

Cementing strong foundations

Cementir Group is revolutionising the construction industry with these two products

Cementir Group (Cementir) is a leading multinational company in the building materials sector. With operations in 18 countries, and a production capacity of over 13 million tons of white and grey cement, the business produces around five million cubic metres of ready-mix concrete.

According to Michele Di Marino, the company's Chief Sales, Marketing & Commercial Development Officer, Cementir is renowned for its cement capabilities. In Denmark, it is the only producer of cement, while in Scandinavia, its name is synonymous with high-quality concrete. Furthermore, the company is the third largest player in Belgium and among the main international grey cement manufacturers in Turkey. "With our Belgian acquisition in 2016, we started to operate one of the largest aggregate quarries in Europe, with over ten million tons extracted each year," says Michele. "In Turkey and the UK, we are active in the treatment of urban and industrial waste, which we use to produce waste-derived fuel for our cement plants."

In the last few years, Cementir has successfully diversified its portfolio, both geographically and in its products, establishing a significant presence in aggregates and concrete. "We have also invested in green technologies and renewable resources, serving the energy needs of our cement plants," Michele tells us. "As a result, we are becoming a global player through investments and acquisitions of over 1.7 billion euros. Between 2016 and 2018, we strengthened our business portfolio and competitive position by acquiring CCB in Belgium, selling all our manufacturing activities in Italy and acquiring control of Lehigh White Cement Company in the US."

◀ **Graanmarkt Kortrijk**
Completion in 2021, Belgium
Extreme® UHPC Vertical Sun-screens
Precster: Enjoy Concrete
Architect: Govaert-vanhoutte architectes



“...listening to and satisfying the needs of customers is an integral part of Cementir’s mission”

quality and sustainability. For us, innovation means continuously broadening our horizon by listening to the market and our customers’ needs. This approach leads us to develop new products and solutions capable of improving existing performances, and promoting a circular economy.

“As a result, our business is constantly evolving,” Michele develops. “We offer a wide range of products from grey and white cement to concrete, aggregates and high value adding cement-based products. We strive to provide tailor-made services to our customers, such as support during the project design, development and construction phases, aftersales services, technical support, environment-friendly solutions, transport, and trading.”

The company established a global innovation engine for white cement known as InWhite, with the purpose of generating an actionable pipeline of customer value initiatives. By bringing new solutions for well-known applications, or completely new applications for white cement-based products, this innovation aligns with megatrends detected in society, such as customisation, circular economy, and high-energy efficient solutions.

For Michele, listening to and satisfying the needs of customers is an integral part of Cementir’s mission. The business is at the forefront of process and product innovation, which is crucial to the strategy that separates it from the competition. “Innovation is in our DNA,” he confirms. “Since the beginning, we have been producing special cement. We consider research and development a strategic and essential tool to improve both product



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As part of the InWhite solutions umbrella, Cementir rolled out Ultra-High-Performance Concrete (UHPC) Aalborg Extreme and Aalborg Excel in 2019. Both products have been successfully used in thin and slim architecture concrete elements of commercial and residential projects thanks to its excellent performance in terms of compressive and tensile strength, shrinkage, and durability.

“Our goal is to develop solutions in close collaboration with customers, consultants, and partners,” Michele shares. “We will maximise existing technology to reduce Scope 1 emissions, according to a net-zero pathway endorsed by the Science-Based Targets initiative and EU.”

Another one of these solutions is Cementir’s FUTURECEM® technology, a patented, low-carbon cement that allows more than 35 percent of the energy intensive clinker in cement to be replaced by limestone and calcined clay. The technology is fully recognised as a solution for clinker ratio reduction in the roadmap to lower carbon in the cement industry by the International Energy Agency. It’s this same technology that forms the basis for Aalborg Extreme and Aalborg Excel.

“FUTURECEM® has been on the market in Denmark since January 2021, placing Cementir as the market leader in sustainable and low carbon cement,” Michele comments. “Following its launch in Denmark, FUTURECEM® roll-out is now accelerating in our European market. CCB, Cementir’s subsidiary in Belgium, has commercialised FUTURECEM® in France in the first quarter of 2022, while in the Benelux, the target is by 2023.

