# Nature Flow® Systems

Self Cleaning
Ultra Violet
Water Treatment
Systems

Efficient
Effective
Chemical free

Australian Made & Owned.

### **Germicidal Ultra Violet**

Ultra Violet water treatment is a unique and rapid method of water disinfection without the use of heat or chemicals. Through the years ultra violet technology has become well established as a method of choice for effective and economical water disinfection.

Nature Flow<sup>®</sup> Ultra Violet Water Treatment Systems utilise germicidal ultra violet lamps that produce shortwave energy which is effective against greater than 99% of waterborne bacteria and viruses (subject to source water quality).

Nature Flow<sup>®</sup> Ultra Violet Water Treatment Systems are the ideal solution for an ever growing range of users choosing their water treatment needs.

# Advantages of the Nature Flow® System

- ✓ **EFFECTIVE** virtually all micro-organisms are susceptible to Nature Flow<sup>®</sup> Disinfection.
- ✓ **ECONOMICAL** Hundreds of litres can be purified for each cent of operating cost.

# "Why buy bottled water when you can own the factory?" TM

- ✓ SAFE No danger of overdosing, no addition of dangerous chemicals.
- ✓ **FAST** Water is ready for use as soon as it leaves the system no further contact time required.
- ✓ AUTOMATIC continuous or intermittent disinfection without special attention or measurement.
- ✓ **NO CHEMICALS** No chlorine taste or corrosion problems. Environmentally responsible.
- ✓ **VERSATILE** UV water disinfection has a wide range of applications.

# The Nature Flow® Turbine

Nature Flow® incorporates into all of its models their patented self-cleaning UV technology – the Turbine Cleaner.

### What Does It Do?

The Turbine eliminates the need to clean the Quartz Sleeve which can be come dirty with use. It also eliminates the need for manual or motor driven wipers.

#### **How Does It Work?**

The exclusive Turbine gently spins upwards when water flow commences. Its twin felt cleaners clean the Quartz Thimble as it rotates to the top of the Chamber where it stays whilst flow continues. When the water flow ceases, the Turbine returns to the bottom of the Chamber, cleaning as it descends. The cleaning cycle is repeated when water flow recommences.

#### **How Often Does It Happen?**

Every time the water flow commences and ceases, the Turbine spins and cleans the Thimble. If you have continuous flow, simply turn off on a monthly cycle to utilise the Turbine.

# Does The Turbine Require Maintenance?

Simply replace the Turbine felts when the Ultra Violet lamp is replaced (minimum once per year). The Turbine is made of Acetyl and will last for years.



#### Why Is It Exclusive?

No other manufacturer has the Turbine. The inventor has patent, design and trademark protection on this innovative technology.

# What Happens In Other Purifiers?

### **Quartz Sleeves & Thimbles**

The build-up of deposits on the glassware must be cleaned manually and/or with chemicals on a regular basis.

### **Teflon (AFP) Tube Units**

Teflon tubes will have deposits reducing the penetration of Ultra Violet light through the tube. The unit must be dismantled to clean the Teflon Tubes and the manifolds – a very time consuming process. Alternatively high pressure cleaning must be used.

# Can It Be Retrofitted Into Existing Units?

No. If you have an existing Quartz or Teflon Water Purifier and you want to upgrade to cutting edge 21st century technology and not waste money on manual cleaning, call for a quotation to replace your existing unit with a Nature Flow® Self Cleaning Turbine Unit.

