Driving Clean Air Innovation for the Automotive Industry

High-Powered, Ductless Ambient Air Filtration

Vista360™ Series

High-Powered, Ductless Ambient Air Filtration
Ambient air quality is looking up.

Introducing another breakthrough innovation from the leaders in clean air: the RoboVent Vista360™.

The Vista360 is a ductless, ceiling-mounted ambient air option that is easy to install, reconfigure and maintain. It’s the perfect ambient solution to capture fumes and dust from manual welding, metalworking and other industrial applications.

For more than 25 years, RoboVent has been working to make clean air more effective, efficient and economical for our manufacturing clients. We make air quality easy, so you can focus on your core business.

Our success is driven by a simple principle: take care of customers by carefully listening to their needs. We take the time to understand your processes and configure a system to help you reach your goals economically and efficiently. And we stand behind our work with the best quality guarantee in the industry, so you can have confidence in your choices.

That commitment to innovation and engineering excellence drives us to continually look for new approaches to solve our clients’ air quality problems. The Vista360 is the result of our close collaboration with customers who expressed a need for a highly effective ambient filtration system without the cost and inconvenience of installing ductwork. Our answer? Consider it done. It’s one more example of RoboVent responsiveness in action.

Breathe easy.
**Lose the ducts. Keep the power.**

If you’re looking for a better ambient air solution, just look up. RoboVent Vista360 blows away traditional ducted push-pull filtration systems with a ductless option that is easier to install, reconfigure and maintain. Vista360 offers great benefits to your facility:

- **Easy installation:** Vista360 is faster and easier to install than traditional ducted push-pull systems for displacement ventilation or ambient filtration. And since there is no ductwork to install, it’s less intrusive and won’t interfere with overhead cranes or production equipment.

- **Cost savings:** Eliminating ductwork saves money up front and energy later on. Vista360 saves 10-20% on initial installation and reduces energy use by 10-15% compared to traditional ducted push-pull systems.

- **Floor space savings:** With Vista360, your dust collectors are overhead and out of the way, where they won’t impact floor space.

- **Very low maintenance:** Everything is easily accessible for fast filter changes and maintenance—no special tools required. The single filter design makes filter change-out fast and easy. And our proprietary eTell system makes maintenance headache-free.

- **Flexibility:** Whenever you need to change your floor configuration, Vista360 is easy to move right along with your production equipment, without rerouting any ductwork.

**Vista360 Push-Pull Configuration**

Vista360 creates circular air patterns in the facility that continually pull contaminated air into the filtration unit and push clean, filtered air back into the plant. Here, short lengths of duct are used to capture ambient air. The number and placement of Vista360 collectors are determined using our proprietary VentMapping Engineering Services (see pages 8-9).

**Helpful Hint**

Vista360 can also be effectively used to create a circular airflow pattern similar to the RoboVent Vortex configuration.
Why Choose an Ambient Filtration System?

Don’t blow money out the roof! An ambient filtration system offers significant benefits compared to traditional ventilation exhaust and make-up air systems:

• **Energy efficiency:** Filtering and recycling factory air keeps heated or cooled air in and lowers overall energy and operating costs.

• **Regulatory compliance:** Ambient filtration does a better job of clearing contaminants from the air than traditional ventilation, resulting in higher employee comfort and better compliance with health, safety and environmental regulations.

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**Vista360 Collector**

The Vista360 is a ductless, ceiling-mounted ambient air option that is easy to install, reconfigure and maintain. It’s a powerful ambient solution made to capture fumes and dust from manual welding, metalworking and other industrial applications.

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**eQ Air Quality Monitoring System**

With the RoboVent eQ Air Quality Monitoring System, your dust collection equipment is on when you need it, and off when you don’t. eQ continually monitors the air quality in your facility and automatically regulates your RoboVent system’s airflow in response to particulate levels.

