# FAIRFIELD SERVICE COMPANY

Providing excellence in Service, Product, and Value in an effort to support the Water, Wastewater, and Material Conveyance field since 1978.



The Mach - Multi Rack Bar Screen



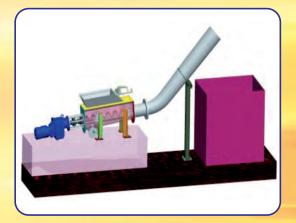
Catenary Bar Screen



Lock Link



THE CAF-Cable Operated Bar Screen



SCREENING COMPACTOR



RECTANGULAR CLARIFIER

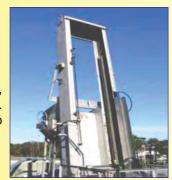
#### **INTRODUCTION:**

Fairfield Service Company has provided water & wastewater treatment equipment for liquid/solid separation and conveyance since 1978. Since separating from Fairfield Engineering, Fairfield Service Company has completed over 700 installations world-wide. Our installations range from the world's largest installation like Cities of Chicago, Detroit, Los Angeles and New York, to municipalities with systems less than 1 MGD. We have screening equipment for deep tunnels going 350' deep, carrying several thousand pounds of debris per cycle, to equipment conveying screenings with flows under 1 MGD. Fairfield Service Company treats each piece of equipment with the same attention to integrity of design, craftsmanship and quality control for all of our products. Experience the Fairfield Service Company name as many have.

#### **SCREENS:**

## >> THE CLAW (Climber Screen)

This screen type (formerly known as the climber bar screen, or RPFF), is a heavy duty rack and pinion design which is front clean/ front return. This design also utilizes a traveling rake mechanism that is attached to a climbing carriage.



#### >> THE MACH (Multi Rake Screen)

This screen type is a chain operated multi-rake system, with the primary difference in models being the path taken by the rakes.



MACH-01 chain operated back clean/back return MACH-02 chain operated front clean/back return MACH-03 chain operated front clean/front return

As an added feature, MACHs have a system to automatically sense and clear obstructions; the rakes move "up and down" a set amount of times to dislodge an obstruction. In the event that the obstruction is still sensed after this process, the MACH will shut down rather than risk damage to the machine.

## >> THE CATENARY

This screen type is a chain operated front clean/front return with no bearings, sprockets, or shafts submerged in the water. This allows most maintenance to be performed without isolating and emptying the channel, as well as making it more reliable.





# >> LOCK LINK (Flexible Rake Screen)

The Lock Link can handle debris of various types and sizes. Under normal conditions, the Lock Link operates like a typical multi-rake bar screen which allows the links to function as a frame, forms its own lower sprocket & connection point for the bar rack scrapers. If the Lock-Link encounters large debris in the influent flow, the link system locks around them and removes them from the stream.

# >> THE CAF (Cable Bar Screen)

This screen is a cable operated front clean/front return screen, more commonly known as a trash rack. It is made to handle high screening loads, and for deeper screening applications.



#### >> THE DEEP RAKER

(R)

This screen is a specialized version of a cable operated trash rake, made to go up to 350' deep and can handle deep tunnel, combined sewer/storm applications.



#### > STREAM GUARD

This screen is for fine screen applications, and is a filter belt type screen, meaning that instead of a bar screen which remains in one place, the screen itself moves vertically. This constantly provides a clean filtration surface to the effluent while in operation.

# >> TRAVELING WATER SCREEN

This screen is primarily used to remove debris from waterways and lakes. It is also a filter belt type screen, similar to the Stream Guard, but used in wider channels.



### **MBR SPIRALFLO**

This screen is a wonder for small channel flows. This screen filters, washes and de-waters the screening, all in one package! It is a great economical solution for small plants and secondary filtration systems.



#### **CONVEYANCE EQUIPMENT:**

#### **→ CONVEYORS**

Fairfield offers a full line of belt conveyors, screw conveyors and live bottom bins. The Fairfield belt conveyors are used to transport light to medium weight of loads such as screened material from bar screen.



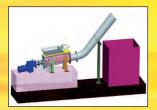


Belt conveyors can be horizontal or inclined (maximum of 28 degrees), designed to convey materials from the loading points to a discharge area.

Screw conveyors can be either shafted or shaftless, conveying screenings, grit and/or sludge to point of discharge. Multiple discharge points are accomplished using motorized or manual discharge chutes.



Washer/Screw compactors receive the screenings from Bar Screens, compresses the material, washes the organics and conveys the screenings to the debris container. Capacities range from 25 CFH to in excess of 140 CFH. Primary screen components are of stainless steel construction with a single shafted screw with flights.



#### **SLUDGE AND GRIT EQUIPMENT:**

#### >> RECTANGULAR CLARIFIERS/ CROSS COLLECTORS

Fairfield offers complete systems and parts support for rectangular clarifiers and cross collectors.

Here is a brief summary of what we offer, please contact us for further information

**Sprockets -** We offer chain saver and sprocket saver options, as well as a variety of materials and configurations. The teeth of our sprockets are machined, not cast

Chain- We offer cast iron, stainless steel, and non-metallic chain

Flights- We offer FRP and aluminum flights

**UHMW-** Components -We offer wear strips, wear shoes, bearing

liners, static sleeves, set collars, sprockets and sprocket teeth (for combination sprockets)



#### **>> GRIT COLLECTORS**

Fairfield offers the following types of grit collectors



- Chain and Bucket
- Chain and Flight
- Screw and Elevator
- Grit Screw
- Grit Classifier



Fairfield also offers flight monitoring systems and torque limiting devices so that in the event something does start to go wrong, often these devices will stop the machine before there is an actual part failure.

#### >> SCREW PRESS

Fairfield offers both single module and multi-module screw presses for sludge dewatering. The SCrew press is much more efficient than the belt filter press, both in power usage and operating cost.



# FAIRFIELD SERVICE COMPANY IS MBE CERTIFIED.

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