

Industry: Pulp & Paper

- Digester Blow Line Flow Measurement
- Knotter Flow Line Flow Measurement

SONARtrac[®] SOLUTIONS

SONARtrac full-bore flow meters clamp onto existing process pipes without shutdowns and deliver reliable flow measurements unaffected by wear, deposits, conductivity variations and debris.

Benefits

- Eliminates drifts caused by wear and deposits and is not affected by the conductivity or consistency variations.
- Eliminates the risk of process fluid leakage associated with “flanged-in” flowmeters, thereby resulting in safety and environmental benefits.
- Eliminates costly process down-time during installation. Maintains continuous plant operation and process flow when changeover in flow instrumentation occurs.
- Immune to damage caused by debris in process lines.

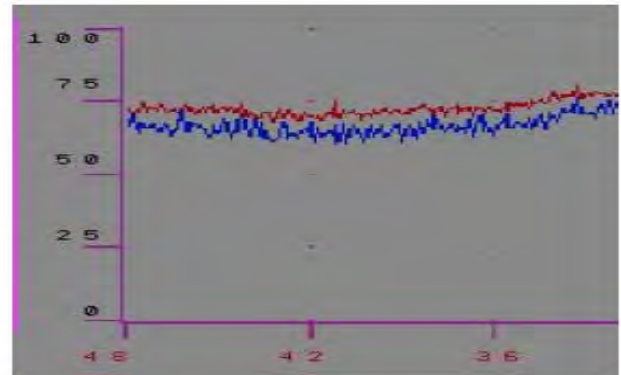
Reliable blow line and knotter line flow measurement forms the basis for stable, continuous operation and optimized production rate controls.

Process and Challenge

The fiber line production is continuous, so unplanned and even planned shutdowns always incur significant production losses.

Typically, in-line magnetic flow meters are used to measure the volumetric flow of pulp and knot slurries. Rapid wear, deposits, and debris caused by these aggressive slurries can affect the measurement reliability and significantly shorten the operational life of in-line flow meters. Furthermore, the high conductivity variations present in blow lines affect the magmeter’s performance, and reliability. These drifts in measurements negatively affect the controls in the digester and the fiber line.

Digester Blow Line Flow Meters



The above example illustrates flow variations from a SONARtrac flow meter and a magnetic flow meter. Automatic process control was not possible when using the magmeter. After this pulp mill installed a SONARtrac flow meter, they were able to go to automated control and benefited by being able to further tune their control loops.