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Ecoline trio slits turnaround times

THIS latest investment – Label Leaders' third slitter/ rewinder from Rotocon – expands the company's arsenal in the quest for quicker turnaround times to five machines.

'The new Ecoline RSI 330 creates a very competitive quality, speed and price proposition,' asserts Rotocon director, Pascal Aengenvoort. 'It has been re-engineered as a fully servo-driven model, featuring three servo motors (instead of two), increasing output from 230m/min to 300m/min. This higher speed has necessitated a more stringent web control and management system to ensure 100% accuracy. With the servo upgrade, we've also been able to remove the gearbox and clutch on the brake – simplifying maintenance for customers.'

Rotocon technician, Neil van der Westhuizen, installed and commissioned this latest generation slitter/rewinder, training Label Leaders' operators within a day. 'The machine is very simple to use thanks to the S-drive servo/software control system on the unwind, rewind and draw stations,' he explains, 'The icons on its moveable touchscreen console are based on smartphone navigation tools, making them easy for operators to recognise and follow.'

This isn't the first time Rotocon has been involved in an upgrade at the George-based label printing and converting operation. Theo Raubenheimer, who with his sister Rene Koen, is responsible for operational management at Label Leaders, comments: 'We've been doing business together for many years because our companies have a great deal in common, being family-run, and follow the ethos of never compromising on quality and service,' he adds.



Label Leaders' directors, Rene Koen and Theo Raubenheimer, stopped by Rotocon's Propak Africa 2019 stand to see their latest investment – the next-generation Ecoline RSI 330 slitter/rewinder – in action. With them is Rotocon director, Pascal Aengenvoort.

Label Leaders has invested in a second-generation Rotocon Ecoline RSI 330 slitter/rewinder, which made its debut during the Propak Africa 2019 show in Johannesburg.

Cracking a successful formula

Amid 2019's tough economic climate and demand pressures being experienced by FMCG producers, Label Leaders had its best April on record. According to Theo, this was partly attributable to the bottling process in the wine industry, and to lean manufacturing principles, customer relationship management and venturing into tag production.

'We can't do anything about the prevailing political climate,' he comments, 'but we are committed to managing the factors under our control. For instance, waste — whether it's in time or raw materials and consumables such as paper or ink — is kept to a bare minimum.

'We also pride ourselves on excellent service levels and quick turnaround times and, therefore, need to maximise flexibility. My office is in the centre of the factory, providing a good view of production at all times so that I can manage priority orders.'

Label Leaders values all customers equally, whether they're a small bakery ordering 10 000 labels monthly or a national retailer ordering many millions and requiring quick action on promotional labels when their butchery departments, for instance, can secure a very good deal on a meat cut. 'All customers and suppliers form a valuable part of our company's ongoing success, which is why we're continuously cultivating positive long-term relationships with them,' Theo asserts.

Solid advice makes the cut

Label Leaders is also adaptable and open to running with feasible opportunities when they arise, especially when these add value to customers' operations. A recent example was blank and printed tag production, at the request of a customer whose regular supplier had failed to deliver.

'We were confident in our label printing and converting machinery's capability to run multiple substrates and approached Rotocon for tooling advice on the die-cutting requirements,' he explains.

Pascal Aengenvoort takes up the story. 'After discussing technicalities such as the die construction possibilities, the layout of the die and the cuts required, we recommended a solid rotary die made from imported steel and vacuum hardened to ensure a longer lifespan. The die was designed and manufactured in our Johannesburg factory by a highly-



experienced team which prides itself on delivering topquality consumables.'

Theo confirms that since November 2018, Label Leaders has been producing an increasing volume of tags, which now appear on FMCG products in retail stores across the country. 'This venture has taken off like a rocket and we're very satisfied with the results and output rates of the solid rotary die,' he enthuses.

Perfecting digital gap control and adjustment

DURING Propak Africa 2019, Wink's die-cutting expert, Wiebke Momann, joined the Rotocon team to demonstrate the partners' leading label production technologies for visitors to the company's three stands.

Rotocon founder, Michael Aengenvoort, points out that die-cutting labels is a demanding process, with several factors influencing the choice of tooling. 'While some applications can be run with standard, uncoated flexible dies, most need specialised coatings or hardening to guarantee efficient processing. This is why we were showcasing Wink's SuperCut flexible dies, which are finished with a wide range of coatings and treatments, to help converters meet their quality, cost efficiency and quick turnaround time needs. This is thanks to Wink being able to help minimise production downtime by manufacturing and shipping these dies to South Africa within 48 hours.'

Michael adds that intelligent cylinder gap adjustment is playing an increasingly important role in compensating for the tolerances of die-cutting components (cylinders, flexible dies and materials), especially with label liners getting thinner and thinner.

To assist converters with these changing market requirements, which are compounded by shorter run lengths, just-in-time delivery and the move towards greater production process automation, Wink has upgraded the SmartGap adjustable anvil cylinder from an analogue to a digital system.

Making its African trade fair debut, Wink's SmartGap Touch, is based on the proven Classic version – a fully-hardened anvil cylinder with high-precision eccentric adjustment unit and special support roller for maximum stability. In addition, it offers extra functions controlled by a digital touchscreen. The intuitively-designed and clearly arranged user interface is connected to a central processing unit, which commands the adjusting units and anvil cylinder, in turn.

'The digital control provides the SmartGap Touch with unrivalled flexibility,' explains Wiebke Momann, 'the step size is individually adjustable, depending on the application. The gap can be changed in small or large steps, with the smallest adjustment unit at just $0.5\mu m$. Furthermore, the operator can adjust the gap individually to the left or right or on both sides simultaneously at the push of a button, instead of being restricted to individual manual adjustments.'

The SmartGap Touch is designed with three feature packages: fully-automatic and continuous gap adjustment, JobControl for the automatic setup of the die-cutting unit through scanning the flexible die data, and an interface for integration into existing management information systems (MIS).

The 'AutoControl' vision system – regulated by a sensor bar – assists operators by maintaining visual control of cutting results and automatically correcting the gap when labels are missing, as well as by marking faulty labels for further processing. Operators can also configure the control function against too deep liner strikes. Furthermore, because the cutting depth doesn't have to be regulated via the pretension, the service life of the tools is increased.

The primary advantage for the management team, from a productivity perspective, is the system's ability to capture data such as run times and the number of labels produced.

The 'JobControl' function package includes a reset function for automatic adjustment of the gap to the initial value, as well as configurable, automatic gap enlargement during job changeovers. In addition, it stores all order data, including the use of preset gap values for repeat jobs. Operators can, however, access an overview of basic job and tool data by scanning the SmartCut flexible die codes.

Wink's network expansion package offers all the necessary interfaces to integrate the SmartGap Touch into



customer-specific software and automation processes. Possible functions include the exchange of order-related data with management information systems (MIS) and other software systems, re-ordering flexible dies at the touch of a button, and presetting the gap dimension as a function of the data supplied by the MIS.

'Propak Africa visitors responded very positively to the various demonstrations utilising the SuperCut flexible dies, which are made with microscopic precision to ensure perfect die-cutting for all label applications,' Michael Aengenvoort reports. 'They were also very impressed by the convenience and accuracy of the touch of a button fully-automatic monitoring and adjustment range ($80\mu m$) of the SmartGap Touch adjustable anvil cylinder.'

