

## Extending the Life of an Existing Fume Scrubber

### CHALLENGE

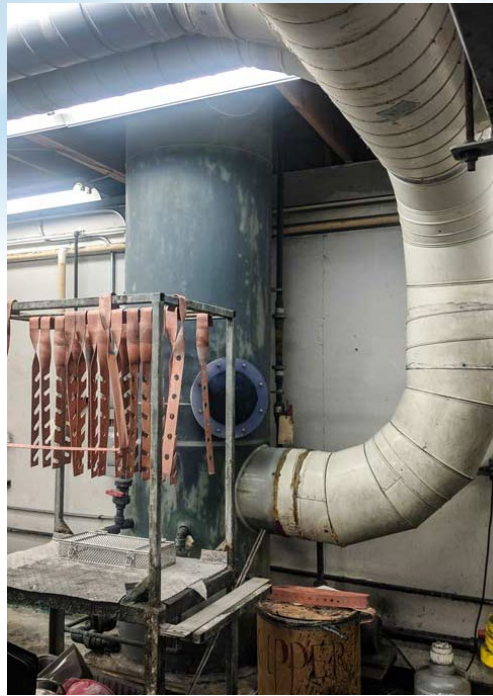
A medical implant manufacturer had noticed a steady decline in the effectiveness of their fume scrubbing system. Low flow and low efficiency led to inadequate control of nitric acid fumes. Monroe Environmental® was called to assess the system and make recommendations. It was determined that a rebuild of the existing scrubber (non-Monroe) was the fastest, most cost-effective solution.

### SOLUTION

- **A new additional access door was added** to allow for future cleaning/improved maintenance.
- **A new recirculation pump, flow meter, and chemical feed pump** replaced existing parts that were corroded and overheating.
- **Drain lines from the fan were installed**, allowing a path for acid to drain back into the scrubber. Without this, excess acid could potentially damage the roof.
- **Scrubber outfitted with all new PVC piping.** The existing metal pipes were corroding from acid service.
- **A Capsuhelic differential pressure gauge was installed** to allow the customer to easily monitor the performance of the scrubber and to determine new maintenance intervals.
- **Improved packing media, mist pads, and new spray nozzles** were installed to resist build up of bacteria and particulate.
- **The unit was totally cleaned** inside and out.
- **Cracks on existing tower were repaired** by Monroe plastic welders.
- **Training was provided** to operators and maintenance staff.

### RESULT

The exceptional Monroe Service Team duo of Josh and Kaleb performed the rebuild in record downtime – only three days, five days on-site total. The customer is so pleased with the increased efficiency that Monroe will be rebuilding several other scrubbers at the customer's various locations, as well as providing regularly scheduled maintenance.



*Before: (Left) A build-up of bacteria and particulate, as well as overheating and pipe corrosion rendered the customer's scrubbing system ineffective.*



*After: (Right) A system rebuild by Monroe's Service team transformed this competitor's failing system to an efficient Monroe Scrubber.*



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