

# **SECTION 6**

## **ScaleNet® Commercial Water Treatment Systems**



**WATER QUALITY PRODUCTS**  
**Catalog 10**

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. Watts reserves the right to change or modify product design, construction, specifications or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

# ScaleNet® Commercial Water Treatment Systems

## The Problem

Calcium creates scale in pipes, on appliances and other plumbing surfaces. This leads to higher heating and energy costs and expensive repairs to appliances, such as ice machines, coffee makers, dishwashers and cooling towers in commercial buildings.



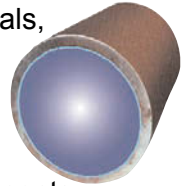
Scale can also be a source of bacteria to grow, which can be a health concern in drinking water applications.

Calcium, on the other hand, is important to human health, and supplements are recommended if Calcium is reduced or totally void in one's diet.



## The Solution

Watts ScaleNet® Treatment Systems transform Calcium ions into Calcium crystals, which are stable and cannot attach to pipes, surfaces, hardware or heat exchanger components. The crystals are so small they are easily rinsed away by the water flow.



## Benefits

- Scale is virtually eliminated!
- Aids in removing existing scale.
- No costly repairs to appliances due to scale.
- No salt.
- No brine tank.
- No backwash.
- Saves water!
- No electricity.
- Easy installation.

**Note:** For satisfactory results recommended flow rates and model sizing must be followed.

## Models

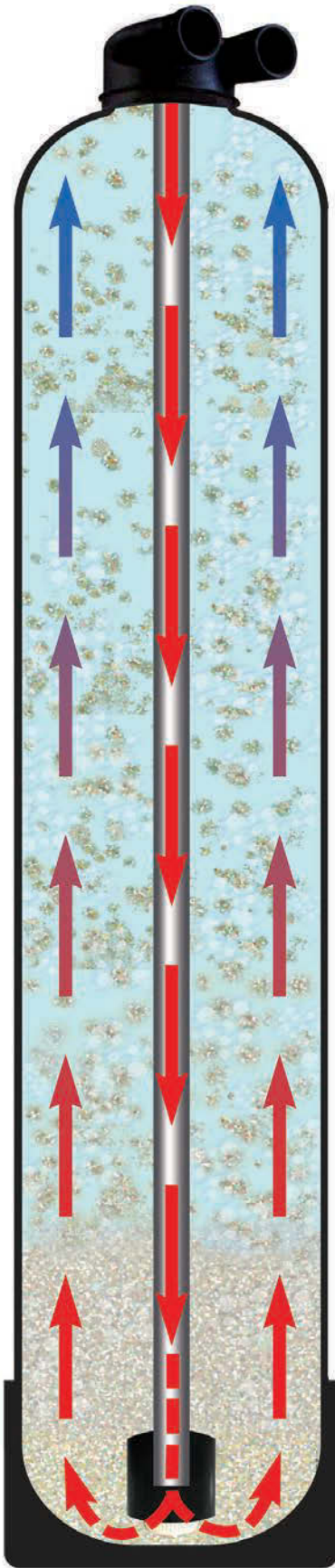
Part Number	Tank Size (Inches)	Tank Type	Pipe Size (Inches)	Media Liters	Gravel Lbs.	Service Flow GPM	Floor Space L x W x H (Inches)	Ship Wt. (Lbs.)
M8407-COM	7x44	Standard	1"	2.5	NA	10	10x10x51	30
M8408-COM	8x44	Standard	1"	3	NA	12	11x11x51	32
M8409-COM	9x48	Standard	1"	4	NA	16	12x12x42	35
M8410-COM	10x54	Standard	1"	5	NA	20	13x13x61	37
M8412-COM	12x52	Standard	1"	7.5	NA	30	15x15x59	45
M8414-COM	14x65	Standard	2"*	12.5	NA	50	20x20x79	77
M8416-COM	16x65	Standard	2"*	19	NA	75	20x20x79	138

\*Units with 2" plumbing have a bottom inlet and top outlet. Dimensions listed do not include outlet plumbing.

**Note:** Commercial systems are designed for long runs and high usage. By-pass valves are optional. Maximum hardness is 75 grains per gallon at specified flow rates. Flow rates are based on 25 grains hardness, maximum. Consult dealer for sizing in higher levels. Do not use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. System must be maintained according to manufacturer's instructions. Pre-treatment for sediment, Iron, Hydrogen Sulfide, Manganese, hydrocarbons and copper may be required depending on conditions. Install systems in new facilities with copper pipe after six weeks of water use.

