



**JOHN DEERE**  
GREEN TECH

"Technology Solutions for the Green Industry"

John Deere Green Tech presents:

# GT SERIES

## Filtration

Automatic Self-Cleaning Water Filters

## GTE & GTH



Each of these systems consist of two stages of filtration; a course pre-filter and a stainless steel fine screen.

The unwanted solids accumulate on the inner surface of the fine screen, building up a filter cake which filters out even finer particles, creating a pressure differential. Once the pressure drop reaches a preset level, a rinse cycle is activated by the control system.

The solids are removed from the fine screen using a focused backwashing method aggressively sucking the dirt off the screen, similar to a vacuum cleaner, and are carried to the drain via the rinse valve.

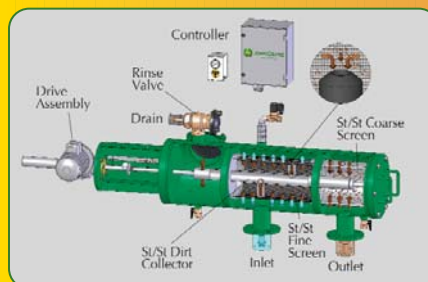
The dirt collector rotates and moves linearly, ensuring the entire screen is completely cleaned for each cycle. Both Electrically Driven and Hydraulically Operated (no power required) configurations can be used.

**The entire cleaning process takes only seconds without any interruption of flow to the main system.**

### GTE Series

**Electrically Driven Self-Cleaning Filter, ideal for use in the following applications:**

- Irrigation
- Process Water
- Reclaim Water
- Effluent Water
- Intake Water
- Waste Water
- Wash Water
- Potable Water
- Cooling Water



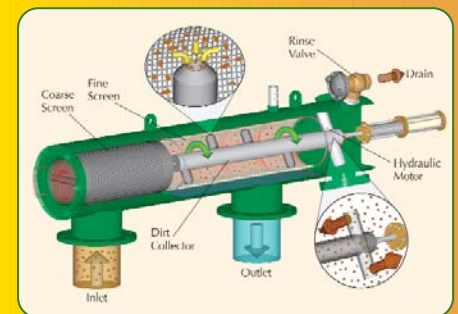
**For Protection of:**

- Heat Exchangers
- Spray Nozzles
- Instrumentation
- Pump Seals
- All Membranes
- Air Compressors
- The Environment

### GTH Series

**Hydraulically Driven Self-Cleaning Filter, Designed Specifically for the Irrigation Industry:**

- Landscape Irrigation
- Nursery Irrigation
- Green House Irrigation
- Frost Protection Systems
- Industrial Water Systems



**For Protection of:**

- Drippers
- Emitters
- Sprinklers
- Micro Sprinklers
- Mini Jets
- Spray Nozzles
- Foggers
- Valves

# GT SERIES

## Automatic Self-Cleaning Water Filters

### GTV Series

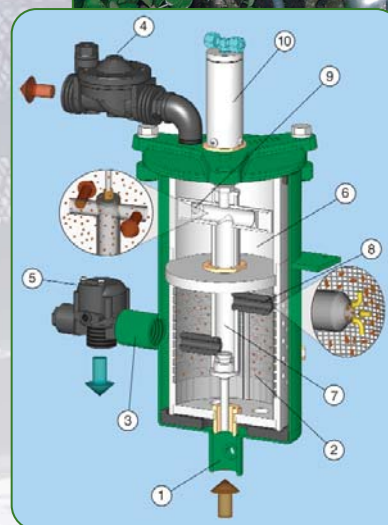
The **GTV** series units from John Deere Green Tech are designed to provide efficient, reliable filtration while reducing the amount of backwash water required. Thanks to its efficient rinse system, the **GTV** uses approximately 90% less than conventional self cleaning units. This low consumption makes it the ideal unit for a wide variety of applications.

