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Sand Media Filtration

For the Most Challenging Dirty Water Conditions in Irrigation

Irrigation Systems
Yardney pioneered the use of sand media filtration in 1965 and through advancing technology, continues to provide high performance and long-term value in the field. Yardney Sand Media filters are manufactured in the USA to the most exacting standards.

**Applications**
- Removal of algae, slime or other organic contaminant as well as sand, rock, grit and other inorganic contaminants
- Protects drip and micro-irrigation systems from plugging with fine filtration removal down to 200 mesh or 75 microns

**Advantages**
- ASME code shaped head construction for durability and safety
- Standard products material thickness:
  - Carbon steel: 3/16"  
  - Stainless steel: 10 gauge
- Standard operating pressure of 80 psi (high pressure systems available)
- Backwash automatically or manually initiated
- Easy-entry lid closure with weld tabs for operator safety
- Exterior of tank on carbon steel product is powder coated with UV stabilized polyester powder coat for longer product life and greater protection from the environment
- Removable stainless steel wedgewire underdrain
  - Ensures structural integrity in the harshest conditions
  - Hydraulically balanced to increase effectiveness of backwash while reducing flush frequency and waste of water
  - High strength stainless steel wedgewire will withstand a collapse pressure in excess of 600 psi
- Drain Ports:
  - 14", 18", 24" and 30" tanks: 3" drain port
  - 36" and 48" tanks: 6" drain port to allow access to the stainless steel underdrain and less time for draining of media
- Made in USA
Inlet and Outlet Endcap Couplings

Weld couplings accompanied with a galvanized plug are standard on the endcaps of inlet and outlet manifolds.

Deflector

The inlet and two-stage deflector plate reduce the velocity of water entering the tank and create a more uniform distribution across the filtration media bed.

Automatic and Manual Valves

Our patented cast-iron backwash valve has the lowest pressure drop in the industry and is designed to be 100% field serviceable with basic hand tools. Valves feature non-corrosive stainless steel shafts, brass bushing, durable molded polyurethane seals, fusion epoxy lining, and a grease fitting for valve shaft lubrication.

Optional removable underdrain

High strength stainless steel wedgewire underdrain has a collapse resistance in excess of 600 psi insuring structural integrity in the harshest conditions. Removable underdrain system feature saves both labor and time during media changes.
**Tank Options**

**SM100**
- Available in 48" carbon steel
- Epoxy composite underdrain
- Top manway cover: 10" carbon steel
- 11 x 14" elliptical side manway
- 3M Scotchkote® 134 on interior surfaces of tank
- Exterior UV stabilized powder coat on carbon steel tanks and all manway lids

**SM200**
- Available in:
  - Stainless steel: 18", 24", 30", 36", 48"
- One 3" drain port on 14", 18", 24" and 30" tanks
- One 6" drain port on 36" and 48" tanks
- Welded stainless steel wedgewire underdrain
- Top manway cover:
  - Carbon steel:
    - 3": 14", 18" tanks
    - 6": 24", 30" tanks
    - 8": 36" tanks
    - 10": 48" tanks
  - Stainless steel:
    - 3": 18" tanks
    - 6": 24" tanks
    - 8": 30", 36", 48" tanks
- Exterior UV stabilized powder coat on carbon steel tanks and all manway lids

### Ordering code part number breakdown:

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<tr>
<th>PRODUCT</th>
<th>Model Number</th>
<th>Number of Tanks</th>
<th>CS: Carbon</th>
<th>SS: Stainless</th>
<th>A: Automatic</th>
<th>CF: Crossflow or</th>
<th>Standard pressure rating</th>
<th>IE: Inline/End feed</th>
<th>IC: Inline/Center feed</th>
<th>EU: End feed &quot;U&quot; pattern</th>
<th>EB: End feed Block pattern</th>
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<td>CF -</td>
<td>80 -</td>
<td>100 125 150</td>
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*For pressure ratings above 150 PSI, please consult a Yardney representative.*
SM300
- Available in:
  Stainless steel: 18", 24", 30", 36", 48"
- One 6" drain port
- Threaded removable stainless steel wedge wire underdrain with Schedule 80 PVC hub
- Top manway cover: 10" carbon steel; 8" stainless steel
- 11 x 14" elliptical side manway
- Exterior UV stabilized powder coat on carbon steel tanks and all manway lids
- Optional cross flow underdrain

SM350
- Available in:
- One 6" drain port
- Threaded removable stainless steel wedge wire underdrain with Schedule 80 PVC hub
- Top manway cover: 10" carbon steel
- 11 x 14" elliptical side manway
- Exterior UV stabilized powder coat on tanks and all manway lids
- 3M Scotchkote® 134 on interior surfaces of tank
- Optional cross flow underdrain

SM400
- Available in 48" carbon steel
- Two 6" drain ports
- Threaded removable stainless steel wedge wire underdrain with Schedule 80 PVC hub
- Top manway cover: 10" carbon steel
- Exterior UV stabilized powder coat on tanks and all manway lids
- 3M Scotchkote® 134 on interior surfaces of tank
- Optional cross flow underdrain
Filtration Process

- The contaminated water enters the system through the inlet manifold, transitioning to the Yardney 3-way valve and into the top inlet of each tank
- The Yardney two-stage deflector creates a uniform distribution for laminar flow across the media bed while avoiding channeling of the media bed
- Particulate is trapped and retained within the media bed resulting in clean process water flowing out through the stainless steel wedgewire underdrain, to the outlet of each filter tank and to the outlet manifold for end use

Backwash Process

- Backwash sequence is initiated by either manual or automatic operation via the Yardney controller
- Water or air pressure opens the Yardney 3-way valve causing the reverse flow of a portion of filtered water up through the stainless steel underdrain to hydraulically and uniformly lift the media bed
- The use of a hydraulically balanced underdrain in conjunction with a gravel pack creates a proper and uniform lift of the media bed while avoiding a turbulent backwash
- Entrapped particulates are released during the backwash event, exhausted up through the backwash manifold and routed to a convenient location
- Each vessel is backwashed one at a time while continuing to process water for use until the entire system is clean
- Once completed with the backwash, filtration continues until the next backwash event is called for
Yardney offers high strength, corrosion resistant stainless steel material as an option on most Sand Media systems.

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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# Specifications

## SPECIFICATIONS | SAND MEDIA FILTERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of Tanks</th>
<th>Standard Flow Ranges</th>
<th>Filtration Surface Area (total sq ft)</th>
<th>Backwash Flow Rate (per tank)</th>
<th>Media Requirements (cubic feet)</th>
<th>Maximum Pressure Carbon Steel</th>
<th>Maximum Pressure Stainless Steel</th>
<th>Inlet/Outlet Pipe Size</th>
<th>Backwash Line Pipe Size</th>
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<td>80 psi</td>
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</table>

Other models and sizes are available.

