

Digitised device tests make checks safer

Automatically detect, check, and evaluate devices for thrombosis prophylaxis



Our customer:
Leading manufacturer in medical technology

One of the leading manufacturers of medical technology devices in his area has been developing various systems and devices for clinical and outpatient use for 25 years with around 40 employees. The main field of application of the devices is the prophylaxis of venous thromboembolism (VTE), postoperative pain and oedema. The manufacturer's thermal compression devices, which are used after operations, for example, are based on compression of the extremities via cuffs that are alternately heated or cooled. In addition to prophylaxis, this type of application can also reduce pain.



The challenge:

Due to patient safety, the requirements for medical devices are very high. This means for the thermal compression devices that extensive device tests must be carried out to ensure that the set pressures and temperatures are actually achieved. Here, a 100 per cent check of all devices before delivery is mandatory. For reasons of traceability, all measured values recorded during the tests must be stored in a database. In the test rigs previously used by the company, the measured values for pressure, temperature and flow rate were recorded with analogue sensors. They had to be checked regularly, and the calibration also had to be recorded in the database. These steps involved a lot of manual work, which is why the company was looking for an alternative solution.

The solution – why ifm?

In order to make the regularly necessary calibration of the sensors in the test rigs superfluous, which requires a lot of work, the company has decided to rely on sensors that are digitally connected via IO-Link. This technology not only ensures that the measured values are transmitted digitally and thus without interference, but also opens a range of possibilities. For example, the sensors can be configured directly from a higher-level controller. This eliminates the risk of false scaling that can occur with analogue sensors. IO-Link sensors can also transmit additional information. In this way, for example, the defect of a sensor can be immediately detected and remedied. For its test rigs, the company opted for flow, pressure and temperature sensors

from ifm, all of which have an IO-Link interface. Thanks to the digital measured value transmission, all measured values of the device tests can not only be reliably detected, but also documented in the prescribed manner. This digitisation of critical test results from the test rigs makes products safer, prevents recalls and reduces the amount of work that has to be done manually.

Results:

- Digital measured value transmission via IO-Link
- Reduction of manual tasks
- Digitisation ensures simplified documentation of test results
- Making products safer and preventing recalls



More reliable test results through digitisation



Simpler documentation and easier to find



Time saving due to less manual effort



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