



### **Watts®**

Family of water quality improvement products and equipment for whole house water treatment.

### Whole house water quality problems.

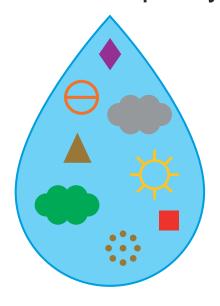
Hardness

Iron

Manganese

Arsenic

**Tannin** 



Bad tastes

Foul odors

Chlorine and harmful chlorine by-products

**Turbidity** 

Acidic water

### The continuous water cycle . . .

Nature intended us to have high quality water. This is why we have the *continuous water cycle*, whereby water from our oceans, rivers, lakes and streams falls to the ground as rain or snow and becomes filtered as it seeps through the earth's surface. As the water works its way through the ground, however, it picks up minerals by dissolving limestone, causing water hardness. Water may also come into contact with iron, manganese, Arsenic and other contaminants, which cause additional water treatment problems.

The chart below lists typical whole house water quality problems and indicates which equipment effectively corrects any problems you may have in your home.

Water Quality Problems	Symptoms	Recommended Equipment
Hardness	Mineral deposits on dishes and glassware; stiff, dingy laundry; high soap usage and need for fabric softeners; dry, itchy skin and scalp; unmanageable hair; extra work to remove soap curd on bathtubs and shower stalls; high energy costs due to scale build-up in pipes and on appliances.	Water Softener.
Chlorine, foul odors and tastes	Chlorine taste; foul odors; damage to hair; itchy skin.	Backwashing filter using activated carbon.
Iron & Manganese	Unpleasant metallic tastes; rust particles; staining on plumbing fixtures; red water; odors.	Iron filter.
Turbidity	Cloudy water; sediment, sand, silt and rust particles.	Media filter.
Acidic water (low pH)	Green stains on bathroom sinks and other porcelain surfaces; blue green water. (Acidic water may cause corrosion of pipes & plumbing fixtures.)	Acid neutralizer using Calcite.
Tannin	Brownish, tea colored water; musty odors.	Tannin filter.
Arsenic	A naturally occurring element found in ground water, Arsenic is a carcinogen at high concentrations, and the EPA reports Arsenic may cause adverse health effects in low concentrations. Testing for Arsenic is highly recommended.	Arsenic Reduction System.

#### Watts®water softeners

"Hard" water is not considered unhealthy; however, hard water problems end up costing you money through increased soap usage, reliance on water softening products and shorter life for appliances due to scale build-up in pipes and other factors.

To correct water hardness, Watts offers a wide range of water conditioning systems, designed to improve water quality throughout your entire household.

# **Enjoy these many benefits Watts®** water softeners provide

- Spot-free glassware and dishes.
- No mineral deposits on bathtubs and shower stalls.
- Brighter, softer laundry.
- Less reliance on water softening products.
- Dramatic reduction in soap usage.
- Manageable hair because shampoo works better.
- Pipes remain free of calcium scale build-up.
- Extended life of appliances and reduced energy costs because scale is virtually eliminated.
- Spot-free car wash (if softened water is used).

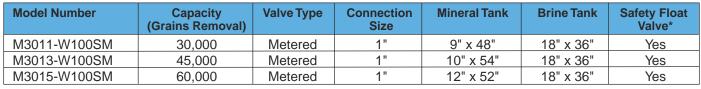


## Metered valve for greater efficiency

Our control valve is metered for greater efficiency and reduced salt usage, because regeneration of the softener resin is based on water consumption. Push button settings provide ease-of-use.

Model selection is typically based on water hardness, water usage, water source and other factors.

# Models Single tank models



#### **Dual tank models**

Model Number	Capacity	Valve Type	Connection	Mineral Tanks		Brine Tank	Safety Float
	(Grains Removal)		Size	Тор	Bottom		Valve*
W3011W100SM-ST1	30,000	Metered	1"	10" x 24"	10" x 35"	18" x 36"	Yes

<sup>\*</sup>Prevents brine water overflow.



### Two equipment types

Watts water softeners are available in two configurations, including:

#### Single tank

Single tank systems include one tank for the softening resin, a brine tank for salt, used to regenerate the softening resin and our metered control valve.

#### **Dual tank**

Dual tank systems come with an additional tank with activated carbon for pre-treatment, which removes chlorine, tastes and odors in municipal water applications and extend the life of the softening resin.



