Sliding Frame
Storage Systems

SCHWING BIOSET

Truck Loading

Truck loading sliding frame silos can be designed for nearly any capacity and discharge configuration. Whether used as the primary means for material to leave the plant or as an emergency bypass to the primary system. Sliding frame silos provide plant operators the flexibility they need to manage ever changing plant operations. Equipped with optional odor and splash control hoods, the operational simplicity and minimal maintenance requirements of sliding frame technology are appreciated by both operators and mechanics alike.

Features and Benefits of Truck Loading Silos

Superior structural shape compared to traditional live bottoms, that requires less steel and in turn lower fabrication costs. A key design feature are the vertical silo walls which eliminate the possibility of material bridging or arching.

Silos and piping can be insulated and heat traced for use in cold weather climates.

Single or multiple discharge points allow for even loading of any trailer. Odor control shroud contains odors and potential biosolids splashing.

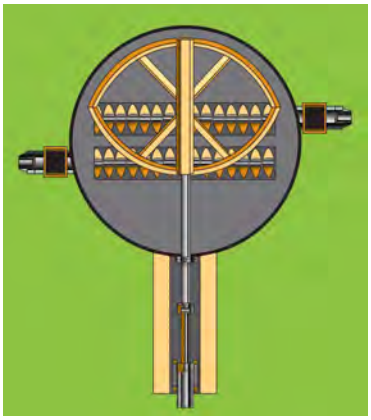
Clean systems with minimal housekeeping requirements. No external ribbing or bracing to collect water or spilled material as with traditional live bottom bin designs.

Intermediate Storage

Intermediate storage silos provide the ultimate in plant operation flexibility. Sized to store a few hours to a few days of material, intermediate silos allow a plant to store an inventory of material to feed systems that require constant material feed rates. They also allow for interruptions in material production without impacting the next treatment process.

Features and Benefits of Intermediate Storage Silos

Piston pump can be directly connected to the floor of the silo to maximize storage capacity and minimize overall height.



Silos can be equipped with multiple discharge locations to feed multiple processes or to provide redundant operations.

One compact hydraulic power pack can drive both the piston pump and sliding frame.

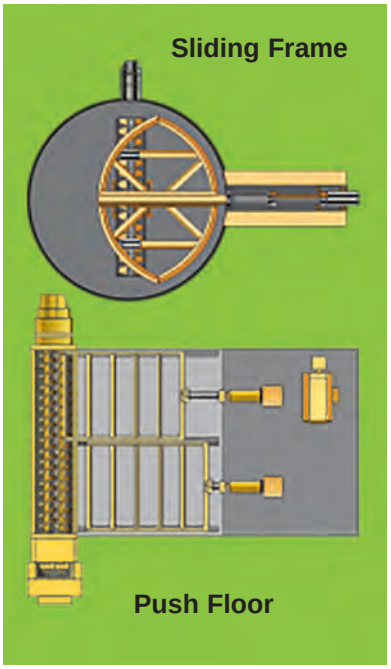
Vertical silo walls provide a low profile storage bin and eliminate the possibility of material bridging/ arching. First in/first out provides a uniform draw down of material.

Truck Receiving

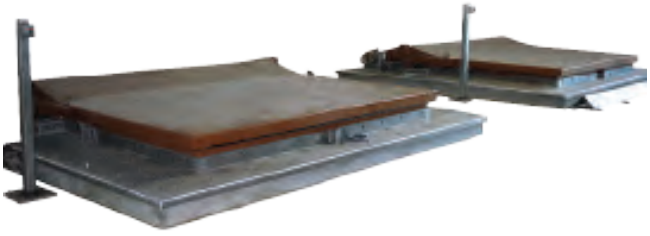
An alternate to the round sliding frame configurations is the rectangular Push Floor design. Commonly used for truck receiving applications the Push Floor consists of two or more hydraulically-driven push frames that reciprocate along the bunker floor. The cylinder action pushes or pulls the material toward either end of the bin or the center of the bunker, depending on site requirements.

