Four factors driving developments

Sustainability is core when designing and engineering flexo presses. Uteco Converting focuses on product sustainability by lowering material waste alongside energy and solvent consumption, and on people sustainability by improving operator ergonomics and safety, explained **Anan Hiyasat**, Middle East and Africa director, during the recent Flex-on-Road seminars in Durban, Johannesburg and Cape Town.

'ACTIVE PACK consisting of Active Start, Active Dry® and Active Ink allows us to equip our new short-run CI flexo presses such as the Onyx Go with top-notch technologies for sustainability,' Anan enthused. 'Our team has calculated that Active Pack enables annual savings of more than €100 000 on material and energy consumption. For instance, it, limits material waste to 8m at each start-up, saving up to 200km or €35 000 per year of material waste.'

Additionally, the printing set-up per job takes less than three minutes and is up to 55% faster than comparable flexo presses without **Active Start**.

Active Start also includes an automatic system that uses a 'super algorithm' to recognise 3D plate characteristics. It transmits printing set-up information to other components to ensure the fast set-up of any printing job type, repeatability over different jobs and real-time data collection on printing characteristics, he noted.

The patented **Active Dry** system optimises energy consumption by regulating the drying power according to the printing characteristics detected by the Active Start system. According to Anan, it can save up to 50% per year of energy consumption versus a comparable flexo press without Active Dry.

The **Active Ink** system – optimally positioned on the side of the CI drum – enables smart ink pumping according to the printing characteristics detected by the Active Start system, which helps reduce ink and solvent consumption levels by up to 40%.

In addition, **Sprint Wash** – positioned on the side of the CI drum – with more compact piping completes solvent washing cycles in less than three minutes with a high level of efficiency that permits maximum solvent consumption savings of 40%.

Safety and ergonomics



Anan pointed out that Uteco's design team has also placed great emphasis on personalising operators' ergonomics when they are using, maintaining and cleaning the Onyx Go. Operators can, for example, adjust the **Dynamic Cockpit** (floating human-machine interface) according to their height. The Magnetic Splash Guards, on the other hand, enable easy



access when the operations team needs to clean and maintain the press.

Operators also require safe access to all printing areas, including the upper part of the press, which has been ensured via a ladder that is positioned on the rewinder rear side and a catwalk that extends the total length of the press. These design features enable easier and safer web monitoring of print results and easier access to the Cl drum and drying system for cleaning and maintenance.

Additionally, integrated lifts within the CI unit are positioned to correspond with the first and last colour units without the need for extra equipment or ladders.

Furthermore, operators' hearing needs to be protected during each shift, which is achieved with a machine casing designed to contain noise to less than 80dB – similar to the best vacuum cleaner on the market.

Also available is an automatic sleeve changeover option called the **SleeveBot**. It's equipped with patented adaptable grippers that go inside the sleeves at the front and back to make these changeovers quick and easy.

Anan concluded by emphasising that Uteco always strives to develop innovative press features that help drive the next generation of converting solutions and businesses that make a real ecological difference.