

Chapter 11

Water Quality Systems

Water Quality Systems



A full range of water treatment solutions to match the unique needs of any location

WATTS®

ONEFLOW® SCALE CONTROL SYSTEMS

WATER CONDITIONING

OneFlow® Anti Scale System

The OneFlow® Anti-Scale System provides protection from scale formation on internal and external plumbing surfaces. The OneFlow® system is a single cartridge/media-based system that may be installed on a cold water line prior to a water-using device (water heater, hot-beverage system, appliance, steamer, etc.) that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively with plumbing surfaces, as opposed to dissolved hardness minerals. These particles make their way through plumbing systems without latching on to pipes, inside fixtures, valves, or heating elements.

The system requires very little maintenance, no backwashing, no salt and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers are no longer a concern.

OneFlow® is not a water softener. It does not add chemicals. It is a scale prevention device with proven third party laboratory test data and years of successful Domestic and Commercial applications. OneFlow® is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

Features

- Chemical free scale control - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free - No salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater
- Uses environmentally friendly “green” technology
- Improves efficiency of all water appliances whether heating the water or not
- Simple sizing & installation – all you need to know is pipe size and flow rate
- Inlet ball valve for easy isolation shutoff and filter changes
- OneFlow® does not remove the essential minerals in water
- OneFlow® cartridge-based systems are easily maintained; change the cartridge once per year
- Treated water is safe for human consumption

SCALE CONTROL SYSTEMS

OneFlow® Cartridge System

This range of OneFlow® conditioners has the TAC media contained within easily replaceable cartridges.

The flow rates are shown on each product and are typically used for smaller domestic and point of use applications.

Models OF110-1, OF120-2 and OF140-4

Connection Sizes: ½" and ¾" (15 and 20mm)

Flow Rates: From 0.5 gpm to 4 gpm (1.9 lpm to 15.2 lpm)



TYPE	PRODUCT CODE	PEAK FLOW RATE	CONNECTION SIZE
OneFlow® Anti Scale	WWQ-OF110-1	1 gpm (4 lpm)	½"
OneFlow® Anti Scale	WWQ-OF120-2	2 gpm (8 lpm)	½"
OneFlow® Anti Scale	WWQ-OF140-4	4 gpm (15 lpm)	¾"

SCALE CONTROL SYSTEMS

Model OF220-2

Connection Sizes: 1/2"
Flow Rate: 2 gpm

The OneFlow® Anti-Scale System with two filter housings provides protection from scale formation and reduces chlorine and other off tastes to improve overall water quality in Food Service applications. The OneFlow® system is a dual cartridge-based system that may be installed on a cold water line prior to a water-using device (coffee maker, espresso machine, post-mix system or other appliance) that requires protection from the ill effects of hard water. OneFlow® works exceptionally well where the water is being heated or brought to steam.

TYPE	PRODUCT CODE	MAXIMUM FLOW RATE	CONNECTION SIZE
OneFlow® System 2 GPM	WWQ- OF220-2	2 gpm (8 lpm)	1/2"



Model OFTWH

Connection Sizes: 3/4"
Flow Rates: 10 gpm (1.9 lpm to 38 lpm)

TYPE	PRODUCT CODE	PEAK FLOW RATE	CONNECTION SIZE
OneFlow® Anti Scale	WWQ-OFTWH	10 gpm (38 lpm)	3/4"



Model OFTWH-R - For Residential Tankless Water Heaters

Connection Sizes: 3/4"
Flow Rates: 6 gpm (22.71 lpm)

TYPE	PRODUCT CODE	PEAK FLOW RATE	CONNECTION SIZE
OneFlow® System 6 GPM	WWQ-OFTWH-R	6 gpm (23 lpm)	3/4"



OneFlow® Media Systems

This range of OneFlow® conditioners for larger applications uses replacement TAC media. The flow rates are shown for each product and are typically used for larger domestic point of entry and commercial solutions.

