



Case Study # 105

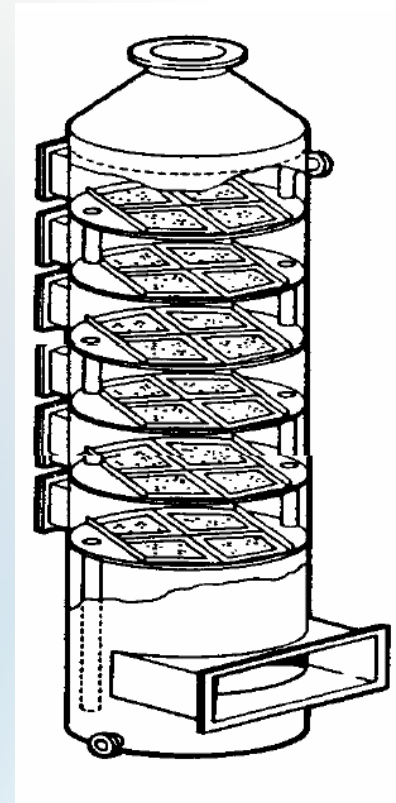
Alcohol Scrubbing in Pharmaceutical Manufacturing

A New York based pharmaceutical manufacturer’s pill coating operation required ventilation to keep the isopropanol levels in the dryers from reaching LEL concentrations. Due to the high volatility of the alcohol, it was necessary to use a once through with water to absorb the hot, high concentrations of isopropanol.

A vertical tray scrubber (Model VTS) was utilized in order to optimize the removal efficiency while minimizing the water requirements. In addition to the tray tower’s ability to minimize water requirements, it also can tolerate low to medium loadings of solids without fouling. The tray tower scrubbers were constructed of durable and lightweight FRP with polypropylene internal trays. Each unit handles a gas flow of 6,000 ACFM and achieves 95% removal efficiency of the alcohol vapors with minimum water usage.

Product Literature: [\(click on links to take you to the literature\)](#)

[Sieve Tray Scrubbers \(VTS Series\) Bulletin 12-14](#)



Application	Pill Coating Dryer Ventilation
Exhaust Volume	6000 ACFM per tower (4 towers)
Exhaust Temperature	140°F
Exhaust Pressure	10" W.C.
Contaminant	Isopropyl Alcohol
Removal Efficiency	95%
Scrubbing Solution	once through water
Materials of Construction	FRP & Polypropylene