Rectangular bunkers are ideal for truck receiving stations as they have straight edges that allow for single or multiple trucks to back up to and unload into the bunker. Side-dump trailers can also be accommodated.

Features and Benefits of Truck Receiving Bin



Can accommodate multiple trucks unloading at the same time. Either push floor or sliding frame design can be used. Can be located at or below grade.



Optional covers contain odors and prevent rain, snow and other tramp materials from falling into the bunker.

Multiple Uses

Schwing Bioset, Inc., the leader in storage, conveyance and pumping of municipal and industrial materials, presents our proven line of sliding frame and push floor storage handling systems. Available in circular or rectangular designs, sliding frame and push floor technologies provide low cost methods to store both large and small volumes of material.

The simplicity and reliability of Schwing Bioset's sliding frame live bottom silos has quickly made them a favorite of wastewater plants. Actuated by a small hydraulic power pack, the sliding frame eliminates the need for multiple gear boxes, spur gears, and other maintenance-intensive components common to traditional live bottom hoppers.

The hydraulic drive actuates a hydraulic cylinder to move the sliding frame across the silo floor. The leading beveled edge of the sliding frame cuts underneath the material as the flat surface on the interior feeds material into the extraction screws. This process breaks any material bridging or arching that may occur in the extraction screw feed zone.

The sliding frame reciprocates slowly during operation and only when material is being removed from the bin, allowing the stored material to be loaded into trailers or fed into pumps or conveyors. Schwing Bioset's design of the sliding frame removes the high wear components associated with live bottoms and replaces them with serviceable items external to the silo that require only basic maintenance.

Sliding frame silos and push floor bunkers serve three primary roles in the design of a wastewater treatment plant.

1. Truck Loading: Silos can be built for nearly any storage volume, discharge rate, and number of discharge points. This provides the ultimate in design flexibility to accommodate on-site storage requirements and greatly compressed loading cycles.

2. Intermediate Storage: Silos can be integrated into the process stream to equalize surges in solids production and provide an inventory of material that allows constant feed to drying, incineration, or truck loading stations.

3. Truck Receiving: Receiving stations can be designed using either the push floor or sliding frame design and allows utilities to accept solids dewatered at off-site locations.

A Name You Can Trust

Piston Pumps

Schwing Bioset, Inc. is the recognized leader in sludge pump technology. SBI units pump dewatered biosolids from Presses and Centrifuges with dry solids content up to 55%. These versatile pumps were born in the concrete industry, but have been used successfully in wastewater plants since the mid 1980's.

Fluid Bed Dryer

Schwing Bioset's fluid bed dryer offers a thermally efficient means of producing dust-free Class A biosolids. The automated system allows for unattended operation, and produces a very simple product to store, transport, and apply.

Screw Press Dewatering

SBI's Screw Press provides excellent dewatering capabilities with a system that is virtually maintenance free, and can be run unattended.

Bioset Process

Schwing Bioset offers the Bioset lime stabilization process, which is approved to EPA's 503 regulations. The Bioset process provides municipalities a low cost Class A system that is affordable to operate and easy to maintain.

Container Wagon

Due to plant layout restrictions, many facilities face the challenge of transporting solids from one loading / unloading point into and out of the process stream. The SBI Container Wagon system provides a variety of solutions.

Operating & Marketing Services

Schwing Bioset's partnership with Biosolids Distribution Services Inc. creates the unique ability to offer complete handling solutions with engineering, equipment, and distribution of Class A biosolids, responsibly offered by a single provider.

Contact Information

Wisconsin:
350 SMC Drive
Somerset, WI 54025
TEL 715-247-3433
FAX 715-247-3438
www.schwingbioset.com

Connecticut:
98 Mill Plain Ste. 2B
Danbury, CT 06811
TEL 203-744-2100
FAX 203-744-2837

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