

Wastewater Treatment: New upgrades increase production

capacity by a wide 4 times margin in a tight space. Stuart Ward of *Process Engineered Water Equipment, LLC* explains improved technology is key...

Case Study

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 overloaded and needing replacement aeration pumps regularly while the manual controls were a maintenance nightmare. See the captions below. To discharge water the facility needed to meet permit guidelines for TSS, BOD and FOG. They had plans for continued expansion but



Deficient System

needed a better long-term improvement solution. The Maintenance Manager first contacted Stuart Ward to solve the problems.



Pump & Control Nightmare

Sustainable Design

Stuart proposed a new larger **PEWE Nx²JEM AS-800** DAF unit constructed of stainless steel and utilizing **Rogue MAX RGT** aeration pumps. The non-corroding welded stainless steel vessel appealed to management after previously enduring the experience of oxidized brittle plastic.



Nx²JEM AS-800 DAF

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.

Oregon Potato received and installed the new system with onsite support. 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.

Final Results

Mr. Walt Gerrard Maintenance Manager with many years of knowledgeable experience is very satisfied with the replacement DAF system. The new PEWE DAF and polymer chemical system



Superior Solids Removal

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 requirements.





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