# **Specifications for Standard Models**

MODEL	LITRES HOUR*	INLET OUTLET SIZE	POWER CONS WATTS	UNIT DIMENSIONS IN MILLIMETRES						LAMP FAILURE ALARMS	MAX PRESS KPA	TEMP RANGE ∘C	TURBINE	
					Chamb	er	Control Box			Audible	sua			
				Н	W	Diam	L	W	D	Au	Visi			
NF 20	900	½" BSP	20	400	160	60	270	100	70	✓	✓	600	2-50	✓
NF 30	1680	¾" BSP	30	670	160	60	270	100	70	✓	✓	600	2-50	✓
NF 40	2220	1" BSP	40	1060	160	60	270	100	70	✓	✓	600	2-50	✓
NF 58	2460	1" BSP	58	670	160	60	270	100	70	<b>✓</b>	✓	600	2-50	✓
NF 75	4500	1" BSP	75	1060	160	60	270	100	70	<b>✓</b>	✓	600	2-50	✓
NF 150	7800	32 mm	150	1300	300	260	Custom Built			<b>√</b>	<b>√</b>	600	2-50	✓

Note: NF150 is no longer available. Recommended replacement is dual NF75 treatment unit.

All units are designed to give 40 000 microwatt seconds per square centimeter of 254nm Ultra Violet at the end of lamp life.\*

\*Assuming: Source Water quality complies with maximum concentration table below and 95% transmission.

For larger flow rates or variances in source water quality contact Nature Flow Systems.

# **Options**

- ✓ Flow Control Valve
- ✓ Solenoid Valve
- ✓ UV Monitor
- ✓ Time Delay Mechanism
- ✓ Hour Run Meter

Use of these options is required to comply with ANSI/NSF Standard 55-1996 & AS/NZS 3497-1998.

## Maximum Concentration Levels Before Ultra Violet

Turbidity 5 NTU
Suspended Solids 10mg/litre
Colour NONE
Iron 0.3mg/litre
Manganese 0.05mg/litre
pH 6.5-9.5

6 gpg

Hardness



### Models:

NF 40/75 NF 30/58 NF 20

All Nature Flow<sup>®</sup> chambers include earth point as standard.

### **COMMERCIAL & INDUSTRIAL SYSTEMS**

### **APPLICATIONS**

Aquaculture Aquariums

Effluent Treatment Fish Hatcheries

Ingredient water Laboratories

Wash Down Water Rain Water

Spa Water Breweries Hydroponics

Storm Water Recycling Soft Drink Manufacturing

Storm Water Recycling Soft Drink Manu Warm Water Lines Pharmaceutical Grey Water Recycling R.O Water Bottle washing
Houseboats
Chicken Hatcheries
Spring Water
Swimming Pool
Cooling Towers
Processing Waters
Drinking Water
Ice Making



### **PRODUCT FEATURES**

Nature Flow<sup>®</sup> Water Purifiers are designed to provide maximum Ultra Violet output and use high quality components to ensure long life.

- ✓ Waterproof (IP68) control boxes on all Nature Flow® models.
- ✓ Exclusive patented self-cleaning Turbine Quartz Cleaner.
- ✓ 316L polished stainless steel chamber Marine Grade AUSTRALIAN MADE.
- ✓ High quality Quartz Thimbles for optimum operating temperature and Ultra Violet transmission.
- ✓ High quality Hard Glass Ultra Violet lamps for maximum germicidal efficiency and long life.
- ✓ Removeable bottom sealing nut for ease of cleaning.
- ✓ Audible and visual lamp fail alarms activated via light sensor standard on all models.
- ✓ MADE IN AUSTRALIA Your dollars come back to you.
- ✓ All units are designed to give 40 000 microwatt seconds per square centimeter of 254nm Ultra Violet at the end of lamp life.\*

### SERVICE REQUIREMENTS

For maximum germicidal efficiency, the following replacement cycle must be conducted:

Ultra Violet Lamp 1 year Quartz Thimble 2 years Service Kit<sup>1</sup> 1 year

 $^{1}1$  x set turbine felts, 3 x o'rings. NB 09 models forward will also require 1 x light sensor - additional to standard kit.

### WARRANTY

Nature Flow<sup>®</sup> Water Purifiers carry the following warranty<sup>2</sup> against faulty parts and workmanship:

Chamber 2 years
Ultra Violet Lamp 1 year
Quartz Thimble 1 year

Other components 2 years pro rata

Electrical 1 year <sup>2</sup>For full details refer to warranty statement.

# **DISTRIBUTED BY:**

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