Made in USA

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info@yardneyfilters.com

© 2019 Yardney Water Management Systems, Inc. | 6666 Box Springs Blvd. | Riverside, CA 92507
Yardney Mini-Media filters are designed as a sand media solution for lower flow applications. These rugged, simple filters are built with the same high performance, high efficiency standards as our other product lines. Constructed of high strength carbon steel, the Mini-Media is fusion epoxy lined on wetted surfaces. Underdrains are made of Type 304 stainless steel for extra-long life.

Applications
- Removal of algae, slime or other organic contaminant as well as sand, rock, grit and other inorganic contaminants to protect drip and micro-irrigation systems from plugging with fine filtration removal down to 200 mesh or 75 micron
- 125 psi standard operating pressure
- Flow ranges from 15-45 gpm

Advantages
- Lower flow applications down to 15 gpm
- Standard operating pressure of 125 psi
- Yardney easy-entry lid closure
- Available in welded carbon steel
- Stainless steel wedgewire underdrain
  ▶ Ensures structural integrity in the harshest conditions
  ▶ Hydraulically balanced to increase effectiveness of backwash while reducing flush frequency and waste of water
  ▶ High strength stainless steel wedgewire will withstand a collapse pressure in excess of 600 psi
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces
- Exterior of housing is coated with UV stabilized polyester powder coat for longer product life and protection from the environment
- Made in USA
Yardney Mini-Media Filters
Specifications

**Standard product includes:**
- Yardney easy-entry lid closure
- Inlet/outlet manifolds
- Grooved couplings to connect hardware
- Coated steel inlet and outlet manifold
- Steel backwash manifold
- Semi-automatic valves
- 1.5" brass gate valve

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of Tanks</th>
<th>Standard Flow Ranges</th>
<th>Filtration Surface Area (total sq ft)</th>
<th>Backwash Flow Rate (per tank)</th>
<th>Media Requirements (cubic feet)</th>
<th>Maximum Pressure</th>
<th>Inlet/Outlet Pipe Size</th>
<th>Backwash Line Pipe Size</th>
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**DIMENSIONS**

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<td>4 15/16&quot;</td>
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</tbody>
</table>

Made in USA

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Yardney Thru-Flush screen filters provide excellent filtration for water sources where inorganic particulate is the major contaminant. The Thru-Flush cleaning action quickly purges the trapped contaminant from the filter using your source water line and pressure. This technology utilizes turbulent water action to shake loose the contaminant from the screen and discharge the contaminant out of the housing.

Thru-Flush Screen Filters feature a replaceable cartridge and screen mesh that ensures consistent and reliable filtration and allows for easy manual cleaning.

Applications
- Removal of sand, rock, grit and other inorganic contaminants to protect drip and micro-irrigation systems with fine filtration down to 200 mesh or 75 microns
- 125 psi standard operating pressure (high pressure systems available)
- Flow ranges from 200 gpm
- Can be used as a primary filter in specific applications
- Can be used as a secondary filter to a sand media filter, centrifugal separator or other primary filtration system with the added benefit of an automatically controlled system

Advantages
- Manual or automatic Thru-Flush stainless steel screen filter
- Type 316 stainless steel housing and cartridge
- Standard operating pressure of 125 psi
- Rugged, field changeable, washable and replaceable polypropylene filter mesh sock available in 40, 80, 100, 150 and 200 mesh
- Flush port provides for manual or automatic removal of heavy contaminants
- Yardney easy-entry lid closure
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces of manifolds
- Labor saving automation includes the automatic Thru-Flush valve and advanced solid state control unit which monitors the filter on elapsed time and pressure differential basis
- Available with flanged or grooved connections
- Made in USA
Thru-Flush Screen Filters
Specifications

Standard assembly includes:

- Type 316 stainless steel housing and cartridge with field replaceable filter mesh
- Yardney easy-entry lid closure
- Manual or automatic valve with accessories
- Multiple housings include inlet and outlet manifolds and grooved couplings to connect all components together

Available options:

- High pressure
- Solar package
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces

---

Made in USA

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Maxi-Flush™ Screen Filters


**Yardney Maxi-Flush automatic backwash screen filters** provide the ultimate in high rate screen filter performance. Built for durable trouble-free service, the filter and cartridge have no internal moving parts to wear out, break down or replace. The field changeable stainless steel filter cartridge requires no maintenance and is constructed with burst strength in excess of 400 psi.

**Applications**

- Removal of algae, slime or other organic contaminant as well as sand, rock, grit and other inorganic contaminants with fine filtration down to 200 mesh or 75 microns
- 100 psi standard operating pressure (high pressure systems available)
- Flow ranges from 250 gpm
- High concentrations of algae and other organic materials
- Large turf or golf course irrigation

**Advantages**

- Heavy duty, durable and low-cost backwashable welded stainless steel wedgewire screen filter
- Rugged, field changeable, washable and replaceable welded stainless steel wedgewire filter mesh available in 40, 80, 100, 150, 200 mesh
- Wedgewire screen cartridge produces long run times between backwash cycles
- Backwash automatically initiated by elapsed time or pressure differential
- No moving parts to wear out
- Yardney easy-entry lid closure
- Available in welded carbon steel
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces
- Exterior of housing is coated with UV stabilized polyester powder coat for longer product life and greater protection from the environment
- Made in USA

---

Maxi-Flush Screen Filters feature a replaceable cartridge and screen mesh that ensures consistent and reliable filtration and allows for easy manual cleaning.
Automatic Backwash Operation

The patented Yardney 3-way backwash valve controls the highly effective reverse flow backwashing of the Maxi-Flush system. During the brief backwashing cycle a portion of the clean water produced by the system is diverted to the filter housing undergoing backwashing. This flow of clean water frees contaminants from the cartridge while discharging these contaminants from the system and restoring the filter back to a clean filter condition. Each filter housing is sequentially backwashed until the entire system is clean.
### SPECIFICATIONS | MAXI-FLUSH | Vertical

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<th>Model</th>
<th>Number of Housings</th>
<th>Maximum Flow (gpm)</th>
<th>Filtration Surface Area (total sq ft)</th>
<th>Backwash Flow Rate (per housing)</th>
<th>Maximum Pressure</th>
<th>Inlet/Outlet</th>
<th>Flush Port</th>
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<td>6</td>
<td>3000</td>
<td>682</td>
<td>48.0 gpm</td>
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<td>1136</td>
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<td>14”</td>
<td>4”</td>
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### DIMENSIONS | Vertical

