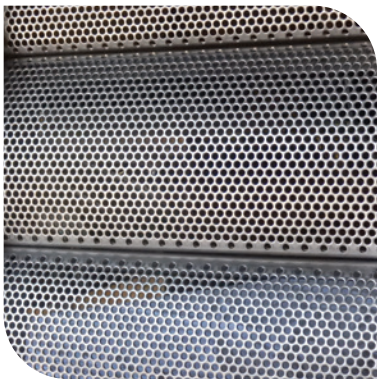


Aqua Guard® PF

Perforated Plate In-Channel Screen

The Aqua Guard® PF screen is an in-channel screening system that utilizes perforated plate media to efficiently remove a wide range of solids from wastewater. The screen design is built on the Aqua Guard® filter element belt screen chassis that has been proven successful with over 6,000 installed units in operation. The Aqua Guard PF can be made with the heavy duty "S" chain or the standard duty "MN" chain.

Principle of Operation

As wastewater flows through the screen, solids are captured on the perforated plate media and carried upward on the panels to discharge at the rear of the unit. Panels are convex in shape with lifting rakes on every fourth panel, or (optional) are of stepped shape, both capable of carrying large solids. At the discharge point, the plate panels are cleaned with a counter rotating brush assembly and water spray. A separate drive for the brush enables the brush and spray to make the most efficient cleaning contact with the panels.

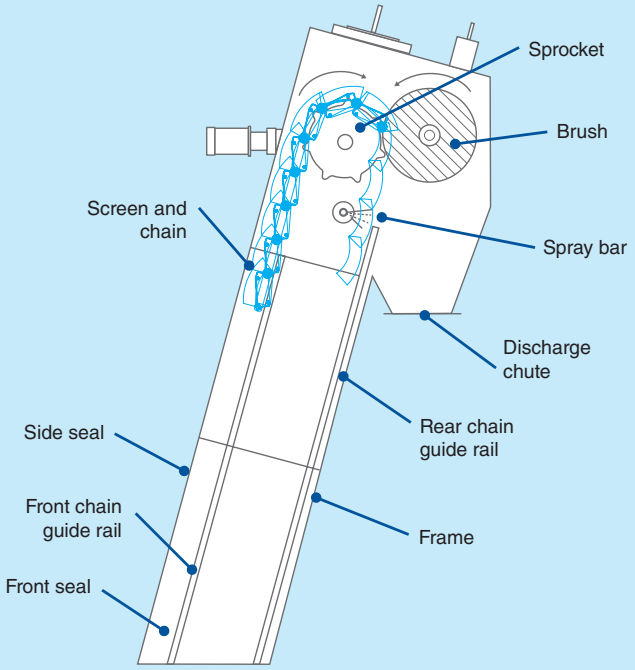
Features	Benefits
— No submerged bearings — Low power consumption — Efficient screen cleaning system — Intermittent operation — All moving parts can be accessed and serviced above water level — Removal of individual perforated panels from the operating deck via access ports	Low operation and maintenance costs
— Perforated plate media — Ability to build precoat — Convex panels with rakes or stepped panels with integral shelves carry large solids	High capture rates
— Flows to 150 MGD in a single unit	High capacity
— Delivered fully assembled — No attachment to sides or bottom of channel	Ease of installation
— Aqua Guard design with slack back — Side frame ports	Less headloss

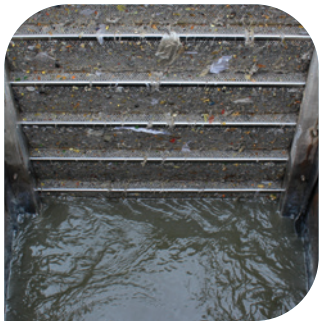
The screen media is available in a variety of openings, with 1/4" (6mm nominal) being the most common. In some instances, perforated screens have shown to remove higher quantities of solids than other types of in-channel screens.

Design Parameters

Standard screen widths are 2.0' to 8.0' with flow rates up to 150 MGD with the single largest unit. Two frame styles are available depending on space and channel depth requirements. Type A is a pivoting design and Type T is a stationary design. The Aqua Guard PF screen can be installed at angles of 60°, 75° and 85° depending on the frame and model selection. For maximum efficiency of operation, greater loading rates and higher solids removal, the recommended angle of inclination is 75°.

Movement of the screen can be continuous or intermittent, however, intermittent operation is recommended. This allows a mat of solids to build on the perforated plate media, which increases the solids capture rate.





Aqua Guard® PF Design Advantages:

- Perforated media provides high solids capture rates compared to bar screens
- Panels available in convex or stepped shape, both with large solids carrying capability
- Lower headloss
- Superior chain strength
- Leverage of Parkson's unmatched screening experience with thousands of installations across all in-channel products

Parkson™ Est. 1960

Fort Lauderdale
Chicago
Kansas City
Denver

1.888.PARKSON
technology@parkson.com
www.parkson.com