## Proven Results!

Lab tests conducted at the Watts test facility, located in San Antonio, Texas indicate ScaleNet® anti-scale media virtually eliminates new scale formation and aids in the removal of existing scale. Tests were conducted in water temperatures to 140°F and hardness levels of 17 grains per gallon. Photos (below) show scale formation in untreated water and no scale in the ScaleNet treated water.



**Scale Build-Up**  
(In untreated water).



**No Scale!**  
(With ScaleNet treatment).



### ScaleNet® Cartridges

We also supply cartridges with ScaleNet anti-scale media for low flow applications.

PART NUMBER	SIZE	FLOW (MAX.)
SNC2510	2.5"x 10"	1 gpm
SNC2520	2.5"x 20"	2 gpm
SNC4510	4.5"x 10"	3 gpm
SNC4520	4.5"x 20"	4 gpm

# ScaleNet<sup>®</sup> Commercial Water Treatment Systems

## Installation – 1" Pipe

The flow thru the Commercial Anti-Scale System is upward. Therefore, the inlet and outlet connections are opposite of traditional water treatment equipment.

The flow rate must not exceed the maximum specified flow rate of the system. A flow control device will be required for applications where flow rates may exceed the maximum specified flow rate.

Part No.	Tank Size	Pipe Size	Max Service Flow
M8407-COM	7x44	1"	10 gpm
M8408-COM	8x44	1"	12 gpm
M8409-COM	9x48	1"	16 gpm
M8410-COM	10x54	1"	20 gpm
M8412-COM	12x52	1"	30 gpm

### Installation Instructions:

1. Place system on a smooth flat surface.
2. Install the fittings and / or the bypass (see separate instructions). Slide the nut on first then the split ring and o-ring.
3. Connect incoming cold water to the inlet of the system.
4. Connect system outlet to service water of the house.
5. Partially open a valve down stream of the system to allow the air to purge from the system.
6. Slowly open inlet valve and allow the system to fill with water.
7. Close the down stream valve five minutes after all the air has been purged from the system and plumbing. This flushes any fines out of the system.
8. Check for leaks and repair as required.
9. System is ready for use.

### Conditions for Operation:

- Minimum pressure 15 PSI
- Maximum pressure 125 PSI
- Minimum operating temperature 34 F
- Maximum operating temperature 120 F
- Water pH range 6.0 to 9.0
- Maximum feed water hardness is 75 grains per gallon.
- Hydrogen sulfide, iron, and manganese
- Pre-treatment required
- Maximum chlorine 3 ppm, de-chlorination recommended
- Oil and grease should not be present

*Warning - Do not exceed specified flow rates*

Note: Do not use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. System must be maintained according to manufacturer's instructions. Pre-treatment for sediment, Iron, Hydrogen Sulfide, Manganese, hydrocarbons and copper may be required depending on conditions. Install systems in new facilities with copper pipe after six weeks of water use.



Top view with optional bypass

# ScaleNet<sup>®</sup> Commercial Water Treatment Systems

## Installation – 2" Pipe

The flow thru the ScaleNet<sup>®</sup> Commercial Water Treatment System is upward. Therefore, the inlet connection is at the bottom of the tank and outlet connection is at the top.

The flow rate must not exceed the maximum specified flow rate of the system. A flow control device will be required for applications where flow rates may exceed the maximum specified flow rate.

Part Number	Tank Size	Pipe Size	Max Service Flow
M8414-COM	14x65	2"	50 gpm
M8416-COM	16x65	2"	75 gpm

### Installation Instructions:

1. Place system on a smooth flat surface.
2. It is recommended that the system is installed with a field constructed 3 valve bypass.
3. Connect incoming cold water to the inlet of the system.
4. Connect system outlet to the service water line in the building.
5. Partially open a valve down stream of the system to allow the air to purge from the system.
6. Slowly open inlet valve and allow the system to fill with water.
7. Close the down stream valve five minutes after all the air has been purged from the system and plumbing. This flushes any fines out of the system.
8. Check for leaks and repair as required.
9. System is ready for use.

### Conditions for Operation:

- Minimum pressure 15 PSI
- Maximum pressure 125 PSI
- Minimum operating temperature 34 F
- Maximum operating temperature 120 F
- Water pH range 6.0 to 9.0
- Maximum feed water hardness is 75 grains per gallon.
- Hydrogen sulfide, iron, and manganese pretreatment required
- Maximum chlorine 3 ppm, de-chlorination recommended
- Oil and grease should not be present

*Warning - Do not exceed specified flow rates*



Outlet



Inlet

Note: Do not use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. System must be maintained according to manufacturer's instructions. Pre-treatment for sediment, Iron, Hydrogen Sulfide, Manganese, hydrocarbons and copper may be required depending on conditions. Install systems in new homes with copper pipe after six weeks of water use.