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<tr>
<th>Model</th>
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<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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</thead>
<tbody>
<tr>
<td>MFSV 10-4</td>
<td>11 7/8”</td>
<td>40”</td>
<td>71 13/16”</td>
<td>63 1/8”</td>
<td>39”</td>
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<td>71 13/16”</td>
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<td>53 1/2”</td>
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<td>42”</td>
<td>72 9/16”</td>
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<td>43”</td>
<td>73 11/16”</td>
<td>65 3/4”</td>
<td>69 3/8”</td>
</tr>
<tr>
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<td>73 11/16”</td>
<td>65 3/4”</td>
<td>83 7/8”</td>
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<td>13 3/4”</td>
<td>43”</td>
<td>73 11/16”</td>
<td>65 3/4”</td>
<td>83 7/8”</td>
</tr>
</tbody>
</table>

Standard assembly includes:

- Yardney easy-entry lid closure
- Filter element
- Valves
- Inlet and outlet manifolds
- Multiple housings include inlet and outlet manifolds and grooved couplings to connect all components

Available options:

- ASME code
- High pressure
- Solar package
- Custom filter station layout piping
- Available in purple for reclaim water applications

Made in USA

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Filtaworx®
Automatic Self-Cleaning Screen Filter

Irrigation Systems
Filtaworx® Automatic Self-Cleaning Screen Filter


Yardney Filtaworx automatic self-cleaning screen filters provide excellent protection for all types of irrigation systems including drip, micro-spray, sprinklers and golf course systems. Filtaworx filters are one of the most technically innovative self-cleaning filters available combining proven high performance, reliability and economy in a compact robust design.

Applications
- Removal of algae, slime or other organic contaminant as well as sand, grit and other inorganic contaminants with fine filtration down to 250 mesh or 50 microns
- 150 psi standard operating pressure (high pressure systems available)
- Flow ranges from 110 gpm
- Irrigation and turf applications including drip, micro-spray and sprinklers

Advantages
- Heavy duty stainless steel filter body
- Durable low maintenance self-cleaning mechanism
- Wide range of screen mesh sizes available in 20, 40, 80, 100, 120, 150, 200 and 250 mesh
- Hydraulically or electrically controlled internal cleaning mechanism
- Automatic self-cleaning piston action moves in both directions
- Sacrificial anode
- Automatic operation of the self-cleaning backflush cycle is achieved when a pre-set pressure drop (5–7 psi) across the filter is reached
- Sectional screens allow easy replacement of a section of screen versus entire cartridge if damage occurs to the screen
- Compact and simple installation can be mounted in any position or orientation, with minimal space requirements

Twist-lock sectional screens provide easy cartridge replacement.

Minimal moving parts means high reliability in the field.
Filtration System Operation

- During normal filtering mode, the raw water enters the inlet of the filter and passes through the coarse screen (the 1/4" perforations remove large debris that may obstruct the lower mechanism).
- Water then travels to the inner section of the filter and through the fine screen to the outlet. The solids in the water are trapped on the fine screen, eventually causing a pressure drop (dp) across the filter.

- At a pressure drop of 5–7 psi, the controller activates the cleaning cycle by opening the flush valve to drain (atmosphere).
- The interconnection of the suction nozzles, via the dirt collector to the drain, causes a back-flushing or “vacuum clean” effect on the fine screen with a high velocity suction jet of water from the clean side of the screen, removing the dirt on the screen as it passes through.
- The water escaping via the rotor causes the dirt collector and suction nozzle assembly to rotate. The piston moves this assembly down and back along the entire length of the fine screen in a spiraling motion, cleaning the screen in approximately 15 seconds.
- At completion of flushing, the valve closes and the filter is ready for the next cycle.

Pressure Losses For Various Flow Capacities

<table>
<thead>
<tr>
<th>Flow Capacity</th>
<th>Pressure Loss (psi)</th>
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<tbody>
<tr>
<td>1 GPM</td>
<td>0.1</td>
</tr>
<tr>
<td>5 GPM</td>
<td>0.2</td>
</tr>
<tr>
<td>10 GPM</td>
<td>0.3</td>
</tr>
<tr>
<td>15 GPM</td>
<td>0.4</td>
</tr>
<tr>
<td>20 GPM</td>
<td>0.5</td>
</tr>
<tr>
<td>25 GPM</td>
<td>0.6</td>
</tr>
<tr>
<td>30 GPM</td>
<td>0.7</td>
</tr>
<tr>
<td>35 GPM</td>
<td>0.8</td>
</tr>
<tr>
<td>40 GPM</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Maximum working pressure: 150 psi
Minimum line pressure required during flush cycle: 30 psi
Approximate flush time: 15-17 sec
Flush volume: 40 gal
Maximum working temperature: 150 °F
**Filtaworx®**

**Automatic Self-Cleaning Screen Filter**

### Specifications

#### Horizontal

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Flow Rate (gpm)</th>
<th>Filtration Surface Area (inches)</th>
<th>Maximum Pressure</th>
<th>Inlet/Outlet</th>
<th>Flush Port A B C E F H L X Y Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>FW04EX</td>
<td>440</td>
<td>870</td>
<td>150 psi</td>
<td>4&quot; 2&quot;</td>
<td>9 1/4&quot; 35 7/16&quot; 18 3/8&quot; 10 3/4&quot; 9&quot; 20 5/8&quot; 76 7/8&quot; 28 3/4&quot; 14 1/4&quot; 143 3/4&quot;</td>
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<tr>
<td>FW06</td>
<td>790</td>
<td>870</td>
<td>150 psi</td>
<td>6&quot; 2&quot;</td>
<td>10 5/8&quot; 35 7/16&quot; 19&quot; 12 3/4&quot; 11&quot; 23&quot; 79 3/8&quot; 30 3/4&quot; 14 1/4&quot; 146 1/2&quot;</td>
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<td>FW06EX</td>
<td>790</td>
<td>1258</td>
<td>150 psi</td>
<td>6&quot; 2&quot;</td>
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<td>1258</td>
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<td>FW10</td>
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<td>FW10EX*</td>
<td>1760</td>
<td>1614</td>
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<tr>
<td>FW12*</td>
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<tr>
<td>FW14*</td>
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</table>

*Products with an asterisk do not include sacrificial anodes

#### Vertical

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Flow Rate (gpm)</th>
<th>Filtration Surface Area (inches)</th>
<th>Maximum Pressure</th>
<th>Inlet/Outlet</th>
<th>Flush Port A B C E F H L X Y</th>
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</thead>
<tbody>
<tr>
<td>FW04EX</td>
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<td>870</td>
<td>150 psi</td>
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<td>7 1/4&quot; 7 3/4&quot; 8&quot; 28 3/8&quot; 22&quot;</td>
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<tr>
<td>FW02*</td>
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<td>FW03*</td>
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<td>FW03EX*</td>
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<td>8 1/4&quot; 8 1/4&quot; 8&quot; 28 3/8&quot; 22 5/8&quot;</td>
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<td>FW04*</td>
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<td>4&quot; 2&quot;</td>
<td>9 1/4&quot; 12 3/8&quot; 8 1/2&quot; 35 1/2&quot; 27 1/8&quot;</td>
</tr>
</tbody>
</table>

