



# Concentration Measurements for Milk of Lime

## Microwave Measurement

### Highly accurate and repeatable Milk of Lime measurements using microwave technology

The ability to monitor and control various parts of the sugar production process is key to producing high quality product.

In the sugar production process, there are several critical process points where repeatable and accurate measurements are required. Among them are Continuous Vacuum Pans (crystallization), Evaporator pans and Milk of Lime.

Using fourth generation state-of-the-art microwave measurement technology, Berthold Technologies Micro-Polar Brix measurement systems can do the job online and in real time. Trends can be recognized and process actions can be taken insuring high quality and cost efficient production. The process can be controlled providing the most accurate and repeatable measurement possible.

# Milk of Lime Microwave Measurement



In the Sugar Production process, concentration measurement and control of milk of lime is critical to insure proper quality and cost stability.

Thin juice naturally contains many impurities and non-sugar substances which are eliminated in the juice clearing process. The juice is cleaned by adding milk of lime to the thin juice.

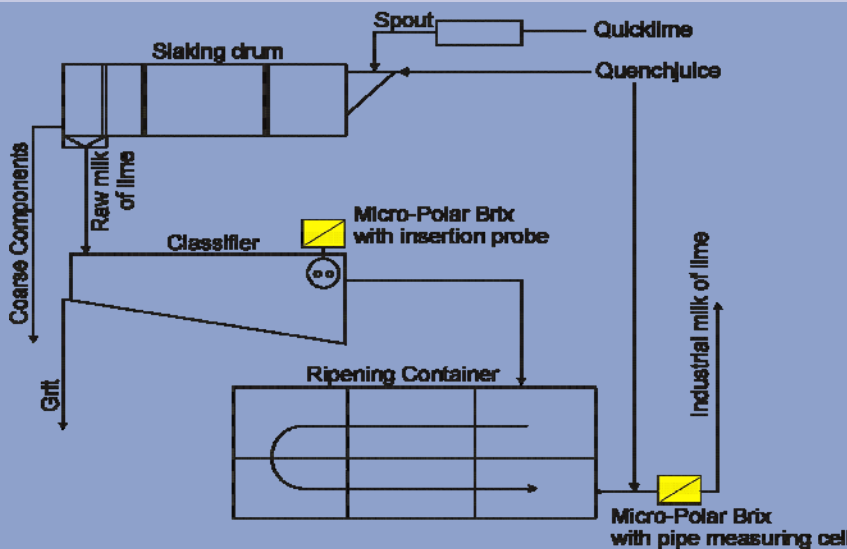
That's where the Micro-Polar Brix comes in. Using sophisticated fourth generation microwave technology, a highly reliable and repeatable concentration measurement is produced for monitoring and control of the quality of the milk of lime. Multi-frequency technology and reference cables for measurement stability are incorporated to insure consistent measurement results.

The menus on the Micro-Polar Brix evaluation unit (shown at left) make calibration and start-up easy to accomplish.

Equipment locations for Milk of Lime measurement using the LB 565 Micro-Polar Brix are shown below.

In the classifier, the LB 565 measures the concentration of the milk of lime, which should be a nominal 22.5 degrees Be. With real time measurement, the process can be controlled and operated uninterrupted, without expensive downtimes or delays.

After the ripening process, the concentration measurement is used to determine the amount of quench juice necessary for the production of industrial lime milk. Based upon the concentration measurement, the addition of quench juice can be more closely monitored and controlled—thus increasing process efficiency.



- Micro-Polar Brix Benefits**
- Simple start up
  - Easy to read
  - Screen graphics
  - Highly accurate and repeatable
  - World-wide support
  - Fourth generation proven technology