◀ ▶ **Swissport building of Brussels Airport, Completion in 2021, Belgium**
Extreme® UHPC Structural fence
Precaster: C-Concrete
Architect: Archipelago and Group Infrabo
Construction: Cordeel Hoeselt NV



“In May 2022, we then launched Aalborg Inbind, a white, premixed cementitious product, across our European markets,” he adds. “Again based on FUTURECEM® patented technology, it’s an excellent complement to the existing range of InWhite solutions. We’re also excited about the next phase of innovation. Our UHPC bridge overlay product Aalborg Recover has completed its trial phase, and will be available for infrastructure applications next year.”

People first

Cementir is currently investing about 100 million euros into sustainability projects, such as the 2022 to 2024 Industrial Plan, approved by the Board of Directors in February 2022. “This development will include the revamping of the kiln at our Belgian plant, thereby increasing our alternative fuels from 40 to 80 per cent. We will achieve this by switching to natural gas and biogas in some plants, and ramping up facilities

at the Aalborg plant to produce FUTURECEM®, as well as extending district heating and other energy efficiency projects. There are also initiatives to reduce transport climate change impact and make the best possible use of water resources.”

To make products like this possible, Cementir depends on a team that prioritises industry solutions and innovation. “People are at the origin of our success, and they are the first stakeholders to whom we turn our attention and our commitment,” Michele emphasises. “We care deeply about the wellbeing of our team, and we strive for our employees to experience serenity in their working environment. We want to make them feel safe and motivated, and recognise that the company’s success is rooted in people and their professionalism. There is an internal awareness that drives us to promote well-being by investing in health and safety, remuneration policies, and professional growth.”



The journey for Cementir has been one of continuous improvement, and although there have been a few challenges, the path ahead looks just as prosperous. Before we end our discussion, however, Michele is keen to reiterate the company's strong focus on professional growth. "Through the internal and external training programmes we have in place, we're launching several initiatives under the Cementir Academy umbrella, which is an accelerator of individual development," he concludes. "These span into four macro learning streams: cultural and corporate, managerial, technical and functional, and onboarding. We're very excited to see them push the expertise of our team." ■

◀ **New Westminster Secondary School in Canada, 2020 | Extreme® UHPC façade**
Precaster: Centura Building Systems Ltd
Architect: KMBR Architects

www.cementirholding.com/en

REDUCING ENVIRONMENTAL IMPACT WITH AUTOMATED LIMESTONE STORAGE

With 70 years' experience in the cement industry, Teamnetwork SRL offers a wide range of integrated industrial services, from single equipment to EPC solutions, plant and design, civil and industrial engineering, logistics, management and technical consulting, and industrial maintenance.