ONEFLOW REPLACEMENT CARTRIDGES

OneFlow Replacement Cartridges

REPLACEMENT CARTRIDGE PRODUCT CODE	FOR ONEFLOW® SYSTEM	FREQUENCY
WWQ-OF110RM	WWQ-OF110RM	Cartridge should be replaced every 12 months
WWQ-OF120RM	WWQ-OF120RM	Cartridge should be replaced every 12 months
WWQ-OF140RM	WWQ-OF140RM	Cartridge should be replaced every 12 months
WWQ-OF220RC	WWQ-OF220RC	Cartridge should be replaced every 6 months
WWQ-OF-TWHRM	WWQ-OF-TWHRM	Cartridge should be replaced every 2 years
WWQ-OF-TWHRM-R	WWQ-OF-TWHRM-R	Cartridge should be replaced every 2 years

SCALE CONTROL SYSTEMS

Series OFRES - Residential

Connection Size: 1"
 Flow Rate: Up to 16 gpm (60 lpm)

OneFlow® Residential Anti-Scale Systems provide a system with protection from internal hardness related scale formation on plumbing surfaces. Water using appliances and plumbing fixtures also enjoy a longer lifespan because hardness scale build up on internal parts no longer occurs.



TYPE	PRODUCT CODE	CONN. SIZE	MINERAL TANK SIZE	MEDIA LITRES	MAXIMUM SERVICE FLOW*	PRESSURE DROP (PSI)**	FLOOR SPACE (L X W X H)
Residential OneFlow®	WWQ-OFRES-0835	1"	8"x35"	2	8 gpm (30 lpm)	<15	13"x9"x40"
Residential OneFlow®	WWQ-OFRES-0935	1"	9"x35"	3	12 gpm (45 lpm)	<15	13.5"x10"x40"
Residential OneFlow®	WWQ-OFRES-1035	1"	10"x35"	4	16 gpm (60 lpm)	<15	14"x11"x40"

Series OF

Models OF744-10, OF844-12, OF948-16, OF1054-20 and OF1252-30

Connection Sizes: 1"
 Flow Rates: 10 gpm to 30 gpm (38 lpm to 114 lpm)

TYPE	PRODUCT CODE	DESCRIPTION
OneFlow® System 10 GPM	WWQ-OF744-10-C	10 gpm (38 lpm), 1"
OneFlow® System 12 GPM	WWQ-OF844-12-C	12 gpm (45 lpm), 1"
OneFlow® System 16 GPM	WWQ-OF948-16-C	16 gpm (60 lpm), 1"
OneFlow® System 20 GPM	WWQ-OF1054-20-C	20 gpm (76 lpm), 1"
OneFlow® System 30 GPM	WWQ-OF1252-30-C	30 gpm (114 lpm), 1"



Replacement Media

REPLACEMENT CARTRIDGE PRODUCT CODE	FOR ONEFLOW® SYSTEM	FREQUENCY
WWQ-OFRES-0835RM	OFRES-0835	Cartridge should be replaced every 3 years
WWQ-OFRES-0935RM	OFRES-0935	Cartridge should be replaced every 3 years
WWQ-OFRES-1035RM	OFRES-1035	Cartridge should be replaced every 3 years
WWQ-OF744RM	OF744-10C	Cartridge should be replaced every 3 years
WWQ-OF844RM	OF844-12C	Cartridge should be replaced every 3 years
WWQ-OF948RM	OF948-16C	Cartridge should be replaced every 3 years
WWQ-OF1054RM	OF1054-20C	Cartridge should be replaced every 3 years
WWQ-OF1252RM	OF1252-30C	Cartridge should be replaced every 3 years

FILTRATION - BIG BUBBA® FILTRATION SYSTEM

Big Bubba® Housing 2"

The Watts Big Bubba® Filter Housing is a high capacity polypropylene filter housing designed to suit for high flow rates, the filter housing is a non-metallic made from rugged, glass-reinforced polypropylene, which will not chip, rust or dent.

The non-metallic construction makes this the perfect economical replacement for stainless steel filtration equipment and ideal for sea water applications or when chemical compatibility is an issue.

