

LQ500 CONSISTENCY METER

The LQ500 Consistency (Density) Meter provides accurate and reliable measurement of density for various applications.

Using the latest in microwave phase shift technology the LQ500 is able to measure consistency without the use of probes or inserts. This gives the benefits of low or no maintenance and making the LQ500 the meter of choice for installations where access is difficult or limited.

The LQ500 consistency meter is recommended for many applications including waste water, water treatment, food and beverages, and pulp and paper.



<u>Features</u>



- High Accuracy
- Robust Design
- 0-50% Total Solids
- Non invasive measurement
- Microwave Phase Shift technology
- · High reliability and low maintenance
- Suitable for difficult to access installations

- Not affected by fluid colour, containments or low pressure
- External equipment synchronisation
- Models available for viscous and abrasive processes
- Stainless Steel
- HART communications
- 50 300mm

Case Study





Sewage Treatment Plant

Toshiba LQ Series consistency meters are widely used in sewage treatment plants - not only to get accurate density measurements, but also to save thousands of Dollars!

The conventional process to extract water from sludge involves mixing of polymer to flocculate (curdle) the digested sludge. The amount of polymer to be added depends on the total solids in the sludge. Typically sewage treatment plants measure the percentage of solids in sludge from periodic samples collected daily and then dose the sludge with a polymer. This polymer is very expensive and the current method of manual dosing is generally not very accurate. Apart from the waste of costly polymer, improper flocculation results into excess water retention in the sludge and increases its cost of final disposal.

Substantial costs can be saved when the polymer dosing is optimized and the water can be properly extracted from the sludge.

The LQ Series consistency meter, using Microwave phase shift technology, accurately measures the sludge density as percentage total solids. This real time density measurement is an input to the control system which continuously regulates the polymer dose being injected into the sludge. The result is the optimal level of flocculation and water extraction for the sludge final disposal.

When LQ Series consistency meters are used in this application, it is not unusual to have their pay-back periods of less than a year!

TOSHIBA

Leading Innovation >>>

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