

## **Thermostating of Adsorbers Using a Vortex Tube in Hydrocarbon Emissions Cleaning Systems**

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**Abstract:** This paper examines thermostating technologies using vortex tubes to improve the efficiency of hydrocarbon removal processes from steam-gas mixtures and prevent hydrocarbon emissions into the atmosphere. This article examines the emissions of volatile organic compounds during loading and unloading operations at oil terminals, where intense hydrocarbon evaporation leads to environmental pollution. Calculations of the efficiency of a combined adsorption-absorption unit are presented. Data on changes in hydrocarbon concentrations in the purified vapor-air mixture at various temperatures are presented.