

Cyclon Ultrapure Water Stills

Fistreem have been the leaders in water still innovation for many years with a reputation for design, quality and reliability.

Distillation is recognised as offering considerable advantages being fail safe in concept and consistently free from impurities including inorganics, organics, micro-organisms and pyrogens.

Fistreem Ultrapure Water Stills improve on this concept through a unique patented vapour trap which creates a 'cyclonic' effect eliminating all vapour borne droplets, ensuring that there is no carry over of impurities in the distillate. The resultant pyrogen free water is therefore at the highest purity - at all times.

Cyclon Stills embody modern electronics and include dual safety systems, auto reservoir control, easy cleaning, matching Storage Reservoir and optional pre-Deioniser

Outputs of 4 and 8 litre/hour single distillers and 4 litre/hour double (Bi) distiller are offered. They are factory supplied for tap feed use. A pretreated feed option is supplied with the Still which allows a variety of treated feed sources to be fed in a controlled way for further polishing by distillation. The quality of the pyrogen free distillate make these stills highly suitable for life science applications.



Cyclon: An Integrated Water Purification System.

The Cyclon is available in 4 or 8 l.hr⁻¹ single distilled or 4 l.hr⁻¹ double distilled formats and as a complete water purification system with matching pre-Deioniser and distillate reservoir. To eliminate the need for routine cleaning in hard water areas, the Stills are also able to be adapted to accept pre-treated water. All systems can be wall or bench mounted while tap feed models can easily be upgraded to use pre-treated water.



Purity

The patented 'cyclonic' vapour trap eliminates all carry over while the advanced borosilicate glassware design removes the risk of foaming and improves purity levels. The distillate leaves the condenser at the optimum temperature to guarantee product quality. Additionally quartz sheathed heating elements ensure distillate purity is not compromised.



Bi-Distiller Model

For increased purity the double (Bi-) distiller is particularly welcome in life science applications where the highest grade distillate is required. Comprising 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. The 4BD model produces 4 lt per hour double distilled water



Safety in Operation

The thermistor protects the still against interruptions in the water supply by controlling heater operation. Additional protection is provided by a thermal cut-out fuse to prevent overheating.

Operator protection is assured through totally enclosed glassware and a built-in spillage tray.

Reliability and Ease of Use

Combined with the microprocessor, the thermistor sensor provides precise control of the still and simplifies operation and cleaning procedures.

A vertical boiler configuration minimises stress on the durable silica sheathed heating elements. Along with an auto-drain function this design also helps to reduce the build-up of scale.

The Cyclon is supplied with an electronic float switch which will shut off the still automatically when the storage reservoir is full enabling safe, unattended operation.



Economy

The flow of cooling water is automatically controlled to minimise water usage.

Cyclon Pre-treated Feed Option

Feeding the still with pre-treated water can eliminate the need for descaling of the still's boiler in hard tap water areas.

All Cyclon Stills are supplied with accessories which enable the user to adapt from tap feed to treated feed supply. In this configuration, for economy, the treated water for the boiler and the tap water for the condenser are separated.

The stills can be fed from the matching Cyclon Deioniser which is specially designed to provide quality pre-treated water. The deioniser is electronically controlled by the still's microprocessor to ensure optimum use is made of the deioniser's ion exchange capacity.

Alternatively, the Cyclon can be used with pre-treated water from the user's own source. Suitable quality water includes reverse osmosis, deionised or purified water from a central piped supply.

Cleaning

Descaling is simplified by an automated cleaning facility requiring no dismantling of glassware. The highly efficient process requires little operator time. The microprocessor and thermistor controlled operation incorporates a dual flush program to ensure the Still is ready to return to normal service on completion.

Cyclon Deioniser

The Cyclon pre-Deioniser features a simple to read conductivity meter which indicates resin exhaustion and a separate outlet tap allowing users to draw off deionised water at any time. The Still's microprocessor controls the operation of the Deioniser to ensure the optimum use of purified water.

The deioniser will typically provide up to 700 litres of purified water on 200ppm tds water. On exhaustion the resin can either be regenerated or replaced by new resin. Replacement resin packs are offered to users should a local regeneration service be unavailable.