*Products with an asterisk do not include sacrificial anodes

**Standard assembly includes:**

- 304 stainless steel body with flanged inlet and outlet
- Glass reinforced nylon support structure with 316 stainless steel mesh fine screen
- Hydraulic controller
- Sacrificial Anode (FW04EX–FW10 only)
- Models FW10EX, FW12 and FW14 include four-layer sintered 316 stainless steel screens

**Available options:**

- Four-layer sintered 316 stainless steel screens
- 316 stainless steel housing available on request
- Alternative materials of housing, seals, screen cartridge, etc., dependent on application
- High pressure
- Electric controller
- Sustaining valve (highly recommended)

---

**Filtaworx ordering code part number breakdown:**

<table>
<thead>
<tr>
<th>Electric or Hydraulic</th>
<th>Screen Size</th>
<th>1 Standard</th>
<th>2 Long</th>
<th>3 Extra Long</th>
<th>Filter (inches)</th>
<th>Mesh</th>
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<td>E</td>
<td>FW147 1</td>
<td>06</td>
<td>150</td>
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<td>150</td>
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</tbody>
</table>

*Extra long screen (3) only available on FW04

---

**Contact Information:**

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Fax: 951.656.3867
info@yardneyfilters.com

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**Filtaworx® Automatic Self-Cleaning Screen Filter Specifications**

Standard assembly includes:

- 304 stainless steel body with flanged inlet and outlet
- Glass reinforced nylon support structure with 316 stainless steel mesh fine screen
- Hydraulic controller
- Sacrificial Anode (FW04EX–FW10 only)
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info@yardneyfilters.com

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Yardney Maxi-Clean Screen Filters are designed for high performance contamination removal in applications where durability and economy are essential. Constructed of heavy gauge carbon steel, Maxi-Clean filters are fusion epoxy lined with 3M Scotchkote® 134 for excellent protection from the environment and long product life. The Maxi-Clean screen filter is easy to operate and comes standard with grooved couplings, manifolds and all accessories for ease of installation.

Applications

- Removal of sand, rock, grit and other inorganic contaminants to protect drip and micro-irrigation systems with fine filtration down to 200 mesh or 75 microns
- 100 psi standard operating pressure (high pressure systems available)
- Flow ranges from 110 gpm
- Can be used as a primary filter in specific applications
- Can be used as a secondary filter to a sand media filter, centrifugal separator or other primary filtration system

Advantages

- Heavy duty, durable and low-cost screen filter
- Rugged, field changeable, washable and replaceable polypropylene filter mesh sock available in 40, 80, 100, 150 and 200 mesh sizes
- Large screen area produces less than 2 psi pressure drop accompanied by long run times between cleanings
- Flush port provides for manual removal of heavy contaminants
- Yardney easy-entry lid closure
- Available in welded carbon steel
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces
- Exterior of housing on carbon steel product is coated with UV stabilized polyester powder coat for longer product life and greater protection from the environment
- Made in USA

Maxi-Clean Screen Filters feature a replaceable cartridge and screen mesh that ensures consistent and reliable filtration and allows for easy manual cleaning.

Irrigation Systems

Maxi-Clean™ Screen Filters

Manual Clean Screen Filters
Standard assembly includes:

- Carbon steel housing
- Yardney easy-entry lid closure
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces of carbon steel
- Polyester powder coating on exterior surfaces of carbon steel
- Internal cartridge element with field replaceable filter mesh
- 3-way valve
- Pressure gauge
- Tubing with fittings
- Purge valve for manual flushing of filter
- Multiple housings include inlet and outlet manifolds and grooved couplings to connect all components

Available options:

- ASME code
- High pressure
- Grooved or flanged mainline connections
- Available in purple for reclaim water applications

---

**Specifications**

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>MAXI-CLEAN</th>
<th>Single Housing</th>
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</thead>
<tbody>
<tr>
<td>Model</td>
<td>Number of Housings</td>
<td>Maximum Flow</td>
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**Specifications | Multiple Housing**

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<th>Model</th>
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<th>Maximum Flow</th>
<th>Filtration Surface Area</th>
<th>Maximum Pressure</th>
<th>Inlet/Outlet</th>
<th>Flush Port</th>
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<td>2</td>
<td>1800</td>
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**Dimensions | Single Housing**

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<thead>
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<th>A</th>
<th>B</th>
<th>C</th>
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<tr>
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<td>16 3/8&quot;</td>
<td>9 1/16&quot;</td>
<td>6 9/16&quot;</td>
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<tr>
<td>MCS 3-1</td>
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<td>18 5/8&quot;</td>
<td>5 5/16&quot;</td>
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<tr>
<td>MCS 4-1</td>
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<td>21 1/8&quot;</td>
<td>6 5/16&quot;</td>
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<tr>
<td>MCS 6-1</td>
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<td>48 1/16&quot;</td>
<td>38&quot;</td>
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<td>MCS 8-1</td>
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<td>64 9/16&quot;</td>
<td>54 1/2&quot;</td>
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**Dimensions | Multiple Housing**

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
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<th>C</th>
<th>D</th>
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<td>MCS 8-2</td>
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<td>38 3/8&quot;</td>
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<td>86 3/4&quot;</td>
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</tbody>
</table>

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Yardney Basket Strainers are a low-cost filter solution designed to be used for the removal of inorganic contaminants. Basket Strainers trap gross contaminants and are able to withstand a substantial amount of loading without failure. When used as a secondary filter the basket strainer is intended to capture contaminants that may enter the system as a result of a pipeline break or system malfunction.

