

El-Watch to supply world-leading Norwegian technology to Hydro in new investment worth millions

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Technology company El-Watch has signed the biggest contract in its history and notes that IoT sensors are in demand as never before. The record order was placed by the Hydro Karmøy technology pilot which will now roll out use of the wireless sensors on a major scale in its production.

This project is about monitoring temperature in cathode bars in aluminium cells. The partnership between El-Watch and Hydro has been extremely rewarding for many years, and this multi-million deal is a result of extremely successful development work to which both parties have contributed. Over time, as a result of this partnership, the El-Watch sensors have been integrated into Hydro's cloud solution, which ensures secure and efficient use of the data. Hydro Karmøy is the very first company to roll out this type of wireless monitoring on such a major scale, with the aim of generating significant cost savings and making work and maintenance processes safer.

The wireless IoT sensors from El-Watch will play an important role in monitoring the cathode ingots in the smelter, which is a critical component in the production of aluminium at Hydro Karmøy. By accurately monitoring the temperature in cathode bars in real time, deviations or problems can be detected early, and indicators of possible meltdown of the aluminium cell can be predicted. This will provide opportunities to apply measures early and reduces the risk of downtime and potentially significant damage to the smelter.

Sensor monitoring will also reduce the need for staff entering high-risk zones in order to perform manual measurements and checks. The technology will also be important from an HSE and safety perspective.

Investing to save millions

- "Real-time monitoring of our processes when an electrolysis cell is nearing the end of its service life is something that has taken a lot of resources to achieve over a long period of time," says Technical Supervisor Process Jan Frode Høines at Hydro Karmøy, who has managed Hydro's part of the project.
- "The harsh environment in a production involving high temperatures and difficult access to measuring points has made monitoring difficult, and it was not something that was possible to perform using traditional tools. We are now able to envision the possibility of this through our excellent partnership with El-Watch. The roll-out entails a significant improvement in our production, in terms of safety risks, but also through the extended service life of electrolysis cells and reduced costs in the event of a meltdown," says Jan Frode Høines.

International scaling potential

The order represents a significant milestone for the technology company El-Watch from Rindal and confirms its position as a leading supplier of innovative wireless technology for industrial monitoring.

- “We are proud to have landed a contract of this magnitude from a company like Hydro Karmøy,” says Sales Director Tom Eskil Grande at El-Watch. “We have worked closely with the Hydro system for many years, and during this time our employees have done an invaluable job. We are now reaping the benefits.

El-Watch points out that Hydro Sunndal also has a proactive approach to new technology and has actively participated in the testing phase.

- “We are seeing that great importance is attributed to our high-tech skills in our partnership with Hydro, and we are pleased that several smelting works both nationally and internationally have now started the process of monitoring cathode ingots using our sensors. The scaling potential is enormous, and we are confident that the solution will give our customers a high return on investment and value in use from day one,” says Grande.
- “We are also pleased that our wireless sensors will now help to improve security while generating significant savings for the company on the basis of effective monitoring. We look forward to continuing our excellent partnership with Hydro and expanding the application of our technology both in process manufacturing and other industries.

Wireless IoT sensors are useful in many different industrial processes and provide the opportunity for cost-effective surveillance and monitoring of a range of parameters. This will often be a game changer in all types of manufacturing companies that have rotating equipment and will therefore benefit from sensor monitoring to ensure efficient operation as well as a focus on HSE and safety.

Sensor monitoring is taking over the manufacturing industry at a rapid pace worldwide. This means that the future looks bright for El-Watch as a sensor supplier.

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About El-Watch: *El-Watch is a leading supplier of wireless surveillance systems and sensor solutions for industrial purposes. The company focuses on developing innovative technology with a low user threshold for applications in different industries and contributes to increased security, cost savings and optimum operational efficiency.*

The company is based in Central Norway with offices in Rindal and Trondheim. The company's own skills environment has developed the 'neuron sensors' sensor platform – an all-Norwegian product that includes robust and wireless sensors, gateway, cloud solution and app – and offers a complete solution that is particularly suitable for the manufacturing industry.

The sensors are currently used by large global groups such as Alcoa and Smurfit Kappa, Norwegian industry giants such as Hydro, Elkem and Bergene Holm, as well as smaller small-scale producers such as local butchers, restaurants, hotels and food manufacturers.

El-Watch offers a large range of sensors that cover countless application areas in e.g. predictive maintenance, uptime measurement, tank level measurement, vehicle monitoring, measurement of air humidity and temperature, different forms of power usage etc.