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**Hi-Vac Industrial Cleaning System**

The RoboVent Hi-Vac Industrial Cleaning System is a rugged centralized vacuum that can be attached directly to your dust collection system for easy collection bin clean out. The central vac system eliminates the need for ladders or scaffolding to clean out collection bins on ceiling-mounted dust collectors.

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**RoboVent Hi-Vac Industrial Cleaning System**

Cleaning out overhead dust collectors just got a whole lot easier. The RoboVent Hi-Vac Industrial Cleaning System is a rugged centralized vacuum that can be permanently attached to your dust collectors for easy, automated clean out. The high-vacuum system collects particulates from all of your dust collectors into a centralized bin for easy disposal. It can also be configured as an industrial-strength central vac for general facility cleaning.

- Reduce dust collector maintenance time and costs
- Eliminate the need for ladders or scaffolding to clean out collection bins on ceiling-mounted dust collectors
- Reduce exposure to harmful particulates when cleaning out collectors or conducting general facility cleaning
- Can be used with Vista360, Fusion Series and Spire dust collectors

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**Why Choose an Ambient Filtration System?**

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- **Regulatory compliance:** Ambient filtration does a better job of clearing contaminants from the air than traditional ventilation, resulting in higher employee comfort and better compliance with health, safety and environmental regulations.
**Vista360:**

**Powerful Filtration in a Small Package**

Vista360 combines the advantages of a ducted push-pull system and a standalone collector in one small but powerful package. Each unit is built for durability, safety and easy maintenance, with rugged cabinet design and built-in features for fire safety and longer filter life.

**Snap-Lock Filter Clamp**

The Vista360’s double-rail clamping mechanism ensures an airtight seal for every filter. The gusseted support structure is welded to the 3/16-inch (0.476 cm) reinforced tube sheet and provides over 200 pounds (91 kg) of compression force on the gasket. With this system, filter change-outs are fast and easy, require no tools and can be performed from outside the filter cabinet.

**Endurex™ RMO Filters**

RoboVent’s Endurex RMO filters use Reinforced Media Optimization and a rigorous quality control system to guarantee performance. In addition to RMO Technology™ a wide selection of media is available including high performance cellulose, NanoFiber, and PTFE, so that the filters can be tailored specifically to the application.

**Internal Hopper**

Dust is collected in an easy-access internal hopper. Just hook a standard shop vac up to one of two 2-inch (5.1 cm) ports to clean out excess dust.

**SafeSensor™ Particulate Monitoring**

SafeSensor is the Vista360’s advanced particulate-monitoring device that can detect leaks past the filters. If one should occur, SafeSensor will shut the equipment down and trigger an alarm.

**Dynamic Pulse™ System**

This patent-pending system takes filter cleaning to an entirely new level. Far more than just a simple blast of compressed air, it has multiple valves working together in a computer-synchronized double-pulse sequence to virtually eliminate re-entrainment while propelling the dust down into the collection area.

**eDrive™ Automatic VFD** (option)

The eDrive constantly monitors airflow, and automatically adjusts the motor RPM to compensate for filter loading. Energy peaks and valleys are evened out, and energy usage is cut by 20% to 30% while filter life is extended by as much as 30%.
eTell™ Intelligent Controls

Each Vista360 unit comes standard with eTell, a revolutionary control system that learns your systems and routines, makes automatic adjustments to save energy and extend filter life and alerts you when maintenance is needed. Each unit has a wireless modem that connects to the internet, so you can access information and have full control of your Vista360 units from anywhere using a free app on your iPhone or Android device. (See pages 10-11 for more.)

Delta3 Spark Arrestor (option)

Our proprietary Delta3 spark arrestance system uses centrifugal force to eliminate sparks at the source for superior fire safety.

RoboVent eQ™
Air Quality Monitoring System

Cut energy costs for your dust collection equipment by up to 25%.

