

Tray scrubbers

Technology
for a
Sustainable Future

Tray scrubbers are used for cleaning gas flows which are contaminated with both particulate and soluble noxious gases. Their unique design enables them to capture particulate > 2 micron as well as soluble gases to high efficiencies of removal. They are widely used in the mining, mineral processing, fertiliser, chemical and petrochemical industries amongst others.

Bespoke designs are prepared by ERG's experienced process engineering team to meet your specific application and detailed requirements.

Key advantages of tray scrubbing are:

- Multiple tray stages of scrubbing give excellent efficiencies of removal
- Highly effective at treating large gas flows at comparatively low capital cost
- Running costs are relatively low due to the low gas side pressure drop and the low liquor rates required
- Trays are self-cleaning, reliable and robust
- Trays types such as fixed valve design can be matched to suit the application
- Tray weir height can be adjusted to give enhanced capture of contamination and greater turn down if this is required

Design parameters:

- Flowrates from 2,000 to 100,000 m³/hr per tower, multiple cylindrical towers in parallel or rectangular cross-section for higher flowrates
- Removal of any soluble gaseous contaminant and soluble or insoluble particulate >2 micron
- Gaseous contaminant loadings typically from 100 to 10,000 mg/m³; particulate loadings typically up to 5,000 mg/m³
- Removal efficiencies typically 90-95% and up to 99% as required
- Vessel diameters from 600 to 3,800mm; vessel heights up to 12m

