



**SCHWING**  
**AMERICA INC.**

## Material Handling Systems

MATERIAL HANDLING

- Sliding Frame/Push Floor Discharge Systems
- Alkaline Stabilization/Pasteurization - Class 'A'
- Drying - Class 'A'
- Piston Pumps



# Design advantages only from **SCHWING**

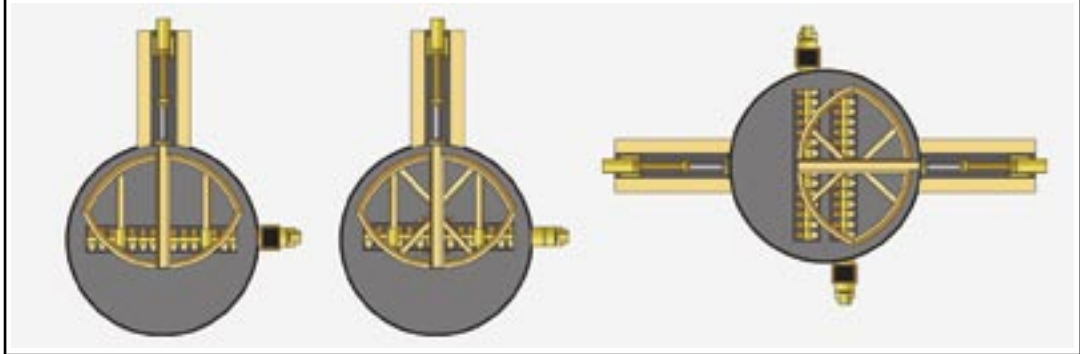
Schwing America, Inc., one of the leading manufacturers of storage, conveyance and pumping of municipal and industrial materials presents our proven line of Sliding Frame and Push Floor storage and handling systems.

Available in circular or rectangular design, the Sliding Frame

/ Push Floor technologies provide low cost methods to store large volumes of material while awaiting final disposal.

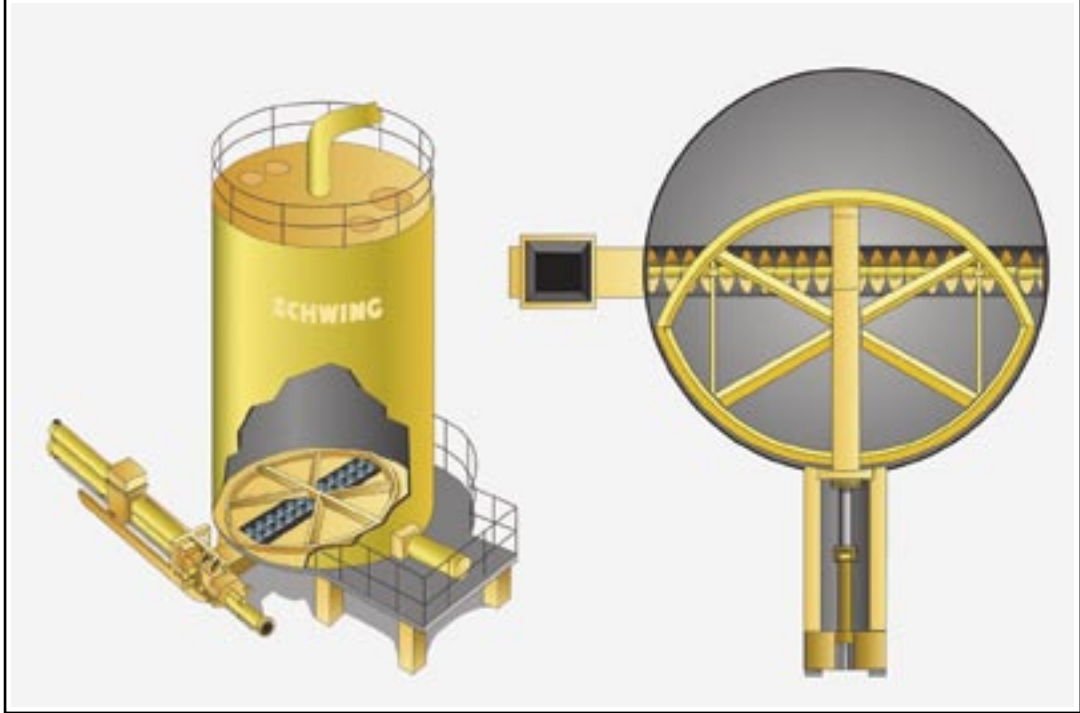
The sliding Frame silo is a simple machine consisting of either one or two hydraulic cylinders driving an elliptical frame that reciprocates across the silo floor. The cylinder action

