

PRODUCTS AT WORK

VERTICAL DRY SCRUBBER AND VENTILATION SYSTEM

Model F102-135 Scrubber Provides Cost Effective Ventilation and Air Pollution Control for Battery Charging Room

Background

Voltmaster Company, Inc. required a cost effective solution for treating sulfuric acid fumes generated in a battery charging operation at their Corydon, Iowa facility. It was determined that a scrubber and ventilation system were required to prevent exposure of workers and equipment to the corrosive mist formed during the charging process and to prevent damage to the facilities and the local environment.

Within an electrolytic cell, gases are generated at the surface of each electrode due to the decomposition of water or the conversion of some other element or compound. Hydrogen, for example, is produced at the cathode (negative plate), while oxygen or chlorine may be produced at the anode (positive plate). Gas bubbles rise to the surface of the liquid and create aerosol droplets when released into the air. A corrosive mist is formed during this process.

Results

Duall Division was selected to supply a Model F102-135 scrubber and ventilation system with capacity to treat 35,000 to 40,000 cfm. The scrubber, hoods and duct were fabricated from PVC, an ideal material of construction for equipment designed to handle corrosive fumes.

Present Status

This system, which was installed by Duall in 1988, continues to operate very well and has accomplished the objective of significantly reducing facility and environmental damage due to uncontrolled emission of sulfuric acid.



Application: Battery Charging – Sulfuric Acid

End User: Voltmaster Company, Inc.

Reference: 7219-88

**Model F102-135 Scrubber
with Hoods and Duct
PVC Construction**



Duall Division

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