

ITRON

Harnessing AMR data

Water utilities today are well-aware that an Automated Meter Reading (AMR) system can eliminate the costs of manual meter reads. What is less apparent is that an AMR system can realise benefits beyond the elimination of costs associated with manual meter readings. When AMR data is utilised correctly and fully, the impact of an AMR system extends throughout the organisation.

The following are some ways in which different departments within each water utility can all benefit from AMR data:

Improving billing process: An AMR system enables elimination of estimated meter reads. Data gathered increases billing accuracy, helping the billing department to avoid bill re-issues and credits.

Improving financial performance: By billing customers more frequently using data gathered from an AMR system, the amount of each bill decreases and collectability of receivables increases. This improves profitability of the utility. Other benefits include analysing

AMR data to make decisions to defer large infrastructure investments and reducing debtor days and improving working capital.

Improving customer service: AMR data allows utilities to have customer information readily on-hand to answer customer queries. As a result, the utility is able to resolve billing issues more quickly and also advise customers on possible leakages. This increases customer satisfaction while also improving call centre and employee morale.

Improving operational efficiency: Beyond efficiencies gained from eliminating manual meter reading, AMR data can help the utility develop its metering and metrological capabilities and improve metering asset selection.

Reducing non-revenue water (NRW): By providing actionable information, an AMR system contributes to reducing apparent water losses. It can also reduce real network losses by locating leakages efficiently and also reduce water theft. All this contributes to increasing the utility's profitability.



SUPREME INDUSTRIES

Insulate with INSUflex

INSUflex from Supreme Industries is a CFC-free, black flexible elastomeric closed cell nitrile rubber thermal insulation that provides a highly efficient method of insulation and effectively controls condensation against both heat loss and heat gain. The material is particularly suitable for insulating pipe works for condensation control. It can be used on chilled water pipe lines, refrigerated pipe works, hot and cold water services and on sheets or rolls in air-conditioning duct works.

INSUflex has a very high diffusion resistance factor to water vapour transmission $\geq 7,000$, a low thermal conductivity and an excellent fire safe performance. It is suitable for a temperature ranging from -55°C to $+105^{\circ}\text{C}$. The product does not depend on any additional outer thick skin or covering but is built with the insulation and extends through the full thickness.

The INSUflex range is resistant to corrosion,

fungal and mildew growth and is therefore suitable for clean room applications. Insulation material with a low 'K' value equates to a high energy saving potential and thermal performance. Thermal conductivity is the main data used to technically calculate insulation thickness required to prevent condensation.

The main goal of a good insulation material should be that of preventing water vapour from spreading through insulation material as water is an optimal heat conductor.

INSUflex, having a high water vapour resistance can prevent the flow of water vapour that tends to pass through the insulating material created in air-conditioning systems as a result of a difference in pressure between the pipe (low pressure) and the surrounding air temperature (high pressure). A high water vapour value corresponds to greater material resistance to water vapour penetration.

