

After two decades of offset printing and analogue die-cutting, the Mantova based company turns to complete automation for digital production.

Grafiche Esposti's carboard production goes digital with Kombo TAV and P5 350 HS

Translated from an article written by Lorenzo Villa, Italia Publishers



Elitron's Kombo TAV installed in Grafiche Esposti

Grafiche Esposti's passion for imagery and unwavering pursuit of quality stand as enduring hallmarks of its founder, Giovanni Esposti.

Trained at the Salesian Graphic School in Verona in the early 1970s, Esposti launched his career as an advertising photographer, earning notable recognition in the competitive Parisian market. After returning to Italy, Esposti established a business in industrial photography in Canneto sull'Oglio (MN). In 1981, he expanded his expertise by integrating photolithography services, founding the renowned Studio E company. Over the next decade, the business expanded rapidly, alongside significant investments in cutting-edge acquisition, exposure, and photo editing technologies. However, the rise of desktop publishing in the late 1990s dealt a severe blow to the entire photolithography market. Bold and disillusioned, Esposti recognized that a decisive repositioning was essential for the company's survival. He chose to invest in the promising yet challenging field of paper converting. In 2000, Grafiche Esposti was founded, specializing in the production of large-format displays and packaging boxes. The company introduced multi-color offset printing presses, die-cutting machines, and gluing equipment, marking the beginning of its new chapter.

Upon completion of their studies, his sons Stefano and Marco joined Giovanni, injecting new energy into the commercial and design departments, laying the foundation for future growth. With a team of 26 employees, a turnover surpassing 9 million euros (2022), and a production facility covering 10,000 m², Grafiche Esposti made a significant leap forward in August 2022 by launching a digital production department, featuring a Durst P5 350 HS and an Elitron Kombo TAV.



Durst P5 350 HS with Automat loading and unloading

Creators of innovative and high-quality POP solutions

Grafiche Esposti boasts an impressive clientele, including renowned food companies such as Lavazza, Barilla, and Noberasco, along with major players in the pharmaceutical and pet food industries, as well as agencies and print buyers. For nearly two decades, the company has been undertaking projects on behalf of multinational leaders in the display manufacturing industry. The strength of this Lombardy-based company lies in its comprehensive production cycle: from initial concept to graphic and structural design, 3D rendering, prototyping, and the production of displays, pallet boxes, and promotional islands in both small and large quantities.

“Promotions are becoming increasingly frequent, fragmented, and tied to seasonality and events,” explains Marco Esposti, President of Grafiche Esposti. “In addition to quality and timeliness, today’s customers demand unique solutions that help them stand out at the point of sale.”

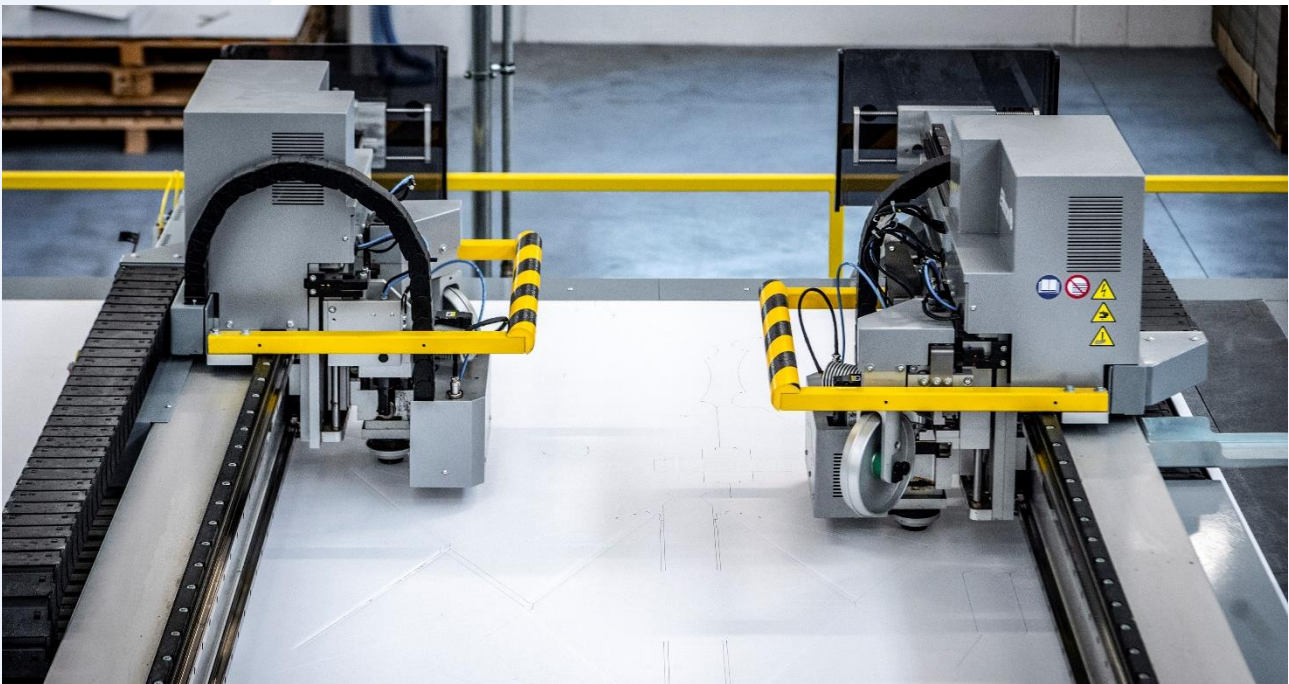
At its two factories, the company manages the entire production process in-house, including prepress, offset printing (up to a 1,200x1,600 mm format), lamination, and gluing. It also provides turnkey services, such as filling and shipping displays directly to points of sale.

