

UK packaging machinery OEM Spiraltech develops automated equipment to cut 60 mm to 1,250 mm diameter cardboard cores with changeable blades, using Inovance servo drives, motors, and PLCs, supplied by leading UK automation distributor CAPSS.

CUSTOMER PROFILE

Spiraltech is a UK packaging machinery OEM known for its use of innovative machine design. Over the past 40 years, Spiraltech has provided a range of cardboard tube cutting and paper converting machinery widely used in the global production of composite cans, paper profiles, and paper tubes. It differentiates itself through innovative machine design and equipment that can be changed over 2-3 times per day to enable efficient small batch work. This is achieved because the machines have double the number of servos compared with its leading competitors.

CAPSS is one of the UK's leading distributors of electrical and mechanical components, specializing in parts for automation and control of plant and machinery. CAPSS provides expert technical advice thanks to its wealth of hands-on control and electrical engineering experience on everything from simple switching to automation systems, networking, motor control, safety applications and software.

THE CHALLENGE

Spiraltech was looking to replace its existing mechanical cardboard core cutting machine with a safer, more user-friendly automated version. The company wanted industrial control products that would ensure repeatability, ease of operation, and more efficient changeovers through servo automation. Key considerations included retaining a 'good square cut', even on very large diameter tubes. Spiraltech needed robust products for industrial settings and harsh environments, with high levels of accuracy. The machines are used on-site across a range of industries, from steel processing to construction, and even theatrical set design.

THE SOLUTION

Spiraltech selected Inovance automation products supplied by CAPSS to fulfil the brief and developed the Edge 1250, capable of cutting cores of 60 mm up to a diameter of 1,250 mm. The company has previously worked with CAPSS using Inovance technology and the products used in the Edge 1250 include: AM52x PLC, GL20 I/O modules, IS810N single and dual axis servo drives, the MD810 multidrive system, and MSI servo motors.

CAPSS helped Spiraltech select the right Inovance products, supplied the parts immediately and provided expert technical support throughout the process.



THE BENEFITS

The new machine enables parameters to be saved, enhancing repeatability. The Edge 1250 now has improved safety features, with operators protected from the blades and changeovers made easier through automation. It can also be easily changed from using a saw blade to a knife blade, providing additional flexibility to end-users. The Inovance products are robust and compact without compromising on high performance, enabling more servos and servo drives to be integrated into the Edge 1250 for greater machine flexibility and automation. The project went well from start to finish, with all products readily available, cost-competitive, and delivering high performance.

The IS810 Servo Drive



KEY BENEFITS

- User-friendly
- Repeatability
- Efficiency
- Improved safety
- Greater flexibility



The MSI Servo Motors

Steven Belwood, Managing Director of Spiraltech, says: "We have a really good existing relationship with CAPSS and excellent experiences with Inovance products, as they are compact, accurate, perform well, and are cost-competitive. We plan on working with Inovance and CAPSS again moving forward. This is the second big machine we have worked on with them, and it is performing well. It has been a pleasure to work with CAPSS and we look forward to using Inovance servos and motion products for more automation in the future."

Paul Seale, Director of CAPSS, adds: "It was great to work with the Spiraltech team again, and we hope to build on the positive relationship and joint commitment to innovation moving forward. To be involved with a project that delivers above and beyond the brief is always a pleasure and the Edge 1250 is testament to what is achievable with industrial automation solutions."