Solutions in Action
Newfoil Machines Ltd

Founded in 1982, Newfoil Machines Limited has become a world leader in the field of roll fed hot foil label printing and converting machines, and can boast over 1,500 installations in 90 countries worldwide. Primary customers include multiple worldwide label printers, particularly those servicing the wines, spirits, and electronics industries.

From the launch of the first machine at the 1982 Labelexpo exhibition in Birmingham, U.K., the Newfoil range of machines and options has been continuously developed and expanded and is now regarded as the industry standard for high quality finishing and converting. Indeed, Newfoil Machines was the first company to produce self-adhesive hologram labels, launched at the 1986 Drupa exhibition.

Technological evolution has culminated in the company’s Servo range of presses, which deploy the latest development in servo technology to offer an integrated motion and safety control system, which brings together the various dynamic and control elements of the machine into one package. Using an HMI touch-screen control panel, the operator can set-up and optimise the label parameters in a minimum amount of time and store the data for re-use.

All Newfoil machines are designed and built at the company’s 2,000 m² factory in the United Kingdom, a modern facility equipped with the latest CAD design systems, CNC machine tools and production equipment.
In-house production accounts for 95% of the machines engineering content and the advanced Servo control system is supplied by Rockwell Automation a market leader in motion control technology. Having total control of the manufacturing process enables Newfoil Machines to enjoy an unrivalled reputation for reliability and quality.

The Servo range comprises seven machine variants, with web widths varying from 175 up to 340 mm. Each model deploys electronic servo web feed control and is capable of up to 18,000 cycles per hour in addition to finished label rewind and matrix removal. In operation the machines take blank or pre-printed material on rolls at the infeed and then, via seven steps (re-register, hot stamp, emboss, laminate, die-cut, strip and rewind) deliver finished, self-adhesive labels, foiled and embossed at the outfeed.

At the heart of the machine is an Allen-Bradley® control suite from Rockwell Automation running over an EtherNet/IP network. Primary control is delivered via an Allen-Bradley CompactLogix™ programmable automation controller (PAC), which controls a four- or six-axis servo indexing systems controlled by Allen-Bradley Kinetix® 5500 servo drives. Allen-Bradley PowerFlex variable-speed drives complete the motion element, while an Allen-Bradley PanelView™ Plus HMI provides the operator interface.

According to Derrick Evans, Managing Director and Owner of Newfoil Machines: “Our machines have been designed to produce very high value labels for premium products so we have to have an automation solution that can address our demanding accuracy and quality levels. Rockwell Automation was able to offer us complete support through the critical design and development period with practical solutions to unusual problems.

“As a result of the integrated Allen-Bradley solution,” he continues, “we have reduced our design time, cut our programming efforts and made troubleshooting easier. We are also seeing increased flexibility, which will help us to evolve our machine design with minimal engineering effort.

“Our customers are seeing easier maintenance and troubleshooting,” he concludes, “while also enjoying enhanced personnel and machine safety. Indeed the incorporation of Rockwell Automation products has resulted in much better productivity and a return on investment that has improved by a factor of 80%.”

For more information, contact:
Derrick Evans MD/Owner
Newfoil Machines Limited
sales@newfoilmachines.co.uk
Phone: +44 (0) 161-627-0550
Fax: +44 (0) 161-627-0551
www.newfoilmachines.co.uk