In 2005, Grafiche Esposti bolstered its technical capabilities by adopting ArtiosCAD parametric design software and a compact digital cutting system, enabling real-time sample creation. For pre-series production and small batches, the company utilizes nearby digital printing services.

This effective and collaborative model has proven successful over the years, but in recent times, it has started to show signs of strain.

"Despite working with highly responsive suppliers, we were losing flexibility," explains Marco Esposti. "Sometimes, even a delay of three or four days to print and die-cut materials is too long."

In 2022, the increasing need to streamline small-batch production, combined with growing demand for eco-sustainable display solutions, prompted the company to reevaluate and digitize its production processes.



Two independent gantries & cutting heads on Kombo TAV

The Digital Revolution in Offset Printing and Die-Cutting

Grafiche Esposti specializes in working with corrugated and stretched cardboard, striving to redefine the standards of paper converting. By integrating fully automated digital machinery, the company delivers results that match the precision and quality of traditional offset printing and mechanical die-cutting processes. In the printing sector, the company identifies the Durst P5 350 HS as the optimal solution for its purposes, thanks also to the printing width of 3.5 m, the maximum productivity of 708 m²/h and the Durst POP Flex inks, which they offer high resistance and (modulating the drying) more or less shiny finishes. Among the decisive factors, the Durst P5 Automat sheet loading and unloading system, designed and built by Elitron, allows 1,600x2,200 mm sheets to be fed from two side-by-side pallets up to 900 mm high, making full use of the performance and printer format.

For die-cutting, Grafiche Esposti carefully evaluates the available cutting and creasing solutions with pallet-to-pallet production. After extensive testing, the company decides

to invest in the Elitron Kombo TAV 32.22, equipped with roller conveyors to streamline pallet handling at both the beginning and end of the production line.

“High stack feeding and the double cutting head are essential for performing operations without operator supervision,” explains Esposti. “The Kombo TAV is not just a cutting plotter with connected automation; it’s a fully integrated cardboard converting machine that leverages advanced digital cutting technology.”

Digital Cutting for Inkjet and Offset Printing Solutions

Grafiche Esposti views the Kombo TAV as the epitome of successful technological integration, making it an ideal solution for both fully digital processes and those involving sheets from printing presses or traditional lamination lines. With a maximum stack height of 1,200 mm, a vacuum table featuring 32 independent zones measuring 3,200x2,200 mm, and dual cutting heads, the Elitron system can efficiently feed and cut multiple sheets simultaneously.



Promotion island & displays created using Durst P5 350 & Elitron Kombo TAV



Loading a pallet of printed corrugated cardboard onto Kombo TAV

Leveraging the exclusive AiroPanel technology, the system releases the cut sheets onto pallets, ensuring they are perfectly aligned and free of attachment notches. The Seeker System camera, which reads register marks and QR codes from below, allows the Kombo TAV to automatically adjust its cutting path to match the printed content, enabling seamless job changes. Once a pallet is completed, motorized roller conveyors seamlessly feed the next pallet, ensuring continuous, uninterrupted production.

“As soon as the material is prepared and the job queue is verified, Kombo TAV can operate autonomously for an entire shift, allowing the operator to focus on more value-added tasks,” concludes Esposti. “Investing in highly automated machines reduces errors and waste, minimizes operator fatigue, and boosts staff motivation.”

Digital Innovation Drives Business Growth

Following the successful installation and integration of new equipment into its workflow, Grafiche Esposti has steadily increased the percentage of orders completed digitally. The company now handles average runs of 300-400 displays, scaling up further based on workload and tight delivery deadlines for offset lines.

The Kombo TAV operates autonomously throughout an entire shift, and when needed, is also utilized during the night shift, all without requiring operator supervision.



Marco Esposti
President, Grafiche Esposti