

SOLUTION STORY

SICK USM Water Ingress

MetSolv

METERING SOLUTIONS & VALIDATION

THE SITUATION

During a routine Accuracy Verification Test (AVT) a series meter prove flow test failed with a -2.2% error. The prove test was carried out again which subsequently failed with an error of 2%.

The flow meter in question had not been used for approx. 6 months. Previous to that the flow meter had been performing within the stipulated tolerance limits.

THE INSIGHT

With Metsolv's vast flow measurement knowledge it was soon realized that there was an intermittent and irregular fault as both errors were not in the same direction.

Metsolv technicians always carry a service laptop with them with the software capabilities and required connection leads to connect to almost any flow measurement device.

The Metsolv technician connected to the flow meter via the SICK Mepaflo software and investigated the fault.

THE SOLUTION

A diagnostic session was performed on the Flowsic600 and it was found that path 2 was performing at a very low performance level and unable to maintain accurate flow measurements.

The transducer cover was removed from the flow meter to reveal approx. 300-400ml of water ingress and a lot of corrosion. The corrosion was cleaned, and the cover left off to dry the transducers and cables out, this resulted in a slight improvement, however the bulk of the damage had already been done.

With Metsolv's flow metering expertise it was known to replace the path 2 transducers and all transducer cables along with a new transducer housing cover and seal to maintain the flow transmitters integrity.

Spare materials were ordered, and the rectification work carried out on site by a Metsolv Technician.

THE SOLUTION

The flow meter was put back into service and series prove flow tested with an overall error of -0.2% which is within the stipulated tolerance limits.

The client has expressed their gratitude for the prompt and efficient service.



PROVIDING CONFIDENCE IN MEASUREMENT QUALITY