



eVOQUA
WATER TECHNOLOGIES



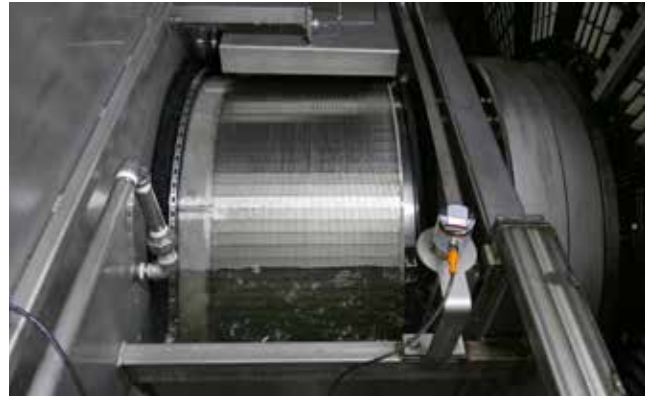
FORTY-X™ DISC FILTER ARMOR SERIES

DISC FILTRATION ARMORED TO DEFEND AGAINST INFLUENT CHALLENGES

The Forty-X™ Disc Filter Armor series is a high-rate filtration device that utilizes an integrated pre-screen and stainless steel panel that are designed to accommodate high solids loading capacities and greater hydraulic throughput. The woven stainless steel panel improves solids rejection and provides higher throughput versus other woven media flat panel designs. The panel's frame configuration is stronger than comparable designs and includes a robust, pressure-assisted seal that allows the panels to sustain and operate at a higher headloss of any other flat panel disc filter.

Evoqua's Forty-X Disc Filter Armor series combines the technology of outside-in and inside-out filtration into a single PLC controlled unit. Influent water flows through the pre-screen (outside-in) into the disc filter panels (inside-out). This innovative combination of two filtration technologies into one unit provides an effective and robust option for those difficult applications.

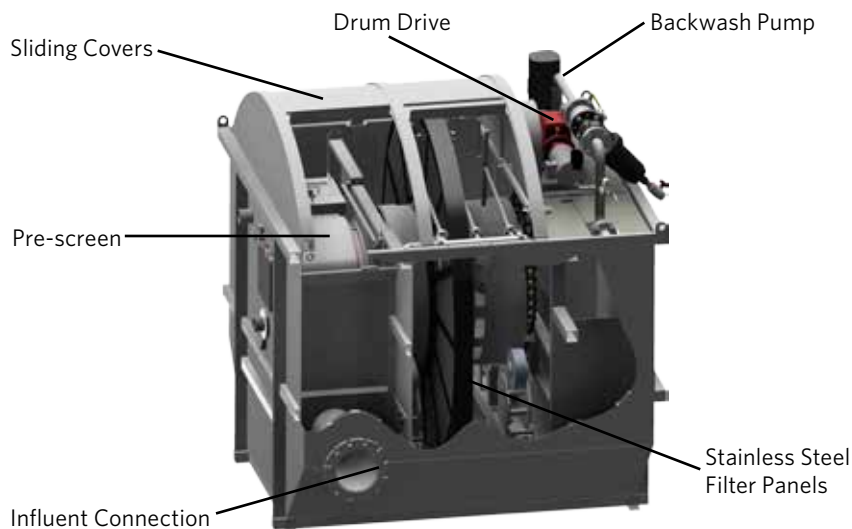
The Forty-X Disc Filter Armor series uses one common backwash pump and level sensor for backwashing both the pre-screen and disc filter panels. The captured solids are backwashed into a reject trough using this positive pressure spray cleaning system. The level sensor is located in the influent channel and automatically controls the backwash cycle. Both the pre-screen and disc filter continue to filter during backwash. The weave pattern of the stainless steel panels allow greater loadings per square foot and as a result less backwash cycles.



The Forty-X™ Disc Filter Armor series includes an integrated pre-screen designed to protect the disc filter by removing large organic and inorganic materials.

Features

- Small footprint.
- The pre-screen is designed to accommodate high solids loading capacities.
- Woven 316 stainless steel flat media panel for greater hydraulic throughput.
- Modular design offers flexibility and expandability.
- Suitable for retrofit of existing conventional filters.
- Wind safe sliding arch covers for easy access and maintenance.
- Easy to operate and maintain.
- Non-metallic chain / sprocket.
- Stainless steel tank or stainless steel frame designs.



Durable stainless steel disc filter panel improves solids retention.

The Forty-X™ Disc Filter Armor series offers a modular design that is flexible and dependable for municipal and industrial filtration applications. The pre-screen is like “Armor” for the disc filter, providing initial filtration of large organic and inorganic materials.

Typical Performance

Filtrate TSS	< 5 mg/l
Filtrate Turbidity	< 2 NTU

Pre-Screen Design Data

Filter Type	Wedgewire
Drum Diameter	32 in.
Flow Orientation	Outside-In
Rotational Speed	1-3 RPM
Backwash Method	High Pressure Spray and Scraper Blade

Filter Design Data

Filter Fabric	OTM (Optimized 316 stainless steel)
Filter Disc Diameter	7.2 ft.
Filter Orientation	Inside-Out
Backwash Method	High Pressure Spray

Filter Drive Unit

Drive motor (per unit)	1.5-2.0 hp
Drive Assembly	Helical wormgear with chain and sprocket

Backwash Cleaning System

Backwash Nozzles (per disc)	20
Backwash Pump	5-30 hp
Nominal backwash pressure	100 psi



1828 Metcalf Ave, Thomasville, GA 31792

+1 (800) 841-1550 (toll-free) +1 (229) 226-5733 (toll) www.evoqua.com/forty-x



Forty-X is a trademark of Evoqua, its subsidiaries or affiliates in some countries.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.

May be covered by one or more of the following patents 7,597,805; 7,972,508; 8,118,175; 8,409,436; 8,801,929; 8,808,543; 8,961,784; and other international and pending patents.

© 2017 Evoqua Water Technologies LLC Subject to change without notice MU-FXArmor-DS-0917