

Hergen grows as a paper machine company in Brazil

Innovation oriented, the company is responsible for the majority of projects presented in Brazil's tissue segment and is consolidating its participation in the external market

Aware of the demands of a market that grows oblivious to periods of economic retraction, Hergen Paper Machinery stands out as supplier of four of the five projects presented by Brazil's tissue paper segment in 2014. Increasing the number of projects executed in the last ten years, the company, from Rio do Sul (SC), registers 20 supply projects in the domestic market. "Roughly 80% of our current business has occurred in the tissue paper segment," says Hergen's general manager William Rodrigues dos Santos.

Even though this particular segment strays from others given the growth opportunities leveraged by a global phenomenon observed in developing countries, Hergen's preparation to duly serve this sector is not a recent thing. The company noticed this ascending trend stemming from better hygiene and health conditions worldwide several years ago and prepared to serve paper manufacturers in the best manner possible, technologically speaking.

The pioneerism in the production of ribbed steel Yankee dryers in Brazil is an example of improvements that triggered an updating in the portfolio of tissue machines in recent years. "When we began producing paper machines, we utilized third-party dryer cylinders. The option to produce machines using third-party cylinders ended up costing too much. We saw that it would be more strategic to have our own production of cylinders," says Emilio Purnhagen, Hergen's industrial director. For such, the company bet on an innovation that was already being used considerably in Europe. "Traditionally, cylinders were made of cast iron, but two European manufacturers began making them out

By Caroline Martin Special for *O Papel*

of steel plates and began obtaining good results. We saw that this would be a simpler alternative to execute in Brazil and our engineering team began to analyze the case. This is how we began developing our own line of cylinders in the early 2000s. Today, we are the #3 supplier of steel plate cylinders worldwide," he said.

In becoming a manufacturer of steel Yankee dryers, the company's main competitive advantage resides in the high thermal transfer and variety of equipment size offered, which can reach up to 24' or 7320 mm in diameter and 6500 mm in width. Such characteristics allow for a composition that ensures high production and energy efficiency, optimizing client production costs. "We have three basic lines of tissue machines: Smart, Evo and Avantis. For each of them, we furnish the respective technologies, with different dryer cylinder sizes, which vary according to the demand and choice of clients. With a bigger cylinder, the initial investment is higher, but operating costs end up being lower, due to less energy consumption," said the industrial director, pointing out that the choice involves other variables. "In Poland, for example, the cost of gas used in the drying of paper does not impact operating costs as much, which fact leads players in this particular country to opt for smaller sized cylinders."

However, the pursuit of less energy consumption is the new word of order in the global market. "At present, all paper makers opt for technologies that reduce energy consumption and improve end-product quality," said Hergen's general manager. Regarding the latter aspect, Santos reveals that the company is now supplying crescent formers in substitution of conventional fourdrinier wires.

Commercial strategies include global reach

Some of the start-ups that marked the country's tissue industry this past year and counted on the supply of machines by Hergen include: the new Smart Eco machine for Claramax, in Paulo Bento (RS); the Avantis 16 for Carta Fabril, in Anápolis (GO); the Avantis 16 for Ipel, in Indaial (SC), and the HCF1100 for OL Papéis,



in Feira de Santana (BA). In turn, projects underway this year include the new Avantis 18 machine, for Mili, in Curitiba (PR); the Avantis 16, for Canoinhas, in Canoinhas (SC), and the EVO 12, for Copapa, in Santo Antônio de Pádua (RJ).

The fact that Hergen is positioned as the main supplier of tissue paper machines in the Brazilian market does not impede the company from defining commercial strategies in other countries. "In addition to activities nationwide, we've been doing business in countries throughout South and Central America and, more recently, Eastern Europe," said Santos. The Smart Fit machine supplied to Besckidy, in Poland, is one of "Roughly 80% of our current business has occurred in the tissue segment," said Santos

By manufacturing the ribbed steel Yankee, the main competitive advantage of the company resides in high thermal transfer and variety in equipment size, reaching up to 24'





One of the start-ups that marked Brazil's tissue industry this last past year and included Hergen's participation is Ipel's new Avantis 16 machine

The first stage

of the expansion project comprised

the construction of a new building and

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steel Yankee drvers

equipment to produce

the projects executed in 2014. Other paper companies in the country, GZP and Levandowski, also signed contracts with Hergen, whereby the first purchased a Smart former with a 1,200 m/min capacity, and the other bought a Smart Plus former, which is still being assembled. The Evo 12, for Papelera Reyes, of Lima (Peru), is another ongoing project.

