

# Horizontal Packed Bed Wet Scrubber

The Advanced Air® Horizontal Packed Bed Wet Scrubber is proven to be efficient and reliable. This type of Packed Bed Wet Scrubber removes soluble chemicals, fumes, and odours, as the contaminated gases pass through the packing media that is wetted with a single pass or recirculating water spray system.

The scrubbing liquid absorbs the gas pollutant by physical or chemical means. The spray system (single pass or recirculating) removes the contaminants before passing through the mist eliminator blades prior to discharging to the atmosphere.

Our Advanced Air® scrubbers are suitable for the removal of 95%-98% of water soluble acids and bases. Other contaminants may require chemical dosing systems.



Advanced Air® fume scrubber 900L/s.

#### Wet Air Scrubber

- Materials of construction include:
  - ▶ uPVC
  - ▶ Polypropylene & Polyethylene
- ▶ Wide range of packing media available
- Chemical treatment, including oxidation and neutralization, is available to increase absorption of gaseous pollutants. pH control available when applicable.
- Corrosion resistant Brinkmann® uPVC/PP extraction fans.
- ► Corrosion resistant recirculating pumps for scrubber liquid recirculation.
- Non-plugging spray nozzles for wetting packing in corrosion resistant polypropylene.

#### **Horizontal Packed Bed Fume Scrubber**

▶ This is a cross-flow design with scrubbing liquid flowing vertically downwards while the gas passes horizontally through the packing section. The Advanced Air® horizontal Packed Bed Scrubber can be used in all situations including limited facility headroom and is ideal for roof and ground installations. The cross-flow design is less susceptible to fouling for airstreams with the air flow capacity range from 150 l/s − 2000 l/s with larger units available on request.







Roof mounted Advanced Air® fume scrubber 1200L/s.

Scrubbers ready for export – Hong Kong.

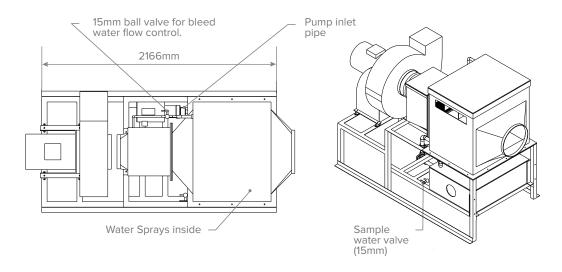
## **Specifications**

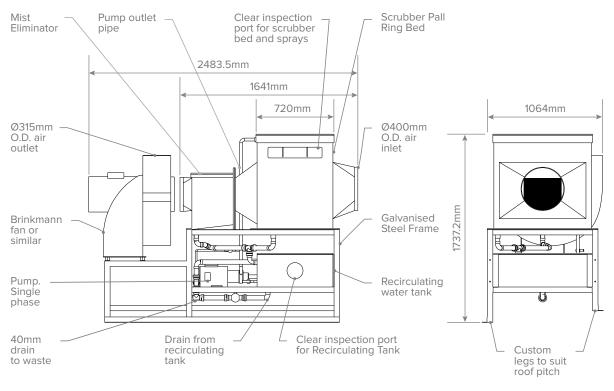
| Size/<br>Volume?                              | 250 -350<br>Litres/sec.  | 450 – 550<br>Litres/sec.   | 650-750<br>Litres/sec.   | 950-1100<br>Litres/sec.  | 1500<br>Litres/sec.   | 2000<br>Litres/sec.   |
|---|--|--|--|--|---|---|
| Materials<br>Types                            | uPVC or Polypropylene  |  |  |  |   |   |
| Dimensions<br>(excludes<br>extraction<br>fan) | 1525mm L x<br>570mm W x<br>1130mm H<br>(allows for<br>Recirculating<br>Tank) | 1525mm L x<br>570mm W x<br>1380mm H<br>(allows for<br>Recirculating<br>Tank) | 1550mm L x<br>720mm W x<br>1380mm H<br>(allows for<br>Recirculating<br>Tank) | 1650mm L x<br>890mm W x<br>1500mm H<br>(allows for<br>Recirculating<br>Tank) | 1650mm L x<br>1050mm W x<br>1600mm H<br>(allows for<br>Recirculating<br>Tank) | 1650mm L x<br>1200mm W x<br>1800mm H<br>(allows for<br>Recirculating<br>Tank) |
| Location                                      | Roof or Ground Mounted   |  |  |  |   |   |
| Inlet/Outlet                                  | 250mm/<br>250mm  | 315mm/<br>315mm  | 315mm/<br>315mm  | 400mm/<br>400mm  | 400mm/<br>400mm   | 400mm/<br>400mm   |
| Nominal<br>Weight                             | 120kg  | 150kg  | 180kg  | 200kg  | 220kg   | 280kg   |
| Nominal<br>Static Pa<br>Loss                  | 350pa  |  |  |  |   |   |
| Water Spray<br>System                         | 6 x Nozzle<br>Sprays Total<br>18 Litres/<br>min.                             | 6 x Nozzle<br>Sprays Total<br>30 Litres/<br>min.                             | 9 x Nozzle<br>Sprays Total<br>40 Litres/<br>min.                             | 12 x Nozzle<br>Sprays Total<br>60 Litres/<br>min.                            | 12 x Nozzle<br>Sprays Total<br>90 Litres/<br>min.                             | 15 x Nozzle<br>Sprays Total<br>120 Litres/<br>min.                            |
| Packed Bed<br>Type                            | Polypropylene Pall Rings   |  |  |  |   |   |
| Mist<br>Eliminator                            | Polypropylene Blade Hooked   |  |  |  |   |   |
| Efficiency*                                   | 95%-98%  |  |  |  |   |   |
| Scrubber<br>Control                           | Fume Cupboard Controller or Separate Switching                               |  |  |  |   |   |
| Low Water<br>Flow Alarm                       | Yes (where applicable)   |  |  |  |   |   |
| Optional                                      | Recirculating Tank, Dosing System  |  |  |  |   |   |

 $<sup>^{*}</sup>$  Advanced Air $^{\circ}$  cross flow wet scrubber capable of removing water soluble acids and bases @ of 95%-98%.



### 1100L/s Scrubber Overview





All pressure pipe to be 25mm and all drain pipe to 40mm. Main Housings made from 5mm white PVC with internal pall rings, sprays and mist eliminator blades made from polypropylene. Unit weight approximately 200kg wet.