

OVER 50% POLYMER REDUCTION USING THE kajaaniTS!



Myrtle Beach WWTP reduces polymer usage utilizing the kajaaniTS solids measurement.

Background

Grand Strand's Myrtle Beach WWTP treats up to 17 MGD and discharges the treated effluent to the Intracoastal Waterway and Waccamaw River. The plant uses several processes to reach a high degree of treatment for discharge including measuring solids for polymer optimization. In mid-2007, a kajaaniTS was installed prior to the polymer injection site to control the polymer feed system based on solids content.

Installation and Results

For lack of having an accurate and reliable solids measurement, the previous method of control for polymer dosing was taking a solids sample and calculating an average polymer dose and running the feed line regardless of how solids changed. Since maintaining floc to the gravity thickeners is essential, this "worst case" method used excessive polymer. Heavy polymer use also caused numerous clogs in the thickener withdrawal lines downstream.

Improvements

Reduced Polymer Usage

- Pre-kajaaniTS - 389 gpm sludge flow with a polymer dose rate of 1.5 gph
- Post-kajaaniTS - 405 gpm sludge flow with a polymer dose rate of 0.425 gph

Process Improvements and Reduction in Maintenance Costs

- Reduction in Thickener line clogs
- Maintain Floc to Thickeners

For information on how you can optimize your process with the kajaaniTS, the most accurate and reliable solids measurement, please contact Craig Hannah at Metso Automation (678) 772-9584, craig.hannah@metso.com.

The information provided in this bulletin is advisory in nature, and is intended as a guideline only.
For specific circumstances and more detailed information, please consult with Metso Automation.

Metso Automation, Flow Control

Europe, Levytie 6, P.O.Box 310, 00811 Helsinki, Finland. Tel. int. +358 20 483 150. Fax int. +358 20 483 151

Europe, 6-8 rue du Maine, 68271 Wittenheim Cedex, France. Tel. int.+33 (0)3 89 50 64 00. Fax int. +33 (0)3 89 50 64 40

North America, 44 Bowditch Drive, P.O.Box 8044, Shrewsbury, Massachusetts, 01545-8044 USA. Tel. int. +1 508 852 0200. Fax int. +1 508 852 8172

Latin America, Av. Independência, 2500- Iporanga, 18087-101, Sorocaba-São Paulo, Brazil. Tel. int. +55 15 3235 9700. Fax int. +55 15 3235 9748/49

Asia Pacific, 238A Thomson Road, #25-09 Novena Square Tower A, 307684 Singapore. Tel. +65 6511 1011. Fax +65 6250 0830

www2.metsoautomation.com