"When we close a project, be it a complete machine or a technological upgrade, we do all the assembly supervision with the client, offering training, monitoring



the commissioning and start-up. We offer customer service until the client achieves the performance contracted and throughout the equipment's entire operation lifecycle," said the general manager about services involved in the contracting of equipment. Business in the external market also includes the rendering of service in conjunction with the supply of machinery and equipment. "We have qualified professionals and multidisciplinary teams to provide these services to different cultures and idioms. We eventually contract local third-parties to help us in this technical support to foreign customers," he said about the company's business activities in other countries.

Hergen's long term strategies are focused precisely on the rendering of services. "We are focusing on services to the paper sector and also the pulp sector, which is proving to be an interesting market for replacement parts and maintenance," said Santos.

Expansion of production units allows for product verticalization

For the company's second production unit, also located in the city of Rio do Sul (SC), to house the production of its own ribbed cylinders, Hergen made the decision to invest in capacity expansion. The industrial director reveals that given the fact that the parts of equipment are elements of wear in the paper production process, this also influenced the decision. "By having a certain time-life, cylinders are part of a continuous substitution market," said Purnhagen, referring to one of the return on investment modes. "We also saw that, by verticalizing production, we would be able to reduce several costs, especially logistics, with a major impact on our competitiveness," he said, mentioning another reason that led to the expansion project.

The first stage of the project encompassed the construction of a new 5,070 m² building, adjacent to the existing one, and the acquisition of a series of large-sized equipment to produce dryers and Yankee cylinder. At present, this first stage of the project has already been concluded and the plant is already producing more cylinders than just a few months ago, when it still had to outsource several stages of production. Phase two of the project, to be concluded by 2019, consists in the construction of a building with more than 6,000 m², which will house the finishing, warehouse, assemblies and shipping sectors.



Hergen celebrates 40 years in the paper market

Founded in December 1975 by Hermann Hinrich Purnhagen, Hergen Paper Machinery started its activities producing equipment for its own paper mills and executing small maintenance services for other mills. "My father came from Germany in 1922, as an immigrant, at a time when Brazil was experiencing a serious economic crisis. But between Brazil, Canada and Australia, he chose to come to here, given the growth potential that the country offered," recalls Germano E. Purnhagen, CEO of Hergen, regarding his father's trajectory, who built the family in Brazil, settled down in Santa Catarina and founded Hergen, among other companies in the forestry sector.

Hergen definitively entered Brazil's paper market in mid-1979, when the company acquired the technical assets of Irmãos Cavallari, in São Paulo. Germano has worked in the family business ever since it was created and continues doing so as the current CEO. An enthusiast of mechanics and robotics, he has significantly contributed to the construction of Hergen's vision, which is to be internationally recognized as one of the best producers of paper machines in terms of product quality, technology and innovation.

When talking about the significant technological leap that the company recently made, he shares the laurels with his son and current industrial director, Emilio Purnhagen. "A major milestone in the company's trajectory was when Emilio joined Hergen, after graduating in Mechanical Engineering. His knowledge coupled with his ability to learn from client needs was what shaped our innovation vision. Today, each machine we produce contains some type of innovation, since overcoming the constant challenge of modernization, developing and presenting technological improvements that optimize the paper production process is our motto," he said.

Hergen currently has 200 employees, of which 40 comprise the technical department and the rest is divided between the administrative and production areas. Over its 40 years of business, it stands as a 100% national option for the rendering of services and the production of complete machines for the paper sector. "Our commercial strategy focuses on three segments: tissue, packaging and specialty papers. Even though tissue paper has stood out for its performance in recent years, the two other segments continue receiving our attention and dedication. The specialty papers segment, for example, has resumed investments, after suffering the impact of the period when the exchange rate was low. These different niches give us the balance and provide a positive business equilibrium," he said, pointing out that the company intends to continue being competitive in all its different business fronts.