The unit is available in line sizes from 3/4" to 8" inlet and outlet, to handle flow rates up to 1320 gpm. Filters can be manifolded for flow rates higher than 1320 gpm. The stainless steel fine screen is available in a variety of sizes to suit any application.

Like the **GTE** and **GTH**, The unwanted solids accumulate on the inner surface of the fine screen, creating a pressure differential. Once the pressure drop reaches the preset level, a rinse cycle is activated by the control system by opening the rinse valve to an atmospheric drain.

As a result, pressure drops in the hydraulic motor chamber and dirt collector assembly causing a vacuuming action on the screen surface at multiple nozzles. All dirt and debris then passes through the dirt collector and hydraulic motor chamber and out the rinse valve. The hydraulic motor rotates the dirt collector and a piston moves the dirt collector linearly. This combination of movements ensures that the entire screen area is cleaned each cycle.

*Uses Up To 90% Less Water than Conventional Self Cleaning Filters*



- 1) INLET
- 2) FINE SCREEN
- 3) OUTLET
- 4) RINSE VALVE
- 5) OUTLET VALVE
- 6) MOTOR CHAMBER
- 7) COLLECTOR ASSEMBLY
- 8) NOZZLES
- 9) HYDRAULIC MOTOR
- 10) HYDRAULIC PISTON

### Applications:

- Irrigation & Turf
- Drinking Water
- Intake Water
- Reclaimed Water
- Effluent Water
- Well Water
- Waste Water
- Wash Water
- Cooling Water
- Cooling Towers
- HVAC
- Pump Seals Protection
- Fire Sprinkler Protection
- I.E. & R.O. Protection
- Nozzle Protection
- Heat Exchange Protection
- Air Compressor Protection

Find out why **John Deere Green Tech** leads the industry in Self-Cleaning Filtration Systems.

Ask your local sales representative for a GT Filter consultation for your site and see for yourself!

# Online Configurator

## FLOW CHART

• Sign up or log in to access the configurator at [www.johndeeregreentech.com](http://www.johndeeregreentech.com).

• Select Configurator, then GT Filter Configurator.

• Create new job or choose existing job. Enter job data and ascending information.

• Select Filter Parameters.

• Select Options and Finish.\*

**FINAL STEP: Save assembly information.**  
Copy and paste information into plans or CAD drawing.

**Part Number:**  
**GTV-06-LS/BV/GTFC-100**

\* Part number automatically changes as you add options.



**John Deere Green Tech's Warranty:**  
John Deere Green Tech warrants that the filtration system or component will be free of defects in workmanship for two years from the date of authorized start-up.

The Green Tech Team is also available to establish a methodical maintenance service program to maximize filtration life. John Deere Green Tech supports a wide network of technical field service agents and recommends they be utilized for service.

**John Deere Green Tech manufactures a wide variety of filtration systems, from 10 gpm to 12,000 gpm, in stainless steel or carbon steel construction.**

# Specifications:

## Technical Data

<b>GTE</b>	Flange Size (inches)	Max Flow Rate (gpm)	Total Screen Area (in. <sup>2</sup> )
<i>RANGES:</i>	2" N.P.T. - 18	110 - 6125	390 - 1560

<b>GTH</b>	Flange Size (inches)	Max Flow Rate (gpm)	Total Screen Area (in. <sup>2</sup> )
<i>RANGES:</i>	2" N.P.T. - 20	110 - 8100	64 - 2140

<b>GTV</b>	Flange Size (inches)	Max Flow Rate (gpm)	Total Screen Area (in. <sup>2</sup> )
<i>RANGES:</i>	3/4" N.P.T. - 10	28 - 2000	WOVEN 64 - 648      SINTERED 96 - 972





## GTE & GTV Screen Apertures

Micron	5	10	15	25	30	40	50	80	100	120	150	200	400	800	1000	1500	3000
Mesh*	3000	1500	1000	600	500	400	250	200	150	120	100	80	40	20	16	10	5
in*	.0002	.0004	.0006	.0010	.0012	.0016	.002	.003	.004	.005	.006	.008	.016	.032	.04	.06	.12

