



Pulsar Measurement dBi HART & SignalFire RANGER Provide Modernized Monitoring for Quarry in Northern Ireland.

Within Ballymena, Northern Ireland, a majestic mountain dominates the landscape. The mountain is the central core of an extinct volcano and rises about 437 meters (1500 feet) above the surrounding plain. The volcano is long-extinct and emits discharges that are mined and sorted by James Stevenson Quarry.

The customer, James Stevenson Quarry, takes the mined material and separates it into different bins based on the size, ranging from dust particles to 50 millimeters in particle size. The customer was looking to modernize their level measurement process, ensuring reliable level measurement

for each bin and a way of displaying the information across site.

Archaic Systems Updated

The customer was relying on archaic level measurement devices to ensure they were not overfilling the bins and that they had enough product to mix. The system was failing, causing the customer to have problems with bins overfilling and contaminating each other with the incorrect sized products and causing issues in the process. This was obviously costing the end user time and money.

SignalFire RANGER & Pulsar Measurement dBi HART

SignalFire wireless telemetry RANGER and Pulsar Measurement solutions are a powerful combination for remote monitoring of level, flow, and volume. Combining a Pulsar Measurement sensor with SignalFire's wireless telemetry products means that you can remotely access measurement data any time you want via your web-enabled laptop, PC, or mobile device. With the power of LTE CAT M1



"Once again the power of the dBi HART and RANGER shows the next step in the Pulsar Measurement journey of products and as always the service team delivering world-class customer service."

and NB-IoT connectivity, the RANGER automatically sends measurement data to the cloud for storage, allowing the customer to view the data, easily make reports, and configure alerts for operators in case measurements go outside normal levels. The RANGER helps save time and money by allowing the user to be able to view how measurement systems are running without needing to be where the devices are installed, and is an infrastructure-independent measurement solution perfect for remote locations. The RANGER is battery-operated and supplies power to 2-wire sensors for making measurements. Alternatively, combine the RANGER with a meter that can be powered by 12 VDC and power your measurement solution with a battery and solar combo.

For level measurement applications, the RANGER with internal batteries will power the dBi HART and take measurements at intervals easily configured by the user with a local connection to the SignalFire RANGER via the Toolkit PC software, or anywhere and anytime via the SignalFire Cloud.

DATEM Technology Makes Difficult Applications Easy

Pulsar Measurement's Digital Adaptive Tracking of Echo Movement (DATEM) is an echo discrimination system that works on the basis that it identifies the true moving echo from the background noise, then follows it, ignoring all the competing echoes as it does. This therefore allows Pulsar Measurement's equipment to work in a cluttered sewage wet well, a noisy stone silo, an agitated tank, or even through a grid. DATEM also looks for echoes within a very small frequency range, which helps to make it especially good at ignoring both acoustic and electrical noise.

Thanks to the built-in DATEM echo processing algorithms in the software, the customer was able to read the level of the product in the bins, even though they contained shoots, old level equipment, and ledges. The power of DATEM showed what it can do in these more challenging applications. The joint power of Pulsar Measurement's level products, the SignalFire RANGER telemetry system, and our best-in class service team was a recipe for a reliable and user-friendly remote level measurement system. The customer was so impressed with how well presented the process measurement was on the SignalFire Cloud, and how easy it was to use the interface, they said "This is very easy to use and this will help with the future efficiency of our production." Also commenting on the project, Tom Denby, Regional Sales Manager for Pulsar Measurement said, "Once again the power of the dBi HART and RANGER shows the next step in the Pulsar Measurement journey of products and as always the service team delivering world-class customer service."



More Information

SignalFire RANGER: <https://pulsarmeasurement.com/en/telemetry-solutions>

dBi HART: <https://pulsarmeasurement.com/en/dbi-hart>



www.pulsarmeasurement.com

INFO@PULSARMEASUREMENT.COM

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

*Copyright © 2023 Pulsar Measurement
Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX
Registered No.: 3345604 England & Wales*

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