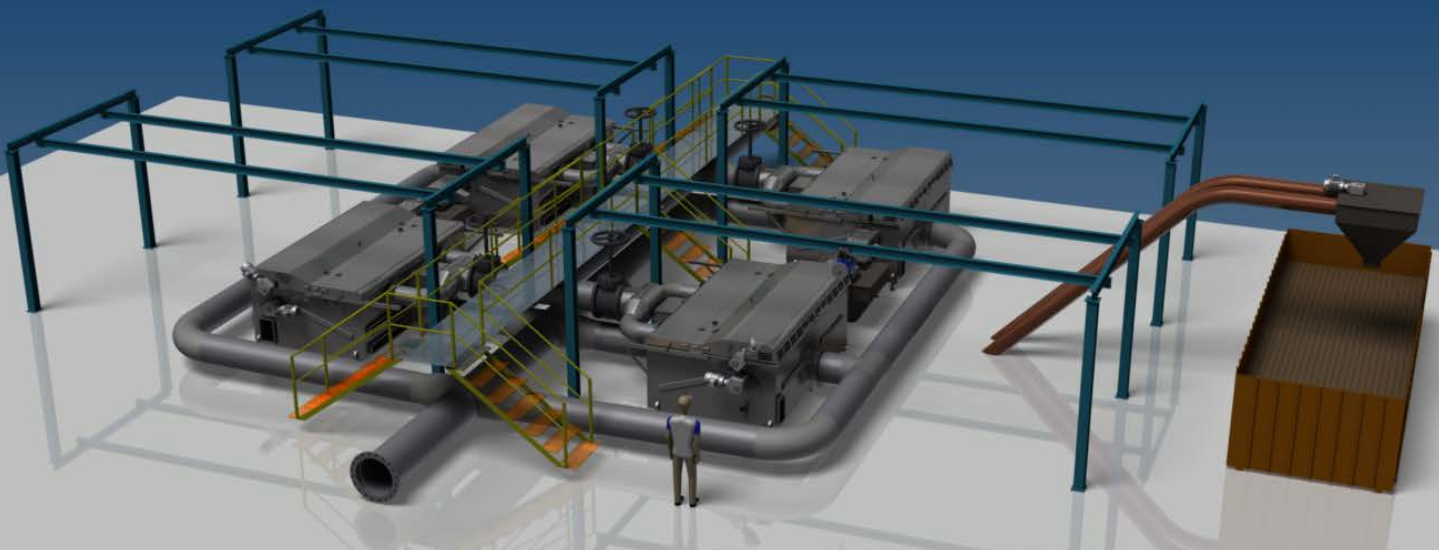




PROVIDING SOLUTIONS FOR A BETTER FUTURE

EcoSieve Industrial Separation



PROVIDING SOLUTIONS FOR A BETTER FUTURE

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The Mitcherson EcoSieve™

The EcoSieve™ is a high efficiency, high flow liquid solid separator that provides large scale filtration in an economical compact modular package. The EcoSieve™ is a mechanical device that screens suspended solids from incoming liquids. Captured solids are collected and dewatered and exiting liquids are filtered. The EcoSieve™ has extensive applications for industrial operations. The EcoSieve™ is the perfect solution for industrial plants that need to remove suspended solids from either a process stream or a waste stream. Whether you are looking to increase capacity of existing systems or looking to upgrade existing systems to meet the rising demands of new discharge requirements the EcoSieve™ is the perfect solution at an affordable price

The Mitcherson EcoSieve™ provides improved treatment efficiency, smaller footprint, lower initial cost and operating costs compared to other treatment processes.

