Testo Reference
Pera Museum, Istanbul

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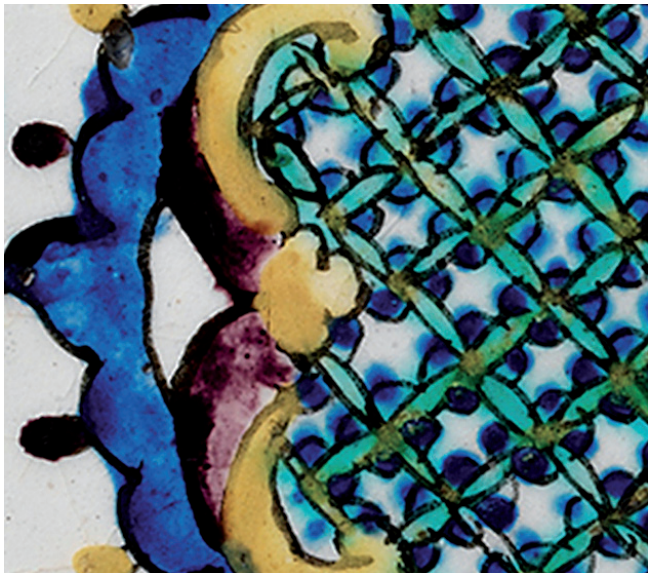
Climate monitoring at the Pera Museum in Istanbul with the testo Saveris measurement data monitoring system.

Indoor climate monitoring is vitally important at museums. Constant and rapid changes in temperature and humidity not only spoil the experience for the exhibition's visitors, but, in the worst case scenario, might also damage the exhibits on show. These parameters must therefore be regularly monitored and adjusted if necessary. Istanbul's Pera Museum has opted for the testo Saveris measurement data monitoring system in its quest to ensure that the museum pieces are stored and exhibited under ideal constant climatic conditions.

The Pera Museum

The Pera Museum, which was inaugurated in 2005 in the Istanbul district of Tepebaşı, is a private museum founded by the Suna and İnan Kıraç Foundation with the aim of offering a broad range of high-quality cultural and arts services. The Foundation shares its permanent collections, "Orientalist Paintings", "Anatolian Weights and Measures" and "Kütahya Tiles and Ceramics", with the general public in various ways, including through exhibitions and educational activities.

PERA MUSEUM



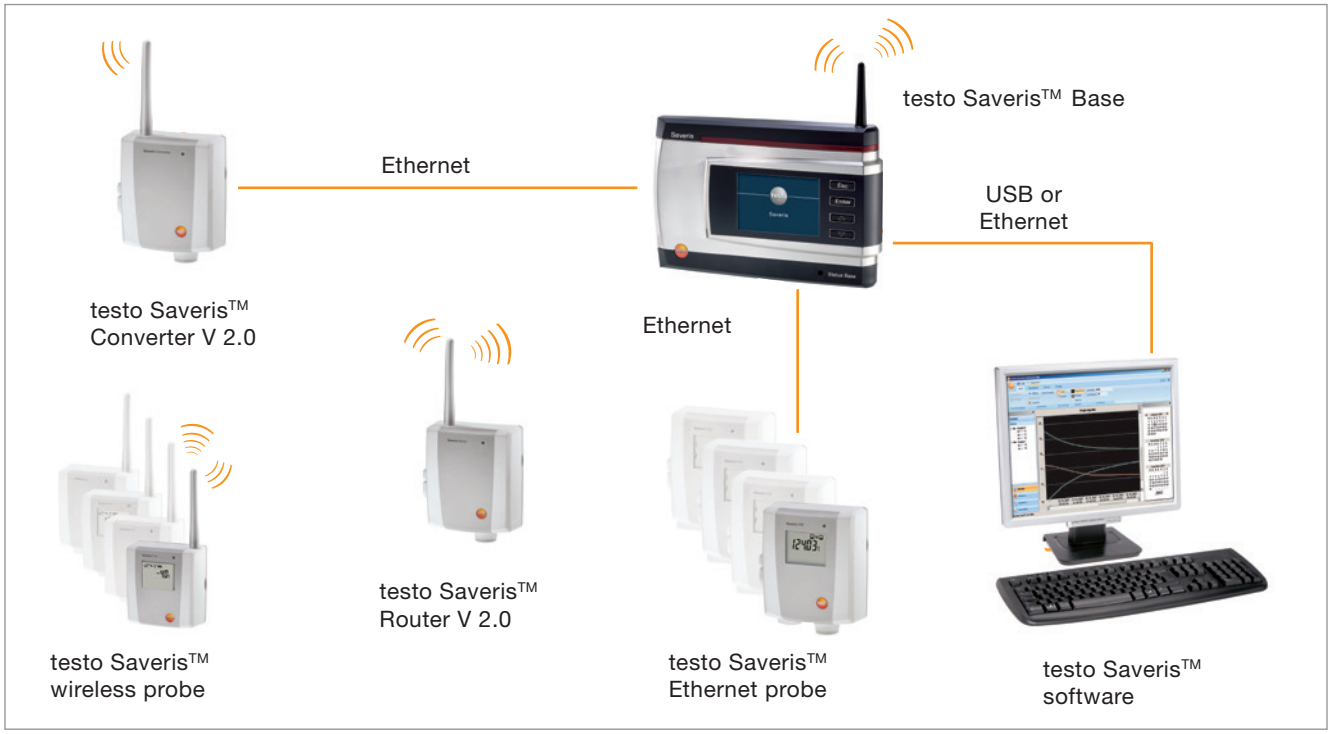
The challenge.

