
Air Filtration for good indoor quality and energy efficient HVAC Systems

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Jan Gustavsson has been working 40 years with air filtration and was before retirement Technical Director at Camfil Farr and adjunct Professor in "air filter technology" at The Royal Institute of Technology in Stockholm. Jan has also been Chairman of the European filter manufacturers association, Eurovent 4b and has managed International and European standardization work of air filters. He has published more than 100 papers in the air filtration field

Objective of the course

This three hours course will increase the knowledge of air filtration to improve indoor air quality, design energy efficient solutions and how to avoid problems associated with hygienic conditions of air filters as well as the maintenance and disposal of soiled air filters. It will give basic knowledge to specify and operate air filters in HVAC systems.

Short description of the course

Air filters are today used to protect people, products and environment in many critical areas. In HVAC systems filters have mainly been used to protect the ventilation components but the effect of small particles on human health has been stressing the need to focus more and more on indoor air quality. We spend 90 % of time indoor and the requirement of air filters with higher efficiency for smaller particles is increasing.

The challenge for the future is to get a good indoor air with low energy consumption and low operation costs. It is also important to avoid or to minimize hygienic problems caused by soiled filters. The course will cover the following items.

- Criteria for filter selection
- What filter performance shall be requested in typical HVAC installations?
- How to identify and to avoid perceived air quality deterioration related to air filters?
- Life cycle cost (LCC)
- Energy requirement to meet EU and National directives
- Maintenance and disposal