



SCHWING

Mining and Industrial Pumps and Mixers



Featuring the innovation and performance expected from **SCHWING**

Count on Schwing equipment to perform as expected in harsh mining and industrial environments. Consult with our engineers early in the planning process and be assured of achieving production goals. As your single source supplier for piston pumps, twin auger feeders, mixers, screw conveyors, live bottom hoppers and integrated PLC controls, Schwing provides the engineering, fabrication and seamless integration of your material handling system.

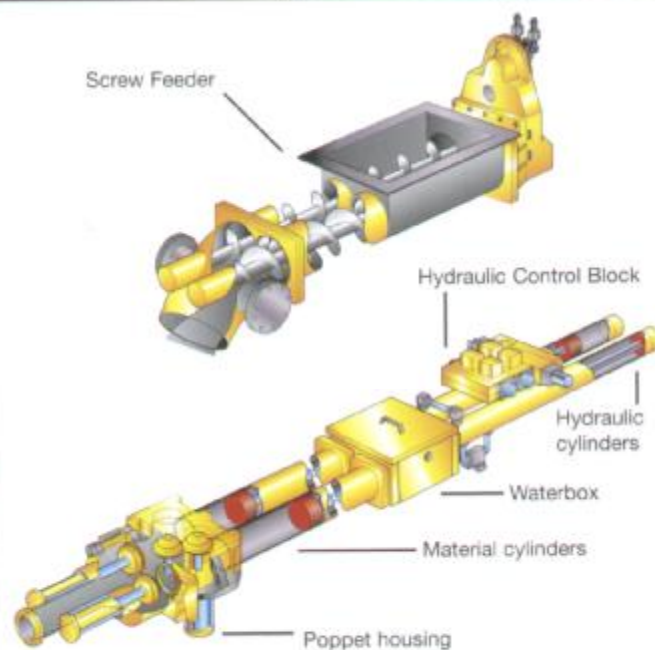
No guesswork, we have the experience to assure a successful system. After sale support is a Schwing trademark with technicians, parts and service strategically located throughout Germany and around the world. Let us streamline your material handling with proven products. Solutions, Value and Success, only from Schwing.



Power Pack/Controls:

Schwing designs both the power source and control system to integrate into your current facility. Specify your preferred PLC supplier and Schwing controls interface seamlessly.

Schwing electrical power packs incorporate the motor, hydraulic pump and oil reservoir in one compact package. Units can be skid-mounted with forklift slots or lifting eyes for easy portability. Stationary units simply mount in the most convenient area of your plant.



Pump Configuration

The pumps may be configured in either the Horizontal Plane (material cylinders sharing the same horizontal plane) or, for added flexibility, in the Vertical Plane (material cylinders sharing the same vertical plane) depending on floor space constraints, height restrictions or other equipment design and layout issues.



Feeders

For highly viscous materials Schwing will equip the pump with a twin-screw feeder that positively charges the material cylinders.

The screw feeder speed is controlled using Schwing's variable speed constant pressure control system that not only minimizes the electrical consumption, but also maximizes the pump filling efficiency regardless of speed or of the materials solids content.

By continuously operating at the peak filling efficiency Schwing maximizes the wear life of the poppet discs and seats and keeps your operation on-line, and profitable.

A Schwing pump is comprised of twin cylinders operated hydraulically. As material is fed to the pump, the suction of one cylinder on its backstroke pulls high solids material into the cylinder as the other cylinder pushes material out.

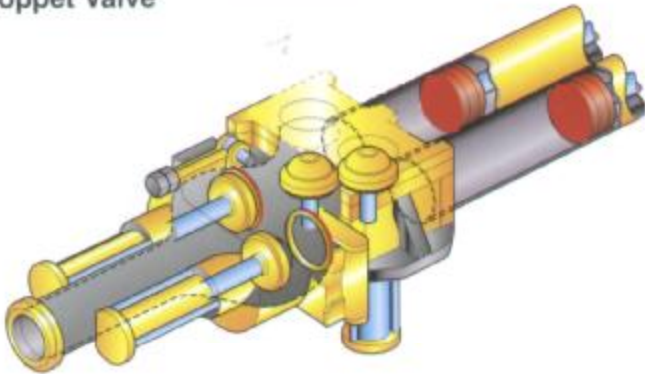
This smooth, slow stroking action provides near continuous flow. Hydraulic components are the same design used on thousands of Schwing concrete pumps.

This all-hydraulic system eliminates trouble prone electronic solenoids that can interrupt continuous operation. All-hydraulic translates to reliability in the 24/7 duty most pumps encounter.

An open circuit hydraulic system provides better cooling and 100 percent filtration of the oil for long hydraulic pump life. Our engineers have the experience to provide a cool running system utilizing separate oil coolers as necessary to assure an ample supply of fresh, cool oil to the system without increasing hydraulic pressure.

We Engineer Success

Poppet Valve



The most important component of the pump is the sequencing valve. The Schwing Poppet Valve is ideal for fine or compressible material. The Poppet Valve assembly isolates the pump from the material pipeline and prevents any harmful hammer effects from pipeline backflow. As the pump cycles, the cylinder that

is stroking forward to push material into the pipeline has its pressure poppet open and the suction poppet closed. The cylinder that is being charged has its pressure poppet closed and suction poppet open. This sequencing of the material cylinders continues to provide smooth discharge at the delivery point.

