

CRYOCONNECT® RM Remote Freezer Monitoring



Equipment (e.g. Freezer)

Challenge

CRYOCONNECT® RM remote monitoring from Linde connects you to your freezer to provide you access to manage your freezer for optimal performance. The system enhances the freezer with additional operational sensors and then connects that sensor information with your operators, with you, and, when necessary, with Linde. Your freezer data is available to you safely and securely wherever and whenever it is most convenient.

By enhancing the array of sensors on the freezer, you are connected to operational parameters that can lead you to answers to questions that you may have about your operation or addressing problems that may arise. In addition to the sensors, the operator interface provides an at-a-glance view quickly telling your operators that everything is functioning as it should.

Using the CRYOCONNECT® RM monitoring system can increase the uptime of your process. Being able to quickly adjust the operation in the proper direction or troubleshoot something quickly can be the difference between minutes versus hours of downtime or lost product. The additional information that the remote system provides also serves as a kind of training; your operators get better and better at understanding the relationships between inputs and outputs of the freezer leading to better operation.

Operational Data

CRYOCONNECT® RM sensors provide more detailed information across several aspects of the freezer operation to improve production. Motor amperage tracking provides insight into motor performance and allows for action to be taken to prevent unplanned downtime. Exhaust temperature monitoring provides insight into exhaust efficiency and is a useful tool for troubleshooting. Additional sensors in the valve and manifold area of the cryogen delivery system provide additional troubleshooting details. Finally, a product-presence sensor allows the operation of the freezer to be tuned for production efficiency.

Remote Data Access

CRYOCONNECT® RM remote monitoring provides the ability to view your operation and operational data wherever you have online access. Using your browser, you can securely log into CRYOCONNECT® RM"s online interface and view the current operation as well as historical operation data. Please note *this is not a remote-control system*, but an operational data view. The freezer remains exclusively operational from the local HMI. You can answer current operational questions like "are we running product through the freezer right now?" or "are we currently cleaning-up?" by looking at the status of the freezer. You can answer questions like "what product did we run last week?" or "is the drive motor starting to increase amp draw over time?" all via your computer, your tablet, or your smart phone.

Linde's remote monitoring freezer technology includes the ability to add mobile alerts. From start-up alerts to shut-down alerts to problem alerts, you can customize what you'd like to know with a mobile alert and act without having to leave what your present activity.

Reporting

CRYOCONNECT® RM remote monitoring allows you to investigate the history of any of the sensors on the freezer, and it allows for multiple sensors to be viewed in time-alignment, so that new insight into your operation of the freezers can lead to better performance. Additionally, you will receive an automated monthly email report from the remote monitoring system with summary data organized into an easily understood format. The automated email reduces the learning curve and lets you begin acting on data right away. As you get more familiar with the system, you can then expand your use of more customizable features.

Remote Troubleshooting

CRYOCONNECT® RM remote monitoring incorporates the ability for Linde's freezer technicians to "dial into" the system at the specific request of the customer. If the system's additional information does not provide enough details to solve a technical issue, your technicians can communicate with our service center, and Linde can look at your data to provide further insight. What Linde has discovered is that as your technicians become more and more familiar with CRYOCONNECT® RM system, either with Linde's assistance or on their own, the need to use this feature decreases over time. Almost everything you need to know about your freezer and troubleshooting is available through CRYOCONNECT® RM remote monitoring, and it is simply learning what to look for and where to find it.

Features

- → Expanded sensor array; improved user interface
- → Remote data access; operational and historical; customizable mobile alerts

Benefits

- → Improved uptime; improved operation
- → Improved troubleshooting both internal and external
- → Graphical reporting capabilities; customizable; monthly email report
- → Easily retrofittable onto existing Linde tunnel and spiral freezers
- → Access to historic data for continuous improvement
- → Monthly reports for easy access to data

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