

Suspended Solids Density Meter: Maintain Your Concentration!

Markland's Meter monitors slurry and sludge concentration in pipes, clarifiers and tanks, and automates sludge removal. It helps industrial plants optimize dry/liquid dosages, program underflow pumps to shut off before sludge density becomes too thin, and adjust polymer dosages and filter press variables for enhanced dewatering.

This process control instrument uses the inherently safe attenuation of non-radioactive ultrasound (no permits/no approvals needed) to provide real-time readings of percentage suspended solids density, in pipes, including re-circulation loops, and clarifiers, including lamellas. Readings are not affected by the colour of particulates or fluid. It may offer early awareness of breaks in filtration material, when used to measure filtrate concentrations.

A sensor on the Meter (available as an inline pipe spool-piece or throw-in style probe) transmits and receives the ultrasound waves. It sends out a pulse of sound, receiving a strong echo and reading zero when the solution is clear. When particles are present in the liquid, they absorb or deflect the sonic energy, the echo is reduced in amplitude, and the meter reads the slurry/sludge density. The output signal, sent to a computer/control system, provides continuous %SS readings and enables calculation of mass flow rate.

The inline pipe spool-piece sensor is non-intrusive. The throw-in style probe may also be used as a single point interface level detector, allowing operators to program de-sludge pumps to turn on when the rising sludge blanket comes in contact with it. Each style is simple to install, calibrate and clean.

Equipped with a continuous awareness of slurry and sludge densities, at critical points in the industrial process, plants are better able to make adjustments and program control systems to improve effectiveness and efficiency, qualities which translate into material and energy savings.

Contact:

Scott Langstaff

markland@sludgecontrols.com

305 Armstrong Avenue, Unit 9,
Georgetown, Ontario
L7G 4X6

Phone: 905-873-7791

Toll-free (NA): 1-855-873-7791

www.sludgecontrols.com