

Case Study

Tata Chemicals Improves Data Accessibility with Honeywell's OneWireless Solution



“We have gained many benefits from Honeywell's OneWireless solution. The challenges we experienced from tapping long-distance signals have been eliminated.”

Chetan Joshi, Deputy Manager, Instrumentation, Tata Chemicals

Benefits

Faced with data integrity issues due to signal transmission problems, Tata Chemicals turned to Honeywell for a wireless solution. Tata Chemicals at Mithapur in Gujarat is a large inorganic chemical complex that produces several products, including cement, iodized salt and synthetic soda ash.

Tata was experiencing problems accessing data in the cement plant control room. In addition to data problems, maintenance and troubleshooting of the signal were challenging. Tata implemented Honeywell's OneWireless™ solution to overcome these issues.

Since implementing OneWireless, Tata can now reliably tap transmitter signals from remote locations and bypass the entire looping of signals. The company has gained improved data accessibility and reliability, and have cut the costs of expensive instrumentation cables. Other benefits include:

- Improved safety and compliance
- Decreased installation, operational and maintenance costs
- Control network can securely access remote locations
- Increased reliability and improved production efficiency through more accurate data enabling better decision making
- Reduced maintenance requirements compared to wired transmitter alternative



Tata Chemicals has improved data accessibility and reliability with Honeywell's OneWireless solution.

Background

Tata Chemicals Limited is India's leading manufacturer of inorganic chemicals. It also manufactures fertilizers and food additives. Incorporated in 1939, the company has an annual turnover of over Rs 5,800 crore and is part of the \$28.8 billion Tata Group, India's foremost business conglomerate.

Tata Chemicals operates the largest and most integrated inorganic chemicals complex in India at Mithapur in Gujarat, a state in western India. Mithapur has four main product groups: soda ash, chloro-caustic group, marine chemicals and salt, and cement. A pioneer and market leader in the branded, iodized salt segment, the company manufactures salt that has the highest purity level in the country. It is also among the largest producers of synthetic soda ash in the world.

Challenge

Tata was facing data accessibility challenges in the cement plant control room tapping signals from remote process control areas and other distant locations, including the gas scrubber. The long distance made maintenance and troubleshooting of the signal that much tougher for engineers.

Tata needed a wireless solution to extend its control network securely to remote locations that would also provide seamless communication with existing control applications.

Solution

Tata considered several vendors for a wireless solution and ultimately chose Honeywell's OneWireless because of the solution's robust features, as well as Honeywell's proven track record with other solutions at the company's chemical plants, including Honeywell's Experion® Process Knowledge System (PKS) and field instruments.

Honeywell's OneWireless network is an industrial wireless mesh network that extends the process control network into the field to deliver applications that improve plant efficiency, reliability and safety. The wireless mesh network is formed with industrial wireless nodes, called multinodes, that self-discover to create an industrial mesh network within seconds.

"Tata Chemicals has been continuously raising the bar in technological competence and gaining recognition as an innovator. Honeywell has proven to be a vital partner in supporting this endeavor and helping us to embrace technology to continuously improve performance," said Chetan Joshi, Deputy Manager, Instrumentation, Tata Chemicals, Mithapur.

Tata installed OneWireless solutions at the Mithapur cement plant. The implementation included wireless transmitters, gateway with SMPS and Lantronix converter. It also included serial interface card and FTA communication assembly for communication with the control system.

Since implementing the OneWireless solution, data is accessible and accurate due to the signal's reliability. Tata now taps transmitter signals from remote locations and bypasses the entire looping of signals through different communication modules. The streamlined process saves money by eliminating the need for costly instrumentation cable. Maintenance and troubleshooting are simplified, saving labor expense.

"The OneWireless system is working very well. We have gained many benefits by going wireless and the challenges we experienced tapping long-distance signals have been eliminated," commented Joshi.

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For More Information

To learn more about how Honeywell's OneWireless solutions, visit our website www.honeywellprocess.com or contact your Honeywell account manager.

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