



***Suggested Specification For Johndec Counterflow Series B
Fume Scrubber**

Counterflow Series B Fume Scrubber

(Ideal For When High Scrubbing Efficiencies Are Required)

The fume scrubber shall be a Johndec Counterflow Series B Fume Scrubber. The fume scrubber is to be free standing and self-contained incorporating liquid spray section, wetted packed bed, mist eliminator, recirculating/neutralizing tank and chemical resistant magnetic drive recirculating pump all incorporated in one self contained module.

The fume scrubber shall be designed to handle airflows of _____ litres per second and capable of scrubbing air borne containments at efficiencies as scheduled on Johndec Engineering Plastics Pty Ltd fume scrubber specification brochure.

The fume scrubber shall be fitted with Johndec Scrubber Packers moulded from polypropylene in a filamentous helical toroid shape.

The unit shall be manufactured from chemical grade fire retarded UPVC/ Polypropylene/ FRP. The fume scrubber shall be fitted with a removable clear viewing panel to monitor the operation of the sprays also allowing access to remove sprays for cleaning and maintenance.

A removable access lid shall be fitted to scrubber for maintenance and cleaning of packed bed a sieve plate.

The sieve plate shall be perforated to allow even distribution of water through the packed bed.

The recirculating pump shall be magnetic drive, seal-less centrifugal with all wetted parts made of non-metallic materials. The pump body and magnetic housing shall be moulded in the plastic materials Polypropylene or PVDF. To obtain maximum chemical resistance the impeller magnets shall be fully encapsulated in the plastic impeller. To optimise the service life, the shaft and thrust washers shall be made of high quality ceramic, impeller bearings of Rulon. The O-ring between pump body and magnet housing shall be made in viton.

The recirculating/neutralising tank shall incorporate level sight panel, ball float valve, drain, drain valve, overflow, removable lid and a low liquid level switch.

The fume scrubber-recirculating pump shall be connected to the fume cupboard control system and shall operate together with the fume exhaust fan. The liquid level switch that is fitted to the recirculating tank shall also be connected to the fume cupboard control system, in the event of low water level the switch shall command the fume cupboard control system to sound an alarm and display a message "Low Water Level" at the same time as this message the control system will isolate the pump. On return of the correct water level the fume control system will reset and the pump shall restart.



The fume scrubber system, recirculating tank, chemical pump, spray bar, drains and overflow shall be provided pre-plumbed and left for easy connection to water and drain supply by the site plumber.

pH Dosing Facilities (*Optional)

The fume scrubber shall be fitted with pH dosing facilities to maintain high scrubbing efficiency and control the pH of recirculating water. The pH dosing facilities shall be of a recognised Australian or overseas manufacture and shall include pH controller, high viscosity dosing pump that is self-priming and suitable for use with sodium hydroxide and pH probe fitted to water reservoir.