With the RoboVent eQ Air Quality Monitoring System, your dust collection equipment is on when you need it, and off when you don’t. eQ continually monitors the air quality in your facility and automatically regulates your RoboVent system’s airflow in response to particulate levels.

eQ works with the eTell control system to modulate system performance in response to real-time conditions. eQ also links with your dust collector’s eDrive system and regulates airflow, ramping the volume and speed up and down as necessary—reducing energy costs, noise levels, and equipment wear and tear, and extending filter life. At the same time, air quality is always kept within defined limits to protect worker health, safety and morale.

The perfect companion for any of RoboVent’s ambient air quality systems, eQ allows you to:

• Get real-time air quality alerts and control system parameters on a tablet or smart phone
• Monitor air quality levels over time and identify meaningful patterns with user-friendly reports
• Reduce energy use and maintenance costs for air quality equipment

Helpful Hint
Add the RoboVent Hi-Vac Industrial Cleaning System for easy dust clean out.
VentMapping®
Engineering Design Services

Your facility is unique. To get the best results, your whole-plant ventilation system needs to be personalized to your individual environment. That requires a thorough understanding of your facility layout, fume-generating applications, airflow patterns and physical constraints.

VentMapping is a systematic engineering and design service that uses a holistic approach to optimize your ambient air quality system. Our comprehensive approach helps us find the safest, most effective and most efficient way to meet your goals.

“[The unique aspect of the RoboVent system is that it is not just a venting hood – it is an entire system that pulls the smoky air away from our operators. We strongly feel that this is the best solution for our employees. We are pleased to have accomplished this with the RoboVent system. And we are pleased to have found such a flexible partner in RoboVent – a partner who works with us to help us achieve our goals.”

— A.M., Senior Project Leader, Bobcat Doosan

Effective Dust and Fume Collection Starts with Data Collection

**Before:** The airflow simulation shows the dirty air concentrating around equipment and the manufacturing process.

**After:** A second simulation shows how optimal placement of dust collectors has effectively circulated and cleaned the air.

2.1 mg/m³ → 0.5 mg/m³
1. Onsite Consultation
Each engagement starts with an onsite meeting to help us understand your goals and your facility. At this stage, we will review your fume-generating processes and the volume of fumes produced and work with you to establish specific and measurable air quality goals. We don’t simply limit the discussion to meeting required regulations. We want to understand your current situation, your desired outcomes and your unique challenges.

2. Data Collection
Next, we gather data about your current air quality. If you already have data of your own, we can build that into the model. If you don’t have your own data, we can help you gather it. We use science-based methods to measure particulate levels throughout the facility so we can map how they are generated, how they propagate through the facility and where they end up. Depending on the data you have available, our data collection may include:
- Onsite Weld Wire Consumption/Fume Generation Analysis
- Onsite Building Ventilation Analysis
- Onsite Air Quality Study
- 3D Laser Scanning (to collect accurate measurements and build a virtual model of your facility)
- Thermal Loading Study

3. Modeling
We use Computational Fluid Dynamics (CFD) to build an accurate model of the airflow patterns throughout your facility. Modeling and analyzing fume generation points, generation rates and airflow patterns allows us to predict the impact of different equipment configurations. Building your model may include:
- Facility CAD Model Creation
- CFD Analysis

4. System Design
Using the simulation software, we can find the ideal placement and configuration for equipment so it works with, not against, your existing airflow and facility layout. This allows us to design a system that will give you maximum results with minimum cost and energy use.

5. Final Review and Analysis
Once your system is installed and implemented, we’ll make sure that the actual results match our predictions, and make any necessary final adjustments.
**eTell™ Intelligent Controls**

**Forget about your air filtration equipment.**

With patent-pending eTell™ Intelligent Controls from RoboVent, your dust collectors will tell you what they need and when they need it. It’s not about preventative maintenance—it’s about **predictive** maintenance.

eTell eliminates costly and time-consuming maintenance routines and targets your efforts where they are truly needed. Just install the cloud-based software once, and let it tell you what needs to be done each month, or in real time. It will even tell you how to perform maintenance activities with easy-to-follow video instructions delivered right when you need them.

