

# **Paste Plant Self-Cleaning Tar Fumes Ventilation Ducts, Design and Operation**

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## **Abstract**

Anodes and cathodes manufacturing generates carcinogenic tar fumes. Capture of tar fumes by ventilation ducts deteriorates when ducts become obstructed by tar and dust accumulation. Modifications to a coke fine tar fumes scrubber were performed to make ducts self-cleaning. Coke fines injection point was added to each tar fume collection point. With clean ducts the capture capacity of the system remains unchanged. History of this development is reported. Working principles are described. Points to check when designing, starting and operating this system are also described, this avoid repetition of mistakes made in the past, when putting into service first versions of this type of scrubber. This description is done from a long-term user of this type of installation.

**Keywords:** PAH scrubber; self-cleaning ventilation ducts; workplace environment.