



Photo: ABB and alcemy collaborate to bring AI-driven quality control to cement production

ABB

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ABB and alcemy have signed a memorandum of understanding (MoU) to develop AI solutions for cement and concrete quality optimisation, while supporting carbon reduction targets. The partnership will integrate alcemy's AI and ML-based quality prediction technology with ABB's automation and process control systems to improve production efficiency, reduce variability, and lower CO₂ emissions. Integrating predictive quality insights into plant operations lies at the heart of this collaboration. Alcemy's solution will extract process and quality data from ABB Knowledge Manager, analyze it using machine learning models, and feed setpoints back to ABB Ability™ Expert Optimizer. This closed-loop approach is designed to help operators better manage variability by refining product consistency and enhancing overall plant performance.

With more precise control of production parameters, the collaboration (photo: Leadership team members from alcemy and ABB met to discuss and sign the recent agreement) supports more efficient use of raw materials and energy while reducing process variability. By combining domain expertise with emerging technologies, the partnership aims to close the gap between data

and process optimization. As part of the collaboration, ABB and alcemy are establishing a framework to explore technical and commercial synergies, including the development of a joint value proposition for cement and ready-mix concrete customers.

Mr. Bodil Recke, Global Manager, Business Unit Cement in ABB's Process Industries division, said: "Artificial intelligence is becoming an important enabler for the future of cement production. Bringing together ABB's expertise in automation, process control, and optimization with Alcemy's AI and industry expertise, we aim to help cement producers improve performance while supporting their decarbonization targets."

Mr Leopold Spenner, Co-Founder and CEO at Alcemy, said: "Working with ABB allows us to bring predictive quality insights closer to plant operations. Together, we want to help the cement industry achieve more consistent results – improving efficiency while reducing environmental impact."

<https://new.abb.com/news/detail/135287/abb-and-alcemy-collaborate-to-bring-ai-driven-quality-control-to-cement-production>

SPOTLIGHT