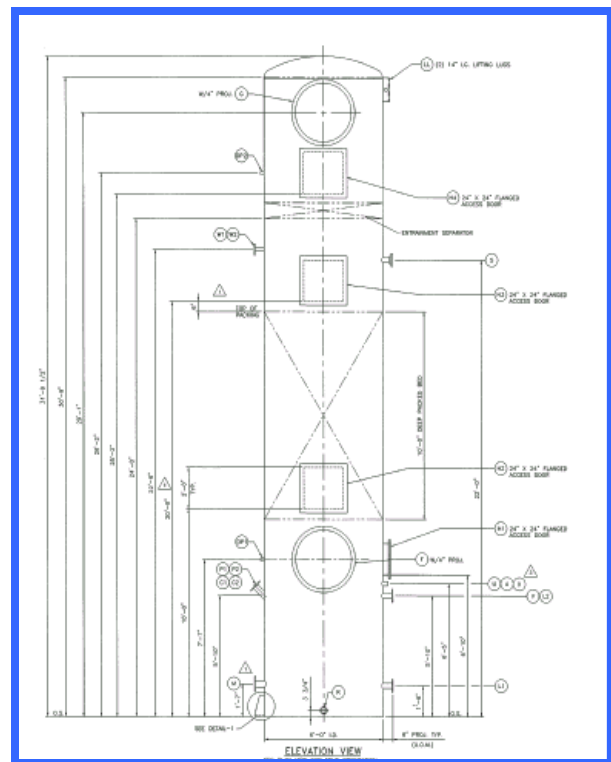


# Foundry Amine Scrubbing

Details	
Market	Automotive
Application	Aluminum Casting Core Box
Exhaust Volume	19,000 ACFM
Exhaust Temperature	100°F
Contaminants	Triethylamine (TEA)
Removal Efficiency	99.5%
Scrubbing Solution	Dilute H <sub>2</sub> SO <sub>4</sub>
Pressure Drop	1" W.C.
Materials of Construction	FRP

The emissions from foundry core boxes are highly odorous and include particulate in the form of sand. A major automotive supplier producing aluminum engine castings solved their core box emissions problem using a Ceilcote fiberglass SPT-72-120 [countercurrent scrubber](#) with inlet drop-out box. This particular application requires high efficiency removal of odorous [triethylamine](#) which is a byproduct of the agents used to bind the core box sand. A carbon steel drop-out box was provided to remove the large sand particles prior to the scrubber. The scrubber was designed to exhaust up to 3 three core machines at a maximum volume of 19,000 ACFM containing up to 500 ppmv of TEA. Designed with high efficiency [Tellerette Tower Packing](#), the unit is achieving greater than 99.5% amine removal using a recycle solution of dilute sulfuric acid.



**SPT-72-120 Packed Tower**

## Product Literature:

- [SPT Bulletin 12-2](#)