Industrial Applications

Efficiently removing solids from your waste streams and improving system performance is the key to lowering cost and benefiting the environment. The EcoSieve™ can surpass the capabilities of existing conventional technologies for primary treatment in any of the following industries:

Meat Processing

Beverage and Fermentation

Fish Hatcheries and Farms

Poultry Processing

Food Processing Industry

Pulp and Paper

Fish Processing

Fruit and Vegetable Processing

Tanning

This list is not exhaustive, EcoSieve can have application anywhere liquid solid separation is a component of an industrial process. Contact us today to find out if your application is compatible with our technology. We can perform simple tests to determine sieve performance in your application with little hassle. We also have a mobile demonstration unit that we can bring to your facility to run full scale tests to determine actual system performances and proof of technology.

EcoSieve™ Design Detail

Mitcherson believes that the key to success is to provide the best possible equipment at the lowest possible cost. Our close attention to engineering and performance has resulted in the design of equipment that out-performs others, is reliable, and operator friendly.



Mitcherson EcoSieve™ Operation

The Mitcherson EcoSieve™ utilizes a proprietary and patent pending continuous sieve to separate solids from influent. The EcoSieve™ passes influent through a revolutionary rotating polyester sieve with openings between 100 to 800 microns.

The continuous belt screen receives influent in an enclosed tank, which is then filtered and directed to downstream process equipment. The sieved solid residue is then conveyed above the tank liquid level, to the belt cleaning section, and removed by dewatering where solids are expelled as a cake. The dewatered solids or cake can discharge to a container or to a conveying system for either quick disposal or conversion to energy.