# Watts® whole house filters for chlorine, taste, odor and sediment reduction

Watts activated carbon filters are highly popular because they correct a wide range of water quality problems, by removing chlorine, tastes, odors and sediment.

#### **Benefits**

- · Great tasting water from every tap in your house!
- No bad tastes!
- No foul odors!
- · Crystal clear water for drinking, bathing and cooking!
- User-friendly equipment.
- · Low maintenance due to automatic operation.

#### **Models**

Part Number	Valve	Mineral Tank Size	Media Cubic Ft.	Gravel (Lbs)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space LxWxH
NC09-W100F	Timeclock	9X48	1.0	10	4	< 15	4.2	16X10X55
NC10-W100F	Timeclock	10X54	1.5	10	6	< 15	5.3	16X11X62
NC12-W100F	Timeclock	12X52	2.0	20	8	< 15	7.5	17X13X60
NC14-W100F	Timeclock	14X65	3.0	40	11	< 15	10	18X15X74
NC16-W100F	Timeclock	16X65	4.0	50	14	< 15	11	20X17X74
NC21-W100F	Timeclock	21X62	5.0	100	20	< 15	25	22X23X70

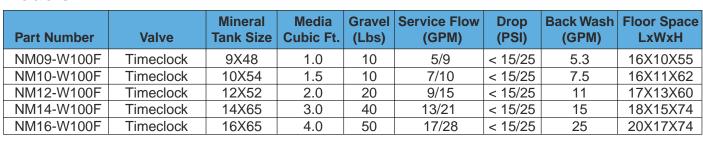
# Whole house filters for sediment reduction with high efficiency Micro-Z<sup>™</sup> filter media.

Watts filtration systems for sediment use our high performance Micro-Z filter media to provide increased loading capability and higher service flow rates. Micro-Z's unique Zeolite structure offers increased porosity to outperform conventional sand filters by reducing water consumption. The need to backwash is dramatically reduced!

#### Features & benefits

- Uses Micro-Z<sup>™</sup> for increased solids loading.
- Unique structure allows for higher flow rates.
- Reduces water consumption because the need to backwash is dramatically reduced.
- Reliable equipment, designed for long-term service.

#### **Models**





# Watts® whole house filters for iron and manganese reduction

Iron is one of the most common elements found in nature, and most ground waters contain a measurable amount of iron. Iron stains bathtubs, toilets, sinks, driveways and it will even stain the side of your house in sufficient concentrations. Watts offers two media types to remove iron in point-of-entry applications.

#### Two media types

#### **FILOX**<sup>TM</sup>

A non-chemical oxidizing media to reduce Iron.

#### Greensand-Plus™

An enhanced version of the traditional medium to remove iron from water.

#### Filox™ system advantages

- · Highest flow rate of any iron removal media.
- · No oxidizing chemicals needed for regeneration.
- High efficiency with 80% manganese dioxide for enhanced performance and capacity.
- Effective, from 5.0 to 9.0 pH.
- System is easy to program, with 10 pre-programmed regeneration cycles to optimize water treatment.

#### Greensand-Plus™ system advantage

- · Lower backwash requirements.
- Known saturation capacity.
- Higher temperatures and differential pressures than traditional Manganese Greensand.
- · Greensand-Plus is also used for radium reduction.
- User friendly, low maintenance electronic time clock valve.



#### Note:

The use of chemicals and oxidizers, such as chlorine, potassium permanganate and oxygen may be required for both systems to provide the optimal treatment for Iron, Hydrogen Sulfide and Manganese.

#### Filox™ models

Part Number	Valve	Mineral Tank Size	Media Cubic Ft.		Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space LxWxH
NF09-W100F	Timeclock	9X48	1.0	10	6	< 15	5.3	16X10X55
NF10-W100F	Timeclock	10X54	1.5	10	9	< 15	7.5	16X11X62
NF12-W100F	Timeclock	12X52	2.0	20	12	< 15	10	17X13X60
NF14-W100F	Timeclock	14X65	3.0	40	18	< 15	15	18X15X74
NF16-W100F	Timeclock	16X65	4.0	50	24	< 15	20	20X17X74
NF21-W100F	Timeclock	21X62	5.0	100	27	< 15	25	22X23X70

