CASE STUDY



Wacker Elastosil N2199

Highly flexible, translucent silicone

Fisnar F4403 ADVANCE

Benchtop dispensing robot





Automated dispensing system increases lighting manufacturers throughput fourfold

Venta Global is a manufacturer of automotive and marine lighting products based in Hampshire. They offer a complete service from custom design to delivery, manufacturing thousands of products each year. With a new production facility recently fitted out, they have been taking steps to streamline and automate processes where possible.

The lighting assemblies Venta Global manufacture often require water and environmentally resistant gaskets to protect them from the elements throughout their lifetime. To help achieve this requirement, Venta Global contacted Intertronics for help in specifying a suitable gasketing material. An appropriate method of dispensing was also required to enable Venta Global to reach its long-term goal of de-skilling processes to enable consistent, reliable results to be produced, removing inconsistencies due to operator variance, and allowing future scalability.

After discussing the requirements for their form-in-place gasketing application, Intertronics put forward a select number of materials for testing. The gaskets were to be dispensed into 3mm grooves of the lamp assembly, after which point the lamp lid was then placed on top while the material is wet to create a cured gasket with a reliable seal. Ultimately, Venta Global chose **Wacker Elastosil N2199** for its environmental resistance qualities, non-corrosive, neutral cure, and compatibility with their parts.

Senior Technical Product Specialist at Intertronics, Matthew Baseley, said:

"Venta Global was previously applying gasket material by dispensing from hand-held syringes they backfilled in-house. This was a time-consuming

Our customer

Venta Global

Customer benefits

- Throughput increased
- Gasketing process time reduced fourfold
- Highly accurate and repeatable process
- Reduced operator health and safety risks



process. They came to us for help in improving the quality of dispense and overall repeatability. The **Fisnar ADVANCE robot** we recommended, along with a **CR300 cartridge retainer** and **HP790 dispensing valve**, allows them to de-skill the process and semi-automate it. The result is a more accurate dispensing method which produces reliable, high-quality products."

Roderick Dible, Production Manager at Venta Global said:

"The robot has sped up our production significantly. With one skilled operative, our old process would take up to 20 minutes to fully gasket nine lamps, the new set up can do this in less than five. We have also been able to remove the health and safety risks associated with repetitive strain injury."

Commenting on Intertronics as a partner, Roderick continued:

"During our initial supplier search, it was important for us to work with a company that could not only provide a dispensing robot for our application, but also an adhesive to be dispensed by it, we found exactly that with Intertronics.

"Intertronics will be our 'go to' company in the future for any dispensing equipment or materials that we may require."

With two different lamp designs being produced with this dispensing set-up, the robot's program memory allows the team at Venta Global to seamlessly switch dispensing programs between configurations. As up to 100 programmes can be stored at any one time, Venta Global will be able to transition additional assemblies to this dispensing method when needed.

Intertronics installed the equipment on-site and provided full training to the team at Venta Global, allowing them to get up and running quickly. Follow-up assistance, such as support with program optimisation, were also provided when required.

Wacker Elastosil N2199

- Outstanding resistance to weathering, aging, moisture, and UV light
- Single part and ready-to-use from the cartridge
- Non-corrosive and suitable for electronics and other sensitive materials
- Good adhesion to plastics, glass, metals, and ceramic
- Meets MIL-SPEC 46146 requirements
- Withstands temperatures from -45°C to +180°C

Applications include: Cure-in-place gaskets, potting and sealing.

Fisnar F4403N ADVANCE Robot

- Fast, accurate and reliable 24/7
- Dispensing dots, lines, arcs and circles
- Resolution 0.001mm/axis
- 100 programs memory, 50,000 points per program

Applications include: Form-in-place gaskets, adhesives, potting and filling materials, coatings, gaskets and shielding.