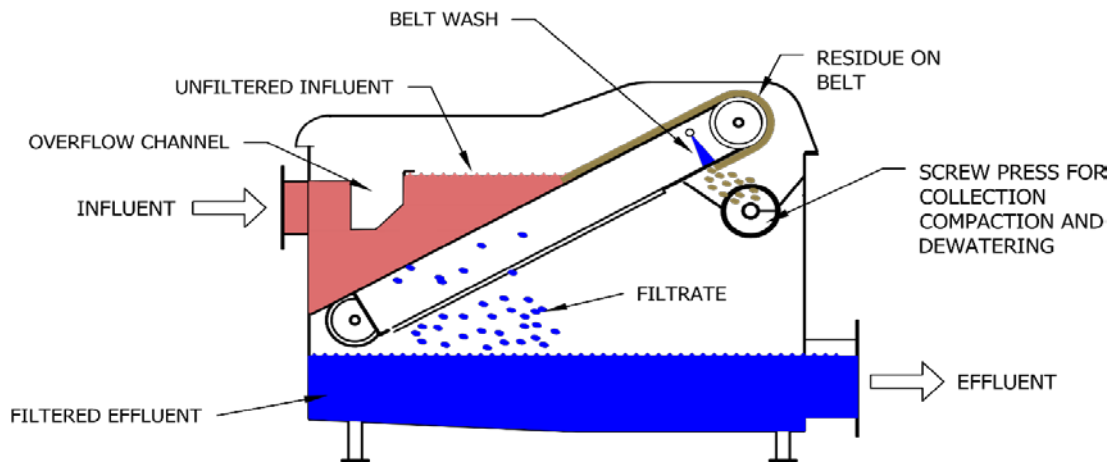


Figure 1. Mitcherson EcoSieve Flow Schematic

Table 1 - MITCHERSON ECOSIEVE™ DESIGN DATA -						
Performance		ES-270	ES-940	ES-1800	ES-3400	ES-3600
Maximum Hydraulic Capacity ¹ GPM (LPM)		300 (1,136)	1,045 (3,955)	2,185 (8,271)	3,765 (14,252)	4,371 (16,546)
%TSS Removal Efficiency (typical) ³		40-70 %	40-70 %	40-70 %	40-70 %	40-70 %
%Solids from Dewatering (typical)		30-40 %	30-40 %	30-40 %	30-40 %	30-40 %
Model	Weight	Dimension		Inlet / Outlet Connections	KWh Rating	Estimated Power Usage ²
ES-270	1,300 lbs. (589 kg)	71" W x 71" D X 50" H 1.8m W x 1.8m D X 1.3m H		3" / 6"	2.09 kWh (2.80 HP)	35 kWh/day
ES-940	1,840 lbs. (835 kg)	88" W x 81" D X 59" H 2.2m W x 2.1m D X 1.5m H		6" / 10"	2.15 kWh (2.88 HP)	36 kWh/day
ES-1800	4,050 lbs. (1,837 kg)	122" W x 86" D X 62" H 3.1m W x 2.2m D X 1.6m H		8" / 12"	3.58 kWh (4.80 HP)	60 kWh/day
ES-3400	3,650 lbs. (1,656 kg)	144" W x 102" D X 72" H 3.7m W x 2.4m D X 1.8m H		12" / 16"	4.51 kWh (6.05 HP)	75 kWh/day
ES-3600	6,635 lbs. (3,010 kg)	208" W x 119" D X 62" H 5.3m W x 3.0m D X 1.6m H		2x8" / 20"	5.63 kWh (7.55 HP)	94 kWh/day

¹Actual throughput capacities will depend on belt screen porosity and incoming solids loading (i.e., TSS)

²Estimated power consumption based on 24-hr continuous operation & 70% duty cycle (average)

³TSS removal may vary significantly in some applications and may be higher or lower than the typical range shown here

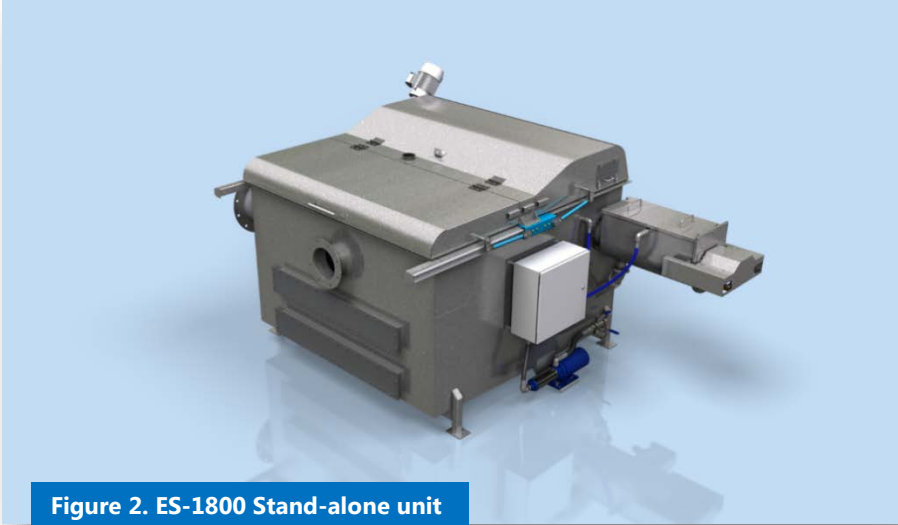


Figure 2. ES-1800 Stand-alone unit



Figure 3. ES-3600 Stand-alone unit



Figure 4. ES-270 Skid Mounted Mobile unit

The Mitcherson EcoSieve Models ES-270, ES-940, ES-1800 and ES-3400 are single belt machines. The ES-3600 is a duplex arrangement with 2 belt assemblies installed in one housing with one solids collection system. The EcoSieve can be provided on a pre-wired skid mounted platform which can drastically reduce field installation cost. Our skid units can be mobile stand-alone units ready for deployment.

Permanent installations can be set-up with automated solid collection systems taking significant labor out of managing solids produced in large scale operations. All EcoSieve units are provided with a basic control system. Mitcherson can customize the control system for remote control, real-time monitoring, upgrade human interface and additional controls for auxiliary systems. Many options are available to make an EcoSieve installation the perfect fit for your application.

Mitcherson LLC
109 East 17th Street, Suite 63
Cheyenne, WY 82001
(877) 937-0330
info@mitcherson.com