



Red Star Instruments provide Open Channel Flow Measurement for Taiwanese PingDong Municipal Government.

The Taiwanese Water Industry faces many challenges year after year. 2021 has seen a major drought across the country and has emphasized having suitable wastewater treatment facilities to treat wastewater and generate extra water supplies.

Pulsar's distributor in Taiwan, Red Star Instruments, recently collaborated with the Taiwanese PingDong Municipal Government of Sewerage Department to help them find a Velocity \times Area calculation that would give them an accurate indication of flow throughout their sewer network.

Red Star Instruments has been a Pulsar Measurement partner in the Taiwanese Region since 2011, and they offer sales and technical support for the island in both the wastewater and industrial sectors.

Why Area \times Velocity measurement?

The Taiwanese PingDong Municipal Government of Sewerage Department was looking to get an indication of flow rate so that they could detect early blockages or spills, from rats, storms, typhoons, and a buildup of debris. Helping them to prevent overflows of untreated sewerage into the local environment – which is generally the sea. Enabling them to reduce their impact on the local environment and protect the reefs that surround Taiwan.

Tony Tsai at Red Star Instruments helped to install 4 FlowCERT Wall Mounts, dBMACH3 Transducers and MicroFlow sensors across 4 different locations within the sewerage network.

It was decided that the velocity sensor that was originally placed in the bottom of the channel should be replaced by a non-contacting solution to remove the need for maintenance and eliminate the risk of buildup on the sensor.

Pulsar Measurement's non-contacting Area \times Velocity solution using FlowCERT, dBMACH3 and MicroFlow velocity sensor was used, and the Taiwanese Pingdong Municipal Government required the signal to be connected with their website. Using the RS-485 Modbus output signal from Pulsar Measurement's FlowCERT controller, this was possible.



"The end-user was satisfied with the performance of the equipment, and it is doubtless to save the time of using high-performance equipment that Pulsar Measurement offer."

Tony Tsai, Red Star Instruments, Taiwan