#### Greensand Plus™ models

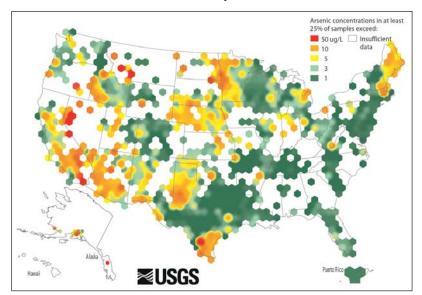
Part Number	Valve	Mineral Tank Size	Media Cubic Ft.		Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space LxWxH
NGP09-W100F	Timeclock	9X48	1.0	10	3	< 15	5.3	16X21X55
NGP10-W100F	Timeclock	10X54	1.5	10	4	< 15	7.5	16X22X62
NGP12-W100F	Timeclock	12X52	2.0	20	5	< 15	10	17X24X60
NGP14-W100F	Timeclock	14X65	3.0	40	6	< 15	12	18X15X74
NGP16-W100F	Timeclock	16X65	4.0	50	7	< 15	20	20X17X74
NGP21-W100F	Timeclock	21X62	5.0	100	12	< 15	25	22X23X70



# Watts<sup>™</sup> whole house filters for Arsenic reduction using highly effective MEDIA G2R<sup>®</sup> for exceptional performance.

Arsenic is a naturally occurring element found in ground water in may parts of the world. The World Health Organization and the U.S. EPA recognize Arsenic as a carcinogen and have determined it may cause long-term adverse health effects in concentrations above 10 ppb.

#### Arsenic concentration map for the United States



Note: US map is not detailed enough to accurately reflect water quality in any specific area. We highly recommend testing for Arsenic.

#### Media G2R®

Media G2R® uses a patented process, whereby two components are combined to produce a unique water treatment media, which outperforms conventional Arsenic reduction materials.

Media G2R® advantages are as follows:

- Adsorbs both Arsenic III and IV.
- NSF standard 61 certified.
- Performs over a wide range of pH, up to 8.
- Long life expectancy to reduce costs.
- Engineered for residential applications.
- Proven results!



#### **Electronic control**

A control valve with special electronics is used to determine when capacity has been reached. This provides assurance only safe water is being provided by the system.

#### **Models**

Model Number	Design Flow Rate (GPM)	Mineral Tank	Media Cu. Ft.
WARS10R	3.75	10" x 54"	1.5
WARS12R	5	12" x 52"	2
WARS14R	7.5	14" x 65"	3

Note: Systems come fully assembled with media installed.

### Additional Watts® whole house water treatment systems

Application	Problems	Model Number	Control Valve	Mineral Tank	Media Cubic Ft.	Dome hole		
Acidic water	Low pH	NN10-W100F	Timeclock	10" x 54"	1.5	Yes		
	Green stains	NN12-W100F	Timeclock	12" x 54"	2	Yes		
Tannin	Discoloration (brown)	Applications vary from one geographic area to another, your authorized						
	Odors	Watts dealer wil	Watts dealer will consult the factory for recommendations.					

### **Drinking water systems**

Your Watts authorized dealer can provide you with a full range of water quality improvement products for drinking water applications. This equipment includes reverse osmosis systems, ultraviolet light disinfectant systems, the Watts® microbiological filter, under counter filters, whole house cartridge filters, whole house ROs and pre and post filters.



#### **Reverse Osmosis Systems**

Recognized as the best technology to remove the widest spectrum of drinking water contaminants. Under counter and whole house models are available.



Whole house model.



#### The Watts® Microbiological Filter

Performance validated by independent lab. Removes bacteria, cysts, virus, chlorine, taste and odors. Certified to NSF Standard 42.

#### Big-Bubba® cartridge filter



Non-electric, non-metallic whole house filter for sediment, chlorine, taste and odor.

#### Watts® UV systems for disinfection

Popular in rural areas and when chlorine disinfection may not be adequate to reduce bacteria, e-coli and other harmful contaminants. Available in 110 and 230 volt models.



## Pre & post filter housings

Ideal before and after whole house softeners and filters.













Watts Regulator was founded by Joseph Watts in 1874 as he "set the standard" for valve technology. Today, Watts Water Technologies is a New York Stock Exchange Company, with over eighty (80) facilities worldwide. We are dedicated to providing the best consumer value for every product we supply. The Watts Water Quality & Conditioning Products division has stocking locations in Florida, Texas and Arizona.



#### **Authorized dealers**

Watts Water Quality and Conditioning Products are sold by independent dealers who are highly experienced and trained to install and service our equipment. For more information regarding Watts water quality products, please contact the dealer listed below:



