

# Laboratory Water Systems

Cyclon Brochure



 **FISTREEM**™

# Fistreem International produces a range of world-leading water purification products



## About Fistreem

In October 2004, Fistreem International Limited was formed with the purchase of part of Sanyo Gallenkamp Plc and its related manufacturing businesses of Water Purification. Although young in organisational terms, the company has immense experience. The management team has many years of Fistreem product experience before divesting from Sanyo Gallenkamp.

Our principal activity is in the manufacture of Water Purification. Products of which the Cyclon Water Still is recognised as a world-leading brand. Our other water purification products include:

- Calypso and Cyclon brand Water Stills A
- range of Deionisers Pre-treatment under
- the Fistreem Puri-Fi brand

Fistreem products are distributed in many countries around the world. The team includes knowledgeable and skilled support experts dedicated to outstanding customer service and support. When you buy a water still from Fistreem, each instrument undergoes an extensive checklist before shipment and includes a 1-year warranty.



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Please refer to  
[www.fistreeminternational.com](http://www.fistreeminternational.com)  
for all ordering information.

# Laboratory Grade Water Purification Systems

Fistream offers a range of water distillers made to meet your water quality requirements and cover your application needs.

Our laboratory-grade water purification distillers are developed and built to guarantee purity. Each water still incorporates the 'Cyclonic' vapour trap, generating the highest quality pyrogen-free water.

The Pre-Treatment Kit and Hydros unit offers an economical supply of pre-treated (deionised) water to Calpyso and Cyclon water stills. In addition, the matching reservoir tank enables additional cost-effective water usage and efficient operation of these water purification systems.



## The Importance of Water Purification

Water is one of the most utilised reagents in the laboratory, and it is critical to find the proper water for your application. Several different technologies can be used to produce pure water that is suitable for scientific applications. The Fistream range of water stills uses the distillation process to remove impurities from water generating Type II water.



### Type I Water Ultrapure

Used for highly-sensitive procedures like HPLC, AAS and Mammalian Cell Culture.



### Type II Water Purified

Used for general lab use in things like media preparation or buffer creation.



### Type III Water Primary Grade

Used for non-critical work like rinsing beakers, filling water baths or feeding autoclaves.

# CYCLON



The Cyclon water distiller is an integrated water purification system, available in 4L and 8L single or 4L double distillers as a complete water purification system with matching pre-deionised and distillate reservoirs. In addition, the 'cyclonic' vapour trap eliminates all carry-over, and the advanced borosilicate glassware design removes the foaming risk, improving purity levels.

The double (Bi-)distiller is ideal for life science applications requiring a higher-grade distillate for increased purity. The Cyclon is comprised of two identical sets of glassware and heaters. The first distillation is fed to the second boiler for further distillation, thus eliminating any possible carry-over of impurities.

## Safe for your Operator

Enclosed glassware and a built-in spill tray provide the operator protection. In addition, the thermistor protects the still against interruption in the water supply by controlling the heater operation. Finally, the thermal cut-out fuse prevents any risk of overheating.

## Pre-Treated Feed Options

When combined with a microprocessor, the thermistor sensor precisely controls the still. This process simplifies operation and cleaning procedures.

## Easy to Clean

Descaling the still is simplified by an automated cleaning facility requiring no dismantling of the glassware.

## Flexible

This space-saving water distiller can be benchtop or wall mounted to suit your lab's needs.

## Applications

The Cyclon distiller is ideally suited for the following:

- General Laboratory Applications
- Preparing Buffers and Reagents
- Media Production
- Sample Dilution and Reagent Preparation
- General Chemistry
- Glassware Rinsing and Washing
- General Environmental Analysis
- Cell Culture Preparation
- Clinical Biochemistry