Applications

- Removal of sand, rock, grit and other inorganic contaminants to protect drip and micro-irrigation systems with fine filtration down to 200 mesh or 75 microns
- 80 psi standard operating pressure (high pressure systems available)
- Flow ranges from 110 gpm
- Can be used as a primary filter in specific applications
- Can be used as a secondary filter to a sand media filter, centrifugal separator or other primary filtration system

Advantages

- Rugged, field changeable, washable and replaceable polypropylene filter mesh sock available in 40, 80, 100, 150, and 200 mesh
- Yardney easy-entry lid closure
- Available in welded carbon steel
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces
- Exterior of housing is coated with UV stabilized polyester powder coat for longer product life and greater protection from the environment
- Made in USA
Standard assembly includes:

- Carbon steel housing
- Yardney easy-entry lid closure
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces
- Polyester powder coating on exterior surfaces
- Internal stainless steel basket with field replaceable filter mesh
- 3-way valve
- Pressure gauge
- Tubing with fittings
- Drain valve

Available options:

- ASME code
- High pressure
- Grooved or flanged mainline connections
- Available in purple for reclaim water applications
Yardney Spin Flow screen filters offer the benefits of a vortex action spin flow with the advantages of a woven mesh screen filter. Water enters the screen housing tangentially, vortexing the flow—a technique that separates heavy particulate away from the fine mesh cartridge. This method of separation simplifies and reduces cartridge cleaning. Heavy sediment is flushed from the filter through a conveniently located flush port, while the finer contaminant is trapped on the fine screen cartridge.

Applications

- Removal of sand, rock, grit and other inorganic contaminants to protect drip and micro-irrigation systems with fine filtration down to 200 mesh or 75 microns
- 120 psi standard operating pressure (high pressure systems available)
- Flow ranges from 125 gpm
- Can be used as a primary filter in specific applications
- Can be used as a secondary filter to a sand media filter, centrifugal separator or other primary filtration system with the added benefit of an automatically controlled system

Advantages

- Rugged, field changeable, washable and replaceable polypropylene filter mesh sock available in 40, 80, 100, 150 and 200 mesh
- Yardney easy-entry lid closure
- Available in welded carbon steel
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces
- Exterior of housing is coated with UV stabilized polyester powder coat for longer product life and protection from the environment
- Made in USA
Standard assembly includes:

- Carbon steel housing
- Yardney easy-entry lid closure
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior surfaces
- Polyester powder coating on exterior surfaces
- Internal cartridge element with field replaceable filter mesh
- 3-way valve
- Pressure gauge
- Tubing with fittings
- Purge valve for manual flushing
- Multiple housings include inlet and outlet manifolds and grooved couplings to connect all components together

Available options:

- ASME code
- High pressure

---

**SPECIFICATIONS | SPIN FLOW**

<table>
<thead>
<tr>
<th>Model</th>
<th>Number of Housings</th>
<th>Maximum Flow (gpm)</th>
<th>Filtration Surface Area (total sq ft)</th>
<th>Maximum Pressure</th>
<th>Inlet/Outlet</th>
<th>Purge Port</th>
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</thead>
<tbody>
<tr>
<td>SF 6</td>
<td>1</td>
<td>125</td>
<td>1.60</td>
<td>120 psi</td>
<td>2&quot; Grooved</td>
<td>1/2&quot;</td>
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<tr>
<td>SF 8</td>
<td>1</td>
<td>200</td>
<td>2.35</td>
<td>120 psi</td>
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<td>1/2&quot;</td>
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<tr>
<td>SF 10</td>
<td>1</td>
<td>350</td>
<td>5.17</td>
<td>120 psi</td>
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<td>1/2&quot;</td>
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<td>SF 10-2</td>
<td>2</td>
<td>700</td>
<td>10.35</td>
<td>120 psi</td>
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<td>1/2&quot;</td>
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<tr>
<td>SF 10-3</td>
<td>3</td>
<td>1050</td>
<td>15.52</td>
<td>120 psi</td>
<td>6&quot; Grooved</td>
<td>1/2&quot;</td>
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**DIMENSIONS**

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>SF 6</td>
<td>6&quot;</td>
<td>17 9/16&quot;</td>
<td>6 1/4&quot;</td>
<td>9 7/16&quot;</td>
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<tr>
<td>SF 8</td>
<td>7 3/8&quot;</td>
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<td>9&quot;</td>
<td>11 3/8&quot;</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>SF 10</td>
<td>8&quot;</td>
<td>29 1/8&quot;</td>
<td>11 3/8&quot;</td>
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<td></td>
</tr>
<tr>
<td>SF 10-2</td>
<td>13 5/16&quot;</td>
<td>34 7/16&quot;</td>
<td>5 7/8&quot;</td>
<td>26 7/8&quot;</td>
<td>4 3/4&quot;</td>
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</tr>
<tr>
<td>SF 10-3</td>
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<td>4 7/8&quot;</td>
<td>40 7/8&quot;</td>
<td>4 3/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

---

Made in USA

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Centrifugal Sand Separators

For Centrifugal Removal of Sand, Silt and Gravel from Water
Yardney Centrifugal Sand Separators are ideal for removal of suspended solids and inorganic materials with a specific gravity of 2 or greater. This highly effective system will provide consistent, simple removal of inorganic material down to 75 microns. Easily installed, these carbon steel units are rated to 150 psi with threaded or flanged inlet/outlet connections. Smaller models are designed for vertical installation while larger models are angled and floor or ground mounted.

Sizing must be within the specified flow range for proper centrifugal action. Larger flow separators and custom designed systems are available.

**Applications**

- Removal of sand, rock, grit and other inorganic contaminants to protect drip and micro-irrigation systems with fine removal down to 200 mesh or 75 microns
- 150 psi standard operating pressure (high pressure systems available)
- Flow ranges from 4 gpm
- Removal of solids with a specific gravity of 2 or greater
- Serves as an excellent pre-filter to allow for improved sand media or screen filter performance by removing the gross solids from the water source

**Advantages**

- Sand removal efficiency of 98% of solids down to 200 mesh or 75 microns
- Multiple units in series provide higher efficiencies of filtration
- Units are available in ASME code or non-code construction
- Available with a manual or automatic solids purge valve system
- Special alloys and coatings are available for prolonged life in required applications
- Made in USA
Standard assembly includes:

- Welded carbon steel
- Vertical models include female threaded inlet and outlet connections and a threaded purge port for purging of contaminants or hookup of automatic flush valve
- Angled models include flanged inlet and outlet connections and a threaded purge port for purging of contaminants or hookup of automatic flush valve

Available options:

- ASME code
- High pressure
- Special metal alloys and coatings for extended product life
- Ability to disassemble unit for inspection through flanged manways
- Automatic purge valve for flushing of filter
- Wall mount kit on smaller units