pushes and pulls the materials towards the silo center breaking material bridging; the material then falls into a metering screw conveyor for discharge into a conveyor truck, or Schwing pumping systems.



**Features and benefits of Sliding Frame dischargers:**

- Uniform drawdown of material, which allows for full utilization of available space.
- Vertical walls of silo and frame eliminate possibility of arching/bridging.
- Flat bottom of silo reduces minimum height clearance required, while maximizing storage volume.



**Municipal Applications:**

Sliding Frame silos and Push Floor bunkers are excellent design selections for the storage and conveyance of municipal biosolids and serve three primary roles in wastewater treatment plant design.

A silo can be integrated into the process stream to equalize surges in solids production and subsequently meter cake to final disposal. Large diameter storage silos are useful for truck loading, and finally, both Sliding Frame and Push Floor designs are effective as receiving stations used to accept sludge hauled in from other facilities. Ultimately, the storage volume of the silos and bunkers dictate the plant's flexibility in disposing of the solids.

The Push floor rectangular bunker design consists of a series of hydraulically driven push frames (or ladders) that reciprocate along the bunker floor. Each push frame is located on the bearing beams running the length of the installation; they terminate at a cross beam to which the hydraulic cylinders are attached. The

cylinder action pushes or pulls the material towards one end or the center of the bunker, depending upon design.

The Push Floor bunkers are generally designed as truck receiving stations.

In comparison to traditional live bottom technology with multiple

drives and gearing, the simplicity of the hydraulically actuated Sliding Frame and Push Floor designs drastically reduces maintenance requirements.

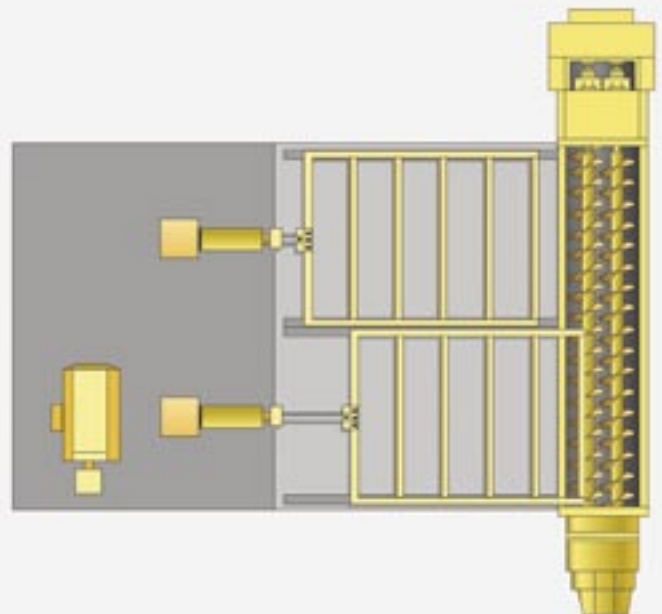
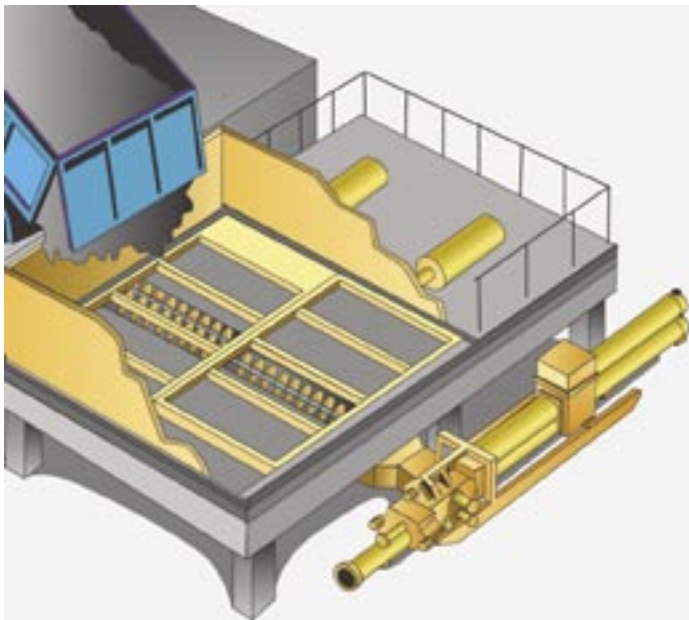
**Industrial Applications:**

