



In Brazil, Valmet is present in the cities of Araucária-PR, Ortigueira-PR, Telêmaco Borba-PR, Sorocaba-SP, Belo Horizonte-MG and Imperatriz-MA; as well as Concepción, in Chile

# VALMET: 60 YEARS OF TECHNOLOGICAL CHANGES IN BRAZIL

Ahead of its time and in line with innovation and technology trends, the company celebrates six decades of operations in South America, and is prepared to be a protagonist of future changes in the pulp and paper industry

by **THAIS SANTI**  
Special for *O Papel*

Valmet was founded in Finland and crossed the European continent 60 years ago to establish operations in South America, writing its trajectory of success on the pages of companies with the most advanced technologies, recognized worldwide by the pulp and paper industry, and other segments. Its technological know-how is expressed through the training of employees responsible for shaping the company with a diverse team full of perspectives for an even more prosperous future

than these last six decades celebrated in the market in 2020, as per the scenario presented in this story for readers to learn more about.

With a history that dates back more than 220 years on a global level, Valmet develops and supplies process technologies, automation and services. The company started manufacturing paper machines in Jyväskylä, Finland, in the early 1950s and delivered its first paper machine in 1953. In the 1980s and 1990s, it sold its shipbuilding, elevator and tractor

plants to focus on paper production technology. As a result of the Valmet and Rauma merger in 1999, Metso was created. At the time, the company supplied paper and board machines, while Rauma's operations focused on fiber technology, mining and flow-control solutions. The following year, it acquired the paper and tissue production technology from Beloit Corporation and, in 2003, Metso Paper began operating in Sorocaba-SP. Other acquisitions followed, such as the Pulping and Power businesses

from Aker Kvaerner, which had a high operating capacity and efficiency in Brazil, in December 2006, and Tamfelt, a manufacturer of filter cloth fabrics for pulp and paper machines, in 2009.

With this, the company completed its portfolio with capacity to supply all process and services areas for pulp and paper mills and biomass-based power generation. In 2013, Metso's general meeting approved splitting the two companies, Metso and Valmet. The Pulp, Paper and Energy businesses were transferred to Valmet. Two years later, the company acquired Metso's Process Automation business. Lastly, in 2019, Valmet acquired GL&V, further increasing its presence in the country. In this trajectory, Valmet combined important human and technical elements to arrive where it is today with great competitive vigor. Examples include the combined experience of professionals, many of them with over 25 years of dedication, and the enthusiasm of the younger generation who come to bring long life to the development of the company's product line and services.

As such, a multicultural environment with beneficial influences from the Finnish headquarters was built in Brazil and other parts of the world, transforming work activities in bonds of friendship. And why not talk about family tradition too? After 60 years, there are many people who have more than one generation working at Valmet. Add to this formula for success the fact that Valmet has also changed, staying ahead of trends and offering cutting-edge technology and solutions that cater to Industry 4.0 in this new digital world, for which the organization is prepared to be a leader.

Last year alone, the group invested 71 million euros globally in research and development, about 2% of annual revenue (Valmet's net sales in 2019 were approximately 3.5 billion euros), with 1,300 patented innovations. "This is a considerable amount allocated specifically to this area," said Celso Tacla, CEO of Valmet in South America. "A reflection of this investment is that, today, we are providing important innovative technologies, such as biomass gasification for burning in lime kilns, a crystallization system

to separate potassium and chlorides from recovery-boiler ashes, compact systems for clarifying green liquor, and the new Continuous Cooking G3™ system," added the executive.

There are many technologies that transcend the issue of digitization and virtual interface, as Tacla says, reaching the process technology area. The Continuous Cooking G3™ launch project, in 2019, was the recipient of the Industrial Marketing award presented by the Brazilian Association of Sales and Marketing executives (ADVB-PR), in Paraná. Translating expertise into numbers, Valmet's representativeness in South America amounts to somewhere between 10% and 20% (due to the cyclicity of projects) of global results, being strategic for the Finnish group.