TYPE	PRODUCT CODE	PIPE FITTING	OVERALL HEIGHT
Big Bubba® Housing	WWQ-BBH-150	2"	40"



Replacement Depth Cartridge for Big Bubba® Housing

Melt blown Polypropylene cartridges are recommended when depth filtration is necessary for gelatinous substances and when chemical resistance may be a requirement.

TYPE	PRODUCT CODE	MEDIA TYPE	MICRON RATING
Big Bubba® D1	WWQ-BBC-150-D1	PP	1
Big Bubba® D5	WWQ-BBC-150-D5	PP	5
Big Bubba® D20	WWQ-BBC-150-D20	PP	20
Big Bubba® D50	WWQ-BBC-150-D50	PP	50

Replacement Pleated Cartridge for Big Bubba® Housing

Ideal for more critical applications, offering greater efficiency, more surface area for greater throughput and reduced cost.

TYPE	PRODUCT CODE	MEDIA TYPE	MICRON RATING
Big Bubba® P1	WWQ-BBC-150-P1	PP	1
Big Bubba® P5	WWQ-BBC-150-P5	PP	5
Big Bubba® P20	WWQ-BBC-150-P20	PE	20
Big Bubba® P50	WWQ-BBC-150-P50	PE	50
Big Bubba® PM150	WWQ-BBC-150-PM150	Mesh	150



Carbon Filter for Big Bubba® Housing 2"

Big Bubba® filters are available in a range of different specifications, Pleated, Melt Blown and Activated Carbon. The difference between these and any of our other filter range is that they are bigger. They are able to cope with very high levels of turbidity and can withstand high flow rates up to 36m³/Hr.

TYPE	PRODUCT CODE	MAX FLOW	CAPACITY	CHLORINE REDUCTION
Big Bubba® Carbon	WWQ-BBC-150-ACP	15 GPM	140,000 Gals.	90%



SMARTSTREAM™ DISINFECTANT SYSTEMS

Watts SmartStream™ B and C Series UV Systems

Lamps, Quartz Sleeves and Sleeve Oring

TYPE	B SERIES			B SERIES PARTS		
	PRODUCT CODE	FLOW RATE (GPM)	SIZE (IN)	REPLACEMENT LAMP PRODUCT CODE	REPLACEMENT SLEEVE PRODUCT CODE	REPLACEMENT ORING SLEEVE PRODUCT CODE
Watts SmartStream™ Systems With B Series Controllers						
B Series	WWQ-WB001ABCX	1	3/8" M	WWQ-T7401024	WWQ-T7401104	WWQ-T7402102
B Series	WWQ-WB002ABCX	2	3/8" M	WWQ-T7401025	WWQ-T7401105	WWQ-T7402102
B Series	WWQ-WB006ADCX	6	3/4" M	WWQ-T7401026	WWQ-T7401106	WWQ-T7402102
B Series	WWQ-WB012BFCX	12	1" M	WWQ-T7401027	WWQ-T7401107	WWQ-T7402102
TYPE	C SERIES			C SERIES PARTS		
	PRODUCT CODE	FLOW RATE (GPM)	SIZE (IN)	REPLACEMENT LAMP PRODUCT CODE	REPLACEMENT SLEEVE PRODUCT CODE	REPLACEMENT ORING SLEEVE PRODUCT CODE
Watts SmartStream™ Systems With C Series Controllers						
C Series	WWQ-WC012BFCX	12	3/4" & 1" COMBO	WWQ-T7401029	WWQ-T7401109	WWQ-T7402102
C Series	WWQ-WC016BFCX	16	3/4" & 1" COMBO	WWQ-T7401030	WWQ-T7401110	WWQ-T7402102
C Series	WWQ-WC025BGCX	25	1" & 1 1/2" COMBO	WWQ-T7401031	WWQ-T7401111	WWQ-T7402102



B Series

FILTER HOUSINGS

Our comprehensive selection of plastic filter housings include products from the brands and companies of Flowmatic®, Pentair, and Watts.

