

Village of Maybrook, NY • Sludge Dewatering System



Facility Contacts:

DPW Superintendent: Matt Thorp 845-427-2222
Consultant: Eustance & Horowitz - David Knapp, P.E.
Installing Contractor: Blue Heron Construction

Project Summary:

The Village of Maybrook WWTP process consists of primary clarification, trickling filters, and secondary clarification. Primary sludge and trickling filter humus is anaerobically digested. The belt filter press dewateres the sludge eliminating the need for sludge drying beds.

The belt filter press discharge cake solids are consistently in the 25 to 30 percent range, which is considered to be excellent performance for this type of sludge. This project is resulting in substantial savings in dewatering operations for the Village. Dewatering equipment is located in the former maintenance room. The compact footprint of the BDP Industries 2VP vertical machine allowed for the complete system to comfortably fit in a 20' by 22' space.

Special thanks to Matt Thorpe for his support of this project. Matt's dedication to the Village is clear - he truly strives to make decisions that benefit the Village and its residents. "This project illustrates what happens when technical know-how, the right equipment and strong personal bonds all join forces to achieve a common goal. Koester Associates and BDP Industries are pleased to be a part of this successful economical upgrade for the village of Maybrook."

Belt Filter Press Performance Data:

Percent Feed Solids: Ranges from 3.5 to 6.0 percent
Sludge Throughput: 30 to 70 gpm wet sludge;
600 to 1,000 dry pounds per hour
Cake Dryness: 25 to 30% discharge solids
Polymer Dosage: 6 to 10 lbs/dry ton

New Technology Features of the Model 2VP Belt Press

- 1.0 Meter 2-belt Machine - Economical machine for small dewatering operations
- Variable Speed Inlet Flocculator - Evenly distributes sludge over gravity deck
- Master Control Panel and VFD - Complete central control of all dewatering equipment
- Hydraulic Power Pack - Reliable, low maintenance belt tracking and tensioning
- Vertical Pressure Section - Eliminates Cake Rewetting
- Tubular, Hot-dipped Galvanized Frame - Structural Rigidity and Corrosion Resistance
- Curved Wedge - Eliminates Squeeze out and increases capture.
- Operator Level - No access platforms, stairs or handrail req. Ease of operation and maintenance.