CASE STUDY - North America
DEWATERING OPTIMIZATION FOR PAPER MILL SLUDGE

ASSETS WASTE WATER

CH-1755

BACKGROUND

A large dewatering operation, processing sludge generated by an integrated mill with a production capacity of over 775,000 tons of paper per year.

SITUATION

- Wide variability in the primary to secondary sludge ratio forced the need to change processing between the more efficient screw press and less efficient belt press
- Inefficient chemical mixing was resulting in less than optimum dewatering performance and chemical use
- Large quantities of drive water were being used to aid in polymer dilution and mixing

SOLUTION

- **Chemistry:** NALCO 9913 FLOCCULANT
- **Expertise:** Industrial Technical Consultant Support, Local Account Management
- **Technology:** FLOCMASTER™ Mixing Technology

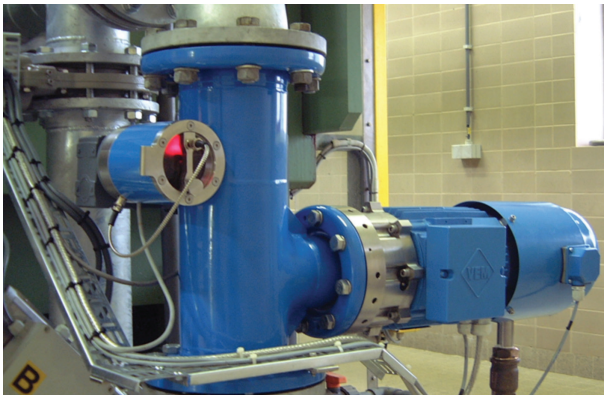


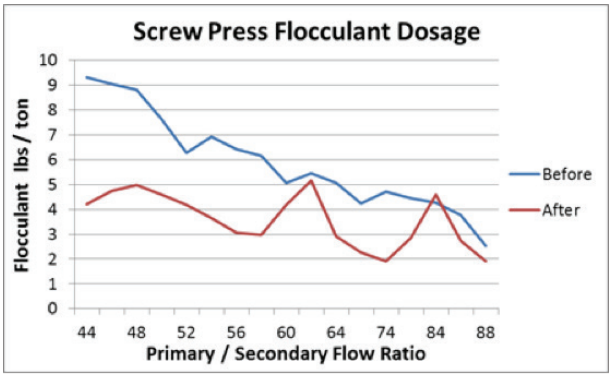
Figure 1 – *FLOCMASTER Mixer Installation*

eROI™ QUANTIFYING AND MONETIZING OUR VALUE

- Increased screw press throughput of 5% and reduced belt press use by 21%
- Optimized chemistry by 71,000 lbs/yr (47%)
- Reduced fresh water consumption (drive water) of 19 million gallons per year.
- Improved solids capture – Filtrate turbidity reduction of 21%
- Improved floc formation and increased cake solids of 1.4 points (23%)

Annual Customer Savings: $211,000

eROI is our exponential value: the combined outcomes of improved performance, operational efficiency and sustainable impact delivered through our services and programs.



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