Cyclon Reservoir Tank

The 30 litre matching Cyclon Reservoir Tank incorporates a fast flow tap and a sight tube showing the contents of the reservoir. Distillate access ports are fitted on both sides allowing the reservoir to be sited either side of the still.

To ensure the highest purity levels are maintained, the reservoir features a polyethylene liner, bacterial vent filter and a cleaning access port. The electronic float switch shuts off the Still on a full reservoir and re-starts automatically when water is drawn.

All models are wall or bench mountable and are supplied with all necessary connection hoses.



Specifications			
Model	WSC004	WSC044	WSC008
Output Capacity	4 litres. hr ⁻¹ Single distilled	4 litres. hr ⁻¹ Double distilled	8 litres. hr ⁻¹ Single distilled
Pyrogen Free	Yes	Yes	Yes
pH	5.6 -6.0	5.6 -6.0	5.6 -6.0
Conductivity	1µS. cm ⁻¹	<1µS. cm ⁻¹	1µS. cm ⁻¹
Power Rating	3kW	6kW	6kW
Tap Water Pressure (min-max)*	70-560 kPa 10-80 lbf.in ⁻²	70-560 kPa 10-80 lbf.in ⁻²	70-560 kPa 10-80 lbf.in ⁻²
Tap Water Flow (min)	1 litre. min ⁻¹	2 litres. min ⁻¹	2 litres. min ⁻¹
Dimensions (HxWxD)mm	750 x 300 x 380	750 x 490 x 380	750 x 490 x 380
Weight	25kg	29kg	29kg

Specifications are subject to change without notice.

Ordering Information			
Catalogue No	Output	Power	Dimensions WxDxH (mm)
WSC004.MH3.4	4 L/hr Single	220V 3kW	300 x 380 x 750
WSC004.MH3.7	4 L/hr Single	240V 3kW	300 x 380 x 750
WSC008.MH3.4	8 L/hr Single	220V 6kW	490 x 380 x 750
WSC008.MH3.7	8 L/hr Single	240V 6kW	490 x 380 x 750
WSC044.MH3.4	4 L/hr Double (Bi)	220V 6kW	490 x 380 x 750
WSC044.MH3.7	4 L/hr Double (Bi)	240V 6kW	490 x 380 x 750

Accessories			
Catalogue No	Description	Capacity	Dimensions WxDxH (mm)
WSC900.RTB.9	Storage Reservoir	30 litre	300 x 380 x 750
WSC901.PDC.5	Cyclon Pre-Deioniser	-	300 x 380 x 750

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Pre-treatment Kit

Fistreem Cyclon & Calypso Water Stills

A low cost means of supplying pre-treated (deionised) water to Cyclon and Calypso Water Stills. The pressure resistant cartridge is ideal for in-line applications. Installed in moments, the deioniser cartridge is easily replaced when exhausted. The cartridge is secured in a convenient and easy to use wall mounting bracket.

The Fistreem Puri-Fi Disposable Deioniser contains high quality ion exchange resin. Water purity is indicated by resin colour change at two exhaustion 'windows' in the cartridge casing (1 & 10 μ S cm conductivity). Incorporates a 50 micron filter to remove particulates.

The smart plastic moulded Wall Bracket is easily mounted on the wall at a convenient location. It is supplied complete with a water flow isolating valve and suitable pressure hose with fittings.



Specification & Ordering Information	
Catalogue No	Description
WSC905.PTK.5	Pre-Treatment Kit for Fistreem Cyclon / Calypso Water Still comprising; 2 x DCF-720-S Fistreem Puri-Fi Disposable resin colour change Deionisers, wall mounting bracket, pressure hose plus fittings and water flow valve.

Separately Ordered Components			
Catalogue No	Description	Flow rate max	Dimensions (mm)
DCF-738-502Y	Wall mounting bracket with hose fittings and flow valve	-	180 W x 90 D x 500 H
DCF-720-S	Fistreem Puri-Fi Disposable Deioniser	30 lt / hr	77 diam x 390 length

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