

Tapping MES Casting Expertise Saves Development Time

Long before it needed help with manufacturing and logistics, a major lighting OEM teamed with MES, Inc. on the development of a new luminaire. As a result of involving MES in the product's earliest design stages, development time for the new luminaire was shortened dramatically.

The Challenge

The customer, a leading OEM brand in the industrial lighting category, had developed a new line of recessed downlights for high-value, commercial applications. These break-through designs take full advantage of the new generation of high-performing LEDs, which need less space to produce a soothing, comfortable illumination.

To accommodate the benefits of LED lighting technology, the customer pursued a new luminaire design that utilized aluminum die castings. Speed-to-launch is critical for any new product in the commercial lighting segment, so the customer engaged an aluminum die casting expert to help it bring the new product to market faster: MES.

The Solution

MES aluminum casting experts worked closely with the customer's design and production engineers, offering feedback at each stage in the development process. MES drew on its own "best practices" experience in working with manufacturers, offering suggestions that optimized component design and streamlined the development process. That collaboration resulted in a component design that met or exceeded all the part's desired functional requirements. In addition, the component was designed, with the help of MES, to be produced in a way that assured the best possible quality at the lowest possible cost.

Once design freeze had been reached, MES moved quickly to build the necessary production tooling and deliver multiple components that conformed fully to the customer's production part approval process (PPAP). The deep tooling capacity available through MES allowed eight tools to be built simultaneously, a critical step in meeting the customer's aggressive delivery targets.

The Outcome

By collaborating extensively with MES throughout the new luminaire's design and production steps, the customer was able to beat all its internal metrics for development and delivery. The full-service approach of MES, and the willingness of the MES team to help the customer find solutions beyond the literal scope of their supply chain needs, allowed the customer to leverage a competitive advantage in the marketplace by significantly reducing the time required to go from initial designs to market launch. It allowed the customer to feature its new product at Lightfair 2019 for maximum industry exposure. And ultimately, a smaller development window resulted in a more efficient development process and lower development costs.