

Revolutionizing Fluid Filtration

A Division of Advanced Separation Technologies

CentraSep Centrifuges Perform Better than Gravity Settling Tanks for Cleaning Process Fluids/Coolant

CASE STUDY: Gravity Settling Tanks vs CentraSep Centrifuge for Low Maintenance and Rapid ROI

PROBLEM: Many companies around the world have chosen to filter and recycle their processing fluids using settling tank systems, instead of a CentraSep Centrifuge. There are some very common myths about the performance, cost and ease of operation of a settling tank system that are being perpetuated by slick sales presentations, misleading results and the lure of a low cost. In reality, settling tanks have many issues that need to be better understood. The first is that settling tanks rely on gravity (only 1 G of force) to perform the separate of solids from liquids. This takes a lot of time, large volume tanks and valuable space in your plant. To get a settling tank system to perform faster, they rely on flocculation chemicals, balanced at a perfect level, to bind solid particles into larger, heavier particles. Managing the flocculant level is a critical and never-ending task that must be performed by trained and experienced operators. Too much or too little flocculant and the effectiveness of the filtration system is compromised, and it causes serious issues that can shut down the system and require the replacement of large amounts of fluid. This chemical-dependency

"Keeping the flocculant perfectly balanced in a settling tank system is nearly impossible, so they never perform as desired, and the operating costs, space requirements and excessive labor make them very expensive to operate."

on flocculant also has an impact on the quality and speed of a plant's production processes in various ways. Another major issue with settling tanks is that the resulting sediment pulled from the system is extremely wet and must be dewatered by placing it in large bags and hanging them to allow them to drip dry. Again, relying only on gravity (1 G of force) for this drying to take place, it takes a long time, eats up more valuable plant space and it is a very messy process. As you can imagine, everything described so far requires a lot of labor, and expense. The flocculation chemicals, large tank volumes of fluid to be replaced, disposable dewatering bags, higher disposal fees and additional labor, add up to an extremely high operating cost. Lastly, in many cases a settling tank system will be used for an entire plant's processing fluid, so when the system is down, the entire plant's production is also stopped.

SOLUTION: CentraSep centrifuges operate at an amazing 2,012 G's of force to rapidly and effectively separate solids from liquids with no flocculation chemicals and no dewatering bags needed. They require much less space, 1/3 of the tank volumes, minimal operator assistance and virtually no maintenance, sometimes operating for years with no service.

CASE STUDY RESULTS:

Settling Tanks vs CentraSep Centrifuge

Using Settling Tanks:

- Operate at only 1 G of force.
- Chemically-dependent on flocculant and maintaining a perfectly balanced system.
- Require experienced operator.
- Require lots of space, large volume tanks and dedicated, messy dewatering bags area.
- High maintenance and very expensive operating costs.

Using CentraSep Centrifuges:

- Operate at 2,012 G's of force.
- No flocculant, no dewatering bags, no continual balancing.
- Minimal operator assistance.
- Very low operating costs and minimal maintenance.
- Up-Time & Profits Increased.
- Costs & Maint. Decreased



Advanced Centrifuge Technology & Design

- Fully Automatic Operation
- Lowest Maintenance and Operating Costs (Media Free)
- Standard 316 Stainless Steel Construction
- Lifetime Warranty Available
- Extensive International Installations

CentraSep Centrifuges

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