IVEC ULTRA®
CLEAN AIR. ONLY SMARTER.

Beyond Automation: Maximized Air Quality with Minimal Effort
Source capture is often the preferred method to particulate extraction because it collects right at the source of the fumes. However, for certain manufacturers, their workspace or the type of work they do requires an alternative air quality solution other than source capture – ambient ventilation. Conventional ambient ventilation systems clean the air with maximum power throughout each shift and around predetermined workstations. This outdated approach to general ventilation comes with high operating costs, extensive labor requirements and inconsistency in air quality.

It doesn’t have to be this way. At IVEC®, we’ve taken a fresh approach to ambient air ventilation. We engineer innovative, award-winning technologies to provide cleaner air to manufacturers with the most cost-effective and efficient solutions. This maximizes a ventilation system’s return on investment.
Consulting with experts who have 50 years of industry experience and using our deep understanding of the principles behind ambient air quality control, we worked with manufacturers across a broad range of industries to design a ventilation system that alleviates the costly inadequacies of outmoded ventilation systems. We call our advanced system IVEC Ultra.

Designed using start-of-the-art technologies, the patented IVEC Ultra is the only ventilation system on the market that combines the lowest energy usage, the fewest maintenance requirements and the most control capabilities to provide the cleanest air. The IVEC Ultra ventilation system revolutionizes cost-saving efficiencies in industrial air cleaning and enhances employee productivity and safety to previously unattainable levels.
**AMBIENT VENTILATION THAT PRACTICALLY RUNS ON AIR**

With systems that are always on, ventilation requires high energy usage increasing your operating costs and requiring extensive maintenance.

Using IVEC-exclusive technologies and engineering aligned with industrial ventilation principles, IVEC Ultra runs smarter to provide cleaner air with the lowest overall cost of ownership compared to conventional ventilation systems.

More intelligent than any other dust collector, the Intellivent™ GVSC (General Ventilation Self Cleaning) collectors are the only collectors on the market designed to self-adjust to optimize air filtration with a low filter pressure drop. With efficient and offline cleaning only, the GVSC units maintain 24/7 operation with zero downtime. GVSC collectors also control their motor speed and power usage with continual collection of dust to ensure lower energy and maintenance costs as well as maintenance requirements. Some of the results you can expect are:

- A filter life extended by up to 150 percent
- Compressed air consumption for filter cleaning that costs approximately $8 per year (per unit), versus $500 or more in electric costs per year (per unit) for conventional systems
- The best air-to-cloth ratio in the industry due to the combination of a larger filter diameter and controlled energy usage and airflow

Beyond the operational benefits of the Intellivent GVSC, the units are also designed to fit below or within crane rails for an out-of-sight, out-of-mind profile. They are also modular, lighter and more flexible than any other ventilation system so they can easily be configured and reconfigured to fit the needs of your facility. GVSC collectors are available for use in many industrial workplaces including metalworking, welding and other applications that produce fine dust and fumes.
The key to an effective ambient ventilation system is a deep understanding of the science behind air quality.

- **SIZE OF PARTICULATE**
  Filters particulate down to 0.002 microns

- **FILTER MERV RATING**
  Nano coated, MERV 15, standard

- **AIR EXCHANGE RATE**
  Reduces particulate with an engineered air exchange rate tailored to each customer

- **AIRFLOW/PATTERN**
  Pushing the air to a specific collector instead of only pulling in the air to ensure particulate collection and complete coverage

- **STRATIFICATION LEVEL**
  Flexible GVSC install to collect particulate at the right height and level for each work zone

- **ZONE CONTROL**
  GVSC units only run in work zones that are being utilized

- **FAN AFFINITY LAW**
  Reduce RPM/CFM by 25 percent to achieve 58 percent energy savings
Gatekeeper Sweeper, the central housekeeping vacuum system

Manual portable housekeeper vacuum
DUST COLLECTION THAT GOES BEYOND EXPOSURE COMPLIANCE

Conventional industrial dust collection continues to drive high labor costs and decrease employee productivity and safety.

These systems require extensive maintenance labor because they run on maximum power day after day. They also require multiple dust collection drums, which means employees are exposed to more particulate. In order to give manufacturers lower energy costs, lower labor costs and the ability to provide employees with the healthiest work environment, a dust collection system needs to be easy to monitor and efficient to maintain.

When you equip your workplace with IVEC Ultra, you gain a ventilation system with centralized dust collection paired with innovative technology to provide the most effective way to nearly maintenance-free air quality control.

The Gatekeeper Sweeper® is the central housekeeping vacuum system. It makes disposing of collected dust a breeze by streamlining the handling of dust into one location. Not only is it more efficient, it also creates a safer workplace with up to a 10-time reduction in employee exposure to particulate.

Intelligent sensors and smart features like E-Z Gates — automated and controlled ducting gates that upgrade system performance and save you money — are built into the ducting that connects the housekeeping unit. These additions help maintain a low filter pressure drop while optimizing dust collection, airflow and energy usage. Depending on your needs, the Gatekeeper Sweeper can be designed with one central dust drum that collects dust from multiple GVSC collectors, or, for smaller systems, you can bring the portable housekeeper vacuum to each GVSC unit.
Manufacturers that are not able to monitor and control their air quality with their ventilation systems have untapped potential to cut costs and consistently provide high air quality. With predictive and proactive tools, now you can take command of your air quality.

