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# Monitoring climate in measurement rooms with testo Saveris.

Highly modern measurement rooms are used in many industrial companies for quality assurance purposes. However, since the materials change depending on the ambient climate, parameters including temperature and humidity must remain constant in order to obtain precise measurement values. This is defined in detail in the guideline VDI/VDE 2627. It also states that the monitoring of ambient conditions in a measurement room has to take place with suitable measurement technology.

Temperature and air humidity can be continuously measured and documented using the measurement data monitoring system testo Saveris. In addition to this, the monitoring system has an innovative function which informs you by alarm even before a limit value violation occurs. Apart from this, it offers interfaces for integrating further measuring instruments for the monitoring of the other parameters defined by VDI/VDE 2627.
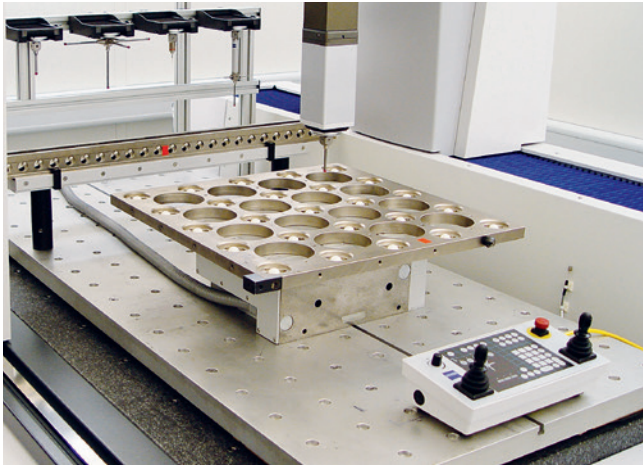
Precision measurement of a component in a measurement room.

Monitoring ambient conditions in a measurement room with a testo Saveris data logger.

The challenge.

The demands placed on measurement rooms are high – after all, they represent a fundamental basis for product quality. Above all, stable ambient values are of crucial significance, since temperature and humidity fluctuations have a direct influence on the properties of materials. Shrinkage or expansion of only 1 µm can already have drastic consequences for later serial production. Independently of the quality class of the measurement room, the basis temperature defined for the respective measurement room and a relative humidity of between 30 % and 60 % are additionally relevant. Only this way can results be obtained which are always comparable and reliable.

But how can you ensure that these parameters remain within the defined limit values, and that an unnoticed deviation does not endanger quality and cause unnecessary costs?

Measurement data monitoring system testo Saveris.

The solution.

The measurement data monitoring system testo Saveris can reliably and automatically fulfil the continuous measurement of temperature and air humidity required by the guideline VDI/VDE 2627 for measurement rooms. Added to this is the innovative function "trend alarm" which makes monitoring climate even easier for you: It calculates the projected temperature development by linear regression over the last four measurement cycles, and provides you with an alarm even before a limit value violation occurs. An example: You want to receive an alarm as soon as the temperature of your measurement room increases by 5 Kelvin within one hour. You have set the measurement cycle so that the temperature is measured every ten minutes. In the forty minutes between 17:01 and 17:40, testo Saveris measures a temperature increase of 4 Kelvin. It calculates from this that in 60 minutes, a temperature increase of 6 Kelvin would have occurred – and therefore already issues you with an alarm by e-mail, SMS, alarm relay, audible signal or LED display after 40 minutes. This allows you to intervene before it is too late.

More information.

More information and answers to all your questions concerning the monitoring of ambient conditions with testo Saveris at www.testo.com.