Flowmatic - 10" Plastic Filter Housings

TYPE	MODEL NO.	SIZE	PR	SUMP	CAP	PIPE SIZE	NO./ CASE
Flowmatic	WWQ-FH4200BL34PR	10"	Yes	Blue	Black	3/4"	12
Flowmatic	WWQ-FH4200CW34PR	10"	Yes	Clear	White	3/4"	12
Flowmatic	WWQ-FH4200WW12	10"	No	White	White	1/2"	12



Watts - 10" Plastic Filter Housings

TYPE	MODEL NO.	SIZE	DESCRIPTION	PR	SUMP	CAP	PIPE SIZE	NO./ CASE
Watts	WWQ-W10CPH34CBPR	10"	Standard	Yes	Clear	Black	3/4"	12
Watts	WWQ-W10FFPH1BLPR	10"	Big Blue	Yes	Blue	Black	1"	6



Filter Housing Accessories

TYPE	MODEL NO.
Watts Wrench	WWQ-WW-C
Watts Bracket	WWQ-WBKT-FF-1
Watts Screws	WWQ-GAFFSCREW
FullFlow Wrench	WWQ-WW-FF
Flowmatic Wrench	WWQ-WR100

FILTER CARTRIDGES

Carbon Block Filters - Watts

Thick wall carbon construction for superior performance. Low cost for economy!

Top-of-the-line coconut shell carbon block filter cartridge for chlorine, taste, odour and sediment reduction.

- Competitively priced!
- 100% Coconut shell Carbon
- Outperform GAC cartridges four ways:
 1. Superior chlorine reduction
 2. Lower pressure drop
 3. Will not channel
 4. Lower cost
- >90% chlorine reduction*
- FDA grade components & materials



TYPE	MODEL NO.	TYPE	OD	LENGTH	MICRON RATING*	CHLORINE REDUCTION*	NO. / CASE
Carbon Block Filter	WWQ-WCBFF975	Thick Wall	4 1/2"	9 3/4"	5 nominal	25,000 gal @ 3 gpm	4
Carbon Block Filter	WWQ-F109009	Thick Wall	2 1/2"	9 3/4"	5 nominal	10,000 gal @ 1 gpm	25
Carbon Block Filter	WWQ-MAXPB-975	Lead + cysts	2 7/8"	9 3/4"	1 nominal	20,000 gal @ 1 gpm	12
Carbon Block Filter	WWQ-MAXVOC-975	Water washed	2 7/8"	9 3/4"	1 nominal	20,000 gal @ 1 gpm	12

Carbon Block Filters - Long Life and High Chlorine Reducer

TYPE	MODEL NO.	TYPE	OD	LENGTH	MICRON RATING	CHLORINE REDUCTION	NO. / CASE
Chlorine Reducer	MAXCL-975	Thick Wall	2 7/8"	9 3/4"	1 nominal	20,000 gal @ 1 gpm	12
Chlorine Reducer	MAXCL-FF975	Thick Wall	4 5/8"	9 3/4"	1 nominal	80,000 gal @ 3 gpm	4



Carbon Block Filters - Watts

TYPE	MODEL NO.	BRANDS	OD	LENGTH	MICRON RATING	CHLORINE REDUCTION	NO. / CASE
Carbon Block Filter	WWQ-F109020	Watts	2 1/2"	20"	5 nominal	20,000 gal @ 1 gpm	25

GAC Filters - Flowmatic

Water Washed, Coconut Shell Granular, Activated Carbon Cartridges

TYPE	MODEL NO.	TYPE	OD	LENGTH	CAPACITY (GALS.)	NO. / CASE
GAC Filter	WWQ-GAC10N	GAC	2 3/4"	9 3/4"	2,500	24
GAC Filter	WWQ-GAC-BB20	Watts	4 1/2"	20"	15,000	4

FILTER CARTRIDGES

Flow-Pro® Melt Blown Sediment Cartridges

TYPE	MODEL NO.	BRANDS	OD	LENGTH	MICRON RATING	NO. / CASE
Flow-Pro®	WWQ-FPMB1-978	FlowPro	2 1/2"	9 7/8"	1 nominal	48
Flow-Pro®	WWQ-FPMB5-978	FlowPro	2 1/2"	9 7/8"	5 nominal	48
Flow-Pro®	WWQ-FPMB-BB5-10	FlowPro	4 1/2"	9 3/4"	5 nominal	24
Flow-Pro®	WWQ-FPMB1-20	FlowPro	2 1/2"	20"	1 nominal	24
Flow-Pro®	WWQ-FPMB-BB5-20	FlowPro	4 1/2"	20"	5 nominal	12



