

SPANISH INDEPENDENT PUTS GOPFERT TO THE TEST; THE RESULT BEING A 14,000 SHEETS PER HOUR OFFLINE PRINTER. A REPORT BY DANIEL BRUNTON

Industry first for LanteroThe Lantero Group is one of Spain's leading box making companies. Originally established as a wooden box maker back in the early 1930s, it wasn't until the 1950s that Jose Lantero E Hijos SA started to make corrugated boxes. The company has grown steadily over the decades, and now operates a total of five conventional box plants strategically located throughout the Iberian peninsula, complemented by a further five heavy duty box plants which trade under the name of Technicarton. The group as a whole, which specialises in not just corrugated but also plastics and book

printing, employs a total of 3,000 people.

One of the company's conventional plants is located less than 20km from Madrid. The 45,000sqm site has a 2.5m corrugator, which produces about 80 million sqm of board per annum. The machine can run a wide variety of board types, from F flute through to AC doublewall 400gsm heavy duty board. With a very high proportion of the sites work being undertaken for the food and drink industry, B flute is the most commonly produced board, accounting for about 40 per cent of production. Running a double shift work pattern, the Madrid site employs 170 people.

INDUSTRY FIRST FOR **LANTERO**

A six colour Göpfert Ovation at Lantero in Madrid, capable of running at 14,000 sph

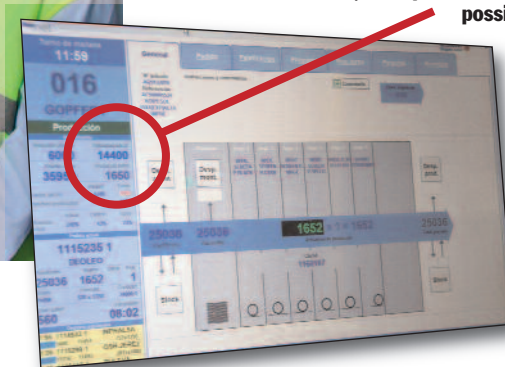


JESUS MARTI, PICTURED BELOW, SHOWS ONE SAMPLE WHICH IS PRINTED BOTH INSIDE AND OUT. "THE CUSTOMERS WANT MORE AND MORE, BUT AT ROCK-BOTTOM PRICES!"



the success of the Evolution rotary die-cutter, and in response to the demands from the market, Göpfert produced its first HQPP machine in 1999; it was called Impression. Only four years later, and once again at the request of its customers, the company developed its first high boardline, stand alone printer — Ovation. The high boardline format enabled the machine to be accessible to prepare the print units while it was running, gave space for inter-stage

14,400 sph! Proof it is possible



Well equipped

Lantero's Madrid facility is well equipped for the production of die-cut cases for the food and drinks industries. Some 60 per cent of all work is printed in at least three colours, 30 per cent with a minimum of two colours and the remainder being printed in four colours or more.

The converting hall houses a diverse range of equipment, including a two colour BGM Jumbo CL 20/48 casemaker, a four colour Martin 924' a four colour Emba 170, a three colour Isowa Cosmos flex folder gluer, an Asahi 1600 flat bed die-cutter, a Bobst SPO 203-A Matic flat bed die-cutter and a four colour Martin DRO. Speciality gluing takes place on a Jagenberg Diana and a Revicart, (which is equipped with a Twin Feed unit specifically for wine boxes). A complete materials handling system has been installed by Para of Italy, with additional pieces from Universal.

Centre stage, however, is taken

by the company's latest investment, the Ovation offline printer.

Manufactured by Göpfert, the machine was installed in late 2010, and is the first of its particular type anywhere in the world. The highlight of the machine is the new servo drive concept, which enables a maximum production speed of 14,000 feeds per hour. This is achieved thanks to the combination of the 1270mm in-feed measurement of the board (optimised for flatbed die-cutters) and the servo driven belt feeder. Stack changes with Zero-Feed-Interruption — from the Para prefeeder through the machine to the stacker — can all be achieved at the highest speed.

Göpfert recently expanded its range of High Quality post print (HQPP) machines and was recognised officially by the FEFCO Technical Committee at the 2011 Technical Seminar in Munich, winning the Gold award. Following

dryers, semi-automatic or fully automatic anilox roll change systems and print quality cameras.

The base platform of the Ovation printer maintained the highly accurate servo drives and belt vacuum conveyors from the Impression printing machine, but offered a new feed system to give better control of microflute grades and those grades using coated liners. Together with manual or automatic plate skew options, the Göpfert machines also benefit from the advantages of Servo drives. The APM system enables the operator to easily and quickly adjust the print length on individual print units to compensate for any stretch. This feature can also be used when using plates designed for a different machine with a different plate cylinder diameter. For the highest print demands, Göpfert developed its own ink



JB Machinery fitted dryers on each of the six print units, to assist drying of sheets printed on coated liners at high speed.

THE ORDER SETUP IS OPTIMISED BY HAVING A LEAD EDGE-TO-PRINT AND PRINT-TO-PRINT REGISTER CAMERAS, WHICH AUTOMATICALLY CORRECT THE SET VALUE TO THE OPTIMUM.

conditioning system providing control of the pH, viscosity and temperature. To ensure that the full production capabilities of the new printing machine are realised, Göpfert further developed its stacker to meet the production demands, while still protecting the printed surface.

The Ovation at Lantero is equipped with six printing units. In each printing unit, there is a JB infrared dryer, which allows the

printing of the highest quality flexo post print on coated liners at full speed. To achieve the best operating flexibility, operators can use printing plates of different heights and the "Auto-Lock" system for clamping of the plates, including motorised angular adjustment, allows for fast job changes.

The order setup is optimised by having a lead edge-to-print and print-to-print register cameras, which automatically correct the set value to the optimum. Thanks to a fully automated anilox roll cassette system, (which has storage space for three anilox rolls per printing unit — 380lpi, 240lpi and 160lpi), the machine is ready for block print on Testliner as well as high graphics on double coated papers.

Technical challenge

But what drove the decision to chose the Ovation? Jesus Marti, Group Technical Director explains. "Over the last few years, there has been significant changes in the demands from our customers. They want more colour, shorter runs, shorter lead times and ever better quality, but always at rock-bottom prices. Prior to the installation of the new printing machine, we relied heavily on pre-print, but the reality was that it became too expensive



for us, as the order lengths became smaller and smaller and we were having to hold so much roll stock it simply became financially impractical. With litho laminators in the group, we looked at trying to provide the best quality printed packaging for our customers, but price then became a huge issue, especially during the recent financial crisis. We had to find a way of printing high quality flexo post print, as we felt that we could get a much better control of lead times.

"The problem I could see was that the equipment available at the time was simply not fast enough to allow us a realistic return on investment. While some equipment had good headline speeds, the production data from some of our counterparts in the industry would suggest that maximum productivity was not being achieved. That is when I decided to speak with Göpfert to see if they could increase the production speed of their Ovation," he continues.

"It certainly was a challenge, but we have never been afraid of trying new concepts," explains Andre Gopfert. "We had to look at some subtle changes to the existing Ovation that we had in the market, but with some upgraded parts and dedicated trials, we were able to deliver to Lantero an industry first, a machine capable of running consistently at 14,000 sheets per hour."

"We have been delighted with the machine," concludes Mr Marti. "We have won significant additional capacity thanks to the quality of print achieved on the machine, but also thanks to the fact we can turn jobs around significantly faster now. Its accuracy is superb and we are able to feed two flat bed die-cutters from the one printing machine." ■



Jose Villaceros (Göpfert agent) and Jesus Marti discuss a print sample.