### SPECIFICATIONS | CENTRIFUGAL SAND SEPARATOR | Vertical

<table>
<thead>
<tr>
<th>Model</th>
<th>Minimum Flow (gpm)</th>
<th>Maximum Flow (gpm)</th>
<th>Inlet/Outlet NPT Threaded</th>
<th>Purge Port</th>
<th>Particle Size Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-5V</td>
<td>4</td>
<td>10</td>
<td>1/2&quot;</td>
<td>1&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>R-7V</td>
<td>10</td>
<td>20</td>
<td>3/4&quot;</td>
<td>1&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>R-10V</td>
<td>18</td>
<td>38</td>
<td>1&quot;</td>
<td>1&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>R-12V</td>
<td>26</td>
<td>52</td>
<td>1 1/4&quot;</td>
<td>1&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>R-15V</td>
<td>38</td>
<td>79</td>
<td>1 1/2&quot;</td>
<td>1&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>R-20V</td>
<td>63</td>
<td>120</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>R-25V</td>
<td>100</td>
<td>180</td>
<td>2 1/2&quot;</td>
<td>2&quot;</td>
<td>1/2&quot;</td>
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<tr>
<td>R-30V</td>
<td>125</td>
<td>260</td>
<td>3&quot;</td>
<td>2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>R-40V</td>
<td>190</td>
<td>345</td>
<td>4&quot;</td>
<td>2&quot;</td>
<td>1/2&quot;</td>
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### SPECIFICATIONS | CENTRIFUGAL SAND SEPARATOR | Angled

<table>
<thead>
<tr>
<th>Model</th>
<th>Minimum Flow (gpm)</th>
<th>Maximum Flow (gpm)</th>
<th>Inlet/Outlet AWWA Class D Flange</th>
<th>Purge Port</th>
<th>Particle Size Maximum</th>
</tr>
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<tbody>
<tr>
<td>R-40LA</td>
<td>200</td>
<td>400</td>
<td>4&quot;</td>
<td>2&quot;</td>
<td>1 1/2&quot;</td>
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<tr>
<td>R-60LA</td>
<td>365</td>
<td>960</td>
<td>6&quot;</td>
<td>2&quot;</td>
<td>1 1/2&quot;</td>
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<tr>
<td>R-80LA</td>
<td>800</td>
<td>1600</td>
<td>8&quot;</td>
<td>2&quot;</td>
<td>1 1/2&quot;</td>
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<tr>
<td>R-100LA</td>
<td>1300</td>
<td>2300</td>
<td>10&quot;</td>
<td>2&quot;</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>R-120LA</td>
<td>2025</td>
<td>3400</td>
<td>12&quot;</td>
<td>2&quot;</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>R-140LA</td>
<td>2975</td>
<td>5000</td>
<td>14&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
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<tr>
<td>R-160LA</td>
<td>4000</td>
<td>6200</td>
<td>16&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
</tr>
<tr>
<td>R-180LA</td>
<td>5000</td>
<td>7800</td>
<td>18&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>

Liquid/solid mix enters unit tangentially, inducing centrifugal action

Centrifugal action moves heavier particles to sides of the separator

Solids drop into the collection chamber and are then purged as required

Clean water is drawn out through the separator’s vortex action
Centrifugal Sand Separators
Specifications

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>Angled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td><strong>A</strong></td>
</tr>
<tr>
<td>R-40LA</td>
<td>48 1/2&quot;</td>
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<tr>
<td>R-60LA</td>
<td>63&quot;</td>
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<tr>
<td>R-80LA</td>
<td>71&quot;</td>
</tr>
<tr>
<td>R-100LA</td>
<td>78&quot;</td>
</tr>
<tr>
<td>R-120LA</td>
<td>102&quot;</td>
</tr>
<tr>
<td>R-140LA</td>
<td>102 1/2&quot;</td>
</tr>
<tr>
<td>R-160LA</td>
<td>108&quot;</td>
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<tr>
<td>R-180LA</td>
<td>118 1/2&quot;</td>
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<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>Vertical</th>
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<tbody>
<tr>
<td><strong>Model</strong></td>
<td><strong>A</strong></td>
</tr>
<tr>
<td>R-5V</td>
<td>21 1/2&quot;</td>
</tr>
<tr>
<td>R-7V</td>
<td>21 1/2&quot;</td>
</tr>
<tr>
<td>R-10V</td>
<td>30 1/2&quot;</td>
</tr>
<tr>
<td>R-12V</td>
<td>30 1/2&quot;</td>
</tr>
<tr>
<td>R-15V</td>
<td>30 1/2&quot;</td>
</tr>
<tr>
<td>R-20V</td>
<td>38&quot;</td>
</tr>
<tr>
<td>R-25V</td>
<td>43 3/4&quot;</td>
</tr>
<tr>
<td>R-30V</td>
<td>47 1/2&quot;</td>
</tr>
<tr>
<td>R-40V</td>
<td>49&quot;</td>
</tr>
</tbody>
</table>

Made in USA

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IRR102-02-2019
Yardney Gravity Screen Filters are designed as a primary filter or for recycling and reuse of backwash water from a primary filtration system. These rugged, stainless steel filters are built with the same high performance, high efficiency standards as our other product lines.

Applications
■ For primary filtration or for recycling and reuse of backwash water from a primary filtration system

Features
■ Stainless steel construction
■ Hydraulic powered spray wands
■ Inlet and outlets utilize a groove coupling
■ Curved screen lip to allow easier flow of containments off of screen
■ Sacrificial anode
■ Stainless steel hinges on all door openings
■ Stainless steel hardware
■ Made in USA
Standard product includes:
- Two 4" PVC S-80 Groove x Slip Adapters
- One 1" Brass FPT Union Pressure regulator
- One 1-1/2" Y-Strainer 200 Mesh
- One 1/4" NPT Pressure Gauge
- One Float Switch 120V AC

Available mesh:
- 150
- 200

SPECIFICATIONS | GRAVITY FILTER

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Flow</th>
<th>Filtration Surface Area</th>
<th>Inlet/Outlet</th>
<th>Return Line (FPT)</th>
<th>Return Spray Bar (psi)</th>
<th>Return Line Specs</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>gpm</td>
<td>m³/hr</td>
<td>(total sq ft)</td>
<td>(Grooved)</td>
<td></td>
<td></td>
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<tr>
<td>GSF-KT 200</td>
<td>200</td>
<td>45</td>
<td>3.9</td>
<td>4&quot;</td>
<td>1</td>
<td>10 psi</td>
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DIMENSIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
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</thead>
<tbody>
<tr>
<td>GSF-KT 200</td>
<td>43 3/4&quot;</td>
<td>31 1/4&quot;</td>
<td>42 1/2&quot;</td>
<td>28 1/8&quot;</td>
<td>9&quot;</td>
<td>23 3/8&quot;</td>
<td>31 1/4&quot;</td>
<td>15 5/8&quot;</td>
<td>13 1/8&quot;</td>
<td>3 3/16&quot;</td>
</tr>
</tbody>
</table>

Made in USA

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IRR119-02-2019
The **Yardney Pump Suction Screen** is designed to filter larger contaminants on the intake piping to allow other equipment such as pumps or primary filtration units to run smoothly without clogging. Our self-cleaning screen is designed to continuously remove trash and debris from water sources saving you time, fuel and maintenance costs. Pump Suction Screens can be used for agricultural, turf, industrial, centrifugal or turbine pump applications.

