KPM KC9 Optical Consistency Transmitter
Testing and industry-specific instruments

Optical consistency transmitters are typically the only choice for measuring total consistency below 2 percent Cs. ABB offers the latest design in optical consistency transmitters covering the widest consistency range for inline and bypass installations. The variety of sensors utilizing different measuring principles ensures that each application can be covered cost effectively without compromising measurement accuracy.

Robust design in AISI 316 steel & sapphire
KPM KC9 sensors are constructed of a stainless steel measurement cell and sapphire glass lenses to withstand the harsh process environments.

The display unit and sensor have protection class of IP65 (Nema 4X) and do not need protective housing to withstand difficult conditions in stock preparation or the wet end.

Inline Sensors
The KPM KC9 inline sensors can be installed directly to process pipe by using Sandvik NS40 process coupling. The sensor is available with an optional retraction system, enabling sensor maintenance without interrupting the process.

The compact and lightweight design ensures that installation locations for optimal performance can be utilized.

The inline consistency sensors are developed to measure single component fiber consistency in liquids from 0-14 percent.

Bypass Sensors
The KPM KC9 bypass consistency sensors are developed to measure consistency in liquids from 0–5 percent. KPM KC9-25 and KPM KC9-50 are suitable for single component fiber consistency and KPM KC9-25 LC for very low consistency applications. KPM KC9-P is ideal for multicomponent stock total consistency measurement. KPM KC9-A includes additional ash consistency measurement that enables accurate monitoring and control of ash content.

The sensors have an application-specific measurement gap between lenses, ensuring accuracy and low maintenance requirements.

Remote display unit for operation
The sensors are pre-calibrated for quick and easy start up. After installation, one-point adjustment is performed against a laboratory test. With multicomponent stock, comprehensive modelling is performed to achieved high measurement precision.

The display unit has four selectable calibration models for applications with varying furnishes.