**eTell is the only control system that is:**

- **Predictive:** eTell can predict exactly how much life is left in your filters and when maintenance tasks should be performed based on your system use patterns.
- **Cloud-based:** Our cloud-based application gives you anywhere, anytime visibility for all of your equipment from multiple facilities on a single application.
- **Smart:** eTell learns your systems and processes and makes real-time adjustments to save energy and extend filter life.

**The eTell Advantage**

- Eliminate standard preventative maintenance routines and schedules.
- Cut maintenance costs by focusing only on what is actually needed.
- Access step-by-step video instructions so your team can perform maintenance activities without prior training.
- Track performance, energy use and maintenance needs for all of your dust collectors on your smart phone or tablet.
- Save money with smart software that learns your processes and adjusts energy use and self-cleaning cycles to reduce operational costs.

**Manage Multiple Collectors**

Now you can view and manage dust collectors across all of your facilities in one easy application. eTell lets you monitor the entire facility and see the alerts and alarms for all of your machines in one place.

**Predictive Analytics**

eTell uses advanced machine learning to analyze your systems and processes and make smart predictions on how future activities will impact filter life and maintenance needs. It uses this information to make simple, automatic adjustments that save energy and reduce costs. Easy-to-understand reports allow you to monitor energy use, filter life and other key metrics for each machine in your network.

**Reminders and Emergency Alerts**

Get alerts and reminders right on your smartphone, tablet or computer. eTell will alert you if your dust collector needs immediate attention and send timely maintenance reminders. You can set your communication preferences so you can be reminded as often (or as seldom) as you like.
**Maintenance Scheduling**
Plant managers can easily monitor system performance and plan maintenance schedules based on each collector’s needs. eTell lets you track updates, alerts and maintenance tasks for every collector in one place and generate a task list for each machine in your facility.

**Collector Dashboard**
Service technicians can pull up the eTell dashboard to get a full list of maintenance recommendations specific to each collector. The dashboard tells you exactly what needs to be done, when it should be completed and approximately how long each task should take. It even provides links to helpful video tutorials right at the point of use.

**Video Tutorials and Help**
The application comes pre-loaded with links to online support materials, helpful supportive materials and general video tutorials for your system, allowing you to self-diagnose and address any item.

**Factory Support 24/7**
Our staff will be alerted if a problem is not addressed immediately, so we can help you stay on top of any issues that should arise. Rather than taking the time to fix any issues yourself, simply call RoboVent to have one of our trained technicians service your equipment on site.

**eTell Premium Services (optional)**
With Premium services, you’ll have all of the standard eTell features plus remotely turning equipment on/off and a more intuitive machine maintenance package.

*eTell* is the standard control package on RoboVent collectors. The RoboVent eTell App is available on Android and iOS devices through the Google Play and Apple App Stores. The eTell Website is available when eTell Server is installed in your facility.

**Preferences**
Customize your reports and alerts setting for your preferred frequency and level of detail. You can get detailed reports for in-depth performance analysis or just “set it and forget it” and let your dust collectors call you only when they need you. eTell lets you adjust system preferences for your workflow and management style.
Aftermarket Replacement Filters

Manual Welding Fume Extraction

Integrated Cooling Equipment

Robotic Welding Fume Collection

Maintenance Programs

Oil Mist Extraction

Full-Plant / Ambient Air Cleaning Systems

Dust Collection Systems

Mobile Dust Collectors

Laser & Plasma Cutting Fume Collection

Robotic Welding Fume Collection

Full-Plant / Ambient Air Cleaning Systems

Improving Lives through Clean Air™

ROBOVENT.COM • 888.ROBOVENT
INFO@ROBOVENT.COM