Watts Sediment Cartridges

TYPE	MODEL NO.	BRANDS	OD	LENGTH	MICRON RATING	NO. / CASE
Sediment Cartridge	WWQ-WPC5-975	Watts	2 3/4"	10"	5 nominal	25
FullFlow	WWQ-WPC5FF975	Watts	4 1/2"	9 3/4"	5 nominal	18
FullFlow	WWQ-WPC1FF20	Watts	4 1/2"	20"	1 nominal	9
FullFlow	WWQ-WPC50FF20	Watts	4 1/2"	20"	50 nominal	9



String Wound (Standard / High temp)

TYPE	MODEL NO.	BRANDS	OD	LENGTH	MICRON RATING	NO. / CASE
String Wound	WWQ-SF1-978	Watts	2 1/2"	10"	1 nominal	25
String Wound	WWQ-SF5-978	Watts	2 1/2"	10"	5 nominal	25
String Wound	WWQ-SF5-10-425	Watts	4 1/2"	10"	5 nominal	8
String Wound	WWQ-SF1-20	Watts	2 1/2"	20"	1 nominal	25
String Wound	WWQ-SF5-20-425	Watts	4 1/2"	20"	5 nominal	4

Watts Water Quality offer a wide range of micron ratings and cartridge sizes, please contact us for more information.



RESIN AND MEDIA

Micro Z - Superior Filtration Media

Micro-Z™ granular filter media outperforms conventional multimedia materials due to its unique structure, allowing particulate to penetrate deeply into the filter bed to provide superior filtration at increased flow rates.



TYPE	MODEL NO.	DESCRIPTION	CUBIC FEET PER BAG	CONTAINER WT. (LBS)	PACKAGE	PER PALLET
Micro Z Media Bag	WWQ-A7200	Micro-Z	1	55	Bag	40

Granular Activated Carbon (GAC)

Granular Activated Carbon (GAC) is a natural material derived from bituminous coal, lignite, wood, coconut shell, etc, activated by steam and other means. Carbon is very popular due to its ability to correct many water quality problems.



TYPE	MODEL NO.	DESCRIPTION	TYPE	MESH	CUBIC FEET PER BAG	CONTAINER WT. (LBS)	PER PALLET
Activated Carbon Media	WWQ-A9231-AL	Coconut shell	Coconut	12 X 40	1	27.5	40

Birm

Birm is a black granular filter material used for removal of iron and/or manganese from water in pressure or gravity systems.

It contains an active insoluble catalyst to precipitate iron and/or manganese. Because the presence of iron is most common, iron removal is the usual application for Birm. Under suitable conditions, the iron and dissolved oxygen in water react on contact with the Birm filter bed and, as a result, the iron is precipitated in the form of hydroxide. This is a flocculent material which is filtered out in the bed of Birm. Periodic backwashing flushes out the accumulated iron and the Birm is again ready to perform its function. Birm is not consumed in the iron removal operation.

TYPE	MODEL NO.	DESCRIPTION	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS)	PER PALLET
Media BIRM Regular	WWQ-A8006	Birm (regular)	Iron, HS reduction	1	44	40

KDF

KDF (Kinetic Degradation Fluxion) process media are high-purity copper-zinc granules that reduce contaminants in water using an oxidation/reduction (redox) reaction. They are used in pretreatment, primary treatment and wastewater treatment applications in order to extend system life and to reduce heavy metal contamination, chlorine and hydrogen sulfide.

KDF 55 granules: designed for removing or reducing chlorine and soluble heavy metals.

TYPE	MODEL NO.	DESCRIPTION	APPLICATION	CUBIC FEET PER BAG	CONTAINER WT. (LBS)	PER PALLET
KDF55 Media	WWQ-KDF55-DRUM	KDF-55	Chlorine reduction	0.33	57	48