



Advanced Air Quality Controls for Dust Collection Systems







Clean air just got even easier.

Introducing eTell Intelligent Controls from RoboVent—the most advanced electronic control system for dust collectors available today. The patent-pending eTell goes beyond preventative maintenance to enable predictive maintenance tailored to the needs of each machine in your facility. With eTell, you can stop wasting time and money on routine maintenance that isn't needed, and focus your efforts on what really needs to be done.

It's the latest advancement in air quality control from RoboVent. For more than 25 years, we have been at the forefront of innovation for the air quality industry. We're committed to helping manufacturers maintain clean, safe facilities, and we've earned our position as a recognized leader in the collection and filtration of airborne contaminates. Our dust collectors and premium filters have been successfully used in hundreds of applications across a wide range of industries, from metalworking to food processing.

We have a long history of developing advanced controls and automated systems to make it easier to monitor and maintain your equipment. Whether it is our brand-new eQ Air Quality Monitoring System, the eDrive Automatic VFD or the SafeSensor Particulate Monitoring System, our systems are designed to keep you safer, save you money, and extend the life of your filters and machines. Now eTell Intelligent Controls help you pull it all together to make maintaining your dust collectors almost effortless.

Forget about your dust collectors. They'll let you know when they need something.

Forget about your dust collectors.

With patent-pending eTell[™] Intelligent Controls from RoboVent, they'll 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. With eTell, you can assign collectors to zones, manage groups of collectors, and streamline all of your maintenance activities.

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 the entire facility organized by tech level.



Helpful Hint

across your entire facility.

Use the eTell Task List to plan and

streamline your maintenance activities

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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 all of the helpful supportive materials and general video tutorials you'll ever need for your system, allowing you to self-diagnose and address any item.





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.

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. You can fix issues yourself, to have one of our trained technicians service your equipment on site.



RoboVent eTell will be available on Android and iOS devices through the Google Play and Apple App Stores in late 2015. It will also be the standard control package on RoboVent equipment beginning in 2016.



Dynamic Pulse System

Proprietary, computerized and efficient, the RoboVent Dynamic Pulse System uses a rapid-fire technique. The synchronized action of the pulsing mechanism virtually eliminates any re-entrainment of dust going from one filter to the next; instead, it causes the dust to fall into the containment tray or drum. The patent-pending Dynamic Pulse System that ensures your filters are used to maximum capacity!

Saving filter life by shedding particulate effectively and eliminating reentrainment, the synchronized Dynamic Pulse System has proven to be 1.5 times more effective than typical pulsing systems. As you can see in the charts to the right, we tested this system thoroughly. With the Dynamic Pulse System, 30% more dust was removed from the filters than with a typical pulsing system. Also, it had 82% effectiveness vs. 57% effectiveness with the standard pulsing system.

Perfectly synchronized pulsing virtually eliminates re-entrainment of dust and extends filter life.

eQ[™] Air Quality Monitoring System

The RoboVent eQ Air Quality Monitoring System is an innovative new system that monitors the current air quality in your facility and automatically regulates your RoboVent system's airflow. On when you need it, off when you don't—eQ allows you to save money on your electrical costs by operating your RoboVent systems only when they are needed. Along with turning your collector on and off, RoboVent eQ also links with your dust collector's eDrive system and regulates airflow, ramping the volume and speed up and down as necessary.

RoboVent eQ was created to ensure that your plant air was consistently cleared of smoke and fumes, and that your employees have a safe work environment. In addition to improving air quality and controlling equipment operation, added benefits of RoboVent eQ are:

- Increased equipment performance
- Decreased stress on equipment and components
- Reduced equipment maintenance costs
- Longer filter life
- Reduced equipment noise levels
- Increased employee morale
- Increased employee performance

RoboVent Dynamic Pulse System Testing



Standard Pulse System Testing



	Controlled Variables		Dynamic Pulse System	Standard Pulse System
	Particulate Volume	Number of Cycles	Recovered Volume	Recovered Volume
Test 1	6 Gallons	(1) Cycle; 12 Cartridges	4.76	3.42
Test 2	6 Gallons	(1) Cycle; 12 Cartridges	4.90	2.88
Test 3	6 Gallons	(1) Cycle; 12 Cartridges	4.88	3.36
Test 4	6 Gallons	(1) Cycle; 12 Cartridges	5.06	3.56
Test 5	6 Gallons	(1) Cycle; 12 Cartridges	4.90	3.76
Test 6	6 Gallons	(1) Cycle; 12 Cartridges	4.76	3.68
Test 7	6 Gallons	(1) Cycle; 12 Cartridges	5.08	3.22
Test 8	6 Gallons	(1) Cycle; 12 Cartridges	4.92	3.62
Test 9	6 Gallons	(1) Cycle; 12 Cartridges	4.98	3.28
	Avera	4.92	3.42	



Helpful Hint

RoboVent's **eQ Air Quality Monitoring System** can save you up to 25% off your equipment electrical costs — a ROI of six months or less!



eDrive[™] Automatic VFD

With the RoboVent eDrive, your collector's airflow is monitored and the motor's RPM is automatically adjusted to compensate for filter loading. As you can see in the graph below, a collector running without eDrive uses more energy in the beginning of the filter's life cycle than a collector with eDrive does.

Benefits of the RoboVent eDrive include:

- Less stress on filter media, which leads to longer filter life
- Decrease in energy usage by 20% to 40%
- Improved equipment performance
- Decreased filter costs
- Decreased maintenance costs

Using the RoboVent eDrive with your dust collector will compress and straighten energy peaks and valleys, cutting energy usage by approximately 40% and increasing filter life by as much as 30%.

In the example below, this 10 HP unit would be using 7.457 KWs per hour of operation. This example shows that you would save 41% over the 18 month period. For filters in this example you have increased the filter life by 4 months or 29% Filter Life Savings.

SafeSensor[™] Particulate Monitoring

SafeSensor is an 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.

AutoSaver

The AutoSaver feature allows your RoboVent system to rest when not in use to save on energy costs. It turns the system on when the welder strikes an arc, and turns it off after five minutes of inactivity. The AutoSaver mounts in your control panel and senses welder power usage.



Helpful Hint The RoboVent eDrive saves money by decreasing energy use and extending filter life.







The Leader in Clean Air. Guaranteed Solutions.™

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