experienced team which prides itself on delivering top-quality 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 0.5µm. 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 (80µm) of the SmartGap Touch adjustable anvil cylinder.'