

# CASE STUDY

Manufacturing and Machinery



**Customer:**  
S.Silpa (2521) Co.,Ltd.

**Location**  
Thailand

**Date:**  
2021

**Sector:**  
Commercial Printing

## MOLECULAR FILTER REMOVES VOLATILE ORGANIC COMPOUNDS (VOCs) FROM PRINTING PROCESSES EXHAUST GAS

**S.Silpa (2521) Co., Ltd., is one of the most successful media printing companies in Thailand, with many varieties of printing machines used in their factory.**

### ABOUT THE PROJECT

Our customer, S.Silpa (2521) Co., Ltd., faced constant odor nuisance and high VOC levels in their factory. This is due to the usage of various chemicals in the printing process that generate volatile organic compounds (VOCs) when exposed to heat, such as thinner solutions, alcohols, inks, cleaning solvents, vinyl sheets.

Camfil Thailand's experts started the project with a field visit to understand customer pain points and site limitations. VOC levels were measured to determine the concentration level.

### SOLUTION

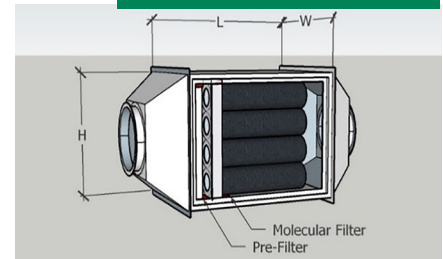
A filtration system was proposed based on the measured VOC concentration and space constraint. The exhaust system comprises a complete filtration solution including 30/30 Panel filters with ISO ePM 10 50% removal efficiency and CamCarb CG 3500 VOC cylinders installed within a customized housing.

The CamCarb CG is a cylindrical, corrosion-resistant molecular filter filled with adsorbents. They are the most versatile gas phase air filter installed in supply, recirculation, and exhaust air systems in commercial, industrial, and process applications. The design provides a low total cost of ownership for the removal of corrosive, odorous, and irritant gases.

### RESULT

VOC exhaust concentrations were reduced and recorded below the government-mandated maximum limits, thus resolving the customer's issue.

3D draft of the solution



Exhaust Unit



CamCarb CG 3500 in the Exhaust Unit