### Applications
- Prevention of large foreign bodies of debris from entering pump intake piping
- 35–65 psi standard operating pressure
- Flow ranges from 325 gpm
- Can be used with virtually any water source to target the removal of larger debris—organic or inorganic

### Advantages
- Precision internal spray bars continually rotate and blast debris away from the screen
- No exterior moving parts that can foul and cause water blockage issues
- Housing utilizes a removable and replaceable stainless steel screen drum saving on repair costs
- Galvanized pump suction screen body
- Heavy gauge stainless steel 12 mesh screen for increased pump efficiency
- Can be installed at any angle without the operation being affected
- Meets many state and federal standards requiring pre-screening of pump intakes
- Standard with a flanged connection
- Improves primary filter downstream of pump by reducing the contaminant and loading concentration
- Made in USA
Standard assembly includes:
- Galvanized carbon steel housing
- Stainless steel filter mesh
- Internally rotating spray bars for contaminant removal
- Y strainer—essential on the water jet supply line

Available options:
- Sealed bearing
- Stainless steel housing

### SPECIFICATIONS | SELF CLEANING PUMP SUCTION SCREEN | 12 Mesh

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate (gpm)</th>
<th>Flow Rate (m³/hr)</th>
<th>Standard Bearing Operating Pressure (psi)</th>
<th>Sealed Bearing Operating Pressure (psi)</th>
<th>Return Spray Bar (gpm)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tbody>
<tr>
<td>CW 100</td>
<td>200</td>
<td>40-60</td>
<td>N/A</td>
<td>12</td>
<td>9°</td>
<td>19 1/2°</td>
<td>12°</td>
<td>3°</td>
<td>1/2°</td>
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<tr>
<td>CW 200</td>
<td>325</td>
<td>74</td>
<td>40-60</td>
<td>20</td>
<td>11°</td>
<td>25°</td>
<td>16°</td>
<td>4°</td>
<td>1 1/2°</td>
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<tr>
<td>CW 400</td>
<td>550</td>
<td>125</td>
<td>40-100</td>
<td>20</td>
<td>15°</td>
<td>28 3/4°</td>
<td>16°</td>
<td>6°</td>
<td>1 1/2°</td>
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<tr>
<td>CW 600</td>
<td>750</td>
<td>170</td>
<td>40-60</td>
<td>20</td>
<td>16°</td>
<td>32 1/2°</td>
<td>24°</td>
<td>8°</td>
<td>1 1/2°</td>
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</tr>
<tr>
<td>CW 800</td>
<td>950</td>
<td>216</td>
<td>40-60</td>
<td>20</td>
<td>18°</td>
<td>34 1/2°</td>
<td>24°</td>
<td>10°</td>
<td>1 1/2°</td>
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</tr>
<tr>
<td>CW 1000</td>
<td>1350</td>
<td>307</td>
<td>40-100</td>
<td>28</td>
<td>23°</td>
<td>39 1/2°</td>
<td>24°</td>
<td>10°</td>
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<tr>
<td>CW 1400</td>
<td>1550</td>
<td>352</td>
<td>40-60</td>
<td>28</td>
<td>26°</td>
<td>42 1/2°</td>
<td>24°</td>
<td>12°</td>
<td>1 1/2°</td>
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<td>CW 1700</td>
<td>1800</td>
<td>409</td>
<td>40-100</td>
<td>28</td>
<td>28°</td>
<td>44 1/2°</td>
<td>26°</td>
<td>12°</td>
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<tr>
<td>CW 2000</td>
<td>2100</td>
<td>477</td>
<td>40-60</td>
<td>36</td>
<td>32°</td>
<td>48 1/2°</td>
<td>26°</td>
<td>14°</td>
<td>1 1/2°</td>
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<tr>
<td>CW 2400</td>
<td>2600</td>
<td>591</td>
<td>40-65</td>
<td>36</td>
<td>35°</td>
<td>52 1/2°</td>
<td>30°</td>
<td>16°</td>
<td>1 1/2°</td>
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<td>3000</td>
<td>682</td>
<td>40-100</td>
<td>44</td>
<td>40°</td>
<td>57 1/2°</td>
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<td>16°</td>
<td>1 1/2°</td>
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<tr>
<td>CW 3500</td>
<td>3500</td>
<td>795</td>
<td>40-65</td>
<td>44</td>
<td>40°</td>
<td>59 1/2°</td>
<td>36°</td>
<td>18°</td>
<td>1 1/2°</td>
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<tr>
<td>CW 4000</td>
<td>4000</td>
<td>909</td>
<td>40-100</td>
<td>44</td>
<td>40°</td>
<td>63 1/2°</td>
<td>42°</td>
<td>18°</td>
<td>1 1/2°</td>
<td></td>
</tr>
</tbody>
</table>

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IRR108-02-2019
Yardney Fertilizer Tanks are chemical application products that provide a simplified method to dispense fertilizer or other chemicals through a low-volume, drip or sprinkler irrigation system. Since these products operate by using the irrigation line pressure and flow, they do not require a pump, motor or other mechanical injecting device.

Applications

- Application of fertilizers or chemicals directly into the water stream
- 100 psi standard operating pressure (high pressure systems available)

Advantages

- Heavy duty, durable and low-cost
- Ease of operation—system does not require a pump, motor or other mechanical injector device
- Standard carbon steel products, 3/16" thick material
- Available in 15-gallon, 30-gallon, 45-gallon, 60-gallon and 75-gallon capacities
- 3M Scotchkote® 134 fusion bonded epoxy coating on 100% of the internal and external surfaces
- Yardney easy-entry lid closure
- Made in USA
Standard assembly includes:

- Welded carbon steel
- Yardney easy-entry lid closure
- 3M Scotchkote® 134 fusion bonded epoxy coating on interior and exterior surfaces
- Internal wand assembly

Available options:

- ASME code

### How it works

A small pressure differential created by the use of a valve, filter or other line restriction creates a parallel flow through the dispenser tank which dispenses the fertilizer into the irrigation system. Flow rate or amount of solution and the displacement rate (dilution) is regulated by installing a flow control valve or flow meter. A “batch” process is employed to measure the amount of fertilizer or chemical to be distributed to the irrigation system in a single application.

