



Techno Bangla Engineering Ltd, Bangladesh, helps the textile industry achieve open channel flow measurement.

The global textile industry is under increasing pressure to ensure that all players are achieving environmental compliance. Most manufacturers in the textile industry have on-site Effluent Treatment Plants that are the basic treatment facilities required to treat effluent at the factory before discharge back into the environment. These kinds of on-site treatment plants help in reducing the biological oxygen demand and keep water bodies healthy.

Manufacturers are being held accountable for their actions and need to closely monitor their effluent treatment plants to ensure that the effluent that they discharge from their factories has minimal impact on the surrounding environment.

Techno Bangla Engineering Ltd, Bangladesh Finds a Solution

A key player in the textile industry, based in Bangladesh, approached Pulsar Measurement partners and experts Techno Bangla Engineering Ltd, for some help with their Effluent Treatment Plant. They were trying to gain open channel flow measurement on a difficult sequence of drainage lines, which was unsuitable for a flume or weir to be installed. After taking a look at the application and considering the site conditions and the difficulties surrounding installation and power supply, Techno Bangla Engineering Ltd decided that the manufacturer should use a non-contacting area velocity solution. Non-contacting area velocity solutions are easy to install and do not cause any interruption to the process of the manufacturer, which allowed the textile plant to keep running.

Non-contacting Area Velocity Measurement

The system of choice for Techno Bangla Engineering Ltd was the FlowCERT Controller, combined with the MicroFlow non-contacting velocity sensor and dBMACH3 transducer.



"We are really satisfied with the Pulsar Measurement equipment; we are getting the necessary technical support and have overcome all of our previous problems. The installation was commendable and the staff at Techno Bangla Engineering Ltd were friendly."

This was an ideal solution as the MicroFlow provides a cost-effective solution to area velocity measurement, where the workings of a site do not allow for the installation of a flume or weir, which was the case for this textile manufacturer. The MicroFlow measures the velocity off the surface of the moving body of water and is combined with the measurement from the dBMACH3, which provides the FlowCERT controller with the cross-sectional area of the channel and level of the water. The FlowCERT does a calculation to provide a fully non-contacting area-velocity measurement.

Due to the difficulty of the drainage lines, the existing flow meter that was installed was producing inaccurate readings. Thanks to advancements in digital echo processing and Pulsar's unique DATEM Echo processing technology, Techno Bangla Engineering Ltd were able to help the end user overcome this issue.

What is DATEM Technology?

DATEM Technology is the Digital Adaptive Tracking of Echo Movement, an echo discrimination system that works on the basis that it identifies the true moving echo from the background noise that can be caused by objects in the measurement path of the transducer. Once the true echo has been identified, the transducer follows it; ignoring all the other competing echoes and allows Pulsar Measurement's equipment to work in a cluttered sewage wet well, noisy textile plant; and many more difficult applications.

The end-user is more than happy with the service received by Techno Bangla Engineering Ltd and are even more impressed with the equipment, so much so that they went on to order 8 more systems from Techno Bangla Engineering Ltd and are in the process of getting them installed. The manufacturer said 'We are really satisfied with the Pulsar Measurement equipment; we are getting the necessary technical support and have overcome all of our previous problems. The installation was commendable and the staff at Techno Bangla Engineering Ltd were friendly.'

Techno Bangla Engineering Ltd is one of Pulsar Measurement's official partners and experts in Bangladesh and provides engineering services to different sectors all over the country. Having installed more than 100 pieces of open channel flow equipment, the company can draw on a wealth of experience. To find your local partner, visit our partner locator.



More Information

FlowCERT Controller: pulsarmeasurement.com/flowcert

MicroFlow Sensor: pulsarmeasurement.com/microflow



INFO@PULSARMEASUREMENT.COM

Pulsar Measurement is a trading name of Pulsar Process Measurement, Ltd.

*Copyright © 2022 Pulsar Measurement
Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX
Registered No.: 3345604 England & Wales*

Delivering the Measure of Possibility

United States
+1 888-473-9546

Asia
+60 102 591 332

Canada
+1 855-300-9151

Oceania
+61 428 692 274

United Kingdom
+44 (0) 1684 891371

pulsarmeasurement.com