Objects of art are often extremely sensitive to climate changes within their immediate environment. Changing temperature conditions, accompanied by rising or falling humidity, may cause lasting damage to these valuable exhibits. However, it is not possible to establish an optimum climate for all the pieces of art, because the pivotal factor here is always the specific material composition of each respective work of art.

For example, the storage conditions for ceramics, marble statues or bronze medallions differ significantly from each other, which means that the air-conditioning of each respective environment needs to be customised individually. Therefore at the Pera Museum, where porcelain, ceramics and Anatolian weights are all exhibited on the same floor, the humidity and the temperature need to be monitored continuously.

Specific climatic conditions also apply to the second floor of the museum, as this is where paintings are exhibited. Organic materials such as leather, parchment, paper or wood are hygroscopic – i.e. they interact closely with the humidity. Moisture is extracted from them when the air is too dry, meaning that they lose weight and “shrink”. When the ambient air is humid, the reverse happens. Changing climatic conditions mean that the objects of art are in constant motion, hence it is only a matter of time until a canvas rips or a wooden framework cracks.

At the Pera Museum priority is given not only to the climatic conditions necessary for storing the valuable works of art, but also on the physical well-being of the visitors. Which is why it is essential to create a constant climate that is pleasant for the visitors.



The measurement data monitoring system testo Saveris with its components.

The solution.

The basic requirement for a reliable monitoring system is a precise measuring system that offers long-term stability. In environments such as the Pera Museum, which stores and exhibits pieces of art that are sensitive to temperature and humidity, the use of high-precision sensors is key to being able to detect even the smallest climatic fluctuations. The testo Saveris monitoring system, which fulfilled all the requirements in terms of measurement data recording, documentation and alarm monitoring, was installed in the exhibition rooms and storerooms of the Pera Museum.

Depending on the condition and material composition of the exhibited artwork, customised limit values for the temperature and humidity stresses are set within the museum. If any one of these limit values is exceeded, the comprehensive Saveris alarm management system guarantees that the valuable pieces of art can be protected from any potential damage in good time.

The advantages.

With its wide range of probes and its system architecture, the testo Saveris measurement data monitoring system offers a high degree of flexibility. Temperature and humidity values can be recorded reliably and accurately whenever required, even under the most difficult structural conditions. The measuring points may be located in display cases and cabinets, in exhibition rooms, on/in/behind pieces of art or in storage rooms that are not open to the public. The customisable wireless technology means that testo Saveris can be installed regardless of the existing infrastructure. Even if there is a power failure, the system still records all measurement data reliably. The system can also be integrated easily into an existing network and upgraded at any future date. The measurement data collected by the radio probes is transmitted to a base station. This can store up to 18 million readings. From here all data is immediately transferred to a PC and archived in a database.

The testo Saveris software makes it possible for the readings to be accessed within a central data archive whenever required. This enables in-depth analysis and detailed evaluation of all values recorded. The automatic reporting system also offers total flexibility and transparency when archiving and presenting the recorded measurement data.

"For our museum it is essential that both the monitoring of temperature and humidity values and the system-generated PDF reports function flawlessly. Once testo Saveris was set up, we were able to detect incorrect settings in our museum's climate control system earlier and take appropriate action. At the same time the system gives us a feeling of security, since we know that unwanted climatic fluctuations will be detected and reported at an appropriately early stage. Purchasing testo Saveris was therefore a very wise decision, and we would opt for this system again, every single time."

Gürkan Demirhan
Administrative Affairs Manager,
Pera-Museum

More information.

You can obtain further information on the testo Saveris measurement data monitoring system and get answers to any queries you may have about climate monitoring in museums and archives at www.testo.com.

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