



Case Study – TubeGuard at Hanyang University Guri Hospital, South Korea

Hanyang University Guri Hospital is on its way to become a number one healthcare provider in the area of east Gyeonggi-do and its surroundings. Once a new Cardiology Center opened doors in 2010, the need for medical imaging increased. The hospital relies on two SOMATOM CT scanners.

At Hanyang University Guri Hospital's (HYUGH) 10th anniversary in 2005, a campaign was started to improve research, education and – most of all – healthcare services. New buildings were added and existing ones renovated. New technology was introduced providing patients, researchers, physiologists, and students alike with a state-of-the-art working environment. In the process, HYUGH was equipped with SOMATOM Definition and Sensation CT scanners. Since the first scanner was installed, imaging systems have become increasingly important for the hospital.

The need for imaging can be expected to increase even further, as a new Cardiology Center was opened in June 2010. With only two scanners at hand, HYUGH depends on both of them to be running at all times. If one had a hard down and were out of order for an entire day or even longer, patients might be at risk, while the hospital is losing money and potentially its reputation quickly. These were the reasons for the hospital to expand their existing Guardian Program service contract with the proactive TubeGuard option.

Profile of Hanyang University Guri Hospital

Since its opening in 1995, Hanyang University Guri Hospital has been a research facility as much as a full healthcare provider for the entire Gyeonggi region around Seoul. With 610 beds, it is part of Hanyang University Medical Center. Recently, a Research Division Center, and a Cardiology Center have been established at HYUGH.

Guardian Program including TubeGuard

Proactive tube failure prediction for the SOMATOM Definition Family and the Biograph **mCT**



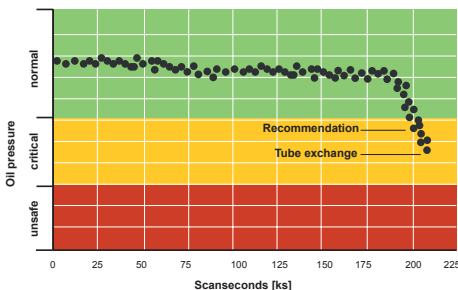
“Now we know first-hand how the proactive service from Siemens works and feel more confident about our equipment.”

Mr. JeongGon Choi,
CT Unit Manager,
Hanyang University,
Guri Hospital,
Guri, South Korea

Proactive support right away

The CT team headed by Mr. Jeong Gon Choi was not completely convinced of the proactive advantage of the new service offering, until they experienced the benefits of TubeGuard firsthand. Jeong Gon Choi received a call from the Siemens UPTIME Service Center, informing him about an oil pressure loss and beginning high voltage problems. TubeGuard detected these issues while proactively monitoring the system. The hospital’s engineer checked the tube and confirmed that the oil pressure had dropped.

Even though Mr. Jeong Gon Choi had not noticed any performance loss of the tube at that point in time, the UPTIME Service Center recommended a tube exchange within the next six days. TubeGuard predicts the remaining lifetime of a tube based on the type of problem and the system utilization. In order to prevent any downtime, the exchange was scheduled for the same day after working hours. Replacing the tube took three and a half hours, so the CT could be used the next day, without causing any interruptions or delays. “We had no problem with patient scheduling on the day of the exchange and the following days,” says Mr. Jeong Gon Choi. “We know we can rely on the skills of the Siemens Customer Services Engineers. Now we can also rely on TubeGuard.”



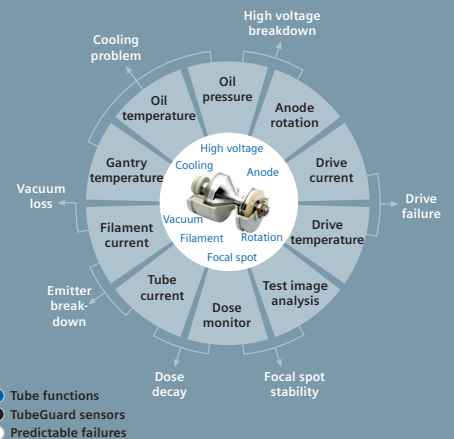
Predicted Failure: High Voltage Breakdown
Based on a significant oil pressure loss and beginning high voltage problems, TubeGuard recommended a tube exchange within the next six days. In order to prevent any downtime, the exchange was scheduled for the same day after working hours.

Guardian Program including TubeGuard

Predicting failures – boosting planning reliability

As an additional service offering of the Siemens Guardian Program™, TubeGuard can predict the majority of all potential CT tube failures within the SOMATOM Definition family and the Biograph mCT. More than 10 sensors proactively monitor the tube functions via real-time data flow with Siemens Remote Service (SRS). Deviations can be detected before problems occur – making it possible to proactively and efficiently handle failures in advance. Your advantages at a glance:

- Predictable downtime, with less risk of unplanned workflow disruptions
- Proactive rescheduling of patients and staff
- Tube replacement performed as scheduled – at a convenient time for you
- Less risk of damaging your reputation or reducing patient satisfaction
- Potentially less revenue loss because downtimes can be planned ahead of time



Global Siemens Headquarters

Siemens AG
Wittelsbacherplatz 2
80333 Muenchen
Germany

Global Siemens Healthcare Headquarters

Siemens AG
Healthcare Sector
Henkestr. 127
91052 Erlangen
Germany
Phone: +49 9131 84-0
www.siemens.com/healthcare

Global Business Unit Address

Siemens AG
Healthcare Sector
UPTIME Services
Henkestr. 127
DE-91052 Erlangen, Germany
Phone: +49 9131 84-0
www.siemens.com/healthcare

Legal Manufacturer

Siemens AG
Wittelsbacherplatz 2
DE-80333 Muenchen, Germany