"Today, there are almost 800 direct employees and subcontractors working in the region, where we have offices and/or Service Centers in Araucária-PR, Ortigueira-PR, Telêmaco Borba-PR, Sorocaba-SP, Belo Horizonte-MG and Imperatriz-MA, as well as Concepción, in Chile," said Tacla, commenting that in comparison to last year, even in the



## Message from the CEO

"I would like to thank the entire Valmet population that works so hard here in Brazil and in South America, as well as our entire global operation. I would also like to thank our customers, who are always very respectful and whom we learn a lot from, listening and developing solutions jointly. This is the path to be followed, it is our purpose and hope to follow it for a very long time. Our thank you also goes out to the entire chain, be it suppliers, institutions that support our operation, like ABTCP, of which we are founding members and have worked with for the past 60 years".

**Celso Tacla, CEO of Valmet in South America.**

middle of the pandemic, the company increased its workforce by roughly 100 people, on account of work and project demands, which reinforces the commitment to its employees and customers and its essentiality in serving the market.

According to the CEO, Valmet's longevity is characterized by its technological portfolio and customer service excellence. A large part of the products, systems and services offered today are the result of technologies integrated from the many companies that were acquired and perfected over the decades, as well as the many new solutions and technologies recently developed. "Valmet has always been there to provide services to improve the performance of its customers, solve problems quickly and assist in stoppages. Many of the innovations in services and automation complement our customer service and got us to where we are today," said Tacla.

Responsible for Valmet in South America since 2008, the executive argues that there is no use developing innovations that do not create tangible benefits and added value for customers. "This is an important point in the services we offer and in the supply of new systems. For this, we develop our teams and our competencies. This continuous work and our ability to create value for customers summarizes our main differentials," said the executive in citing the value of human capital for Valmet. "We work with clarity and transparency and this is linked to our DNA, a legacy of the Finnish culture that's aligned among the people who work here. We really live our day-to-day values and these are the same values that guide our decisions."

Technological innovations combined with human capital led Valmet

to beyond the challenges imposed by each decade. But nothing was easy in this trajectory. (See *timeline with key facts*). The company suffered oscillations over the years in the market, such as the 2008-2009 global economic crisis, which put many countries in recession, even interfering in the cancellation of projects, as well as other moments like the one now. These moments were important to strengthen Valmet and encourage it to define an even more competitive strategy in each period, such as when Valmet and Metso split in 2013.

While under the former configuration its business scope was more comprehensive, with five business segments, after this process, Valmet, which was retained, started being used again for its strong reference in the pulp and paper and energy markets. "From then on, our development was quite positive. The acquisition of Metso's Process Automation business area, with the entire structure of advanced control systems, provided us a very good foundation and enabled us to develop Industry 4.0 solutions, which allowed us to accelerate their introduction to customers today," said Tacla.

At that time, right after the split in early 2014, "when Valmet's shares started being traded on the Helsinki stock exchange, the price was close to 7 euros. Since then, share prices appreciated considerably in the market, and are now worth around 22-23 euros. In other words, the company's value increased more than three-fold! Precisely because of this leaner business model, the market understood that, being a specialized engineering company and focused on one activity, it could offer many benefits to customers, grow and, with this, deliver more value to all stakeholders also," said Tacla.

After this process, the company started gaining market and making some acquisitions, such as GL&V and J&L, in 2019, increasing the offer of products and services for pulp production, pulp preparation, paper and finishing manufacturing, and now, on September 11<sup>th</sup>, it announced the acquisition of PMP Group of Poland. PMP Group provides process technologies and services for tissue, paper and board machines worldwide, focusing on small and medium size tissue machines and overhauling paper and board machines. With this, we will start serving a greater number of customers," said Valmet's CEO.

## VALMET IN THE EYES OF ITS EMPLOYEES



Employees are a part of the company's history. Check out the photo gallery as of October 20, 2020, on the magazine platform at [www.revistaopapeldigital.org.br](http://www.revistaopapeldigital.org.br)

To get where it is today, the team traveled many roads, swallowed a lot of dust and accumulated a lot of experience in order to serve all possible regions. This is the case of Elio Krummenauer, director of Special Projects at Valmet. Even before working for the company, he was a client for 14 years, in the beginning of his career in the 1970s, at Borregaard (CMPC Celulose), in Guaíba-RS. But it was in 1984, more precisely June 18<sup>th</sup>, with an Engineering degree, that he started officially working at Kamyr do Brasil, in Curitiba-PR.