IVEC Command is the central communication hub for the entire IVEC Ultra system. You can use it to monitor and control the efficiency of your ventilation system through industry-leading sensors that verify system performance and ensure proper operation. IVEC Command not only displays all of the controls for these sensors in one location for easy monitoring, it also continually monitors performance to provide system analytics, predictive maintenance and customized reports.

To advance your control and monitoring abilities even further, IVEC Command also comes with remote display capabilities, allowing you to monitor your ventilation system from your computer or mobile device. The groundbreaking controls included with IVEC Ultra turn operational fixed costs into reduced operational variable costs you can monitor to ensure efficiency, savings and cleaner air.

As a manufacturer, how do you monitor your air and ventilation system? Do you feel you are in full control of your workplace air quality?
DUCT VELOCITY SENSOR
Optimizes air velocity in the ducting to ensure total dust carrying and no dust buildups

FILTER PRESSURE SENSOR
Monitors the filter pressure to sustain the lowest HP required

PNEUMATIC PRESSURE SENSOR
Measures compressed air to maintain energy savings and guarantee effective cleaning

DRUM FULL SENSOR
Inform you of the capacity available in the drum storage unit(s)

THERMAL SENSOR
Guards against excessive heat in the collector
GET YOUR AIR QUALITY RIGHT THE FIRST TIME

From the start, we want you to be confident in the return on investment you get with a ventilation system.

Air quality control in your workplace shouldn’t be a guessing game. True air quality experts use industry expertise, top-of-the-line technology and applied ventilation science to deliver air quality solutions with the first installation.

The IVEC Ultra ventilation system provides you with a previously unavailable state-of-the-art approach to air quality in order to accomplish energy savings, labor savings, maintenance efficiencies, employee productivity and safety improvements. Explore the customer success stories on our website to see the results we have delivered to manufacturers just like you:  ivecsystems.com/success-stories/

“The IVEC Way” is more than just setting the standard for innovative engineering, technology and cost-efficiency in air quality control. It is a commitment to meet the unique needs of any manufacturer and to be a part of the whole air quality process from designing, selling and servicing to educating and on-going support. We are only satisfied when you are.

We will continue our commitment to conducting research, development and testing to ensure our customers are educated and equipped with the most effective, efficient and up-to-date ventilation system.
PRELIMINARY SITE ANALYSIS
Manufacturers get a site analysis to gather information on their ventilation system and receive a preliminary estimate of savings

EDUCATION
Take on-site visits to customers with similar systems, visit our Technology Experience Center for hands-on demonstrations of the technologies available and take a class on industrial ventilation

SERVICE
IVEC provides you with professional, on-going support that assists you with the controlling and monitoring of your IVEC Ultra system to help you verify its performance and keep your manufacturing processes up and running at all times

FUNDING
IVEC helps identify if manufacturers qualify for grants, incentives or subsidies with a calculation of ROI and a comprehensive Total Cost of Ownership analysis

ANALYSIS
IVEC can provide baseline energy and particulate readings to evaluate air makeup and exhaust – a full engineering study and written report is available as an optional service

FINAL QUOTE
Provide a design concept paired with a final quote based on the analysis or engineering study

INSTALL
Installation of the equipment by qualified and approved personnel so it is turnkey-ready based on your current and future business requirements

CONTROL
Control the system from central HMI or remotely using the Remote Access and Verification (RAAV) system

VERIFY
Use the IVEC Command app to track and document the performance and energy savings of the system

PLAN
Use the IVEC Command app to plan future maintenance and expenses

WARRANTY
2-year warranty on standard components (includes motor, blower, controls, pulse valves, etc.), 10-year warranty on cabinets and 1-year warranty on IVEC automation controls and components
WHY CHOOSE IVEC TO CONTROL YOUR PROCESS VENTILATION?

Because IVEC Systems deliver ROI and other benefits which make IVEC Controls a very wise investment.

IVEC SYSTEMS WILL
- Save money by managing energy consumption
- Add capacity to existing systems
- Reduce noise from ventilation fans
- Extend filter life in dust collectors and air cleaners
- Eliminate/manage negative or positive pressure in your building
- Extend life cycles of new and existing equipment
- Lengthen intervals between required/scheduled maintenance

IVEC SYSTEMS CAN
- Provide exhaust on-demand
- Control cleaning for self-cleaning collectors
- Monitor filter-loading and adjust to pressure changes
- Provide total automation that eliminates employee interaction and tampering
- Provide valuable analytics for management that can be monitored locally or remotely
- Monitor power consumption

IVEC SYSTEMS ARE
- UL Listed and cUL Listed (control panels)
- Recommended for new or existing equipment
- Available for ducted or ambient systems
- Complete networks; not components and wiring
- Backed by a long-standing, full-service company

IVEC SYSTEMS REPRESENTATIVES
- Can provide complete turnkey project management
- Are experienced with weld fume, wood dust, coolant mist, vehicle exhaust and many other applications
- Will design a system specific to your needs — simple to sophisticated
- Are backed by a company with 50 years of experience and thousands of installations