



GRAVISAND® FILTRATION SYSTEMS DAVCO™ FILTRATION SYSTEM TECHNOLOGY



The Gravisand® filtration system features a non-segmented underdrain, backwash shoe, and indexing backwash.

ENHANCED WASTEWATER TREATMENT

Gravisand[®] filtration systems are ideal for use after suspended growth systems, for tertiary polishing and water reclamation, and algae removal with appropriate configuration.

Gravisand systems are a favorite among wastewater treatment plant operators because of their exceptionally low life-cycle costs and their legendary effectiveness in wastewater applications. In fact, the Gravisand system is so effective that wastewater processed through it can be used for re-use applications, such as the irrigation of golf courses. This can reduce the demand on raw water systems and reduce water costs for re-use customers.

The Gravisand filter employs a unique tubular, nonsegmented underdrain which is guaranteed to eliminate filter media leakage and is not susceptible to irreversible fouling. A specialized backwash shoe eliminates seal face wear and resultant unequal side load on the traveling bridge mechanism. This feature eliminates the potential of bridge derailment from frictional side load as well as eliminating wear-prone components while providing a positive seal engagement.

Superior media cleaning is accomplished through the use of an indexing backwash system which allows the traveling bridge to remain stationary at the index point, in backwash, as required to thoroughly clean the media.

PERFECT FOR PROCESS WATER POLISHING

The Gravisand filtration system is the perfect solution to meet process water polishing needs. Much as with potable water applications, the Gravisand filter can dramatically reduce turbidity and effectively remove particulate material. Food-grade lubricants and stainless steel components are available for process applications related to human consumption.

Gravisand package units are available for quick installation. Also, these units have small space requirements and are ideal for factory installations.

The operation of Gravisand units are easily managed through the bridge-mounted PLC-based control panel, which features a simple, user-friendly interface. Backwash periods may be easily varied to match individual process requirements.

Process water for food and soft drink manufacture—as well as other industrial processes that require highly filtered and polished process water—is easily and economically provided by Gravisand filtration systems.



The Gravisand® filter employs a unique tubular, non-segmented underdrain that is guaranteed to eliminate filter media leakage and is not susceptible to irreversible fouling. The slotted orifice design is selfcleaning due to flow path characteristics and provides direct media retention. The tubular design requires no caulk or sealer for installation to prevent media leakage.



When backwash is complete at that index point, the traveling bridge backwash system is indexed forward to its next cleaning position.

AVAILABLE IN NUMEROUS CONFIGURATIONS

STEEL PACKAGE, CONCRETE BASINS, RETROFIT

Gravisand[®] systems can be provided as a factory built steel package or a component system for concrete basins. Also, the Gravisand system approach can be provided as a retrofit package for use in existing basins, and is especially compatible with existing two-pump traveling bridge filters. The system is available in the basic Gravisand system design, with induced air scour (IAS) or with the advanced XCELL[™] filter configuration.

The steel package design is provided in units ranging in capacity from 0.05 to 2.0 mgd—concrete basins up to 5.0 mgd with unlimited capacity in multiple units.

NON-CORROSIVE COMPONENTS

Gravisand system components for concrete basins are provided complete, ready for simple "bolt-in" field installation. Plus, cell divider grouting is eliminated with the system. The underdrain material is PVC (polyvinyl chloride) and cell dividers are provided in FRP (fiberglass reinforced plastic). Hardware provided is stainless steel and metal components are coated steel, galvanized or stainless steel.

EASILY RETROFITTED

Gravisand system retrofit packages provide a convenient "bolt-in" upgrade. Components are available to replace all or part of the filtration system, including the underdrain, backwash shoe assembly and indexing controls. Steel package system



Contrete - New Construction or Retrofit



Backwash Hydraulic Actuator Shoe





Visit www.evoqua.com/gravisand to connect with a Gravisand expert.



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