“On the same day that I started my job, I boarded a plane to South Africa, with a one-way ticket”, he said. Krummenauer was to represent the company abroad with the responsibility of monitoring projects overseas. Over a nine-year period, he lived in several countries: South Africa, France, Portugal and New Zealand. “I performed the commissioning of new plants. I checked equipment, trained teams, tracked the learning curve of these new machines to comply with the commitment to quality and quantity supplied,” he said.

And this went on for years. In 2013, the company was acquired by Metso, where he continued his work reaching the position of Services Director until 2018, and then took over the Special Projects area doing what he likes most: to participate in big projects and provide solutions to customers. The relationship, which has been going on for more than 36 years, always required a lot of work and dedication, which continue strong to this day. “In order to be a committed professional, it is important to like what you do,” said the Special Projects director, declaring himself as a passionate person about his work, travels and experiences. “It is very gratifying to meet people outside the workplace and learn about the culture of countries that I have been to,” said Krummenauer, who also mentioned having witnessed events of major importance worldwide, such as Apartheid, in South Africa. “Valmet provided me a lot of personal and professional enrichment,” he said.

During this same period, Simone Malinowski’s father worked at Kamyr and from her early childhood, the plant was already part of her universe. “One of the things he liked



PERSONAL ARCHIVE

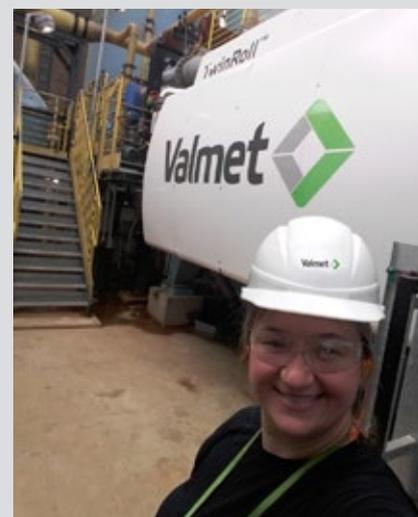
**Elio Krummenauer, Special Projects director at Valmet where he has worked for 36 years: “It is very gratifying to meet people outside the workplace and learn about the culture of countries I have been to. Valmet provided me significant personal and professional enrichment.”**

to do was carpooling. Every week, one person would pick the other up in their car, and that’s how I met my father’s friends, who later became my friends. This is as present to me as the year-end parties, when the unit received employee families. And my dad used to dress up as Santa Claus,” says Simone, remembering how she looked forward to all these events.

Years later, when she was 15, Simone wanted to work, and with her parents’ encouragement, she got the opportunity to be a young apprentice at the company. As an IT intern, she remembers that for 15 days her shyness was such that she wouldn’t go to lunch, but she also remembers that her colleagues made the place even more friendly for her. That same year, she said, “my father was named a model worker and he was even given a party. There was a dinner with the director, Mr. Tadeu Carraro, an incredible and very important person in our lives. He even went to my graduation,” said Simone with joy.

Even better days were part of Simone’s history at Valmet. “From the room with only two computers, one for Engineering and another for the Processes area, my role was to type letters and other minor chores. But when Carlos Bestwina came in to take over the Planning area, he started teaching me. In 1993, at age 17, I became an employee. We did everything on paper, clipboard, because there was no software back then,” she said. Later on, the area’s infrastructure changed radically, and Simone had the opportunity to become a Planning Analyst. “Today, we run a project in two years, but at that time it used to take three years or more, and I had the opportunity to see all this evolve. Especially because I have lived this area since I was ten, and now, at 44, I see how much I’ve been involved with the company,” she said.