Model	WSC004	WSC044	WSC008
Output Capacity	4L/hr Single Distilled	4L/hr Double Distilled	8L/hr Single Distilled
Pyrogen Free	Yes	Yes	Yes
pH Level	5.6 – 6.0	5.6 – 6.0	5.6 – 6.0
Conductivity	1µS/cm	1µS/cm	1µS/cm
Power Rating	3.0kW	6.0kW	6.0kW
Tap Water Pressure (min – max)	70 – 560kPa 10 – 80 lbf/in <sup>-1</sup> (PSI)	70 – 560kPa 10 – 80 lbf/in <sup>-1</sup> (PSI)	70 – 560kPa 10 – 80 lbf/in <sup>-1</sup> (PSI)
Tap Water Flow (min)	1L/min	2L/min	2L/min
Dimensions (HxWxD) mm	750x300 x380	750x490 x380	750x490 x380
Weight	25kg	29kg	29kg



# RESERVOIR

The 30L matching Reservoir tank is available for the Calypso and Cyclon water distillers. The Reservoir incorporates a fast flow tap and a sight tube, showing the volume of the contents of the Reservoir. Our range of storage reservoirs has been designed to maintain the optimum purity of stored water, protecting against airborne contaminants.

## Easy to Use

The Reservoir contains special ports to feed deionisation systems, and the sight tube allows for early water level observation. The storage reservoir is easy to clean, as you can open it up for easy accessibility.

## Filtered

Anvent filter prevents airborne contamination from bacteria, particulates, and organic vapours.

## Polyethylene Construction

Each Reservoir is fitted with a polyethylene liner.

## Automated

The electronic float switch shuts off the still on a full reservoir tank and restarts it automatically when water is drawn.

## Space Saving

All models are wall or benchtop mountable.

Model	WSC900.RTB.9
Capacity	30L
Max Pressure psig (kg/cm <sup>2</sup> )	80 (5.6)
Min Pressure psig (kg/cm <sup>2</sup> )	10 (0.7)
Auto Start/ Stop Controls	Yes - when connected to a still or using level monitor provided
Auto Drain	Yes
Low Water Cut-Off	Yes
Dimensions (HxWxD) mm	750x300x380
Weight	15kg



# PRE-TREATMENT KIT

Depending on the frequency of use, purpose and quality of water, a pre-treatment is sometimes necessary to maximise the effectiveness of water purification systems. The Pre-treatment kit can be used with both the Calypso and Cyclon water stills.

## Quick Installation

The pre-treatment can be installed in moments. The cartridge is secured in convenient and easy-to-use wall mounting brackets supplied with the water isolating valve and a suitable pressure hose with fittings.

## High-Quality

The Puri-Fi disposable deioniser in your kit contains a high-quality ion exchange resin with 1-10µS cm conductivity. This incorporates a 50-micron filter to remove particulates.

## Flexible

This space-saving water distiller can be benchtop or wall mounted.

Model	WSC905.PTK.5
Type	Deioniser
Resin Type	High-Quality Ion Exchange Resin
Flow Rate	30L/hr
Pressure	500kPa
Length (mm)	390 and 690
Diameter (mm)	77
Applications	Purifying Water In-Line Applications



# Fistream Service Contracts

Our Service contracts (Bronze, Silver, and Gold) offer great value for money and flexibility to meet your specific needs to ensure that you find the contract that will work for you. Fistream also offers a variety of value-added services for our water purification systems.

## Installation and Commissioning

When you purchase new equipment for your laboratory, the reliability and lifetime of your instruments depend on them being installed and commissioned correctly.

## Service Pack

This service pack contains spare parts to ensure that your instrument continues operating smoothly throughout its life. This service pack is also available for overseas customers.

Our range of service contracts are built to fit your needs and ensure that your equipment is always performing to its best.

	<b>Bronze Package</b>	<b>Silver Package</b>	<b>Gold Package</b>
<b>Length of Contract</b>	<b>1 YEAR</b>	<b>1 YEAR</b>	<b>1 YEAR</b>
<b>Onsite Visit</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>
<b>Cost of Labour</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
<b>Spare Parts Covered</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
<b>Preventative Maintenance</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>
	*Available for the Calypso system only*		



## Contact Us

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for any support and spare parts.