In addition to extensive municipal applications, Schwing's Sliding Frame and Push Floor technology has been proven on a variety of bulk handling processes; including coal dust, wood chips, compost, gypsum and industrial plant sludges.



**Features and benefits of Push Floor dischargers:**

- Can be located at grade for truck receiving installations
- Can handle wide variety of bulk solid materials with different shapes and characteristics.
- Wide range of sizes to accommodate job requirements.



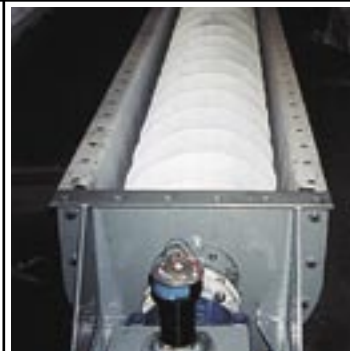


With over 25 years of US based manufacturing, engineering and service, Schwing America is proud of our history in the municipal wastewater industry. Schwing started within the industry as the manufacturer of the world's finest cake pump and maintains that tradition today. To complement our pumps we added metering systems, automated controls, sludge storage, truck loading/receiving systems and conveyors to our product line. As a result of this approach and extensive support of our products, we are today one of the leading suppliers of biosolids handling systems in North America. Our fully integrated systems offer our customers a well-engineered, low risk solution to their biosolids handling needs.

**System Solutions For Your Material Handling Requirements**

**We Design and Build**

- Sludge cake pumps
- Multi-screw live bottom discharge systems
- Conveyors
- Class A thermal dryers
- Class A chemical stabilization
- Admixture storage, metering and mixing
- Truck loading and receiving stations
- Automated control systems
- Piping and valves
- Maintenance and operation contracts
- Turnkey facilities

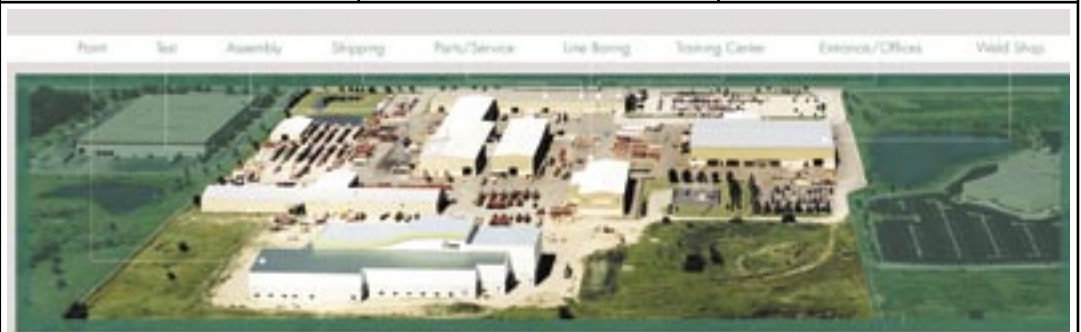


To address the expanding market demand for single source Class 'A' EQ system solutions, Schwing as added premier products that produce Class 'A', allowing us to offer a single point system supply for the entire biosolids process and conveyance train from dewatering to final distribution.



**MADE IN THE U.S.A.**

Schwing's engineering, manufacturing, training schools and national service organization are all based within our state-of-the-art facility in White Bear, Minnesota. Visit our factory and see why Schwing craftsmanship really matters to your success.



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