

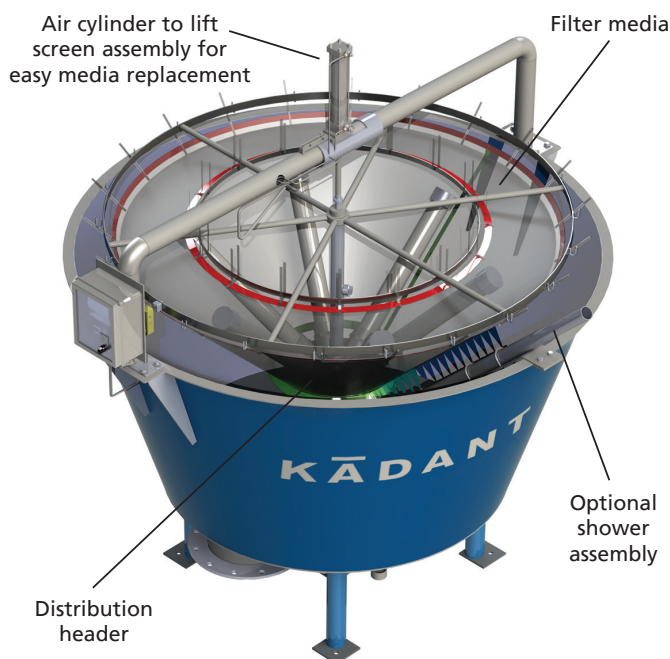
RotoFlex™ Resource Recovery Strainer

How It Works

The fluid to be filtered is supplied to a distribution header that feeds six stationary distribution header arms mounted on an angle parallel to the screen. A series of uniquely designed slots on each header delivers the feed at low pressure (less than 6 psig/1.4 bar) uniformly around the screen surface area. The impact force from the distribution slots combined with the precisely angled flow results in rotation of the screen assembly. Water that passes through the filtration medium collects and drains from the bottom of the unit. The retained solid material slides down the angled screen to the center where it exits the system to a user supplied collection tank.

Patented Filter Media Cleaning

The RotoFlex resource recovery strainer uses a unique method of filter media cleaning to keep the filter medium open and to flush contaminants from the surface. The conical media hangs freely from the upper support ring and is not attached or in contact with any part of the strainer below the ring. As the feed flow from the distribution headers impact the media and the media rotates, the synthetic mesh flexes back and forth, shedding the fiber and debris without the aid of a cleaning shower or scraping device. The feed flow helps wash the material to the center collection chamber for reuse or disposal.



RotoFlex Filter Media Life

Traditional backwashing filters and strainers use a secondary backer screen to support the primary filter media used for solids removal. Drawbacks include both reduced capacity and filter media wear at the point of contact between the two layers. The RotoFlex filter media free-hanging backerless design eliminates both issues, maximizing throughput and media life. In addition, debris sheds from the filter media without the need of a shower or water backflush. Energy applied to the media during the cleaning process is often a contributor to filter media wear. Elimination of the continuous shower will improve the media life and minimize the filter media change-out frequency.

Capacity

The maximum flow capacity of the RotoFlex resource recovery strainer is approximately 1500 gpm (5678 lpm). However, the maximum flow achieved for a given application will be dependent on the filter media, nature of solids removed (fiber freeness), and the total amount of suspended solids in the feed water.

Overview



Features

- Backerless filter media design
- Automatic upset recovery
- No external power for screen rotation
- Patented filter media cleaning system
- Optional intermittent cleaning shower
- Replace filter media in minutes



Benefits

- Recovery of water, heat, chemical, and fiber
- No electrical motors or continuous shower water required
- Continuous operation through system upset conditions
- High volume capacity



Applications

- DAF filtrate
- Clearleg save-all water
- Overflow cylinder vat water
- Vacuum pump seal water
- Felt hair removal from press section
- Fiber recovery from u-drains