

## Wastewater Treatment: Oregon Potato Company

Dissolved Air Flotation (DAF) installation critical for TSS, FOG & BOD reduction.  
Stuart Ward of *Process Engineered Water Equipment* explains system design...

### Facility Background

*Out with the old and in with the new!* Oregon Potato production capacity had overrun their worn out existing wastewater treatment DAF unit.

It had been installed years before and soon was over-loaded and needing replacement aeration pumps regularly while the manual controls were a maintenance



Deficient System

nightmare.

To discharge water the facility needed to meet permit guidelines for TSS, BOD and FOG. They had plans for continued expansion but needed a long-term improvement solution. The Maintenance Manager contacted Auquix.

### Solution Design

Auquix proposed a new larger **PEWE Nx<sup>2</sup>JEM AS-800** DAF unit constructed of stainless steel and utilizing **Rogue MAX RGT** aeration pumps.



Nx<sup>2</sup>JEM AS-800 DAF



The non-corroding welded stainless steel vessel appealed to management after previously experiencing oxidized brittle plastic. More appealing was the fact the new system fit within the same area as the old unit yet provided more than 4 times more treatment capacity. Better yet the regenerative turbine aeration quietly produced 20-30 micron micro-bubbles and ran without a hitch.

the surface of the DAF and are effectively swept by the neoprene and stainless skimmer system.

### Final Results

Oregon Potato received and installed the new system with onsite support from Auquix personnel. Upon commissioning the water started flowing and the new DAF simply "cruised". The system was fed polymer by a **PolyAccu Dose RGT** chemical station proportional to flow. This ensures the maximum insoluble solids capture and subsequent removal.

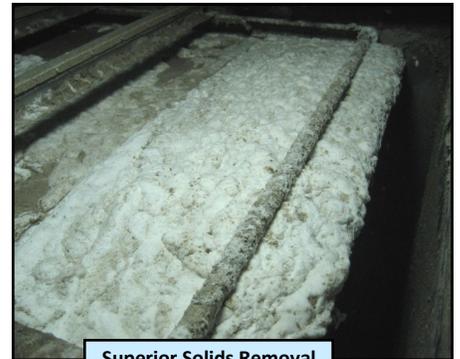


Operator staff commented on the fact that their sludge solids never looked so good. The solids evenly formed upon

the surface of the DAF and are effectively swept by the neoprene and stainless skimmer system.

### Pay Off

Mr. Walt Gerrard Maintenance Manager with many years of knowledgeable experience is very satisfied with the replacement DAF system.



Superior Solids Removal

The new PEWE DAF and ancillary polymer sub-system easily handle the plants wastewater process flow. The plant is now looking forward to increasing production without the former bottle-neck downstream. Discharge to the Port of Morrow meets and exceeds require-

ments.



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