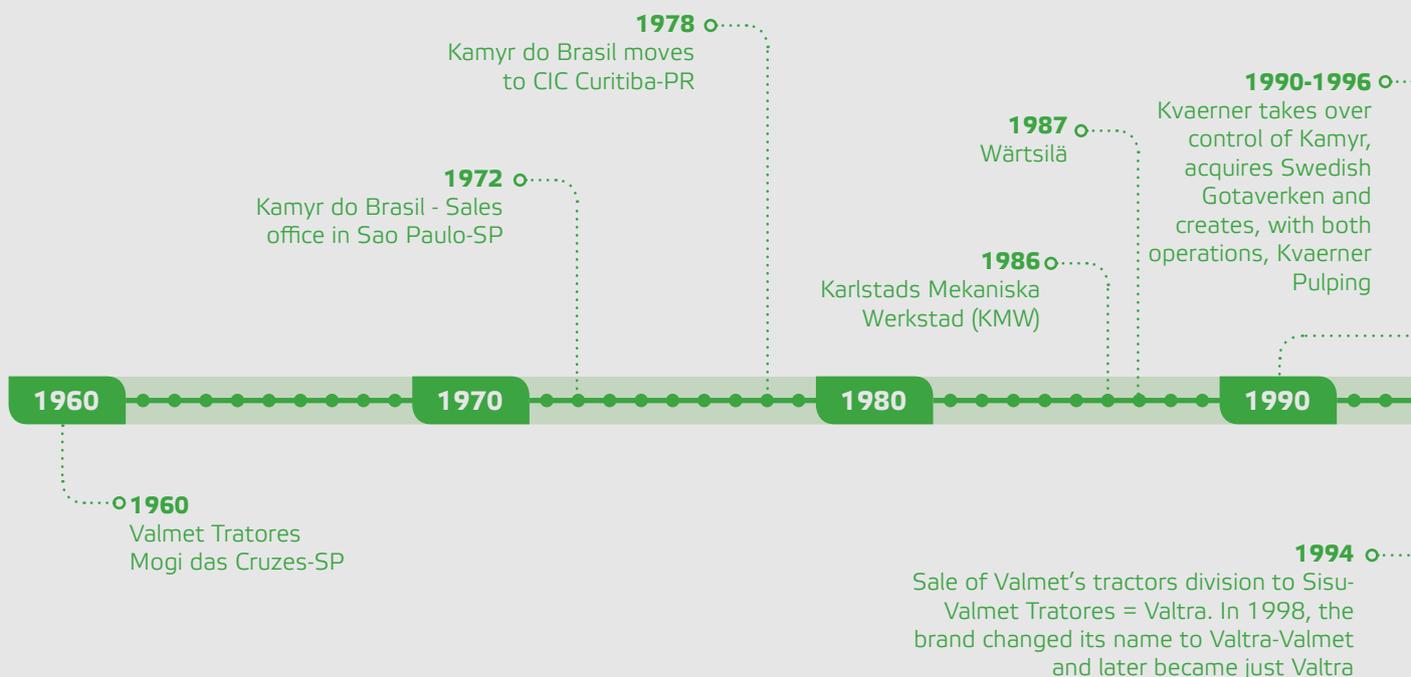
Meeting people, experiencing projects and special moments were also part of the trajectory of another special employee. At Kvaerner since

