5 Ways the Contura Pulse Controller Simplifies Dust Collector Management

By Asa Bowen, product Manager at Donaldson and David Van Eylen, Engineering Manager at Donaldson Industrial Air Filtration



Streamlining Operations and Supporting Productivity with Intelligent Dust Collection Cleaning Modes and Programming

Achieving peak efficiency is the goal in plant or factory settings to optimize production, lower expenses, and stay ahead of the competition. Simplifying complex processes and minimizing waste allows businesses to maximize their output while using resources effectively.

Industrial dust collection systems can play a vital role in this efficiency, and the Contura Pulse Controller goes beyond basic on/off functionality to help simplify

operations. Rather than becoming a complex burden, dust collection, especially when managed by the Contura Controller, can become a strategic advantage.

By intelligently controlling the dust collector, the Contura Controller supports efficient handling of manual tasks, supports improving cleaning cycles, and ultimately helps contribute to a simple and efficient plant environment. This ease of management can translate directly to time and resource savings, allowing personnel to focus on core production activities. Here are five ways Contura Controller simplifies dust collector management to support overall plant efficiency.

1. Tailored Cleaning for Every Dust Type:

Forget one-size-fits-all cleaning. The Contura Pulse Controller offers versatile cleaning modes to match specific application needs:Reaching this level of purity typically involves a combination of filtration and drying stages, including:

- Automatic Cleaning:
 - Auto Continuous: Cleans regularly at set intervals.
 - Auto Pressure: Cleans only when filter pressure reaches a certain threshold.

Manual Cleaning: You initiate these cleanings.

- Manual Continuous: Cleans constantly while activated.
- Manual Cycle: Runs a single pre-set cleaning sequence.
- Manual Single Pulse: Activates a short cleaning burst per command.
- Downtime Cleaning: Cleans automatically after the system shuts off.

Instead of guesswork, operators can select the cleaning mode best suited for their specific dust collection challenges, leading to effective and efficient dust removal.

2. Precision Control at Your Fingertips:

The Contura Pulse Controller puts you in command with advanced programmability:

- **Programmable Setpoints**: Limited installation Easily define critical pressure thresholds (high, low, alarm) to automate cleaning cycles and receive timely alerts, ensuring proactive maintenance.
- Different user levels to control levels of access: Secure your settings and prevent unauthorized changes, providing consistent and efficient system performance.
- **Programmable Setpoints:** Benefit from precise measurements (±1% full scale) and robust solid-state electronics, helping minimize the need for maintenance and providing long-term accuracy.
- Unit Flexibility: Seamlessly integrate the controller into diverse industrial environments with the option to use metric or imperial units.

Operators gain granular control over their dust collection system to help achieve optimal performance tailored to their specific needs.

3. Remote Insights with Cloud Connectivity:

The iCue™ Connected Technology integration transforms dust collector management:

- Proactive Performance Issue Resolution: Real-time data and trend analysis accessible remotely allow for early detection of performance issues like rising pressure or excessive cleaning, enabling timely intervention before they impact operations.
- Optimized Cleaning Cycles: Remotely analyze cleaning performance data to fine-tune parameters for maximum efficiency and resource conservation.
- Simplified Regulatory Compliance: Cloud-based reporting and data logging streamline compliance efforts, helping support adherence to different environmental regulations.
- Reduced Unnecessary Maintenance Trips: Remote diagnostics capabilities provide remote troubleshooting options, helping manage the time and costs associated with on-site visits.
- Proactively change filters: Replacing them on a planned schedule before they reach a point of failure or severe degradation that could lead to operational issues or equipment breakdown (downtime).

Operators can monitor and manage their dust collection system from anywhere, gaining valuable insights and enabling proactive maintenance to help manage downtime and operational costs.



4. Simplified System Management:

Eliminates the complexity of traditional airflow control by integrating the functionality directly into the dust collector's main controller.

- No Separate Components: Removes the need to purchase, install, and manage standalone airflow control devices or manual dampers.
- Automated Adjustments: The system automatically and continuously optimizes fan speed based on real-time conditions, supporting consistent performance by freeing up personnel from having to make manual adjustments.

5. Contributing to a Productive Plant:

Ultimately, the Contura Pulse Controller can help support your plant operations by:

- Controlling Downtime: Proactive monitoring and precise control help prevent equipment failures for continuous operation.
- Help Reduce Energy Consumption: Intelligent cleaning modes and optimized cycles minimize the use of compressed air and electricity.

By providing precise control, remote insights, and versatile cleaning options, the Contura Pulse Controller empowers operators to effectively manage their dust collection systems, leading to efficient and cost-effective plant operations.



**The Contura Pulse Controller is not intended to replace or alter any policies, procedures or processes operators have or may develop regarding their facility, equipment, and their maintenance and safety. Operators will be solely responsible for managing their facility and equipment in a safe and appropriate manner.





Technical Article No. F119732 ENG (09/25) 5 Ways the Contura Pulse Controller Simplifies Dust Collector Management
©2025 Donaldson Company, Inc. Donaldson, Torit, Fibra-Web, Torit-Tex, Ultra-Tek, