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Air quality is a critical issue for manufacturers. Fumes and particulates created by welding and other industrial manufacturing processes aren't just unpleasant they have real health and safety consequences for employees and having dirty equipment and facilities also cuts down the useful life of your capital equipment purchases. This is why RoboVent has launched our **Clean Air Academy** tailored to help manufacturers learn first-hand the scientific and practical lessons to improve the air quality and production processes within their plant.

Do you have the knowledge you need to make effective decisions regarding air quality issues in your plant?

RoboVent has developed a two-day course designed to give engineers, facility managers and maintenance staff a solid foundation in the science of air quality management. Participants will come away armed with the knowledge they need to recognize air quality problems, evaluate remedy options, make informed equipment selections, and maintain a healthy work environment.



Become an Air Quality Expert

Who?	The academy is open to anyone interested in learning more about industrial hygiene, clean air and equipment solutions. It is especially geared towards engineering, operations or maintenance staff who have a role in selecting, implementing or maintaining air quality solutions.
When?	September 20 & 21, 2016
Where?	Classes will be held at RoboVent's headquarters in Sterling Heights, Michigan.
Why?	RoboVent is providing these courses as a service to our loyal customers in order to help operations and engineering staff make effective decisions about air quality solutions.
Cost	\$995 USD per person. Lunch provided at no additional charge. Client discounts available. All travel, lodging and accommodation costs must be covered by the attendee.

To register for the Academy, please visit www.robovent.com/academy

or call Steve McCallum, Academy Coordinator, at 586-698-1823.

What You'll Learn

The RoboVent Clean Air Academy is a two-day course that teaches the fundamentals of industrial air quality, ventilation and filtration.

Day one will start with the basics: How does air move and behave? How do factors like temperature, humidity, elevation, and the presence of contaminants change the behavior of air? And how do you use that knowledge to your advantage in designing or selecting an air quality remedy? Then we'll cover the fundamentals of industrial ventilation and filtration. Participants will gain new insight into the technologies that are available to capture, clean and filtre air, and how to match the right solutions to specific applications and plant characteristics.

Day 1:

Introduction to Industrial Hygiene & EPA/OSHA Regulations

A basic understanding of industrial hygiene is helpful to understand why dust control systems are required within our manufacturing plants. What are the important risks associated with the various manufacturing processes? How do you ensure the general health and safety of the manufacturing environment? How do we comply with regulatory bodies and stay out of trouble when we have air quality issues? In this introduction, participants will learn to recognize and understand the exposure effects of dust and fumes on the human body, as well as, come away with a deeper understanding of current and emerging regulations and their implications and consequences.

Characteristics of Weld Fumes and Other Contaminants

Airborne particulates wreak havoc on our facilities. What are these nuisances? How do we understand their characteristics so that they can be captured and controlled? We'll take a closer look at the types of fumes and particulates generated by different processes and the risks and challenges of each.

Capture and Conveying Methods

To remove dusts from the workplace environment, the dusts must be captured. What are the various capture methods? Which ones work...and which ones don't? This session will focus on design principals of capture and conveying systems, including duct design and duct velocities. We will also discuss design for robotic welding cell enclosures.

Ambient Air Filtration

Ambient Air Filtration can be an effective method for controlling airborne particulates in a large manufacturing facility—but this option is often overlooked. What is Ambient Air Filtration, how does it work, and how is this strategy implemented?

Day 2:

Filtration and Air Distribution

What effect does air distribution have on overall air quality? How do we maximize these effects to our benefit? This session will explore the strengths, costs and weaknesses of different filtration options and air distribution methods. Participants will learn how to choose the right options to effectively remove particulate from the air stream in their facility and how to calculate energy savings for systems that return air to the facility vs. those that discharge to the outside.

Spark Arrestance and Combustible Dust

Fires in an industrial ventilation system is an obvious concern in our manufacturing areas. What are sparks, how are the created, and— most importantly—how are they stopped? What are the available options for spark arrestance and fire suppression systems? We'll take

a closer look at the risks of fires and explosions, especially as related to combustible dusts, as well as compliance with the latest NFPA Combustible Dust standards.

Retrofitting Existing Systems

Many times an existing dust control system can be retrofitted to either perform more effectively or be used to capture the dust from a new process. How do you go about this? How do you identify the limitations? And what factors must be considered during the design?

About RoboVent

During the past 25 years RoboVent has established itself as leader in the field of air filtration with highly efficient, reliable and cost-effective systems installed at major manufacturing operations across North America. Applications include welding, cutting and metalworking; dust collection and lubricant mist collection; and general ventilation. RoboVent is headquartered in Sterling Heights, MI, with sales and service centers located throughout the United States and the world. At its core, RoboVent is an environmental problem solving company for process systems. Their expertise and resources in collecting, filtering and recycling contaminated air can be applied to almost any process in the manufacturing environment. For more information visit **www.RoboVent.com.**

www.robovent.com/academy



Improving Lives through Clean Air.™