

Revolution Pacheco

The future begins yesterday

When ideas meet the right people to implement them.

By: Enrico Pieruccini

We now understand why it's possible to build our future by looking into the past. It happened exactly four years ago when Mario Speranza - the President of Celupaper SA - decided to scrap the firm's old manual machines for producing toilet paper with one ply, due to an increase in the market share. The simplest thing to do would have been to buy four or five new machines, train his staff and start production. An operation that wouldn't have been entirely painless for the company: in addition to the economic investment, time for commissioning

the machines and training specialised staff (both machine operators and maintenance workers), it could have gone on for too long and not being able to supply the needs of the market. At the risk of making the investment counter-productive. Mario Speranza then thought he'd take a different path, an unusual one. Some years earlier, he'd purchased some used machinery (in particular an Alpha, Alphetta and Bravos) and thought about getting them working again, by applying the newer technologies that the electronics industry had developed in the meantime. Definitely a brilliant idea. To make this "dream" happen, rather than capital, he needed people: technicians who

were not only able to get the machines functioning again, but who could also implement a project to make these machines flexible, and easy to use, even by inexperienced operators and who are designed for producing single-ply paper.

This unusual idea of Speranza's - whose name [in English: "hope"] confirms the Latin saying "Nomenomen", or "a name, a destiny" and 'Speranza' which says a lot - this suggests Typhoon (Typhoon, 1903) by Joseph Conrad, a seafaring novel in which the protagonist, Captain MacWhirr, an old sea-fox who has spent his life with sailing ships, finds himself facing a terrible typhoon off the coast of China, in command of a steamship that for him, is entirely new. To address the needs of a typhoon, he had to make a choice, take a decision immediately. The sea, as the market, is just not going to wait. And MacWhirr, without losing a moment, makes his choice. It is an unusual choice, "creative": disregarding the navigation manuals that encourage sailing around "rotating" typhoons, he puts his ship at the heart of the typhoon, and it survives. Just like Mario Speranza, who also followed the unconventional route.

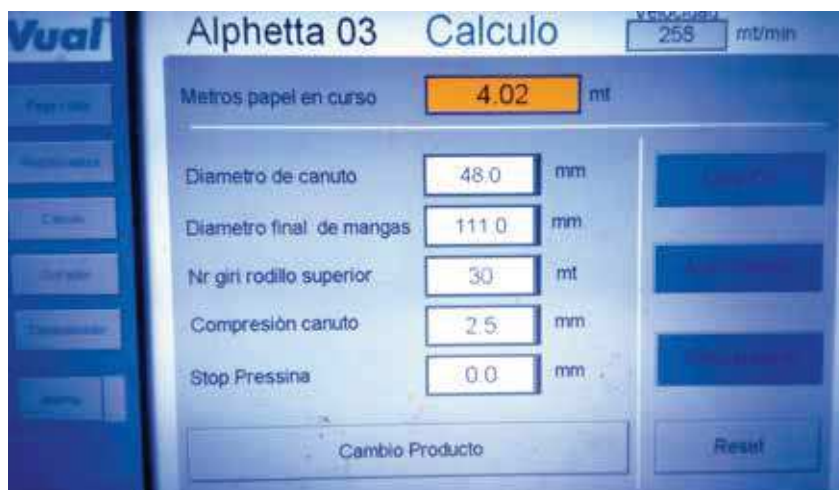
Creativity is not enough. If a steamboat beats a storm it's because it has a great team. Everyone on board serves their purpose and gives the most of themselves in work that is arranged to the millimetre: from Mr. Rout, who runs the engine room to the sailors furiously pumping the water back into the sea.

Aware of how important the division of labour and teamwork were to achieving his goal, Speranza chose some specialists in mechanical engineering, and others from electrical engineering to form a team that would devote itself completely to this project. He lacked a skilled technical expert from the world of tissue manufacturing, who would be able to apply new technologies to this old machinery. The choice finally fell on AFD, in the person of Alessandro Giampaoli, a digital designer of software for various machines in the converting world with thirty years of proven experience.

At first, Giampaoli was not very convinced. He was rather skeptical about the success of a project that was going to be implemented in Argentina



◀ Main page operator panel.



▲ Page of product calculations, simple - but not simplistic.

with no expert support workshops in the paper industry, and the difficulty of finding high quality electrical and electronic materials. Then, however, after having met the technical team, who was composed of highly skilled staff, and having been greatly influenced by Mario Speranza's enthusiasm, Giampaoli realized the project was valid, and accepted the challenge.

We thus began to plan the times for the work, and decided to take the delicate components that were more difficult to find on local markets and sourced them in Italy. Brands were chosen for reliability and high performance, like Yaskawa, sold via ZF

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Alphetta in production.

AFD srls

The province of Lucca has been considered as the main European area for the paper industry, and among the more important in the world. The "Paper dust" has entered into all economic sectors of our industrial fabric, as has the story of AFD, which was born out of this dust. We started working at companies that were building machines for processing, when electronics and automation was in its infancy. We saw the first PLC on-board machines, instead of the old relay logic, the programming of the first axis controls and of the first industrial networks. In 1989 we created the first electronic "Pressina", and participated in the Gemini project, the first converting machine with dedicated axis controls and first-generation brushless motors. In 1995 we started to manufacture interfolder machines, that were recognised as the fastest and most productive on the market. In 2007, AFD was born, giving rise to machines such as the I-Jet500 for industrial roller and interfolding IMFOLD. Currently we are working with several transformers around the world. Finally, and the most important thing, we are not just a technology supplier but above all, we listen to and implement the ideas of entrepreneurs that looking ahead.

Italia, for the electronics components, and Wittenstein for the gearboxes. The performance criteria that had to be achieved with the various machines were defined, and were aimed at achieving maximum ease of use of the machines, to allow even inexperienced operators to use them to the max. It was decided to standardized the graphic of operator panel to allow an interchange of operators without losing productivity. In addition, all of the mechanical and pneumatic components that could be replaced by a motor were removed: like the clutches, pistons, mechanical cams, were replaced with inside precision reducers, brushless motors and axis controls. Between 2013 and 2016, six lines were put into service, that made Pacheco the Argentinian plant with the largest number of automatic machines for processing single-ply paper. Currently, the machines are working at a production speed of 400 m/min. On each machine you can change the product (final diameter, meter card, etc.) without stopping it. The know-how about the machines was available to the Celupaper technicians: this allowed downtime to be kept very short in the event of a breakdown.

Meanwhile, Mario Speranza continues to look ahead: he wants in fact to further automate production cycles at Pacheco by bringing in new machines for packaging and logistics, aware that in order to make successful investments, in addition to capital, he also needs ideas and people who are able to make them happen. Just like MacWhirr commanding the steamer NanShan, Speranza knew how to exploit his creativity and ideas, and how to choose the right people who would make a difference. It is precisely this that makes him a successful entrepreneur. ●

AFD Antica Fabbrica Digitale Srls

Via Pacconi 78i 55016 Porcari (LU) - Italy

phone: +39 3938373758

email: alessandro@afdcom.it

website: www.afdcom.it