

- Engineering
- Manufacturina
- Installation
- Support

KWS Environmental is a major U.S. based manufacturer of wastewater process equipment. We are unique in the scope of our capabilities to meet the needs of customers in this demanding industry.

Using our unsurpassed experience and expertise, we work closely with the operators and engineers to optimize the functionality and reliability of our equipment KWS

Environmental, as a full service supplier,

Environmental, as a full service supplier, provides engineered solutions, quality manufacturing, commissioning assistance and full maintenance/parts support after the sale... on time and with sensitivity to budget.

#### 1. Screw Pumps

- Eco-friendly solution for low solids, high volume applications up to 180,000 CFM.
- Low maintenance, low energy consumption and long service life.

KWS builds screw pumps up to 196" diameter holding the tight manufacturing tolerances

necessary for an efficient design. Screw Pumps can also be rebuilt to original equipment manufacturer's tolerances.



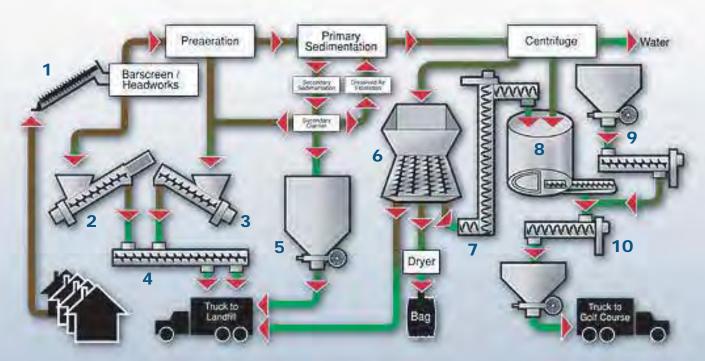
- Reduces the overall volume of screenings up to 75%.
- Reduces debris hauling costs.
- Product is dryer and more manageable with lower odor and bacteria count.

KWS offers a compact, low cost design with volumetric capacities up to 120ft<sup>3</sup>/hr. or may be custom designed to fit your specific needs.





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#### 3. Grit Washers/Classifiers

- Washes and dewaters, greatly reducing the volatile organic and moisture content.
- Separates excess water and reduces the putrescent nature.

KWS Grit Washers can be configured with single or multiple cyclones to process and compact pumped grit slurry at a feed rate of 5 p.s.i. to 20 p.s.i. Concentrated grit is discharged into the classifier for separation, washing and dewatering. KWS fabricates with abrasion resistant materials including ceramics, stellite, tungsten carbide and AR plates.

### 4. Shafted and Shaftless Screw Conveyors

• Low cost, low maintenance solution for conveying difficult wastewater residuals.

KWS builds screw conveyors of stainless and carbon steel construction. They may be designed to incorporate abrasion resistant linings of materials such as ceramics and high-density plastics.

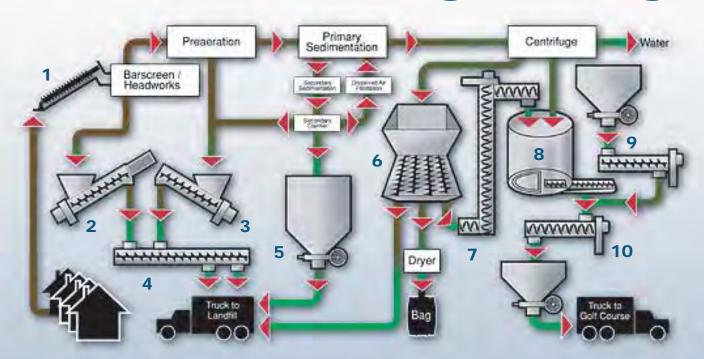
### 5. Storage Bins/Gates

- Low cost solution to control the discharge of difficult solids.
- Very low maintenance bin/gate or bin/gate with vibrating bin discharger.
- Metered or non-metered.

KWS builds robust gates that can limit or eliminate troublesome leakage and material build-up, common in wastewater processing. They are available in open/close or infinitely controlled operation for product metering.









#### 6. Bin/Live Bottom Dischargers

- Required for buffer capacity between continuous and non-continuous wastewater treatment plant processes. (i.e. Dewatering and truck-loading.)
- Provides storage and extraction of dewatered material.

KWS has unparalleled experience in supplying fully integrated truckloading systems. KWS engineers develop equipment especially designed and manufactured for the unique characteristics of wastewater plant residuals.

### 7. Shafted and Shaftless Vertical Screw Conveyors

- Cost-effective, compact and low-maintenance.
- Alternative to cake pumps as a means of addressing difficult plant routing.

KWS shaftless vertical screw conveyors are engineered to provide solutions to your unique plant layout.

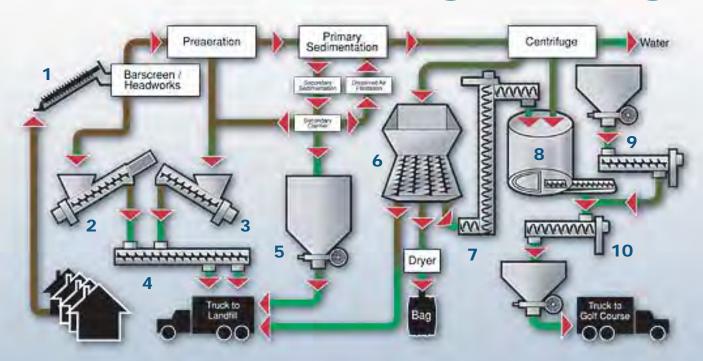
### 8. Cylindrical Silos/Sliding Frame Dischargers

- Cost-effective and space efficient alternative to typical rectangular bins.
- Sliding frame system allows the use of a flat floor on the bin.
- · Acts as a combination "bridge-breaker" and a means of directing solids to an extraction screw conveyor and/or gate.

KWS is one of only a very few companies with the applications knowledge and specialized manufacturing capabilities required to design and manufacture this system for wastewater solids. We understand the unique issues to be dealt with in designing and building equipment compatible with many types of storage vessels. We build silo extraction screws, live bottom screw assemblies based on shafted, shaftless, ribbon, paddle or a combination of designs to optimize performance on a specific application.



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#### 9. Lime Stabilization Systems

KWS understands EPA 503 regulations regarding stabilization of dewatered solids and builds complete stabilization systems from admixture delivery screw conveyors to product storage.



#### 10. Mixers

- Offers efficient mixing of wastewater solids and admixtures.
- Provides recirculation to coater stream in a drying or stabilization process.

KWS designs and builds paddle, ribbon, and plough style mixers and will select the right equipment for your application. Ensured through the use of a pilot plant, KWS can simulate the application and analyze the projected full-scale results.

## Teamwork from Start to Finish. KWS.









