CASE STUDY



FIS F4200N Benchtop dispensing robot





Our customer

CT Production

Customer benefits

- Straightforward to program
- Allows UK manufacturing to contend with offshore competitors
- Fits into flow line assembly
- High standard repeatable application
- Reduces errors and rejects
- Continuous production process

CEM increases competitiveness with dispensing robot

Contract electronics manufacturer CT Production contacted us when they needed to expand their dispensing robot capability for a low-energy lighting product.

Explained Alan Trevarton, Managing Director of CT Production:

"It is company strategy to compete with offshore manufacturing by lowering costs using robotics – compared with manual operatives, the benefits are greater flexibility, continuous working, reduced mess and clean up, plus enhanced consistency and quality. In the highly competitive arena of small to medium production runs, we see this as crucial to achieving positive outcomes for UK based manufacturers. Consequently we were interested in the **Fisnar F4200N Dispensing Robot** for its mix of price, performance and flexibility which exactly met our criteria. This was backed up by a highly successful onsite demonstration with ex-stock supply from Intertronics which enabled us to get straight on with the job, with lower unit costs and improved quality straight away."

CT Production are a CEM with varying requirements and a variety of other robotic equipment. In this case, they needed a compatible unit to fit in with their flow line assembly – the **Fisnar F4200N Dispensing Robot** offered exactly that as a compact and economically priced benchtop robot. Designed for manufacturing, medical and laboratory environments requiring a streamlined, robust and easily maintained machine, the F4200N is intended to support most light dispensing applications that require a high performance standard with considerable repetition.

At CT Production, the F4200N is used for lighting products with end caps which need to be sealed. The machine enables controlled dispensing of customer-specified RTV

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sealant in the right amount in the right place using a needle which dispenses a "gasket" of sealant, building up a couple of layers on the Z axis to achieve an internal tube within the cap. This was found to be quicker than manual application while reducing errors and rejects. The F4200N handles a dispensing area of 200mm x 200mm x 50mm and is capable of storing up to 100 difference programs. This enables processing a jig holding approximately 10 caps at a time.

Alan Trevarton commented:

"Our view is that the F4200N is straightforward to program, is reliable and effective and so is good value for money. We have already identified other areas such as application of heat transfer adhesive to bond aluminium PCB substrates to heatsinks. It is also quicker than manual operations and we have set up the process to fit in with adhesive setting times. This is a measurable factor in being price competitive with offshore manufacturing and so retaining work that would otherwise have gone overseas. The UK is becoming much more competitive with more people these days realising that they can produce in 1000's in the UK rather than the very large quantities suited to the Far East. By use of machines such as the F4200N, we are able to offer greater flexibility, lower carriage costs, shorter supply chain, shorter lead times and an ability to discuss products and requirements face to face – plus we can increase output quickly without an additional labour commitment."

Our Product Specialist David Peat describes the Fisnar F4200N:

"It uses step-by-step intuitive instructions to simplify job creation tasks, allowing a program to be entered and running in minutes. A 16-channel I/O interface provides for communication with external devices for secondary applications and multiple dispensing equipment components. We find that programming is simple with easy to follow English language instructions. Commands are followed and responses entered by a teach pendant. An LCD display prompts the user for a data input and once confirmed, automatically displays the next instruction. By this method, a programme can be created quickly and simply."

FIS F4200N dispensing robot

- Dots, lines, arcs and circles
- Resolution 0.001mm/axis
- Continuous path motion and point to point
- Step and repeat copy functions
- Automatic offset calculations
- Quick "fluid purge" button
- No computer skills required
- 100 programs, 4,000 points per program
- Software tip alignment routine for quick program offsets when changing dispensing tips
- USB connector allows system updates and program interchange between robots

Applications include: Adhesives, coatings, gaskets, potting, filling and shielding



Contact us for more information on our Robotics

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