

Yara International and Kongsberg Digital enter collaboration on digital twin technology

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Kongsberg Digital, a leading provider of industrial software, and Yara International, a global fertilizer company and the world's largest distributor of ammonia, have entered into a two-year agreement under which Kongsberg Digital will develop digital twin technology for Yara's factories in HerÅ,ya in Norway and Sluiskil in the Netherlands.

The agreement includes an operational twin for Yara's production facilities at HerÅ,ya in Porsgrunn and a project twin for the carbon capture project in Sluiskil in the Netherlands. The ambition is to deploy the solution to Yara's production facilities worldwide.

The operational twin for the production facility at HerÅ,ya will utilize industrial data from the factory in combination with technical data and equipment documentation. Based on this, a contextualised work surface with detailed 3D models of the plant and the various units will be created, along with associated maintenance, operational, and facility information gathered from the factory's sensors and data sources. The work surface will assist users in making the right decision at the right time by providing relevant information.Å

Twin technology will also be implemented into the carbon capture project at Yara's facility in Sluiskil, Netherlands, where a new carbon capture unit is being built to convert CO₂ gas into liquid before transporting it by ship for injection and storage in reservoirs in the North Sea. The twin technology will play an essential role in this project by contributing to efficient collaboration and preparations for data transfer from project to operation before the plant is operational. The digital twin will establish a "digital thread" through all project phases and into the operation and maintenance phase.

"Yara is the first wholly Norwegian industrial company to use Kognitwin Å Kongsberg Digital's twin technology. With this technology, a significant improvement in the work process is expected, thereby leading to a more efficient workday for

engineering, maintenance, and operations," says Merete Åstby, Digital Manager at Yara Porsgrunn.Å

"In cooperation with Yara, Kongsberg Digital will build on the already close cooperation between Kongsberg Gruppen and Yara and deliver technology that provides Yara with improved insights and new opportunities to optimize the operation of their facilities" says Shane McArdle, CEO of Kongsberg Digital.Å