

Single-pass and Kombo TAV automatic, digital cutting: how McGowans revolutionizes POP materials

A longtime digital technology pioneer and advocate, the Irish printer eliminates bottlenecks in display production using Elitron technology.

Translated from an article written by Lorenzo Villa, Italia Publishers



Founded in Dublin in 1989 as a copy shop and CAD reproduction center, McGowans Print embraced the core business of printing in the mid-1990s, when its founder and CEO, Mal McGowan, sensed its potential and lucrative margins. Their first notable investment in 1995 was an HP Indigo, which was tested and negotiated with Benny Landa himself. From that moment on the company took off, rapidly increasing its fleet of machinery with a wide variety of systems from Scitex, Inca, Agfa, Durst, Fotoba, HP Indigo, EFI, Kongsberg, Xeikon, Canon, and Zund.

Business grew in all directions, from small to large format, from commercial printing to converting. In some segments, volumes were big enough to justify the introduction of analog technology. Nevertheless, McGowan continued to express unwavering faith in digital, and Mal McGowan did not stop researching, experimenting, and investing to raise the bar. It is no coincidence that when the entrepreneur first met Elitron in 2013, he fell in love with the fully automatic Kombo TAV cutting system and purchased the 32.16 version, one of the Italian manufacturer's first dual gantry and dual cutting head systems.

Over the past decade, McGowans Print has made ambitious investments. These include the EFI Nozomi C18000 single-pass printer for corrugated displays in 2018, and a dedicated folding carton department with Landa S10, Scodix Ultra 6000, and Highcon

Beam in 2022. In January 2023, the company purchased a new Elitron Kombo TAV-R 32.22 to meet the demand for digital corrugated cutting.



From digital printer to European display leader

While many visual merchandising projects are conceived and implemented locally, major brands and some retailers use agencies and suppliers that can provide consulting, creation, and delivery services outside national borders. Based in a relatively small nation and accustomed to working with suppliers and customers in the UK and major EU countries, McGowans Print has turned its digital firepower into an asset to supply the European market. In under a decade, the company has achieved remarkable growth, with turnover soaring from €2 million to over €30 million by 2023. This success stems from a dramatic expansion in production capacity, enabling the acquisition of previously out-of-reach customers, the elimination of external procurement, and the ability to sell both semi-finished and finished products back to its suppliers.

"Our first inkjet printer produced eight sheets of corrugated every hour, the next was 14, and the M-Press Tiger, in 2010, was up to 140. With EFI Nozomi, we jumped to 4,000 sheets/hour with offset quality," McGowan says. "It was a gamble, but we have industrialized a digital production that most of our colleagues still handle in analog or by using digital printers that are too slow with much higher production costs."

McGowans Print provides a turnkey service, from concept development to structural design, prototypes, and production of kits to be sent to stores. The sudden growth in die-cutting volumes in 2018 led the company to indulge in the only digression from its digital development path: an analog die-cutter.

The "new normal" dictates lean digital processes

The arrival of the pandemic, with forced closure of stores, imposed a setback for McGowans Print business, but at the same time, created conditions for a more conscious, efficient, and sustainable design and procurement process, more conducive to a digital workflow.

"Price is important for our customers, however carbon footprint and inventory reduction are imperative issues," McGowan says. "Using LED UV technology and energy from renewable sources, coupled with producing the exact required quantities gives us a substantial advantage."

Although the company's cardboard department is a model of efficiency, mechanical die-cutting represented a bottleneck and a grey area that the company owner wants to overcome at all costs. Thus, in late 2022, McGowan is back knocking on Elitron's door to check in on the latest innovation and technology.

Kombo TAV makes a difference (again)



While thoroughly testing Kombo TAV's new capabilities, the McGowans Print production team analyzed other automated cutting solutions available in the market, concluding that the Italian manufacturer's platform was still the most versatile, productive, and qualitative platform for their workload. The durability of the first unit, which is still fully operational after ten years, corroborates the decision to purchase a new Kombo TAV-R with a feeding system able to load pallets up to 1.2 m high.

"Average display quantities are declining, and budgets are flattening. To grow, we need to win more customers, reduce lead times, and increase quality," says McGowan. "To date, Kombo TAV is the only cost-effective digital cutting technology for a few hundred displays, which is exactly the range in which we have become very competitive."



Elitron's pluses for more efficient production

In addition to the high volumes printed by EFI Nozomi, the finishing department runs the two Kombo TAVs, the mechanical die-cutter, and four automatic gluing machines to process dozens of jobs printed on the Durst 1312 and Durst P5 350 multipass printers. Most jobs are printed on single and double-coated B-, E-, EB-, and BC-wave boards, but with the introduction of the Landa S10, packaging jobs on microwave are growing. Run lengths vary from a few units to several thousand pieces, and the number of sheets and delivery times are the main criteria for choosing the cutting method. While single-pass operates on a five-day-a-week shift, Elitron systems work 24/7, in many cases without operator oversight.

"We chose Elitron because of the high productivity and the ability to make cuts without nicks, which simplifies the production process," McGowan explains. "Kombo TAV is also very reliable: you load a pallet in the evening, and in the morning you find it ready to be glued."

Under normal conditions, all jobs under 500 sheets are cut and creased on the Kombo TAV, while longer runs are die-cut mechanically. Elitron makes the most sense even for a thousand sheets if the die-cutter is busy or has straightforward cutting paths.

"Productivity for us lies in the number of sheets cut and stacked at the end of a shift," McGowan summarizes. "Over the years, Elitron has steadily improved the reliability of its systems, speeded up processing, and reduced downtime to zero. That's why it continues to be our first choice."

A greener and more digital future

By introducing the Kombo TAV-R McGowans Print has cut the number of dies in half, reducing lead times and procurement costs. This decreases start-up waste, storage space, and the amount of material to be disposed of.

In addition, thanks to the Elitron Power Management System (EPMS) technology, the new system has much lower energy consumption. This contributes to McGowans Print energy self-sufficiency goals, which already self-generates 28% of its own energy using a 6,000 sqm photovoltaic system.

In June 2024, McGowans Print purchased a new Elitron Kombo SDC+ 43.32 conveyor cutting system, to meet the growing demand to cut and mill rigid and flexible materials, including fabrics.

