

Department of Radiology, Marienhospital, Stuttgart



Who? Peter Heidi, Co-head of Hospital Technology Anita Hahn, Head of Radiology Technologists Gert Ranzinger, IT department

Where?

Marienhospital, Stuttgart, Germany

- 761 beds
- Treats around 31,000 in-patients and 65,000 out-patients every year
 17 specialist departments
- 1,900 employees

Challenge?

Provide real-time insight into MRI systems to drive quality, efficiency, and uptime

Solution?

24/7 monitoring and alerting for helium compressor with expansion to other critical parameters planned with Philips e-Alert

Always in the picture

For Peter Heidi, Co-head of Hospital Technology, every working day is different. With new tasks and challenges arising all the time, how does he maintain a clear view of his imaging systems' health? To ensure that MRI systems can deliver the right quality, efficiency, and uptime, critical parameters, such as magnetic field, helium level, temperate, and humidity must be in balance. If one of these factors is impacted, the effects can be far-reaching – with consequences for operational efficiency, staff, and patients alike.

Marienhospital in Stuttgart, Germany, operates a busy radiology department with two Philips MRI systems. With up to 30 scheduled patients a day, the machines must run smoothly at all times. To support this aim, the hospital has implemented an innovative solution that continuously monitors the helium compressor and issues an automated alert when it detects a problem. Hospital technicians receive immediate notification on a mobile device, enabling them to respond quickly before system performance can be affected.

Finding solutions in real time

"We now work proactively rather than reactively if an issue occurs. This reduces the likelihood of costly downtime and, in turn, minimizes the impact on patients."

Peter Heidi, Co-head of Hospital Technology, Marienhospital

A simpler way to work

By providing insight into the helium compressor and its functions, the alerting solution has streamlined the way Co-head of Hospital Technology Peter Heidi and his team work. "In the past, we were aware that something was wrong but didn't know exactly what and where until much later," he explains. "Now, we have targeted information and can respond faster. And because we receive alerts on a mobile device and have remote access to settings, we can take action there and then, which saves valuable time."

Leading the way

Marienhospital's radiology department is well known for its forward-looking approach and its willingness to cutting-edge technology. To keep this commitment to continuous improvement, the facility was eager to adopt an innovative alerting system. "Technology is becoming ever-more complex and there is increasing interaction between systems," Heidi continues. "Having a clear, digital overview and immediate notifications helps us manage this complexity."

The current sensor-based alerting solution gives Heidi and his colleagues a comprehensive picture of how the helium compressor is functioning. For example, it issues an alert if the temperature of the water returning from the helium compressor is outside a predefined threshold. "This set-up has many benefits," he remarks. "And I would certainly be interested in extending these benefits to additional MRI parameters, such as power supply, chiller function, and climate, in the future."

Key MRI parameters in view



Inform Proactively monitor MR systems with the right information at the right time



Act Respond quickly and accordingly to alerts



Resolve Resolve issues before they impact system performance

"The alerts give us rich insight into our imaging systems, which means we can respond to problems fast – a major benefit."

Peter Heidi, Co-head of Hospital Technology, Marienhospital "When we know everything is running smoothly, we can scan more patients."

Anita Hahn, Head of Radiology Technologists, Marienhospital

Seeing more patients each day

Getting more out of every hour

The MRI department at Marienhospital runs on a tight schedule. So for Anita Hahn, Head of Radiology Technologists, excellent system performance is essential. "Scanner downtime causes delays and disruptions which not only slow us down but are a burden for patients," she explains. The alerting solution has helped improve uptime, which reduces the organizational effort involved in solving problems. "When everything runs according to plan, we have fewer issues and phone calls to deal with and can concentrate on scanning patients."

The right support

Mrs. Hahn and her colleagues also benefit from smooth communications with in-house technicians and external Philips service staff. "When Mr. Heidi receives an alert, he can pass on details to us so we know what's going on and everyone is in the picture," she explains. "What's more, we enjoy a close working relationship with our contact at Philips who's always just a phone call away should we need additional support.

Philips e-Alert: the proactive sensor-based way to enhance uptime

Philips e-Alert gives technicians rapid visibility into key MRI parameters, helping them take fast action to fix problems before they escalate. It is a smart, sensor based tool. It measures environmental factors against thresholds, triggering an alert if a parameter diverges from a defined value. Depending on the facility's specific requirements, alerts are sent by email, text message, and/or as part of a local alarm system.

Philips e-Alert monitors*:

- helium compressor function
- chiller function
- helium level
- magnetic field
- magnet pressure
- power supply
- humidity
- temperature
- cold head function

* Expanding the existing alerting and monitoring solution to include additional MRI parameters would bring benefits all round. I like the fact that the future solution will allow me to use the Philips email server or our own email server for alerts. So when can we get started?"

Gert Ranzinger, IT department, Marienhospita

Ready to gain deep insight into your MRI system's critical parameters?

Discover how Philips e-Alert can help you identify issues before they can impact your MRI operations. Contact your local service representative or visit **www.philips.com/e-alert**

* The MRI parameters monitored are subject to change and may vary according to MRI system configuration and contract entitlement

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