

Waste Power

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The purpose of this theoretical experiment is to present a device that will lessen the frequency of acid rain that occurs from the amount of sulfur dioxide that is emitted from oil refineries. The device, to include the smokestack, is internally coated with AMETEK style fluoropolymer and is designed with two conversion chambers to insure the device does not malfunction and halt the air flow, thereby resulting in an explosion. The device will convert sulfur dioxide released from the smokestack into a liquefied, fuming sulfuric acid, or oleum, which then drains into a storage tank where water is regularly added, thus creating pure, industrial grade sulfuric acid. The gases that are not affected by this process are compressed and passed through industrial turbines (also coated with the fluoropolymer) that power the entire device 100 kilowatts of surplus electricity. Not only will this device provide oil refineries with a recyclable supply of sulfuric acid, it will provide an additional energy source, and it will purge the environment of unneeded sulfur dioxide.