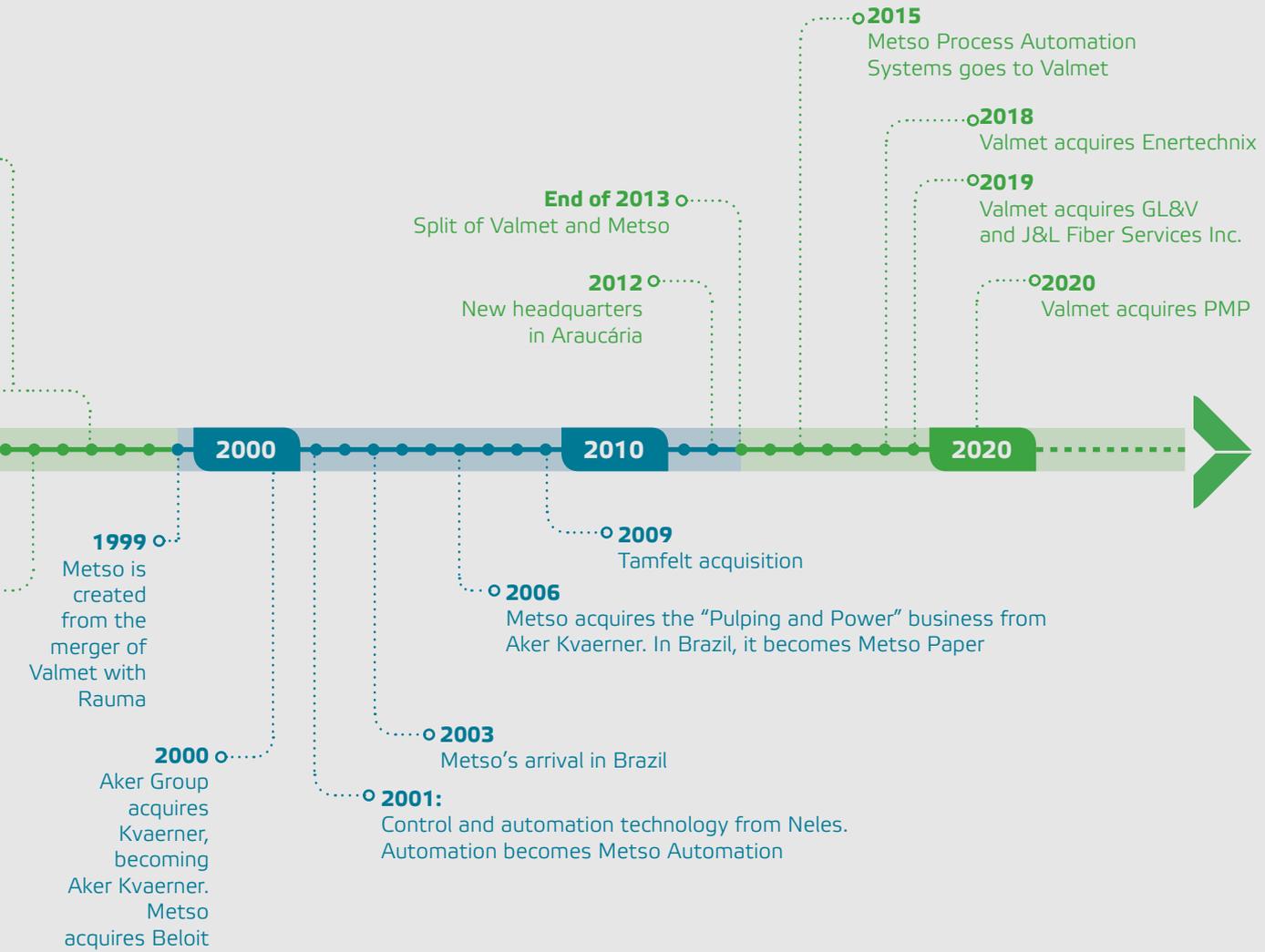


PERSONAL ARCHIVE

**“Today we run a project in two years, but at that time it used to take three years or more, and I had the opportunity to see all this evolve,” says Planning Analyst Simone Malinoski, who has been with Valmet for 28 years**

# Valmet's Timeline: converting renewable resources into sustainable results







**“My professional growth was very interesting, since I worked in several pulp production areas, specialized in chemical recovery, specifically black liquor evaporation, and I worked in several projects”, says Carla Fonseca, who has been with Valmet for 25 years**

1995, Carla Fonseca emphasizes the technological evolution and the relationship with various Valmet professionals around the world. Today, a process manager in the Recovery and Energy area, Carla has been with the company for more than 25 years.

“My professional growth was very interesting, since I worked in several pulp production areas, specialized in chemical recovery, specifically black liquor evaporation, and I worked in several projects. I currently lead twelve process engineers, and together with Valmet’s Technology Centers in Sweden, Finland and Denmark, we support sales processes, projects and services. We work from conceptual engineering to project execution. From calculating balances to plant startups,” said Carla with enthusiasm.

She also shared another story: her love for the profession also brought her the love of her life. At an ABTCP event, she met Guilherme, who later became her husband. In a very favorable workplace, today they work

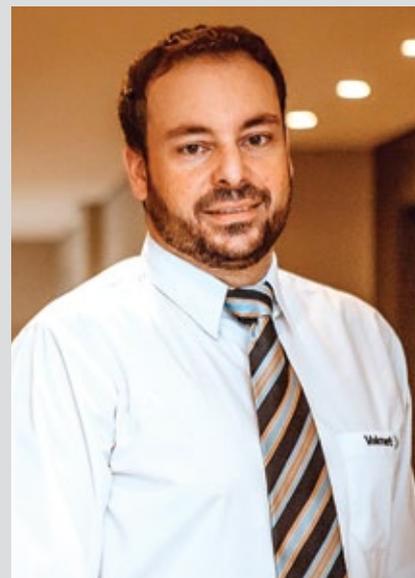
together in the company, in different areas. “We have two children, who now are teenagers. But when they were younger, it was a bit complicated, because we worked on projects and had to travel a lot and to different places. So, to care for the children, we counted on their grandparents’ help. But being married to a person who understands your professional context is really wonderful. We have a great partnership between the two of us,” shares Carla.

