

Strategy in Action

New Luminaire Assembly Area



Following the construction of the new distribution warehouse in 2013, it was clear that the next stage in the development of the Redditch manufacturing facility should be the re-layout of the luminaire assembly area. The continuing growth in Thorlux revenue had created a need to increase the total manufacturing capacity and also improve the overall efficiency of luminaire manufacture. In previous years, additional assembly cells had been created to satisfy demand, but had not necessarily been constructed in an optimised layout, so a target was set to increase the number of assembly cells by 50% while improving the flow of materials.

While these changes were being planned, it was decided that a number of other improvements could be incorporated into the design of the luminaire assembly area. These include creating an enhanced customer experience that demonstrates the latest luminaires in a live operational factory, and a better working environment for the assembly operators. The overall goal was to create a “visual” workplace with well-lit, clearly defined areas for assembly cells, kits of parts and finished goods. Ease of access for general maintenance, and areas for manufacturing aids such as quality documentation, assembly jigs and product drawings, were further important considerations. The new layout also enables the more efficient processing of materials such as waste cardboard, through the use of designated recycling points.

The manufacturing team became fully engaged in the design of the cells and the factory layout. The layout incorporates the new in-house-designed electrical test benches that had been installed across the whole of the Group in order to test an ever increasing portfolio of controllable LED products. The arrival of the electrical test benches provides a common test platform and the benefits of a centralised management system for maintenance schedules and software updates.

The introduction of wireless technology for the new SmartScan products had generated many new printed circuit board designs that incorporate components susceptible to electrostatic discharge. To overcome any possible damage to these components and eliminate potential failures in the field, a new floor coating incorporating a large copper grid was laid in the assembly area to prevent the build-up of static charge.

Other areas of the factory have also benefited from these layout changes. These include the component part stores area, where new pallet racking was purchased to increase the number of sheet metal sub-assembly locations, and two further vertical storage units for small parts.

All these enhancements have produced a new clean working environment that is already beginning to show the envisaged productivity gains. However, in this ever changing world, further improvements are already being initiated. In forthcoming months, shop floor wireless communication will enable the bar-coding and scanning of materials, to track their movements, and give electronic access to engineering information such as product drawings and process information.



Royal Visit

HRH The Duke of Kent KG visited Thorlux Lighting on 25 May 2017 to open the new luminaire assembly area. The Duke received a tour of the factory, met apprentices old and new, and unveiled a plaque to commemorate the occasion.

