

# case study

## Bespoke Pressure and Leak Noise Monitoring

Exploiting the versatility of the multi-channel MultiLog LX2 and the dual functionality of Hydrophone 2, our bespoke solution both monitors network pressure and listens for leaks.

Wanhua Chemical Group is a global leader in polyurethanes and is the world's largest manufacturer of Methylene Diphenyl Diisocyanate (MDI). Employing over 33,000 people and playing a vital role in global supply chains, it is critical that their facilities function constantly.

Wanhua Chemical Group approached HWM Global with a unique set of requirements for monitoring the water networks at one of their largest manufacturing facilities. The brief was to provide a single solution that could accurately monitor the water pressure within their network whilst also identifying the leak noise that indicates pipe bursts.

To meet these specific requirements, we combined our MultiLog LX2 data logger with a high-sensitivity Hydrophone sensor. As well as delivering high performance leak noise sensing, our Hydrophone also features a push-fit point for pressure monitoring, which meant that one single sensor could be used to perform two monitoring functions.

We chose MultiLog LX2 as it has the capacity to record both flow and pressure data, delivering the complete capability required for this application in a single data logger. Additionally, a long battery life, multiple telemetry options and fast logging support made MultiLog LX2 the dependable heart of this solution.



As this was the first time we had combined these products, we worked closely with Wanhua Chemical Group throughout the installation process. Weekly meetings were conducted to support and review the installation process and we worked together to select locations within the network for system deployment. Within these reviews we were able to resolve any issues swiftly, including on the rare occasion when a logger was delivering false readings having picked up external noises.

For the initial phase of this project, we installed 42 leak noise and pressure monitoring systems at this one Wanhua Chemical Group site and the initial feedback has been very positive. With our ongoing support, we are expectant that Wanhua Chemical will continue to successfully monitor their water network using the innovative combination of the MultiLog LX2 and our Hydrophone sensor.