Felipe Floriani’s story started a little differently. He is Services Director at Valmet. When he was still studying engineering at PUC-RS (1999), he remembers that he met some people from Neles (which belonged to Metso Automation at that time) when he was organizing a seminar at the university. “I started a friendship, with Alexandre Lins, who invited me to do an internship in Finland. I spent six months in Tampere, at the Automation headquarters. There, I worked with DCS for pulp and paper machines. When I returned, I finished college and, two months later, the Metso team in São José dos Campos-SP invited me to work in Aracruz-ES. I would fly out on Thursdays, Fridays and Saturdays and did this for three months,” he recalled about the beginning of his professional trajectory.

With a degree and a job of junior engineer, he worked in Sales for a year and then started working at Metso Paper, in Sorocaba-SP. “These were the years that I learned the most. I worked on projects such as VCP in Jacaréi-SP, at Suzano with bleaching equipment, Klabin projects (MA900 and MA1100), at BSC, International Paper, Ripasa, etc. The experience I gained was fantastic because it was when I had the most contact with

all the project technology. That was extremely positive for what was to come in my career,” says the director of Valmet Service Center about combining technical work with sales work, a key trait of the company’s professionals.

For Valmet, he changed cities four times. The last one occurred when he assumed a Management position and migrated to the Services area. And that’s when the biggest challenge came of leading a team of four in 2008. To give you an idea, today, Floriani has a team of 250 employees. For the executive, “being able to lead such a team is the result of all the work developed for years, coupled with the need to serve a growing sector, which had its installed base expanded”. Upon completing 19 years with the company, Floriani says that this entire process and learning was part of a career plan within the company and his ability to accept changes and adapt to all these transitions.



**“The experience I gained was fantastic because it was when I had the most contact with all the project technology. That was extremely positive for what was to come in my career,” says Felipe Floriani, Services Director at Valmet, who has been with the company for 19 years**

## BIG PROJECTS AND TECHNOLOGICAL CHANGES

At Valmet, all projects are treated with the same importance, but each one with its unique challenges. Simone says that, more and more, projects have greater capacity and require greater control, remembering that since the boiler supplied in the early 2000s to Veracel until the CMPC project in 2013, all of them required great teamwork, because they included the experimentation of new systems. “Today, we use this system to control projects and we are executing the LD Celulose Project,” she said.

Another unique project that involved a lot of hard work for the Valmet team and also a lot of satisfaction, was the evaporation plant supply to Eldorado Brasil in 2012, the largest plant in the world at the time, with a capacity of 1,600 t/h. “It was simply the largest plant at the time and required a great effort from the team. Today, we are working on a new challenge that will surpass it. With a superconcentrator of liquor and a capacity to evaporate 3500 t/h, this is the evaporation plant of Bracell’s project Star,” said Carla on leadership in this area, also commenting about the Suzano Grandis and CMPC Guaíba projects, which consolidated the Valmet name, after the Metso split.

“To get an idea of the growth and evolution of this technology, the first evaporation project I worked on, when still Aker Kvaerner, was for Klabin, with a 390 t/h capacity, and since plants gradually became greater, we gained a lot of assurance and the confidence necessary to execute larger plant projects. But startups continue being a special moment, with a lot of ‘adrenaline’, because it’s when we see if the plant will work and deliver the performance promised,” said Carla.



Remote support for Valmet field work. Technology was used as an efficient solution during the pandemic

Krummenauer, in turn, highlighted the Valmet Service Center project in Chile, inaugurated in 2019, which he participated in its entire development, from feasibility study to implantation in the region, living in Chile for 18 months.

