**Side-Stream Filtration Package Specifications**

**General**

Provide a packaged screen type side-stream filtration system, Masterflow Model GSF series, for the periodic filtering of cooling tower water, comprising of the following equipment (as supplied by Masterflow - Phone: (02) 9748 2022).

* BAKER-BLOC end suction, closed-coupled motor pump in CI/SS/SS or SS/SS/SS construction capable of delivering a minimum of 5% of the total cooling tower flow rate.
* Fully automatic self-cleaning, hydraulic operated screen filter using pressure differential as the motive for self-cleaning. Alternative filter types will not be accepted.
* Screen surface area must not be less than 1200cm².
* 80/100mm micro-switch wafer check valve for protection of pump against dry-running.
* Backwash shall not exceed 30 Liters per flush.
* Eductor nozzles for basin ‘sweeping’ (supplied loose).
* Inlet, outlet and drain flanges conveniently located for ease of installation.
* Pipework is PVC, Class 12.
* System operates on 3-phase, 415V, 50 Hertz.
* Control panel mounted on hot dip galvanized base with pump and micro-switch wafer check valve pre-wired. Power supply to panel by others.
* Filtration levels shall be 150micron.

# Features

* Fully hydraulic and self-cleaning.
* Dry-run protection.
* Uses minimal water during backwash; backwashing on pressure differential.
* The suction scanner uses filtered water to produce a reverse flow regime for highly effective debris removal from screen.
* Materials of construction to be thermo-plastic, stainless steel or PVC.
* Volt free contacts for BMS for both Pump Run and Pump Fail.
* Compact design.
* Mounted on its own free-standing skid with hot dip galvanized base.