

Ragless Impeller Installation

RL-3

Comparison of the Performance of the New RL-3 Impeller to the HE-3 Impeller in a Water Treatment Application

Plant Information:
Pinellas County Florida
South Cross Bayou WRF

Application Information:

- Anoxic Basin: Start-up in 2000
- Basin Dimensions: 40' long by 35' wide by 17' water depth
- Plant Flow: 21 MGD average

Agitators Compared:

- 5hp at 30 rpm unit with 94" ϕ HE-3 up-pumping impeller
- 5hp at 30 rpm unit with 84" ϕ RL-3 down-pumping impeller

HE-3/RL-3 Initial Installation

HE-3



RL-3



HE-3/RL-3 After 8 Weeks Operation

HE-3



RL-3



Summary

- Maintenance Benefits
 - Customer had to drain the basin and increase flow rate to other basins which required manual changes to the process
 - Outfitting personnel for basin entry and removal of fibrous material is eliminated
 - Disposal issues of fibrous material eliminated
- Mechanical Benefits
 - Increased up-time of your plant
 - Reduces load on agitator system such as gears, bearings, motor, shaft, and impeller blades
 - Reduced vibration and increased life of agitator
- Process Benefits
 - Increased process up-time and elimination of manual process changes
 - Elimination of fibrous material on impeller maintains top to bottom flow pattern which improves solids suspension and blending uniformity in basin
 - Reliable and consistent discharge within plant operating permit limits
- Application and Sales Support at Your Disposal
 - Local Sales Engineers:
 - www.chemineer.com/sales
 - Chemineer Main Office:
 - reachus@chemineer.com
 - 937-454-3200