

Cerulean opts for a synchronised control system for its packaging line solution



New approach offers greater control, flexibility and scalability

Cerulean, part of the Coesia Group, has opted for a complete solution from Omron for the control system of its packaging solutions. This has also prepared the company for the development of Industry 4.0 capabilities in the future.

Cerulean has been supplying precision test and measurement equipment solutions to the tobacco, oral hygiene, healthcare and cosmetics industries for over 70 years. Its clients include leading organisations such as Colgate, Albea and Essel. The solutions it has developed include the design and manufacture of specialist equipment for packing empty, squeezable tubes into cartons.



Seeking a powerful solution to a complex issue

The company invests a significant proportion of its revenue on in-house research and product development. The move from its incumbent supplier to Omron originated from the need for a more controllable, scalable and flexible solution that would enable equipment to be integrated smoothly into the production line. This included integration into complex lines in which both upstream and downstream equipment needed to work in synchronisation.

One particularly important aspect of this was the need to comply with safety and start-up procedures and emergency stop scenarios. With the company's existing set-up, a stop on the more complex production lines meant that there had to be a manual restart in order to comply with safety standards. This was both time-consuming and inefficient.

Shaun Toms, Cerulean's Portfolio Manager, explains: "We were looking for a precision skill set that would be able to take our proven machine design into Industry 4.0 and would enable us to set up new machines and gather data simply and efficiently. We were looking for a solution that would be versatile, cost-effective, future-proof and scalable. Omron was able to meet all of these criteria."

Optimized solution from Omron for flexibility and scalability

Omron provided both a hardware and software solution to Cerulean's needs. This included its Sysmac programmable logic controller (PLC) NX1P2 PLC, designed to handle applications from small-scale equipment to entire production lines. The company also supplied its NB5Q human-machine interface (HMI), which provides faster, more efficient control and monitoring. Finally, Omron provided and R88A servo systems which optimise everything from the machine design, installation and commissioning right through to maintenance once the equipment is in production.

The full Omron solution has given Cerulean greater control of its production line, more flexibility and a scalable capability for the future. The servo systems provide a faster and smoother operation that is Industry 4.0 ready.

Omron Project Manager, Paul Cusack comments: "This project underlines Omron's strengths as a complete solution provider. We were surprised by the complexity of the software that had been implemented but we worked closely with Cerulean to deliver a superb piece of code that would match the hardware capabilities. As part of our complete solution, we were also able to provide applications engineering support as well as other items such as robotics."

Shaun Toms adds: "Omron has provided us with everything we were looking for and more. It has successfully delivered a versatile and future-proof new platform upon which we will be able to build our next-generation products."

About Cerulean

For 75 years, Cerulean has been synonymous with the supply of precision test and measurement equipment solutions for the tobacco industry. With continued release of new devices, Cerulean is committed to delivering the solutions that their customers require, investing a significant proportion of its revenue on in-house research and product development. This commitment demonstrates the Cerulean philosophy of innovation and continuous improvement.

About Omron

OMRON Corporation is a global leader in the field of automation, based on its core technology of 'Sensing & Control + Think:'OMRON's business fields cover a broad spectrum, ranging from industrial automation and electronic components to social infrastructure systems, healthcare and environmental solutions. Established in 1933, OMRON has about 30,000 employees worldwide, providing products and services in some 120 countries and regions. In the field of industrial automation, OMRON supports manufacturing innovation by providing advanced automation technologies and products, as well as extensive customer support, to help to create a better society. For more information, visit OMRON's website at www.industrial.omron.eu.