## GTH Screen Apertures

Mesh*	1000	600	500	400	250	200	150	120	100	80	40	20	16	10	5
Micron	15	25	30	40	50	80	100	120	150	200	400	800	1000	1500	3000
in*	.0006	.0010	.0012	.0016	.002	.003	.004	.005	.006	.008	.016	.032	.04	.06	.12

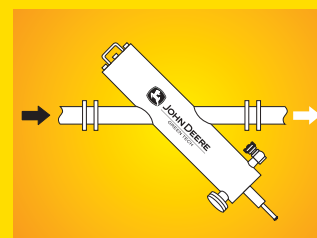
## Screens and Features

	<i>Woven on PVC Support</i>	<i>Multilayer Sintered</i>	<i>Wedgewire</i>	<i>Nozzles</i>	Adjustable Nozzles use 50% less rinse water than conventional nozzles by automatically adjusting to the screen's dirt level.  The result is a more aggressive and efficient cleaning cycle.
<i>Screen Patterns:</i>					
<i>Screen Apertures:</i>	15-5000 Mic	1-5000 Mic	25-2500 Mic		

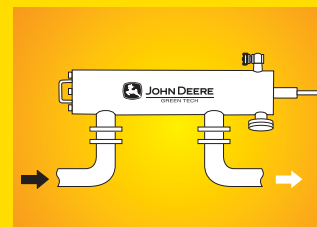
## Controls

<b>GTFC-100</b>	Operated by 9-12 Vdc with built-in timer and pressure differential functions to initiate rinse cycle. Can be configured for 1 or 2 hydraulic filters in parallel.
<b>GTFC-400</b>	Operated by 110/220 Vac 1 with built-in timer and pressure differential functions to initiate rinse cycle. Configured for 1 hydraulic filter only.
<b>GTFC-500</b>	Operated by 110/220 Vac 1 with built-in timer and pressure differential functions to initiate rinse cycle. Can be configured for 2 to 6 hydraulic filters.
<b>GTFC-2000</b>	Operated by 110/220 Vac 1 with built-in timer and pressure differential functions to initiate rinse cycle. Can be configured for single or multiple electric filters.

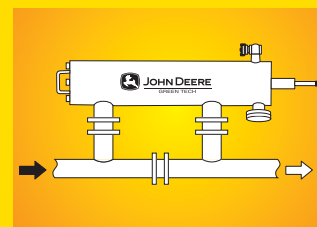
## INSTALLATION OPTIONS



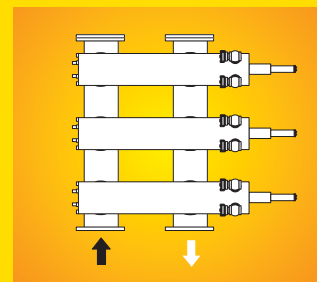
**GTE or GTH In-Line**



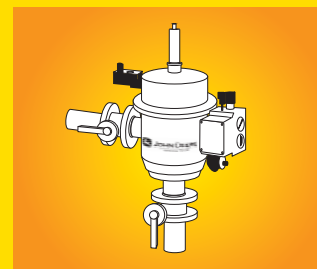
**GTE or GTH On-Line**



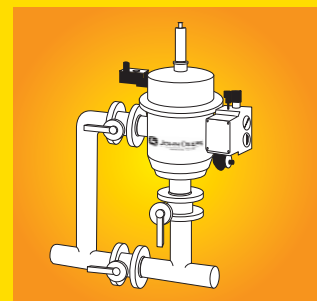
**GTE or GTH On-Line with By-Pass**



**GTE or GTH Multiple**



**GTV On-Line**



**GTV On-Line with By-Pass**

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