

Postings: from the desk of Jim Brodrick



As I mentioned a few weeks back, I'm starting [a new series of occasional Postings](#) that focus on solid-state lighting companies that are either growing or establishing a manufacturing presence here in the U.S. Today's *Posting* marks the first such "SSL in America" profile and takes a look at Ruud Lighting. Many of you may be familiar with Ruud through its BetaLED product line, but the company predates SSL by nearly two decades.

Ruud got its start back in 1982, when engineer/lighting designer Al Ruud and his partner, Don Wandler, built prototype lighting products in the garage of Al's home in Racine, WI, with the intention of selling directly to electrical contractors. Luckily for Al's wife, it wasn't long before the company moved out of the Ruud homestead and opened an office and warehouse at a separate location nearby.

Manufacturing began soon afterwards, and the company grew at a brisk pace, eventually moving to larger quarters that had to be expanded several times over.

In 1992, Ruud launched a sister company, Beta Lighting, to provide high-quality, specification-grade luminaires for interior and exterior applications. Initially producing high-intensity discharge and fluorescent products, Beta Lighting entered the SSL market in 2007 with the introduction of its BetaLED product line, which has focused primarily on outdoor applications.

Beta designs, engineers, and assembles these LED products entirely at the company's Wisconsin headquarters. Although Beta outsources the manufacture of all SSL components, most of that

outsourced manufacturing is done here in the U.S. by U.S.-based companies. Unlike some manufacturers, Beta has avoided vertical integration, preferring instead to focus on its core competencies of design and engineering and to tap into outside talent for the other aspects of manufacturing. Company president Chris Ruud says this approach makes for flexibility as well as scalability.

It also has resulted in the direct creation of thousands of U.S. jobs at Beta Lighting and its outsource partners – and even more jobs through a ripple effect stemming not only from the beefed-up buying power of those U.S. workers, but from the increased production of the companies themselves. Chris reports that for every 100,000 units of LED product the company sells, 227 U.S. jobs are created on the manufacturing side alone. That's what I call a gift that keeps on giving – a product line that saves energy and is a real boon to the economy.

What led Beta Lighting to manufacture its LED products here in the U.S.? A number of things, including the fact that the company's headquarters were here, along with the bulk of its talent and resources. Another factor was Wisconsin's proximity to Detroit, the hub of the U.S. auto industry, which meant there was no shortage of metal-related machining and manufacturing capability in the region – a big advantage for a luminaire maker. Still another inducement was the relatively low labor costs in the Midwest, as compared with other parts of the country. And then there was Wisconsin's central location, which promised to minimize shipping costs.

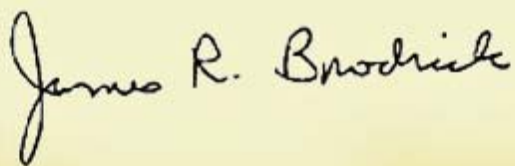
Beta's management feels so strongly that the future of lighting lies with SSL that the company and its parent company, Ruud Lighting, are devoting all of their R&D efforts to LED products, and none to other lighting technologies. Earlier this year, Beta Lighting expanded its SSL offerings to interior applications with the addition of a line of downlights. But new products aren't Beta's only focus; the company spends a significant amount of time and energy on improving existing LED products. For example, Beta Lighting's re-engineering

of the same LED product between Phase II and Phase III of a GATEWAY street lighting demonstration in Oakland, CA, increased energy savings by 25% while reducing product cost by 34% – a dramatic improvement that was due to the company's refusal to stand pat.

Beta has worked with DOE on other [GATEWAY demonstrations](#), as well as at many of our SSL workshops, and is an active member of DOE's [Commercial Building Energy Alliances](#). All of these things are a direct reflection of the company's commitment to advance solid-state lighting technology and speed up its adoption by sharing knowledge. Beta Lighting is also ramping up their R&D and quality control efforts because, with such a new and complex technology, the stakes are higher and the pitfalls greater.

We congratulate Beta Lighting for working to nurture and keep an SSL manufacturing base here in America, where the technology was born.

As always, if you have questions or comments, you can reach me at postings@lightingfacts.com.



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