specialized equipment to drill, but instead of outsourcing that relatively low-level process, it's done in-house, where last-minute adjustments can be made when necessary.

Noribachi 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.