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New Generation Slurry Density Measurement Device

Accurate slurry density measurement is a cornerstone of quality and efficiency in AAC production, and therefore the measuring device must work reliably to achieve this. Traditional devices, while effective, often struggle with maintaining accuracy under varying production conditions.Enter Aircrete's new generation Density Measurement Device (DMD) – an innovation designed to enhance accuracy and streamline efficiency in AAC production. It features a new bypass concept for slurry density measurement that significantly improves measurement accuracy, while keeping the system constantly cleaned with water. This article explores the key features and benefits of the new DMD and how it addresses longstanding challenges in the industry.

New developments

The new generation Aircrete DMD introduces significant advancements in measurement accuracy. With its innovative design, the system achieves an impressive accuracy of up to 9 kg/m³, a substantial improvement over earlier models. This level of precision ensures tighter control over AAC production, directly contributing to the consistency and quality of end products.

A key feature of the redesigned DMD system is its water-filled standby mode. Unlike traditional set-ups where slurry continuously flows through the pipe, the new bypass design only allows slurry to enter the pipe of the DMD during specific intervals for measurement. Between cycles, the pipe of the DMD remains filled with water that serves as a density reference point, enabling automatic recalibration before each cycle. Furthermore, should something go out of order within the system, water density reading will show a significant difference from the actual water density, adhering to more optimized on-demand maintenance.

Advantages of the new system

The new Aircrete DMD offers several advantages that set it apart from traditional systems. Foremost among these is its high accuracy, ensuring precise density measurements for maintaining consistent product quality in AAC production. Additionally, fill-

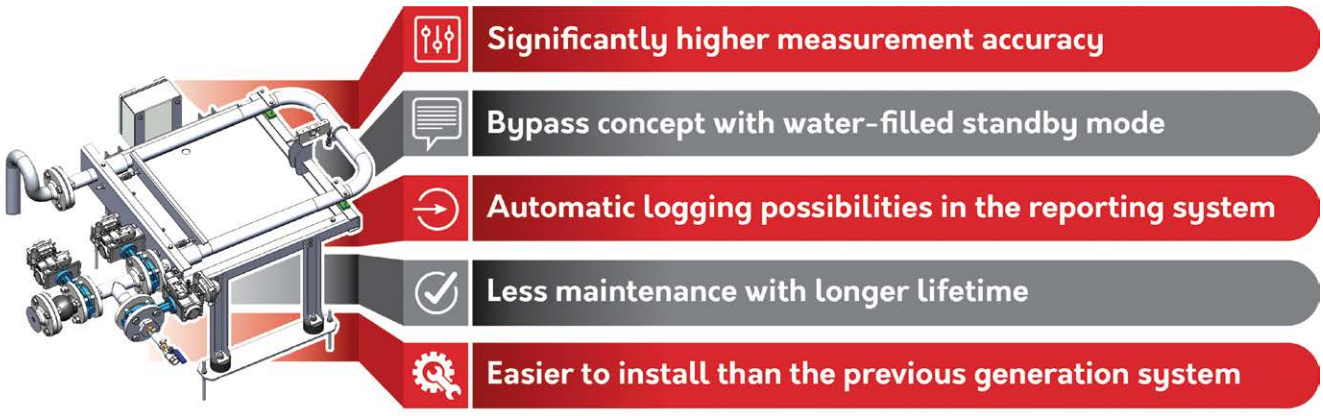

Fig. 1: advantages of automatic slurry density measurement.

Fig. 2: New generation slurry density measurement device in an existing plant in Türkiye.

ing the system with water on the standby mode prevents material build-up inside the pipe, significantly reducing wear and extending the device's lifespan. A common issue in systems with continuous slurry circulation is the pump vibrations affect on the load cell – the bypass concept of the new Aircrete DMD eliminates this influence.

The new Aircrete DMD not only enhances measurement reliability and accuracy, but also simplifies integration into existing plant infrastructures, making it easier to adopt without extensive modifications. These features collectively make the DMD a robust and user-friendly solution for modern AAC manufacturing needs.

Conclusion

In conclusion, Aircrete's new Density Measurement Device marks a significant advancement in AAC production technology. Its high accuracy, water-filled standby mode for automatic recalibration, and resistance to material build-up offer substantial improvements in reliability and longevity. By addressing issues like pump vibration interference, and simplifying installation within existing plant infrastructure, this new generation system provides a practical and efficient solution for modern AAC manufacturers. With its innovative design and robust performance, the new DMD is set to enhance quality control for any AAC manufacturer out there.

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