In addition to memories of experiences lived in these projects, the new coronavirus pandemic did not stop anybody. With shutdown dates approaching, the company had the opportunity to accelerate technologies and put them into practice. Brazil’s industry needed to seek alternatives to continue the production of essential activities. In June, Cenibra conducted its field analysis virtually, with remote support to validate connection points. It was a remarkable moment for both companies, as it was their first virtual analysis executed.

In line with Industry 4.0 concepts, two examples of this remote services application were also carried out at Suzano units. At the plant in Limeira-SP, the company carried out an inspection of the vacuum filter via remote connection, using an augmented reality tool that allows for the remote monitoring by

a specialist, in real time, to execute the repair.

And, more recently, in July, Valmet pioneered the use of augmented reality glasses during CMPC’s General Shutdown, at the industrial unit in Guaíba. “We already operated remotely and this service was used in the general shutdown of plants. With our glasses, it was possible to inspect machines by the same experts, without having to be physically present, providing several benefits for both companies,” says Krummenauer. “Clearly, it doesn’t replace in-person monitoring entirely, but it will be a complementary technology that proved its efficiency during this period,” added Floriani, confirming that this model led to savings regarding the number of people mobilized, as well as travel, lodging and other costs for a large number of professionals involved”.

This type of service has become a target for coming years at Valmet, which invests more and more in Industry 4.0, with tools to contribute to the digitization process of the pulp and paper industry. “The Industrial



The Valmet Performance Center (VPC) in South America was inaugurated in 2019 and is located in Araucária-PR

Internet solutions offered combine advanced monitoring and prediction applications, Advanced Process Control (APC), dynamic process simulators and remote service by Valmet's Performance Center with complete solutions," said the services director.

"We developed the Valmet Performance Center to facilitate interfacing. With the size of plants growing, every minute you lose, often due to a drop in performance, represents a considerable figure. Especially given the current scenario. Therefore, having served the market under this new format was a change of culture. We showed how practical, fast and cost effective it is for both parties and the trend is to further expand the use of these tools, creating benefits for the entire sector," said Tacla.

### VALMET +60 YEARS

Megatrends will direct or indirectly exert influence on customer business activities. Tacla, CEO of Valmet in South America, cites the population's urbanization process, which has occurred to a large extent, as well as consumer awareness about a cleaner

world. "These trends favor the products that pulp and paper manufacturers produce, which are found either in current or new applications," he said referring to the digitization process. And more: "If on one side modernization reduces the use of printing and writing paper and the consumption of newsprint, on other hand, this transformation favors e-commerce and board consumption/use."

The executive also pointed out that the current moment has led people to review their hygiene habits; the production of textile fibers from dissolving pulp that replace synthetic fibers or cotton fibers, which require large areas and the use of pesticides for planting. "These are proposals that are in balance with more sustainable production for the environment, including microfibrillated cellulose (MFC), which can replace various materials from non-renewable sources, replacing plastics, for example. The list is extensive and it's worth mentioning biofuels, an area in which we also operate, like converting biomass into heat and energy, as well as new processes such as 2G ethanol, black pellets and several other possibilities," he listed some.

His coworkers agree. Carla and Simone pointed out the new future of pulp mills, functioning as major biorefineries. An example is the lignin pilot plant supplied to Klabin, or the supply of sulfuric acid plants, methanol treatment, executing its purification, etc., and will become part of the industry in the future. Krummenauer and Floriani highlighted the path of innovation through the industrial internet. The great advantage, in this case, is to offer all these possibilities to customers from a single source. "Valmet has always looked to serve customers in the best way, offering a lot of technology. We also have the Valmet Performance Center, which facilitates our contact with customers and results in safer and more assertive assistance. Unfortunately, a little bit of face-to-face will get lost, but people will be more connected, being able to serve a much wider range of customers. We are on the right path, investing in innovation and people. Our future is promising," said Tacla.

### BIRTHDAY CAMPAIGN

On Valmet's 60<sup>th</sup> anniversary, the company will celebrate the date with its customers and employees remotely, but that's not why it won't be special. Strategy and Marketing manager Pedro Paciornik says that the company held a hybrid event in 2019 and counted on the participation of several customers. "Under this model, we want our customers and employees to make their contribution and share with us their stories with Valmet. We have set aside a time at the end of the year to share this material that we receive. We won't have a hug, but we will have this important exchange with everyone," he summarized. Just wait! ■