

DENSITY & SOLIDS CONTENT IN THE THICKENER

Optimize your discharge process



 **BERTHOLD**

MEASURING THE SOLIDS CONTENT IN THE THICKENER

Large volume thickening tanks are used in the mining industry to concentrate ore or minerals. Gravity settling drives the solid-liquid separation, which concentrates the solids at the bottom of the tank. The concentrated slurry is removed via an underflow outlet and should have a high solids content. However, care must be taken to monitor slurry solids content, as too high solids content can clog or damage pumps and pipes.

The SmartSeries LB 414 has been designed for the harshest of environments and is best suited for density measurements in the rough mining industry in non-hazardous and non-explosive environments.

Berthold's SmartSeries LB 414

The solids content in the underflow is monitored continuously by the SmartSeries LB 414 radiometric density measurement system. The robust and cost-efficient device provides a reliable measurement with excellent accuracy and reproducibility for many years.

The local user interface with display and software focused on key aspects make calibration and operation of the HART device easy. Calibration can be carried out via the detector's push button, HART communicator, PC with service modem, or infrared remote control. Once calibrated, in addition to the 4–20 mA HART output, the current measured value is continuously shown on the local display.

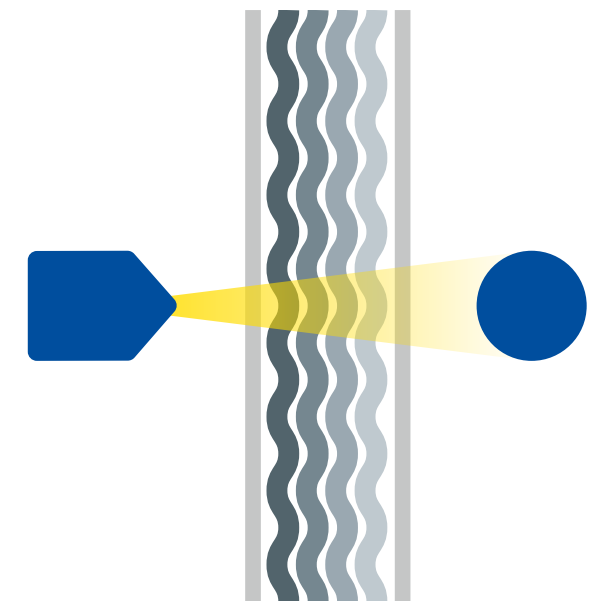


Customer Benefits

- Ensures smooth process flow and prevents pipes and valves from clogging
- Optimizes flocculant use through feeding rate control
- Exact mass flow determination, in combination with a flow meter
- Minimal operating costs
- Maintenance free, no re-calibrations needed, and non-contact measurement avoids wear

Features

- Easy to install on the pipeline exiting the thickener with clamp-on mounting
- Not affected by corrosive or aggressive process media
- Non-contact, non-intrusive measurement
- One time calibration, with no need to recalibrate
- Online, real-time measurement
- Long term stability in the face of temperature changes and aging
- Highly repeatable measurement



Typical arrangement of a radiometric system for contactless, non-intrusive density measurements



THE EXPERTS IN MEASUREMENT TECHNOLOGY

Berthold Technologies stands for excellent know-how, high quality and reliability. The customer is always the focus of our solution. We know our business!

Using our varied product portfolio, our enormous specialized knowledge and extensive experience, we develop suitable solutions together with our customers for new, individual measurement tasks in a wide variety of industries and applications.

We are here for you – worldwide!

The engineers and service technicians from Berthold Technologies are wherever you need them. Our global network assures you fast and above all competent and skilled assistance in case when needed. No matter where you are, our highly qualified experts and specialists are ready and waiting and will be with you in no time at all with the ideal solution for even the most difficult measurement task.

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