# For Commercial and Industrial Applications

Job Name	Contractor
Job Location	Approval
EngineerApproval	Contractor's P.O. No

# LEAD FREE\*

# Models OF1465-50 and OF1665-75

OneFlow® Anti-Scale System

Connection Sizes: 2" (50mm)

Flow Rates: From 30 gpm to 450 gpm (114 lpm to 1703 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal plumbing surfaces. The OneFlow® system may be installed at the point-of-entry to a building to treat both hot\* and cold water, or it can be located directly before a water heater, boiler, or other hot water-using device that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles, as water travels through the media filled tank. These precipitated microcrystals stay suspended in the water and are passed to drain, thereby having a greatly reduced ability to react negatively like dissolved hardness does. 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 and on fixtures are no longer a concern.

OneFlow® is not a water softener or a chemical additive (like anti-scalants or sequestrants). It is a scale prevention device with proven third party laboratory test data and years of successful residential and commercial applications. OneFlow® is the one water treatment device that effectively provides scale protection and is a great alternative to water softening (ion exchange) or scale sequestering chemicals.

#### **Features**

- Chemical-free scale prevention and protection 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
- No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
- Improves efficiency of all water using appliances both hot\*\* and cold
- Simple sizing & installation all you need to know is pipe size and the peak flow rate
- Perfect system for towns or communities where water softeners are banned or restricted

### NOTICE

\*\* For hot water applications where water temperature is 100°F – 140°F (38° – 60°C), please consult ES-OneFlow-HotWater



OF1665-75

- Manifold assemblies for easy installation of multi-tank, highflow applications (Can be operated in parallel for high flow applications.)
- OneFlow® does not remove minerals or add sodium to the water supply
- OneFlow® can be installed as pre-treatment to reverse osmosis (OneFlow® should be the last stage in treatment unless a point-of-use system is being used down stream.)



<sup>\*</sup>The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

#### Models

 Model
 Maximum Flow Rate

 OF1465-50
 50 gpm (189.3 lpm)

 OF1665-75
 75 gpm (283.9 lpm)

Connections

Inlet Connection 2" (50mm) PVC Union with 90° Socket

Outlet Connection 2" (50mm) PVC Socket

# Replacement Media

OF1465RM Media should be replaced every 3 years
OF1665RM Media should be replaced every 3 years

### **Specifications**

A OneFlow® scale prevention system shall be installed on the main water service pipe just after it enters the building, but after other whole building water safety devices (backflow preventers or pressure reducing valves), to effectively address water hardness concerns. A system may also be installed further downstream to protect specific equipment or areas within a plumbing system. The system shall be plumbed with a bypass valve to allow isolation of tank(s) and to allow the bypass of untreated water in the event that service or media replacement be necessary. The installation area should be suitable in size for the tank(s) to be serviced without encumbrance and sit upright on a flat level surface.

The system must operate in an upflow manner and not require additional water to backwash, flush, or regenerate once put into service. The system must not require any chemical additives and must not require electricity for operation.

Multi-tank systems shall be installed in parallel with PVC/CPVC manifold to meet peak flow rate requirements.

# NOTICE

Copper lines need to be passivized for a minimum of 4 weeks before placing unit into service. Not for use on closed loop systems.

# Feed Water Chemistry Requirements

pH 6.5 to 8.5

Hardness (maximum) 75 grains (1282 ppm CaCO3) Water Pressure 15psi to 100psi (1.03 kPa to 6.9 bar) Temperature 40°F to 110°F (5°C to 43°C)

Free Chlorine < 2 ppm Iron (maximum) 0.3 ppm Manganese (maximum) 0.05 ppm

 Manganese (maximum)
 0.05 ppm

 Copper
 1.3 ppm\*

 Oil & H2S
 Must be F

Oil & H2S Must be Removed Prior to OneFlow Polyphosphates Must be Removed Prior to OneFlow

Silica (maximum) 20 ppm\*\*

# NOTIC<u>E</u>

Water known to have heavy loads of dirt and debris may require pre-filtration prior to OneFlow.

#### **A** WARNING

\* High levels of Copper will foul OneFlow media and typically originates from new Copper plumbing. Wait a minimum of 4 weeks before placing system in operation. Avoid applying excess flux on the inner surfaces of the pipe and to use a low-corrosivity water soluble flux listed under the ASTM B813 standard.

## NOTICE

\*\* OneFlow media does not reduce silica scaling. Silica can act as a binder that makes water spots and scale residue outside the plumbing system difficult to remove. This 20 ppm limitation is for aesthetic purposes.

# **WATTS**

#### **Dimensions**

Model	Dimensions									
	1	4	В		С		D		E	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
0F1465-50	17	432	14	356	79	2006	65	1651	101/4	260
0F1665-75	17	432	16	406	79	2006	65	1651	10½	267

The overall height and the height of the inlet fitting varies due to material variations and assembly tolerances. Please allow additional clearance above the tank for making connections.

### **Standards**

Independent scientific testing has confirmed Template Assisted Crystallization (TAC) technology provides scale reduction of over 95+%. Testing was conducted under protocol based on DVGW W512 test to access control of scale formation.

# Peak Flow Rates - Weights

	OF <sup>-</sup>	1465	0F1665		
Dry Weight	54 lbs.	31.8 kgs.	88 lbs.	30.8 kgs.	
Service Weight	350 lbs.	158.8 kgs.	420 lbs.	190.6 kgs.	

	Maximum Flow Rate***			
Models	gpm	lpm		
0F1465-50	50	189.3		
0F1665-75	75	283.9		

<sup>\*\*\*</sup> Exceeding maximum flow can reduce effectiveness and void warranty.

< 5 psi pressure drop @ Maximum Flow Rate

### NOTICE

The information above shows flow rate data for our large single tanks (50gpm & 75gpm), high-flow applications with OneFlow utilize multiple tanks, plumbed in parallel, to meet flow rates from 100 gpm up to and above 1000gpm or more. An example of a multitank OneFlow system is shown below:



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