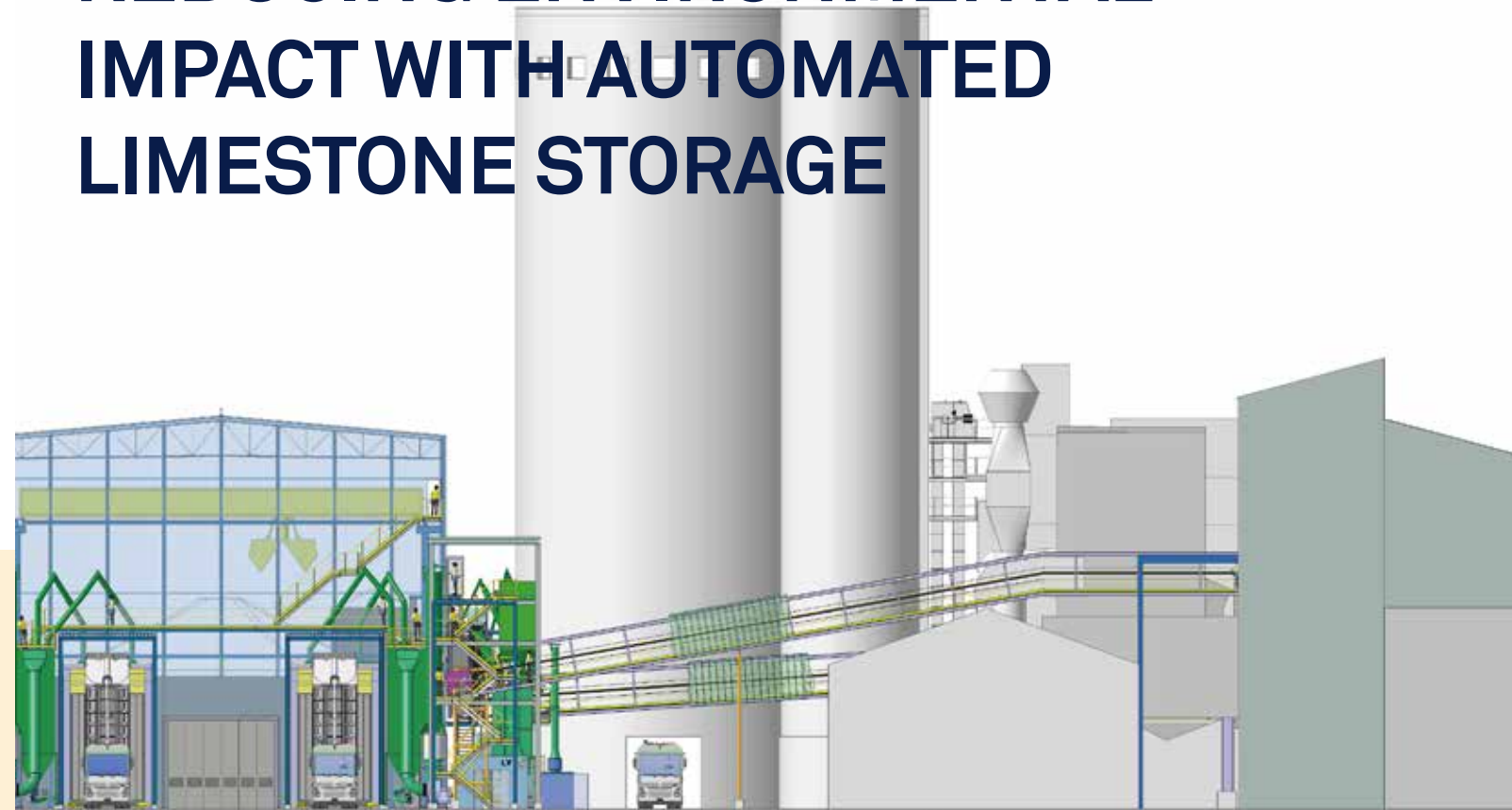
In June 2022, Teamnetwork established an EPC solution to feed limestone to cement mills, reducing both clinker consumption and CO2 emissions for Aalborg Portland's Plant in Denmark. Teamnetwork's technical department has proposed an automated limestone storage that is less invasive than its competitors' solutions.

The 6000-ton storage structure consists of concrete and steel. Trucks unload the material into two pits, and an automated crane handles it either in the storage area or in two hoppers, with feeding capacity of 220 t/h. Weigh feeders and belt conveyors connect storage to mills, with modular dosing capacity set by a control system from CCR, and dedusting systems are at storage input/output points.



Teamnetwork EPC solution to reducing clinker and CO2 emissions for Aalborg Portland's Plant in Denmark

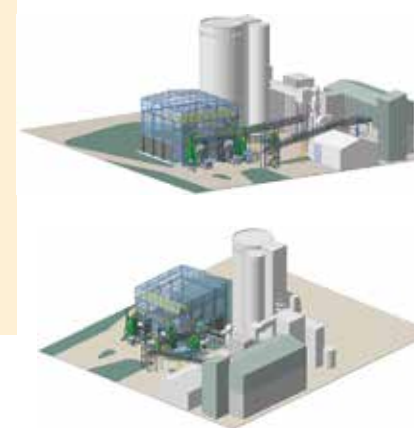
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The storage structure will be made of concrete and steel with a capacity of 6.000 tons; trucks will unload the material in two pits and an automated crane will handle it either in the storage area or in two hoppers, with feeding capacity around 220 t/h. Weigh feeders and belt conveyors will connect storage to mills, with modular dosing capacity to be set by control system from CCR, and dedusting systems will be in storage input/output points.



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