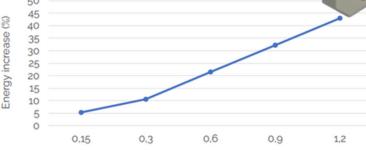
WAYMAKER

WAYMAKER TECHNOLOGIES CORPORATION

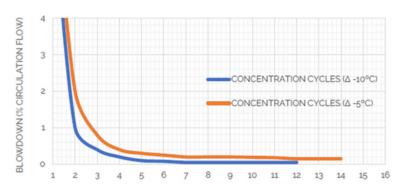
SYSTEM FEATURES:

- Continuous clean water output; filters 50–130 µm with auto backwash
- Low water/energy use; self-cleans at <2 bar pressure
- Automated controller with minimal power draw
- Dual filtration: centrifugal + media (surface/in-depth)
- Modular, plug-and-play, corrosionresistant thermoplastics
- No media replacement required
- Heavy Duty
- Uses just 10 L per 6-8 sec flush—up to 99% less water than MMF



Particle layer thickness (mm)

The accumulation of particles in the system increases the thermal gradient between the cold and hot sources, increasing the energy consumption of the pumping and ventilation equipment.



Higher water quality increases the concentration cycles, reducing the number of purges needed to maintain the salts concentration in the system and avoid precipitates

WayClean™

SIDE STREAM FILTER SYSTEM



OVERVIEW:

Waymaker's side-stream filters are compact mechanical filtration packages for the removal of grit, airborne dirt and scale from cooling tower water to prevent system fouling by capturing and removing them before it accumulates in the basin and spread to other parts of the system and reducing system design efficiencies.

Areas of Application: Cooling Towers, Data Centres, Heat Exchanger, Evaporative Condensers

SIDE STREAM FILTER



FILTER EQUIPMENT SIZING & DIMENSION

Note: Power is only required if a pump installation is included.

| | | | | | _ |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
| Equipment Model | 2x2inch ATD | 2x3inch ATD | 3x3inch ATD | 4x3inch ATD | 5x3inch ATD |
| Water Flow Rate | 20-30 m ³ /hr | 30-45 m ³ /hr | 40-60 m ³ /hr | 50-80 m ³ /hr | 60-100 m ³ /hr |
| Space Required/ Dimension | 1.0 m ² | 1.4 m ² | 1.8 m ² | 2.0 m ² | 2.5 m ² |
| Power Required, 3phase, 480V 60Hz | 4 kW | 11 kW | 15 kW | 22 kW | 22 kW |

Other factors, conditions will affect the system performance, water analysis also affects the micron sizing and selection to be further advice.

FILTER OPERATION PRESSURE

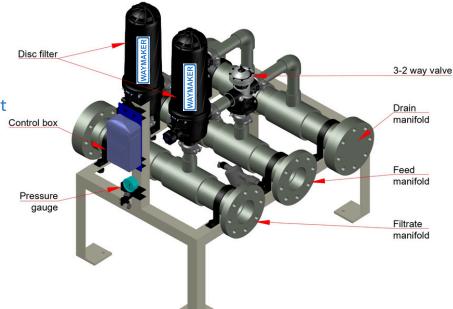
| Maximum working pressure | 10 Bar (145 psi) | |
|--|-----------------------------|--|
| Minimum backwash pressure | 2.0 Bar (29 psi) | |
| Minimum backwash flow rate | 10 m3/hr (36 GPM) | |
| Maximum working temperature | 60°C (140°F) | |
| Maximum feed water Total Suspended Solids | 100 ppm | |
| pH Range | 3-12 | |
| Back-Flush Water Volume | 12-22 (L) per single filter | |

MATERIAL OF CONSTRUCTION

| Filter Housing & Lid | Polyamide, Polypropylene | | |
|----------------------|--------------------------|--|--|
| Disc Elements | Polyamide, Polypropylene | | |
| Backwash Valves | Polyamide, Polypropylene | | |
| Manifolds | HDPE | | |
| Seals | NBR | | |
| Control Tubing | PE or PA | | |

SYSTEM BENEFITS

- Reduce energy consumption
- Higher Concentration Cycles
- Reduced Pathogen Development
- Reduced Operational Costs
- Higher Productivity
- Prolongs Lifespan of Equipment
- Reduces Chemical Usage



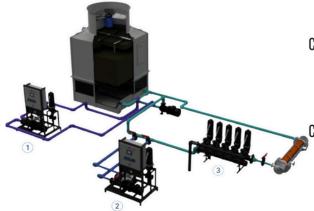
SIDE STREAM FILTER



SYSTEM CONFIGURATION

CONFIGURATIONSSide Stream

Filtration System



CONFIGURATION 1. BASIN SWEEPING

- Utilizes 20-50 µm filtration to clean the cooling tower basin, with a nozzle system that keeps settled particles suspended. Ideal for setups where access to the cooling circuit is limited or where avoiding hydraulic work is preferred.

CONFIGURATION 2. SIDE STREAM FILTRATION

- Uses a 50-130 µm filtration range to capture incoming contaminants from the system.
 Uses just 10 L per 6-8 sec flush—up to 99% less water than MMF

CONFIGURATION 3. FULL FLOW FILTRATION

- Filters 100% of the system's circulating water. Employs 100–200 µm filtration to remove larger particles that could damage heat exchangers or other sensitive components. Best for high-capacity filtration needs that directly impact the cooling circuit operation.

TYPICAL INSTALLATIONS

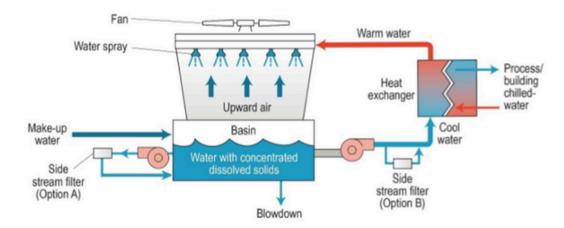
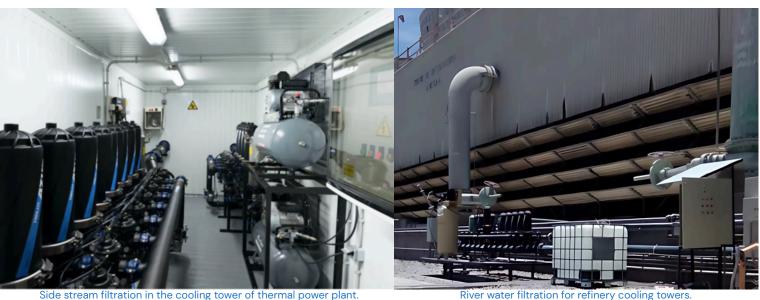


Figure 1. Cooling Tower with Two Possible Locations for Side Stream Filtration



Side stream filtration in the cooling tower of thermal power plant.

Automatic Self-Cleaning Filter 200 µm Flowrate = 200 m3/h

Automatic Self-Cleaning Filter 50 µm AA Flowrate = 160 m3/h