# ScaleNet® Commercial Water Treatment Systems

## LIMITED WARRANTY

Watts Water Quality & Conditioning Products warrants its Commercial Anti-Scale tank systems as follows:

- Tanks having diameters of 6" to 13" are warranted to be free of defects in materials and workmanship for 10 years from the date of original installation or 123 months from date of original shipment, whichever comes first.
- Tanks having diameters 14" or larger are warranted to be free of defects in materials and workmanship for 5 years from the date of original installation or 63 months from date of original shipment, whichever comes first.
- The head is warranted to be free of defects in materials and workmanship for 5 years from date of original installation or 63 months from date of original shipment, whichever comes first.
- The ScaleNet® media is warranted for performance for a period of 2 years from the date of the original installation or 27 months from original date of shipment, whichever comes first, when installed and operated in accordance with the instructions in the corresponding Installation and Operation Manual.

Watts Water Quality & Conditioning Products warrants its ScaleNet® cartridge system as follows:

- The ScaleNet® cartridge system is warranted to be free of defects in materials and workmanship for 1 year from the date of original installation or 15 months from the date of original shipment, whichever comes first.
- ScaleNet® cartridges are warranted for performance for a period of one year from the date of original installation when installed and operated in accordance with the instructions in the corresponding Installation and Operation Manual.
- Carbon replacement filter cartridges are not warranted to perform for any period of time because the service life of replacement carbon filter cartridges varies significantly with local water conditions and volume.

### Conditions

1. The Commercial Anti-Scale System must be installed and serviced by an authorized Watts Water Quality & Conditioning Products dealer or Watts approved entity.
2. Any component failure must not result from abuse, fire, freezing or other acts of nature, violence, or improper installation.
3. Equipment must be installed and operated in compliance with the local plumbing codes and on an approved water supply that does not exceed specification of the system.
4. Equipment is limited to use at water pressures not to exceed 100psi and temperatures not to exceed 110 degrees F.
5. Water supply must not exceed 2.0-PPM chlorine. For water supply exceeding 2.0 PPM chlorine, pretreatment is required. (Please contact your water treatment specialist.)
6. Water supply must not exceed 0.3 mg/l iron, 0.05 mg/l manganese, 1.3 mg/l copper, oil/hydrogen sulfide/phosphates none allowed. Copper usually originates from new copper plumbing. We recommend six weeks of use prior to placing the E-Treat™ systems in service. For water supply exceeding these limitations, pretreatment is required. (Please contact your water treatment specialist.)
7. Information, including model number, serial number, and date of installation, must be provided for any claims pertaining to equipment in warranty.
8. Defective parts are subject to inspection by either Watts Water Quality & Conditioning Products or any authorized representative before final commitment of warranty adjustment is made.
9. Watts Water Quality & Conditioning Products reserves the right to make changes or substitutions in parts or equipment with material of equal quality or value and of then current production.
10. This warranty shall not apply to any Commercial Anti-Scale System system installed or used for residential applications. For purposes of this warranty, a residential application is an application for a building with 4 or fewer dwelling units.

### Limitations

Our obligation under this warranty with respect to the tank or valve is limited to furnishing a replacement for, or at our option, repairing any part or parts to our satisfaction that prove defective within the warranty period stated above. Such replacement parts will be delivered to the owner F.O.B. nearest factory, at no cost, excluding freight and local labor charges, if any.

Our obligation under this warranty with respect to the ScaleNet® media will be limited to furnishing a replacement for the media within two years from date of original installation. Such replacement media will be delivered to the owner F.O.B. nearest factory, at no cost, excluding freight and local labor charges, if any. Damage to the media due to chlorine, other oxidizers or fouling caused by local water conditions or any other operation outside of the limits shown under specifications, is not covered by this warranty.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY WATTS WATER QUALITY & CONDITIONING PRODUCTS WITH RESPECT TO THE PRODUCT. WATTS WATER QUALITY & CONDITIONING PRODUCTS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. WATTS WATER QUALITY & CONDITIONING PRODUCTS HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The remedy described under this warranty shall constitute the sole and exclusive remedy for breach of warranty, and Watts Water Quality & Conditioning Products shall not be responsible for any incidental, special or consequential damages, including without limitation, freight, handling, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which Watts Water Quality & Conditioning Products has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product.

Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights that vary from state to state. You should consult applicable state laws to determine your rights. SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE APPLICABLE WARRANTY PERIODS STATED ABOVE.

