



Uteco's efficiency equation

Sustainability in flexographic printing is often measured through operational performance: kilowatts saved, kilograms of waste avoided, litres of ink conserved and minutes of downtime eliminated.

RECYCLABILITY, recycled content and circularity have dominated sustainability discussions in the packaging sector for years. Yet for converters operating sophisticated flexographic presses, another question is also becoming important: how efficiently can packaging be produced?

The issue sits at the intersection of profitability and environmental performance. Every metre of substrate wasted during makeready, every kilowatt consumed during drying and every litre of ink unnecessarily pumped through a press carries both a financial and environmental cost.

According to Anan Hiyasat, CEO of Uteco Middle East and Africa (MEA), the next phase of sustainability gains lies in production efficiency. 'Converters are under pressure from every direction,' he says. 'Brand owners want more sustainable packaging, energy costs continue to rise and production schedules are becoming more demanding. The opportunity lies in helping printers produce more efficiently while reducing waste and consumption.'

This thinking has shaped Uteco's ESG strategy, which focuses on developing technologies that improve operational performance while reducing the resources required to produce packaging.

The company's approach centres on two priorities. The first is continuous innovation aimed at reducing waste, lowering energy consumption and improving production efficiency. The second is ensuring customers receive ongoing support to keep equipment operating efficiently.

ActivePACK tackles inefficiency

One of Uteco's recent developments is ActivePACK, a package of technologies developed for CI flexographic presses. Rather than focusing on a single aspect of production, ActivePACK targets common sources of inefficiency in a pressroom.

'The industry often talks about sustainability in broad terms,' says Anan. 'We prefer to look at measurable parameters. How much substrate can be saved? How much energy can be reduced? How much downtime can be eliminated? Those are the metrics that ultimately matter to converters.'

The system combines three technologies: Active Start, Active Dry® and Active Ink.

Active Start addresses one of flexographic printing's oldest challenges: makeready waste. By automatically setting printing pressure and register, the system can complete start-up in less

than three minutes while limiting waste to approximately 8m of substrate. In an environment where multiple short-run jobs have become common, reducing start-up waste can have a significant cumulative impact over the course of a year.

Energy consumption is addressed through Active Dry®, Uteco's patented drying technology. Drying is one of the most energy-intensive stages of flexographic printing, particularly in high-speed applications. By optimising drying parameters, Active Dry® can reduce energy consumption by up to 50%, delivering savings as energy prices continue to rise.

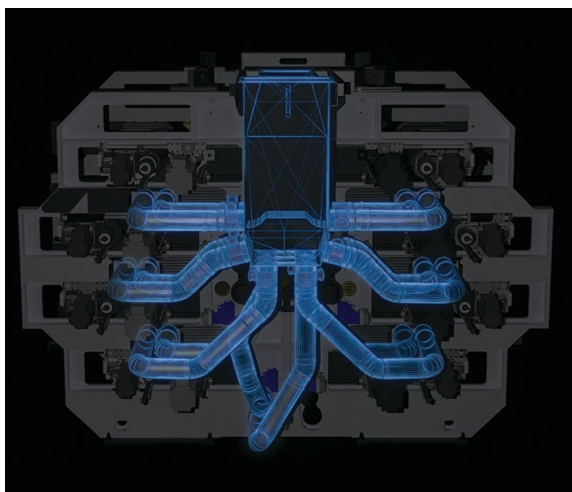
Completing the package is Active Ink, an intelligent ink management system that optimises pumping frequency according to production requirements. The result is lower ink consumption, reduced waste and improved process stability.

Uteco estimates that ActivePACK can deliver annual savings of up to €300 000 (roughly R6.2-million) on a single flexographic press through reductions in energy usage, consumables and production waste.

Uteco's ESG ambitions extend beyond environmental considerations. The company has also invested in technologies designed to improve operator safety and workplace ergonomics.

Its Dynamic Pack system simplifies cleaning and maintenance procedures, improves access to colour units and automates functions such as tensioning and splicing. These improvements reduce manual intervention, minimise operator fatigue and contribute to a safer production environment.

'We often speak about sustainability in terms of environmental performance, but people are equally important,' says Anan. 'A sustainable operation supports its workforce through safer, more efficient and more ergonomic working conditions.'



Uteco has also sought to quantify the value of these improvements. Through its proprietary total cost of ownership (TCO) simulation model, converters can evaluate the long-term financial impact of reduced energy consumption, lower waste levels, maintenance requirements and productivity gains.

Available as a mobile application, the tool allows customers to model potential savings in minutes, providing a practical framework for evaluating investment decisions.

The company's efforts have also received independent recognition. In 2024, Uteco became the first printing machinery manufacturer to develop a UNI protocol for ESG product certification in collaboration with UNI, ACIMGA and industrial partners including SIT Group.

Anan says the significance extends beyond certification. 'Sustainability cannot rely on assumptions. It needs measurable data, recognised standards and verifiable results. That's the direction the industry is moving in and it's a direction we fully support,' he concludes.

Ed's note: Uteco is represented and distributed in South Africa by Sareltech.