

CONTINUOUS SAND FILTER (CSF)

We offer a Continuous Up flow Filter, which can filter influent containing up to ten times more dirt than a conventional filter. This revolutionary sand filter does not require to be backwashed to keep the filter bed clean as the sand bed is continuously cleaned and regenerated by internal recycling. This ensure uninterrupted operation without stopping for backwash. The continuous operation results in a constant and low pressure drop. Maximum clean filtrate is assured since the filter bed always contains a certain amount of solids which improves filtration. This mode of operation also enables the filter to accept a highly polluted flow with high efficiency. The unique cleaning method means backwash water storage tanks and backwash pumps can be dispensed with.



Principle of operation

The sand bed of this continuous up flow filter is dirtiest around the feed inlet in the lower part of the filter. The dirty sand is carried from the lower part of the filter through the air lift pump up to the sand washer in the upper part of the filter. The cleaned sand is then returned to the upper layer of the bed. The entire filter bed is thus constantly moving downwards.

This continuous action enables it to filter influent containing up to ten times more dirt than a conventional filter. Now the Government of India and many international Agencies have fixed a maximum allowable limit of 0.01 PPM of Arsenic Content and 0.30 PPM of Iron content.

<p><u>Applications</u></p>	<ul style="list-style-type: none"> • Raw water filtration for portable use • Raw water filtration for industrial process water • Cooling tower side stream filtration and make up • Recycling of white water in pulp and paper industry • Tertiary treatment of sewage • Treatment of industrial waste water • Filtration of water to remove mill scale
<p><u>Features</u></p>	<p>The Bharti Plus Media has the following advantages:</p> <ul style="list-style-type: none"> • Continuous service flow • Continuous backwash required • Handles suspended solids load up to 150 ppm and gives consistent treated water quality of less than 5ppm • Operates at atmospheric pressure • Simple modular construction with minimum moving parts
<p><u>Advantage</u></p>	<ul style="list-style-type: none"> • Less manpower required • Elimination backwash downtime and requirement of backwash accessories like storage tanks, blowers and pumps • Simple wash water handling • Remove oil effectively, if present, without 'mud balling' effect • Elimination the requirement of clarifier for medium loads • Low energy consumption • Low operation, space saving, easy capacity expansion
<p><u>Technical Features</u></p>	<ul style="list-style-type: none"> • The system is suitably designed for operating at atmospheric pressure • Filter shell is in mild steel plate or in RCC construction, depending upon the flow rates and requirement • Component like inlet hood, overflow weir, collection vessel and sand distribution cone are in mild steel epoxy coated construction • Filter media is graded sand which is suitably selected for the application • Air lift pump hose is in natural rubber and clamps are of stainless steel • Available in various sizes in steel with flow rates of 2-100 m³/h. For higher flow rates, a concrete walled honeycombed structure is used • Surface loading depends upon the type of application and varies from 6 m/h to 30m/h

Performance Comparison

Model Number	Filter Area (m2)	Diameter (mm)	Heighton Straight (mm)	Heighton Straight (mm)
DS 03	0.3	640	2700	1.3
DS 07	0.7	960	3125	3.2
DS 15	1.5	1430	4450	9.0
DS 30	3.0	1920	4800	16.0
DS 50	5.0	2550	5850	34.0

Other Products for clarification and Filtration

- Chemical Dosing Systems for dosing coagulants and flocculants
- Solids Contact Clarifier and Lamella Clarifier
- Multigarde Sand Filter, Dual Media Filter, Pressure Sand Filter and Auto Valveless Gravity Filter
- Sludge Thickeners, Oil Removal Systems and Ultra Filtration Membranes

Note: The height of CSF shall vary depending upon the inlet water quality of suspended solid content and the type of inlet water type of treatment.

BHARTI WATERS PVT.LTD.

M-4B, Aradhana Bhawan, Azadpur Commercial Complex, Delhi-110033
 Email: bharti@bhartiwaters.com | Ph: 011-27674396, 27681298, 47502243
 Website: www.bhartiwaters.com
 CIN NO: U15543DL2004PTC128953

