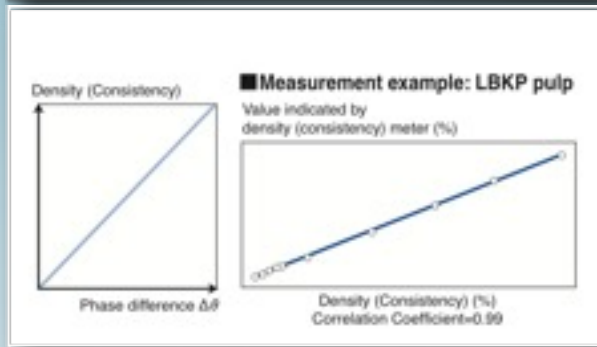
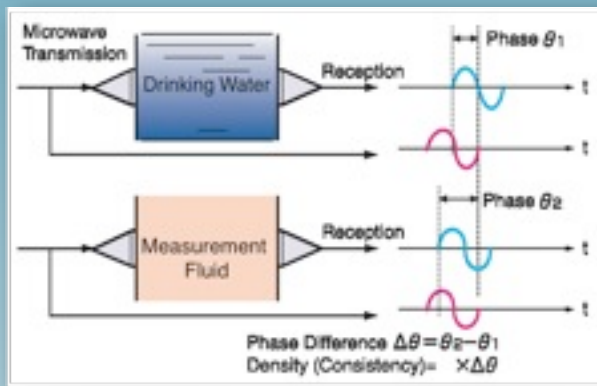


LQ500 Microwave Consistency Transmitter

Description

Patented technology based on Phase-difference measurement of microwave signal – result is highly accurate measurement (resolution, linearity and repeatability) over the full range of consistency.



Accurate, Total Consistency Measurement

Unlike shear force technology, the LQ500 is unaffected by variations in pulp species, fiber length and freeness, as well as the LQ500 is immune to changes in process conditions such as flow rate, pressure and temperature.

The LQ500 measures fibers and fillers for excellent total consistency control and is a great tool for reducing the basis weight variability.

“A Perfect Solution for a Paper Machine”

Remote Converter / Display Unit

Remote electronics offers large, easily visible display for virtually unrestricted installation. Intuitive, menu-driven interface features simple set-up, calibration and troubleshooting functions.



High Reliability, Easy Maintenance

No moving parts and no in-line projections guarantee high reliability and minimal maintenance requirements. The absence of moving parts also greatly reduces costs for consumables like O-rings and bearings.

Features and Benefits

- ✓ Reliable – Excellent MTBF
- ✓ No moving parts, No regular maintenance
- ✓ Excellent Repeatability, Linearity and Resolution
- ✓ Single point calibration
- ✓ Immune to process condition changes such as flow rate, pressure, temperature, turbulence
- ✓ Unaffected by variations in wood species, varying pulp grade, fiber length, freeness, brightness, color, shives
- ✓ Total Solids measurement. Measures fillers, excellent for basis weight control

LQ500 Specifications

SENSOR TYPE	Microwave Consistency Transmitter
OUTPUT SIGNAL	4 - 20 mA + HART
BINARY INPUTS	24 VDC, Externally synchronized input, Calibration selection input
BINARY OUTPUT	Consistency fault or Maintenance signal (Solid state contact)
ANALOG INPUT	Conductivity signal input, 0 – 10 mS/cm, 4-20 mA, Isolated
MEASUREMENT RANGE	0 - 50 % Cs
MINIMUM SPAN	1 % Cs for 4" – 12" (100 – 300 mm) sizes and insertion type (LQ300) 2 % Cs for 2" (50 mm) size
REPEATABILITY	0.01 % Cs for 4" – 12" (100 – 300 mm) sizes and insertion type (LQ300) 0.02 % Cs for 2" (50 mm) size
RESOLUTION	0.001 % Cs for 4" – 12" (100 – 300 mm) sizes and insertion type (LQ300) 0.002 % Cs 2" (50 mm) size
FLANGE STANDARD	DIN 16, ANSI 150, JIS 10K
CONDUCTIVITY LIMITS	2" (20mS/cm) 3" (16mS/cm) 4" (15mS/cm) 6" (10mS/cm) 8" (8mS/cm) 10" (8mS/cm) 12" (6mS/cm)
PROCESS TEMPERATURE	32 - 212 °F (0 - 100 °C)
AMBIENT TEMPERATURE	2 - 122 °F (0 - 50 °C); Option: -4 to 122 °F (-20 to 50 °C)
FLOW VELOCITY	No effect
WETTED MATERIALS	316 SS; Applicator window: Polysulfone; Applicator window sealant: Fluoric rubber. Options: PFA coating, HDPE window
RELIABILITY, MTBF	135.8 months under 77 °F (25 °C) based on MLL-HDBK-217F
APPROVALS	FCC, CE, UL/CUL-C1-D2
ENCLOSURE CLASS	Sensor: IP67 Display Unit: IP65
POWER SUPPLY	100 to 240 VAC, 50/60Hz; 25 to 40VA