



Press release – Villeneuve d’Ascq, October 21, 2024

Heidelberg Materials’ first industrial concrete recycling facility in Poland uses award-winning FCB Rhodax® technology

Heidelberg Materials, one of the world’s largest integrated manufacturers of building materials and solutions, has recently commissioned the first industrial concrete recycling plant in Poland, near Katowice, to recycle 100% of demolition concrete. It is equipped with Fives’ breakthrough FCB Rhodax® technology, which releases all the components of demolition concrete in the highest quality.

This technology was awarded the French Marc Regnier Recycling-innovation prize, which recognizes innovations in the recycling and mineral recovery sector, and promotes industrial projects that have an impact on the circular economy and the reduction of CO2 emissions, projects that contribute to sustainable development and are part of a “green growth” approach.

| An advanced bed compression grinding technology to turn demolition concrete into new high-quality products

Heidelberg Materials was looking for the best suited technology to develop and implement an innovative platform turning **100% concrete recycling into high-quality aggregates, sand and cement paste**, which could later be reused as sustainable building materials. The FCB Rhodax® choice results from a successful cooperation between the two groups’ R&D which demonstrated its utmost performances when processing concrete.

“After several pilot plant testing with the FCB Rhodax®, we see this as the best suited system to recover recycled cement paste from deconstruction concrete and get high-quality recycled aggregates and recycled sand.”

Wolfgang DIENEMANN

Director Global Research & Development, Heidelberg Materials

The singularity of the FCB Rhodax® consists in the perfect control of the force applied to the material bed. It results in an excellent liberation of the different concrete components of preserved -or even-improved quality. The resulting recycled aggregates and sand comply with the European Standard for recycled and even virgin materials, especially in terms of cubicity and low water absorption.

| An innovative driver for sustainable future of building materials

This unit is a major step for Heidelberg Materials and a great illustration of its strong commitment to offering alternative and low-carbon construction materials to its clients for a “sustainable future”.



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The FCB Rhodax® application in deconstruction concrete opens a new perspective for circular economy. 100% of the recycled fractions can be efficiently used again in new construction products. The high-quality recycled aggregates and sand are used in new concrete, thus preserving natural resources, reducing the energy consumption and CO₂ emissions related to the extraction of materials from quarries. Furthermore, the cement paste extracted from the fine fraction can either be used as an additive in cement recipes, or introduced in the raw mix of cement kiln to produce low-carbon clinker.

“We are proud of this first partnership with Heidelberg Materials. This reflects our commitment to support cement and building materials producers in their roadmap to reduce CO₂ emissions by offering them efficient and reliable solutions.”

Yan HUERRE
Sales Director, Fives FCB

About Heidelberg Materials

Heidelberg Materials is one of the world’s largest integrated manufacturers of building materials and solutions with leading market positions in cement, aggregates, and ready-mixed concrete. They are represented in around 50 countries with around 51,000 employees at almost 3,000 locations. At the center of their actions lies the responsibility for the environment. As the front runner on the path to carbon neutrality and circular economy in the building materials industry, Heidelberg Materials is working on sustainable building materials and solutions for the future. The company enables new opportunities for its customers through digitalization.

www.heidelbergmaterials.com

About Fives

Fives designs and supplies machines, process equipment and production lines for the world's leading manufacturers. From the first railway lines to the Eiffel Tower elevators and industry 4.0, Fives has been designing the disruptive solutions and technologies that make industry for over 200 years. A pioneer in decarbonization and digitalization, Fives is always one innovation ahead thanks to its ability to anticipate customer needs. By responding to the specificities of each market locally, Fives combines economic and environmental performance in 24 countries thanks to nearly 9,000 employees. In 2023, Fives reached an order intake of over €2.5 billion.

Within the Cement & Minerals division, Fives FCB is a major technology provider in the cement and minerals industry, providing innovative and tailor-made solutions designed to maximize the energy efficiency and reduce the environmental footprint of cement producers' facilities.

www.fivesgroup.com



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