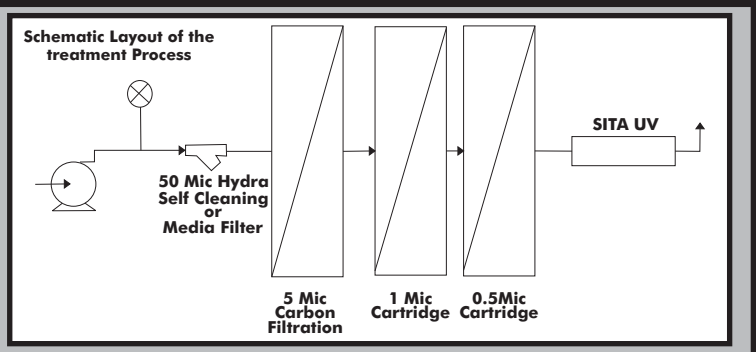
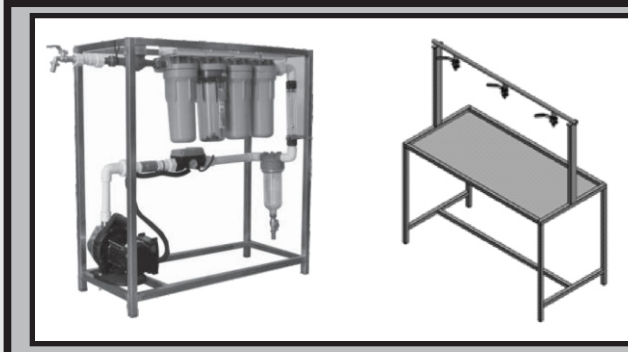




# PW

## Pure water Treatment Plants



Dayliff Pure Water treatment plants are specially designed for the production of totally pure water from the majority of natural or municipal sources, typical applications being bottled water production, institutional, commercial food processing facilities and manufacturing facilities requiring pure water in the production process. They eliminate most conditions of impurity including sediment, unappetizing taste or odour, and bacteriological contamination, the treated water output being to the highest consumption standards. Particular features include;

- Five stage treatment that uses no chemicals providing simple operations and consistent pure water output at low operating cost.
- Three sizes available - 500, 1000 and 2000l/h.
- Supplied complete with all components as well as necessary auxiliary accessories frame mounted to provide a compact, easy to install unit.

Though the main application is for bottled water production, the plants are also suitable for in-line filtration for a distributed supply and also bespoke plants can be designed and manufactured to suit specialized treatment requirements. With benefits of simplicity, economy and, most importantly, effectiveness, Dayliff Pure Water treatment plants are the ideal solution for the production of totally pure water from the majority of semi-treated water sources.

### APPLICATION

Dayliff Pure Water treatment Plants are designed to purify sweet, low conductivity, soft and neutral raw waters as is typically provided from low turbidity natural and semi-treated municipal sources. They do not treat for dissolved trace elements, including salinity, or change hardness levels or pH. Prior analysis of the raw water to assess its suitability to this treatment process is important as there are some conditions for which it will not provide WHO standard potable water.

### THE TREATMENT PROCESS

- 1<sup>st</sup> Stage - Filtration :** Raw water is passed through a 50 mic self-cleaning filter screen or media filters to remove sludge and large particles.
- 2<sup>nd</sup> Stage - Carbon :** The process water is passed through a 5 mic Carbon Block filter for the removal of trace chlorine, organic chemicals, insecticides, pesticides and herbicides as well as unpleasant taste and odours.
- 3<sup>rd</sup> and 4<sup>th</sup> Stage - Micro Filtration:** The process water is passed in series through two progressively finer polypropylene yarn element filter cartridges of 1 and 0.5 micron mesh sizes to remove most suspended solids.
- 5<sup>th</sup> Stage Ultra Violet Disinfection:** The final step in the treatment process is disinfection using an Ultra Violet sterilizer. Ultra-Violet kills all known bacteria and provides totally disinfected water.

### EQUIPMENT SPECIFICATION

**Pre-Filter:** Manually operated media filter or self-cleaning Hydra filter with 50 micron pleated plastic net cartridge. The filter incorporates high efficiency of self-cleaning operation, by means of a counter-current which maximises particle removal from the filter cartridge. The cleaning operation with back-wash is simply operated by the opening of the discharge valve at the filter base.

**Carbon:** Carbon Block 5 mic cartridge. This is made out of modified moulded block which creates a unique filter media by attaching powdered activated carbon onto a cellulose-free synthetic fibre matrix.

The result is a single cartridge that combines the benefits of both a sediment filter and a carbon filtration.

**UV Unit:** Sita UV made out of stainless Steel 304, characterized by compactness and ease in installation/servicing. The UV is supplied with or without a control unit with LCD display, which indicates working hour of the lamp, lamp faults, the irradiance and the temperature. The UV gives a dose of 300 J/m<sup>2</sup>.

**Booster Pump:** DAYLIFF DDG 1000 pump close coupled to a 0.8kW electric motor pressure controlled by Brio pump controller to operate on demand.

**Monitoring Equipment:** A flow meter and pressure gauge are provided.

**Mounting:** All components are mounted on a stainless steel frame. All necessary fittings including stainless steel piping, stainless steel valves, electric wiring and switches are provided from the raw water inlet and no other items are necessary for installation other than a 5Amp single phase power supply. Filling station is provided as an option.

### SYSTEM DATA

Model	PW500	PW1000	PW2000	
<b>Flow</b>	0.5m <sup>3</sup> /hr	1m <sup>3</sup> /hr	2m <sup>3</sup> /hr	
<b>Atlas 50 micron pleated hydra cartridge or media filter</b>	1	1	1	
<b>10" 1mic wound sediment cartridge</b>	1			
<b>20" 1mic wound sediment cartridge</b>		1		
<b>20" 1mic jumbo sediment cartridge</b>			1	
<b>Carbon block 5 Micron 20"</b>	1			
<b>Carbon block 5 Micron 20" big blue</b>		1	2	
<b>Pump</b>	DAYLIFF DDG1000 0.8kW Pump			
<b>Dimensions (mm)</b>	<b>L</b>	1120	1120	1120
	<b>W</b>	480	480	480
	<b>H</b>	950	950	950