### SPECIFICATIONS | FERTILIZER AND CHEMICAL TANKS

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity (gallons)</th>
<th>Discharge Time with Controlled Flow</th>
<th>Maximum Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.5 gpm</td>
<td>0.75 gpm</td>
</tr>
<tr>
<td>HF 15</td>
<td>15</td>
<td>3.0 hours</td>
<td>2.0 hours</td>
</tr>
<tr>
<td>HF 30</td>
<td>30</td>
<td>6.0 hours</td>
<td>4.0 hours</td>
</tr>
<tr>
<td>HF 45</td>
<td>45</td>
<td>9.0 hours</td>
<td>6.0 hours</td>
</tr>
<tr>
<td>HF 60</td>
<td>60</td>
<td>12.0 hours</td>
<td>8.0 hours</td>
</tr>
<tr>
<td>HF 75</td>
<td>75</td>
<td>15.0 hours</td>
<td>10.0 hours</td>
</tr>
</tbody>
</table>

### DIMENSIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF 15</td>
<td>31 13/16&quot;</td>
<td>23&quot;</td>
<td>5&quot;</td>
<td>4 3/4&quot;</td>
<td>20&quot;</td>
<td>23 3/8&quot;</td>
</tr>
<tr>
<td>HF 30</td>
<td>29&quot;</td>
<td>18&quot;</td>
<td>6 5/8&quot;</td>
<td>4 3/4&quot;</td>
<td>25 5/8&quot;</td>
<td>29&quot;</td>
</tr>
<tr>
<td>HF 45</td>
<td>42&quot;</td>
<td>31&quot;</td>
<td>6 5/8&quot;</td>
<td>4 3/4&quot;</td>
<td>25 5/8&quot;</td>
<td>29&quot;</td>
</tr>
<tr>
<td>HF 60</td>
<td>55&quot;</td>
<td>44&quot;</td>
<td>8 5/8&quot;</td>
<td>4 3/4&quot;</td>
<td>25 5/8&quot;</td>
<td>29&quot;</td>
</tr>
<tr>
<td>HF 75</td>
<td>42 1/16&quot;</td>
<td>28 1/2&quot;</td>
<td>8 5/8&quot;</td>
<td>4 3/4&quot;</td>
<td>31 9/16&quot;</td>
<td>34 15/16&quot;</td>
</tr>
</tbody>
</table>

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Toll-Free: 800.854.4788
Fax: 951.656.3867
info@yardneyfilters.com

www.yardneyfilters.com
Yardney Water Filtration Systems utilize backwash valves patented and manufactured in-house by Yardney. All three models (1.5", 342, 454) of Yardney backwash valves are manufactured from cast iron and CNC machined to achieve the lowest pressure drop in the industry. The Yardney backwash valve is the only valve in the industry designed as standard equipment to be 100% field serviceable with basic hand tools and includes a grease fitting for valve shaft lubrication.

Applications

For backwashing Yardney media filters and Maxi-Flush screen filters

Advantages

- Heavy duty and durable
- Rugged and 100% field rebuildable with basic hand tools
- CNC machined cast iron valve body
- Stainless steel seal retainers
- Polyurethane valve seal for durability and long life
- Internal steel parts are 100% polyester powder coated for extended life
- Exterior of valve is coated with UV stabilized polyester powder coat for longer product life and greater protection from the environment
- 3M Scotchkote® 134 fusion bonded epoxy coating on 100% of the internal valve body
- Replaceable brass bushing with internal grease cavity and double O-ring seal protected for easy on-site maintenance without removal of the valve from the system—a feature not found in competitive valves
- Grease fitting for periodic maintenance and lubrication of the valve shaft—a feature not found in competitive valves
- Type 416 pump shaft quality stainless steel valve shaft with wrench flats for easy removal and service
- Available in 1.5", 3" and 4" sizes
- Air or water actuation
- Made in USA
Filtration
Valve is closed to allow process water to enter tank for filtration of the water.

Backwash
Valve opens to create a reverse flow of water. This reverse flow of water hydraulically lifts the media bed of each tank purging any trapped contaminants within the media bed.
Yardney’s new SYNERGY™
Automatic Controller Features:

- 16-station output
- Operates up to 2 valves per station plus a master valve
- Selectable input power: 110V AC, 220V AC, or 12V DC
- Backwash on time stamp, elapsed time or pressure differential
- Programmable filter-backwash frequency, duration and delay
- Manual start with station advance and stop
- Water and bug resistant enclosure
- Pre-dwell 0-5 minutes
- Alarms events displayed on digital screen display including output terminals for light and/or siren
  - Continuous backwash
  - Short circuit of solenoid
  - High pressure with automatic pump shutdown
  - Faulty panel
  - Faulty pressure differential switch
- 72-hour power backup in the event of a power outage
- Digital display with selection of English or Spanish
  - Real-time hours and minutes
  - Number of backwash events
  - Number of backwash events within a time period
- Wire loom block for quick and easy solenoid wire installation and removal
- USB port for historical data logging
- Made in the USA

Made in USA

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NOTE: Pressure differential switch sold separately.
The **Yardney Ultra 116 Automatic Controller** is simple and easy to use. The filter control system design features user selection flexibility of power source, output power type and number of stations. The controller incorporates elapsed time monitoring as well as pressure differential activation with filter system backwashing activity reported through the backwash cycle counter program. The Ultra 116 is available with up to sixteen stations.

**Application**

Available for use with all Yardney automatic filter systems

**Advantages**

- Four-station base unit is expandable to sixteen stations using 4-station plug-in expansion modules
- Operates up to 2 valves per station plus a master valve
- Selectable input power: 110V AC, or 12V DC (Optional 220V AC)
- Flush activation based on elapsed time and/or pressure differential
- Programmable filter backwash frequency, duration and delay
- Backwash cycle counter
- Manual start with station advance and stop
- Lockable rain-tight outdoor enclosure
- Three year limited warranty

Made in USA

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**Irrigation Systems**
LED display provides the following status information:

- Elapsed time differential
- Pressure differential activation
- Backwash cycle counter
- Filter operating status between backwashes
- Active station number during backwash cycle
- Dwell status (active/inactive)

The backwash cycle may be manually initiated, station advanced or stopped as needed.

### ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Station Capacity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Unit</td>
<td>1-4 Outputs</td>
</tr>
<tr>
<td>Plug-in Modules</td>
<td>4 Outputs each / 16 maximum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Source</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Selectable 120V AC 60 Hz or 12V DC</td>
</tr>
<tr>
<td>Optional</td>
<td>220V AC 50 Hz</td>
</tr>
</tbody>
</table>

| Display Power Consumption | 46 milliamps when the display function switch is depressed |

<table>
<thead>
<tr>
<th>Outputs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Power</td>
<td>Selectable 24V AC</td>
</tr>
<tr>
<td>DC Power</td>
<td>Selectable 12V DC continuous or pulsed. Maximum 3 amps continuous output, 20 milliamps pulsed output</td>
</tr>
</tbody>
</table>