

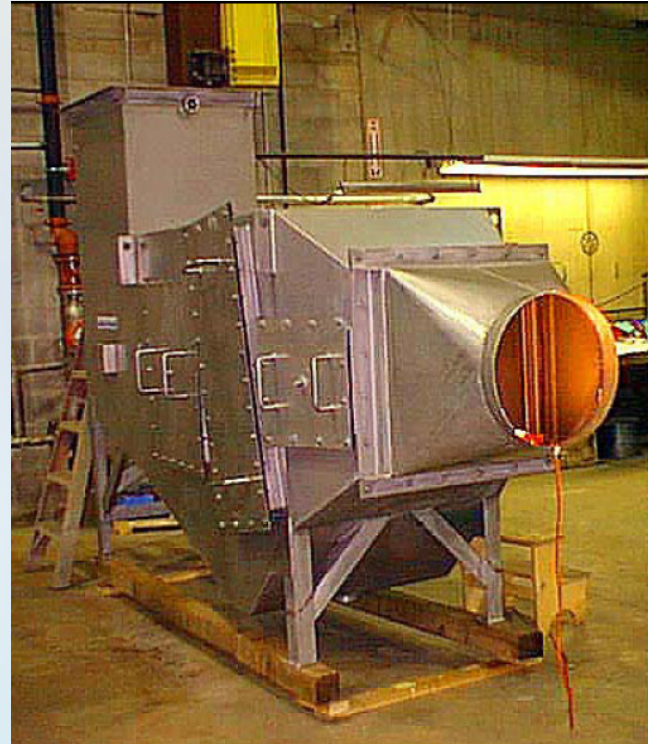


# Case Study # 107

This Ohio manufacturing company refurbishes Teflon coated baking trays by removing the teflon coating in a high temperature furnace. The process not only generates high levels of Hydrofluoric Acid but also particulates in the 5 micron size range.

A Fluidized Bed Scrubber was utilized based on its exceptional ability to simultaneously absorb gaseous contaminants and remove fine dust and soot particulates without fouling. The Fluidized Bed Scrubber follows a high temperature adiabatic quenching system that cools the process gases from 1500°F to near its saturation temperature. The scrubbers solids handling capabilities make it ideal for recycling slurries, minimizing wastewater and product recovery processes.

## Particulate Removal from Process Furnace Exhaust



<b>Application</b>	Oxidation Furnace
<b>Exhaust Volume</b>	1600 ACFM
<b>Exhaust Temperature</b>	1500° F
<b>Exhaust Pressure</b>	8" W.C.
<b>Contaminant</b>	HF & Particulate
<b>Removal Efficiency</b>	>99%
<b>Scrubbing Solution</b>	Recycled NaOH
<b>Materials of Construction</b>	Hastelloy-C, FRP, & Polypropylene