OC Optical Consistency Transmitters

provide solutions to manage and control consistency, in the best possible way, without compromise – Flexible optical transmitters, without wear parts, for a wide range of applications from the KPM product group.

In-line and by-pass sensors
KPM offers full range of optical consistency transmitters for in-line and by-pass installations. Optical consistency transmitters are the best choice for range 0–2 %Cs. The sensor measures fibers and particles that are greater than 0.88 µm, such as stock from 0.001 % (10 ppm) to 15 % (depending on type of stock). The measuring principle is based on the ability of suspended particles to absorb and reflect/transmit NIR-light (near infrared), which is pulsed at 880 nm.

Robust design in SS316 steel
The OC sensors are constructed of 316SS with sapphire glass lenses, to withstand the most aggressive media. The sensor pressure class in PN25 for by-pass sensors and PN16 for in-line sensors.

OC In-line Sensors
The OC 20/70 can be installed directly to the process pipe in a similar way as blade type consistency transmitters.

OC By-pass sensors
The OC by-pass consistency sensors are developed to measure fiber consistency in liquids from 0.001–2 %. The OC P03/25 has polarizing measurement making it suitable for paper machine retention measurement, where there are variations in ash content.

The sensors have a 20 mm (OC P03/25 has 3 mm) gap between the lenses, which produces a self-cleaning effect due to the increased velocity. The OC 20/25 has a special meter 20/25-LC for mill effluents and OC 20/25-K for white liquor dregs measurements.

Remote display unit
The sensors are pre-calibrated for quick and easy start up. After installation, one-point adjustment is performed against a laboratory test. The OC display unit has four selectable calibration curves for applications with varying furnishes.