

Safe and easy access to process data via Bluetooth

Kemira benefits from faster troubleshooting and commissioning

kemira

Kemira is a global leader in sustainable chemical solutions for water-intensive industries. It partners with customers to improve their product quality, processes and resource efficiency. The company's focus is on pulp & paper, water treatment and energy industries. In 2022, Kemira had annual revenue of around EUR 3.6 billion and around 5,000 employees.

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Paul Farrar
Maintenance Specialist
Kemira



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Micropilot FMR60B and the SmartBlue app

The challenge At Kemira's production site in Bradford in the UK, polymers are manufactured for use in water treatment. Polymers are chemicals used in flocculation, a process that facilitates bonding between solid particles, creating larger clusters, or 'flocs', that are easier to separate. In wastewater flocculation and sludge treatment, particles are flocked to aid their removal or to help sludge dewatering. Polymers can be used alone or together with inorganic coagulants to make flocs bigger and more resistant to shear forces.

As with many other chemical processes, polymer manufacturing is reliant on accurate monitoring of parameters such as level and temperature. The team at Kemira need access to real-time data to allow them to check the process and make informed decisions about inventory management and maintenance.

The solution Monitoring level has traditionally been a somewhat manual process in chemical plants, requiring physical access to the instrumentation. Now devices with

Bluetooth can be accessed remotely, making it easy to monitor and maintain devices that are located in hard-to-reach areas. Kemira has utilised this technology in the form of Endress+Hauser's Micropilot FMR60B, one of the new generation of 80 GHz radar sensors for level measurement. As well as offering easy access to process data via Bluetooth, the in-built 'wizards' guide users through commissioning, proof tests and verification of the devices for simple operation. Heartbeat Technology offers verification and monitoring functions to identify anomalies for improved safety and productivity.

The benefits All commissioning, maintenance and documentation tasks that usually require access to the instrument can be carried out remotely via Bluetooth and Endress+Hauser's SmartBlue app. "Having Bluetooth makes our lives ten times easier," confirms maintenance specialist Paul Farrar. "We can sit in the control room rather than having to climb on the vessel. It's a safer way of doing things and it's much quicker."



Kemira's Bradford site



Kemira's Chris Jerome with Ian Nelson of Endress+Hauser

The technology also reduces the risks posed by dangerous substances, harsh environments and potential explosions as workers can remain outside the danger zone during maintenance and inspections.

For Kemira, the main benefit has been ease of use. "The app is more helpful than navigating through the menu on the device," says Paul Farrar. "It gives you a visual representation of the process and it's easy to build reports and store them on your computer. It also makes ordering easier because you can see the required part code." The SmartBlue app can be accessed via smartphone or industrial tablet, such as the Field Xpert SMT50 (for non-hazardous areas) or SMT70 (for hazardous areas). The SMT50 and SMT70 come with pre-installed software and access to Endress+Hauser's digital

service Netilion for maximised productivity.

The use of Bluetooth in the Bradford plant has been so successful that they're planning to extend its use to other processes and parameters, including temperature measurement. Paul confirms: "As we're replacing our old instruments we're changing them for new Endress+Hauser devices with Bluetooth."

The advantages of Bluetooth

- Fast and wireless configuration and interface
- Standard communication cabling, e.g. 4–20mA, is unaffected
- Faster communication than HART
- Remote instrument access from a safe working area
- No need to open the device housing to set up the instrument – advantageous in hazardous areas
- No driver or software installation needed
- No need to connect at the control panel and disturb the loop, making the process much safer

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