

Wastewater Treatment: Oil Water Separation

Edible Oil facility treats wastewater with Oil Water Separator and DAF System
 Stuart Ward of *Process Engineered Water Equipment* explains system design...

Case Study

Adams Oils is a processor, marketer and toll manufacturer of specialty vegetable oils situated in Arbutle CA for the past 25 years. Founded in 1981 to supply the European & Domestic their customers include the food manufacturing, cosmetic and pharmaceutical industries. Adams



Big Water Issues

has evolved into America's largest supplier of organic expeller pressed oils all of which are GM Free. Along with growth came increasing wastewater discharge issues. Antiquated systems and an overloaded lagoon became a high priority.

System Solution

PEWE supplied a complete new wastewater and product recovery system. The design utilized the innovative **OZ** oil/water separator and unique **HD²XLRator** DAF technology for oil removal and recovery. The system was engineered with state of the art PEWE **Command Control™** panel. Custom equalization/pH tank, pumps and **PolyAccu Dose** chemical feed sub-systems completed the package treatment plant.



Oil Separation with OZ

Controlled Operation

The wastewater first enters the **OZ** oil/water separator where free oils readily are collected at the surface without the aid of chemistry. Next the water flows to the equalization tank for balance and pH adjustment. The widely varying discharge flows necessitate a robust system. The water is fed from the EQ tank to the **HD²XLRator** DAF for final clarification. A coag and polymer aid the process. Also a special feature of the control package is



OZ & HD²XLRator DAF

the **TSS Optimization** system option selected by Adams during the purchase. This unit automatically monitors the water influent and effluent TSS while automatically adjusting the chemistry to match the current water condition. High oil conditions are dealt with on the fly.

Final Results

The much anticipated start-up day finally arrived. This was after a rigorous shake-down process with PEWE Technical



DAF Solids & Effluent

Services personnel. The multi-day event assured a smooth transition to the new system. Mr. Rich Lathrop, Engineering Manager for Adams, is gratified it all came together so well, the water is the best ever and valuable oil is recovered.



Success Realized



Quality Liquid/Solid Separation Systems
 Screening, Gravity, Flotation, Dewatering & Accessories

SuperSkreen™
Dueler™ DAF
HD² XLRator™ DAF
Poly-E²™ Economy DAF
T²-Max™ Thickener
OZ Oil/Water Separator™
PolyAccu Dose™
DeWater Systems™

Test Your Water
 with the
HD² XLRator™ Pilot

Reduce
BOD
TSS
COD
FOG

PROCESS ENGINEERED
WATER EQUIPMENT

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