



## Helping Bathgate Silica Sand find a flow measurement solution at their sand quarry.

### Overview

Bathgate Silica Sand has been established for over 100 years, and their site in Cheshire comprises a well-established silica sand quarry, processing plant, and onsite laboratory. Bathgate Silica Sand is one of the largest producers of high-quality sand, top dressing, and root zone mixes throughout the UK and provides sand production for the equestrian, leisure, industrial, foundry, and play sand markets.

With the recent spike in energy prices, Bathgate Silica Sand approached Pulsar Measurement for help with monitoring flow at various points, to maximize the efficiency of their process and minimize costs.

### Successful flow measurement for sand slurry.

The site at Bathgate Silica Sand has a sand quarry where raw sand is excavated into an industrial plant and then classified into a finalized product. Sand slurry, which is a mixture of

sand and water, is pumped from the quarry to the industrial plant to be dewatered and classified.

Due to the nature of the application, Julius Guth, our UK Sales Manager who has responsibility for the North of England, assessed that the PDFM Portable Doppler Flow Meter was the best solution from our range of flow equipment. The PDFM 5.1 is ideal for monitoring and troubleshooting flow in full pipes and works perfectly on applications that contain bubbles or suspended particles, as it uses Doppler technology that reflects off bubbles or particles in the liquid, to measure velocity.

The portability of the PDFM 5.1 was perfect as the flow meter was used to test flow on six different pipes, all at different points in the process. The clamp-on sensors of the PDFM 5.1 meant there was no need to cut into the pipe or shut down flow for installation.

The unit was used on six different pipes, and provided stable, accurate results on all the pipes. For four of the pipes, the equipment worked immediately, however on two of the pipes, there was an additional step required before measurements could be taken. A fairly thick layer of rust



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and paint had to be removed from these two pipes with a grinder to expose the pipe metal so that the ultrasound could penetrate the pipe.

### **Outstanding results for the PDFM 5.1**

The customer was very happy with the equipment and clearly surprised by how easy and fast it was to use. They wanted to place an order on the spot and wouldn't let Julius leave the site without an order number! Having worked on the project with Bathgate Silica Sand, Julius had this to say "The PDFM 5.1 is so quick and easy to use that many pipes can be measured in a single morning. It's clear that this information will be invaluable in helping the customer to improve the efficiency of their process and ultimately save money through reduced energy consumption."

To learn more about our PDFM 5.1 Portable Doppler Flow Meter, or other clamp-on flow meters, visit the Pulsar Measurement website.

## **More Information**

PDFM 5.1 Portable Doppler Flow Meter: <https://pulsarmeasurement.com/pdfm-5-1>



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