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The scalping shaker removes oversize and debris prior to the dewatering process.

Employees of American Earth Movers monitor operation of a sand recovery system fed by a 10-inch hydraulic dredge at a recreational lake rehabilitation project in Palm Beach County, Florida. Three sand/desilt units removed the bulk of the material, and the fourth, on the far right, handled finer material. Story on page 8.

ON THE COVER

Palm Beach County Chain of Lakes Project Benefits from DEL Corporation Fast Dewatering System



At a coal fines recovery project in Kentucky, the project owners look over a DEL TCW-3000 dewatering system set up in tandem with a smaller TCS-1500 system, newly manufactured for the project, which was completed in fall, 2006.



The desander produces a dry product that can be stockpiled immediately.



A closeup of the G-Max cones.



The 10-inch dredge used by American Earth Movers to feed the dewatering system at about 2500 gallons per minute of a slurry containing 15 percent solids.



Stockpiled material to be used in the park. The dredge and dewatering system processed about 80,000 cubic yards of sand, at times at a rate of 100 cubic yards per hour.



In this aerial view of the project in Florida, a mechanical dredge is digging into a barge. The Del separator system is visible on shore about midpoint in the photo. Almost 80,000 cubic yards of material was dredged and dewatered in the course of the project.

employed a Del TCW-3000 unit. American Earth Movers was contracted to dredge the recreational lake and dewater the sands for use in the park area.

The Total Clean System consisted of one scalping shaker (see cover) and four desand/desilt units mounted on the v-tank. The patented flow process through the system allows large volumes of sand and silt to be removed at high flow rates. On this particular project, the first three desand/desilt units handled the bulk of the sand load, while the fourth unit handled the finer material. The total amount of sand recovered was approximately 80,000 cubic yards over a five-month period, working one shift per day, and six days per week.

The contractor used a 10-inch hydraulic cutterhead dredge to feed the dewatering system with slurry containing about 15 percent solids at 2500 gallons per minute. Pipeline length on the project ranged from 50 feet to 1000 feet. In some instances, the dewatering rate was more than 100 cubic yards per hour. The effluent from the Total Clean gravity flowed through a 10-inch pipe back to the lake. No additional treatment of the effluent was required on this specific project.

You can see a short five minute video of this project by visiting www.deltank.com, or emailing dan@deltank.com for a copy on disk.

Two big advantages of DEL's system

are the simplicity of set up and ease of operation. It takes about half a day to set up the TCW-3000 system, and only requires one person to operate. The smaller systems only take a couple of hours to set up. The TCS-1500 is capable of handling 1500gpm, and the TCW-3000 is capable of handling 3000gpm. These rates are based on sand slurries. Slurries with high volumes of silts may require reduced flow rates in order to assure maximum solids removal. At these flow rates, the system can



Arriving on site, the dewatering system consisted of one scalping shaker and four desand/desilt units mounted on a v-tank.

produce 75 to 85 percent dry solids, recovering material as small as 400 mesh (37 microns). Multiple units can be used in series or parallel to achieve maximum solids removal at flow rates in excess of 3000gpm.

DEL Tank and Filtration System is a division of DEL Corporation, and specializes in the rental, sales, and manufacturing of dewatering, solids control and material handling equipment.

Since 1979, when the Kulbeth family founded DEL Corporation, it has become an international supplier of turnkey systems for dewatering, solids separation, mixing, and various other types of material handling projects. The diverse equipment line makes it possible for clients to “one-stop-shop”, eliminating the need for multiple vendors, and conserving valuable time and capital.

The product line includes the patented Total Clean Systems and Multi-Screw V-Tanks, as well as mix tanks, agitators/mixers, filter presses, DELineator linear motion shakers, and custom fabrication.

DEL's rental fleet consists of:

- TCW-3000, 3000 GPM Total Clean Systems
- TCW-1500, 1500 GPM Total Clean Systems (wheel mounted and skid mounted units available)
- Filter presses (up to 200 cubic foot high pressure available)
- DELineator shakers (three and four-panel)
- Mix tanks
- Closed loop systems for the oilfield
- Cuttings tanks
- Pumps
- Centrifuges

Del's has grown into many industries, including environmental, construction chemical/petrochemical, pulp and paper, mining, oilfield, dredging, governmental/municipal and power plants.

The company recently launched a new division – DEL Solids Control Services (DSCS). This new division brings more than 40 years of experience to the drilling industry, specifically closed loop projects in North America. DSCS provides complete turnkey operations for solids control and closed loop operations for the oilfield market.

ABOUT THE AUTHOR:

Dan Baker has been with DEL Corporation for two years, and prior to that worked for a small dredging company in Kentucky. He holds a bachelors degree in Computer Science from Eastern Kentucky University. “I enjoy marketing and sales a lot more than computer programming,” he told IDR.