

BARNES® SITHE - A cost saving solution to your clogging problems

Barnes® Sithe chopper pump solves clogging by macerating solids from screens at waste water treatment plant in Hamilton, AL

In a nutshell

SITE:

Hamilton, AL
The city sewer district consists of 19 lift stations that cater a population of 6500. It's treatment plant has a capacity of 1.5 million gallons per day.

APPLICATION:

Solids caught by the treatment plant's screens are discharged into a sump. Water from these solids is conducted into a lift station which is also exposed to rainwater and other infiltration.

PROBLEM:

The station has high solids content and the City had to pull out pumps monthly to unclog. Typically rags, hair, mop heads and debris were clogging the pumps.

SOLUTION:

Crane Pumps and Systems' developed and provided a 7.5 HP Barnes® Sithe chopper pump with a mono-vane impeller. The pump has been chopping all solids and hasn't clogged once in over 8 months of operation.

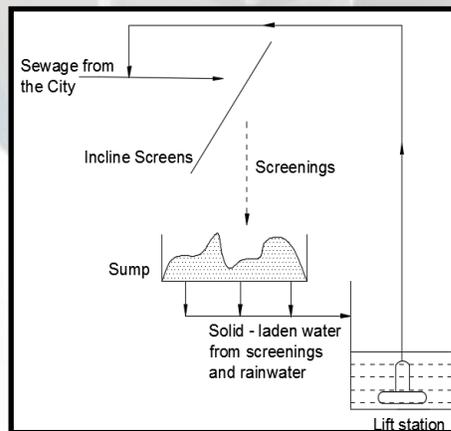
Lift station at the waste water treatment plant in Hamilton, AL has an unique application. Sewage from across the city is pumped on to incline screens in the treatment plant. Water from the screenings along with rainwater and debris is collected in a sump. This water is again pumped back to the screens in a closed loop.

The station evidently has high solid content. City had to de-rag the non-clog pumps every month. These pumps were unable to handle solids like mop heads, rags, greasy hairballs, plastics and debris.

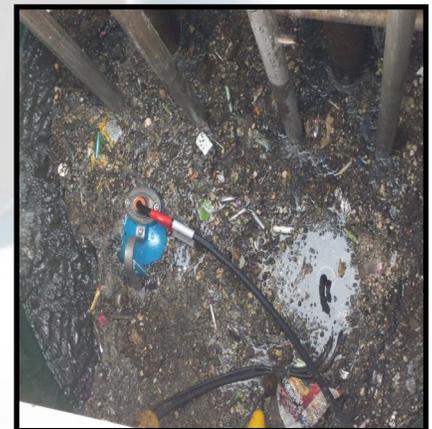
Ron Hylton, treatment plant's supervisor, approached Pump & Process Equipment (PPE) for a permanent and cost effective solution for his clogging problems. PPE and Crane Pumps and Systems worked together and provided a Barnes® Sithe 4SCMD 7.5 HP chopper pump in June 2017.



Solids-laden water entering the lift station



Process Flow, WWTP Hamilton, AL



Solids in the lift station

"I was impressed by the looks and design of the pump. At present, Sithe is doing a great job running by itself."

- Ronald Hylton, Wastewater plant maintenance Supervisor

It's been 8 months since Sithe's installation and it hasn't clogged even once. The first time it was pulled was for a 6-month regular checkup. Sithe's stainless steel heat treated blades were found in pristine condition and had retained sharpness. It continues to operate as the lead pump in the station obliterating even the biggest and toughest of solids.