Rock Valve



In applications requiring pumping of harsher materials such as concrete and oil field cuttings, the patented Rock Valve is the method of choice. This is the valve used so successfully by the thousands of Schwing pumps serving the construction industry. This valve provides low maintenance, reliable service and can be equipped with carbide wear parts to extend rebuild intervals.



Dual Discharge

Pumps can be equipped with optional dual discharge to allow multi-port placement of grout or pastes. This allows the unit to simultaneously pump to two separate injection points.

CPR Wear Parts

Schwing's commitment to offering the very best in wear parts has led to the development of our proprietary CPR steel alloy. This alloy yields a tough and durable material suitable for highly abrasive slurries. Used as an option to our standard HRC 55 case hardened poppet wear parts, the CPR components offer superior wear resistance in tough applications.



Carbide Wear Parts

By manufacturing these essential Rock Valve wear parts from carbide, Schwing allows replacement intervals to be dramatically extended in even the harshest environments.



Flow Measuring System (FMS)

Schwing's flow measuring system operates on the principle of variable calculated filling efficiencies for each individual pumping stroke. As such the FMS measures the volume of material pumped to within +/- 5%.

Tunneling:


In tunneling, the smooth stroking and effortless shifting means low surge at the point of placement. Careful monitoring of the discharge pressures prevents over-pressurization of the tunnel annulus. Optional dual discharge and control blocks permit multi-port placement at varying outputs. Pumps and controls can also be designed to meet explosion proof requirements.



SCHWING solutions for storage and mixing technology

<p>Schwing Mixers</p> <p>These mixers represent an effective and reliable solution for continuous mixing processes, particularly mine paste backfill applications. The mixer produces mineral mixes, RCC, landfill sealings, heavy concrete, etc.</p>	<p>Twin Shaft Mixer</p> 	<p>Sliding Frame/Push Floor Storage Technology</p> <p>Sliding Frame truck loading, receiving stations, or intermediate storage silos incorporate vertical walls and flat floors to eliminate bridging and maximize storage capacity. These low cost, low maintenance storage vessels operate on a first-in first-out basis that allow for uniform draw down of material and accurately metered discharges. The hydraulically driven sliding frame reciprocates slowly on the floor of the silo breaking any material bridges while feeding material into the extraction screw.</p>	
<p>Notable features are reduced wear, simple maintenance and minimal energy consumption. The retention time of the mix can be adjusted to the respective requirements in order to obtain constantly homogeneous mixing results.</p>	<p>Continuous Mixer</p> 		<p>Tell us what you have...We'll pump it. From highly viscous pastes to high solids sludges, Schwing equipment has probably pumped it. As recognized leaders in pumping technology, Schwing can tailor a unit to fit your material handling needs.</p>
<p>Schwing manufactures both twin shaft batching and continuous mixers as well as single shaft continuous mixers. With years of mixing experience, Schwing can select the right mixer, and incorporate the right optional features to ensure peak performance and availability. The twin-shaft compulsory mixing principle of the Schwing Continuous Mixer guarantees a high mixing effect.</p>	<p>Single Shaft Mixer</p> 		<p>We pioneered the movement of materials through a pipeline and now our pumps are operating in the largest construction projects, municipal wastewater treatment plants, and mines throughout the world. In industrial settings, Schwing equipment is pumping calcium carbonate, food by-products, industrial waste, pulp in paper mills, coal slurries, and many other hard-to-handle materials. Mines have utilized Schwing pumps for years. Current installations include a Schwing-supplied mixer for batching tailings, integrated feeding systems and pumps for mine paste backfilling.</p>
<p>The counter-rotation of the parallel mixing shafts ensures intensive horizontal and vertical mixing. Binding agents, water, and different aggregates are dispersed homogeneously within the shortest possible time.</p> <p>Let Schwing engineer your entire system from batching, to feeding to pumping. Single source responsibility with Value, Solutions and Success.</p>			<p>We have a wealth of experience pumping material to incineration which may require dual-outlet pumps for even feeding. Send us a sample of your material...we'll analyze it and, if it is pumpable, Schwing has the system.</p>
			

Wherever you are...



... SCHWING Sludge Pumps with original spare parts and service are always close at hand!

When you buy from SCHWING you get the total package, reliable equipment, parts stockpiled throughout Germany and around the world.

The SCHWING trading and distributing organization in more than 100 countries with its finely meshed customer service network of subsidiaries, agencies, service centres, branches and production facilities gives you the good feeling of being supported and supplied with original

SCHWING spare parts in the best and fastest way.

Attend a SCHWING service seminar and get the education the factory service-men receive. Our unique dedicated training facility utilizes the latest computerized training techniques.

Cut-away components, troubleshooting of actual problems and computer animated hydraulic schematics assist in the learning process.

We do not want just your business, we want your complete satisfaction and success!

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Subject to modifications in the interest of technical progress. Details of the standard extent of supply are to be drawn from the offer.