

ROSEMOUNT[™] SAM42 ACOUSTIC PARTICLE MONITOR

Non-Intrusive transmitters for real-time monitoring of solids production

Rosemount SAM42 Acoustic Particle Monitor, Detection Before Damage

Emerson's Rosemount[™] SAM42 Acoustic Particle Monitor is a non-intrusive monitor designed to provide reliable and robust performance to allow for the optimization of production while minimizing the risk to erosion. This can be combined with Emerson's non-intrusive thickness sensors to fully understand the risk and impact of erosion to your topside piping infastructure.



Compact

Delivers measurement directly from the device, without software



Flame proof For safe use in hazardous zones



High Temp Operates between -40 °C to 290 °C

Improved data reliability leading to a better understanding of asset health

Traditional methods which are still used today such as sampling and weighting are labor-intensive, can have poor repeatability and only provide delayed information. Rosemount SAM42 Acoustic Particle Monitor is a permanently installed non-intrusive device.

Delivering accurate and reliable data in the challenging environments

It will deliver highly accurate quantification data directly from the field to your control system continuously. This means you can be alerted as soon as solid production occurs without the risk of being missed because of infrequent and unreliable data.

The Rosemount SAM42 Acoustic Particle Monitor can detect very low concentrations of particles in challenging conditions. With industryleading measurement repeatability and sensitivity, the Rosemount SAM42 Acoustic Particle Monitor can deliver data that can be actioned to ensure that the health and integrity of your asset can be maintained.





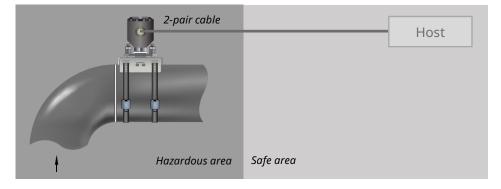
Monitor erosion risk before facing damage

Solid production can fluctuate throughout operation, meaning that large quantities of solids can be produced in a short period of time. If such sand bursts go undetected, they can lead to equipment damage, loss of containment, and costly repairs. With the Rosemount SAM42 Acoustic Particle Monitor, you can continuously monitor what is happening inside your asset. This means that you can be alerted as soon as you are producing solids at a higherthan-expected rate. The alert allows you to make quick decisions to protect your asset from unnecessary damage while maintaining production at the highest possible level.



Rosemount SAM42 Acoustic Particle Monitor designed with simple and easy installation in mind

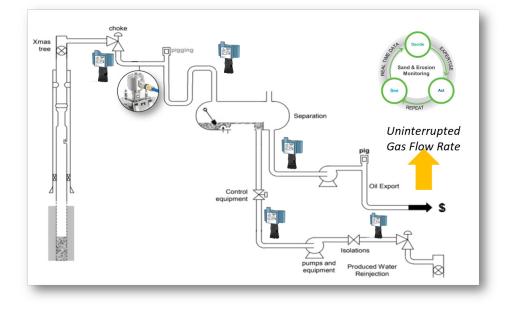
Rosemount SAM42 Acoustic Particle Monitor is designed to be easily installed, with no external equipment required. Data from the monitor is sent instantly to a control or asset management system, without requiring a designated software, via a Modbus RTU RS485 digital wired connection. Alternatively, the data can also be visualized in Emerson Fieldwatch software.



System diagram showing how the Rosemount SAM42 Acoustic Particle Monitor Ex d connects to the Host system.

Possibility of combining technologies to provide a complete monitoring solution

Emerson has a complete corrosion and erosion non-intrusive product portfolio, which allows you to have a full understanding of your asset health. Rosemount SAM42 Acoustic Particle Monitor gives understanding to what the risk to your asset is, by determining solid production quantities. By understanding the impact the solid production is having on your asset you can use measurements from the non-intrusive Wireless Corrosion & Erosion transmitters, which continuously measure wall thickness of your asset. The whole solution allows you to have continuous live data which enables actions to be taken to ensure asset health is maintained.



For more information, visit Emerson.com/RosemountSAM42

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