

Application

Implementing a nitrogen flow and consumption monitoring system

Sector

Chemical Industry

Goal

Improving the nitrogen system efficiency and reliability

Customer

Chemical Manufacturing Company



Improving Production Process Efficiency and Reliability with Real-Time Nitrogen Flow Monitoring

In a chemical manufacturing plant

Overview

A chemical manufacturing company in the United States was facing challenges in monitoring the nitrogen flow and consumption in their plant.

Nitrogen is a critical component used in various stages of their production process. Therefore, the need for accurate and reliable nitrogen flow monitoring was critical, despite the difficult conditions on the production line.

The challenges they faced where:

- Inaccurate flow measurements, resulting in inconsistencies in the manufacturing process
- Difficulty in monitoring and controlling the nitrogen flow rate
- Lack of real-time data on the usage of nitrogen gas
- High costs for nitrogen supply

Solution

To address these challenges, the chemical manufacturing company implemented a high-precision nitrogen flow monitoring system from SUTO iTEC.

The system included several S415 Compact Flow Meters which were exactly calibrated for their needs. Thanks to the small size and built-in flow conditioner, the devices could be installed directly at the required location without the need for a straight pipe inlet.

The S415 Flow Meters were connected to the S331 Data Logger, which then transferred the data to the facility management system for monitoring, analysis, and real-time measurements.

Products In Use



S415 Compact Flow Meter



S331 Data Logger and Gateway

Results

The installation of the highly economical S415 Compact Flow Meters significantly improved the company's ability to monitor the nitrogen flow and consumption. The S331 Data Logger provided a centralized platform to store, monitor and analyze the data. This has led to several improvements:

- Better process control and safety
- Improved production process efficiency by ensuring that the right amount of nitrogen supply
- Real-time data helped to identify and immediately address any issues
- Increased safety and compliance with industry standards and regulations
- Significant cost reduction due to optimization adjustments

Conclusion

The S415 Compact Flow Meters and S331 Data Logger proved to be an excellent solution for the chemical manufacturing company's nitrogen flow monitoring needs. The real-time data enabled the facility management to quickly identify any issues or inefficiencies in the process. The company able to achieve significant cost savings and improved production reliability.

"We now have the opportunity to make informed decisions about our nitrogen use and production processes."



Be smart. Measure it.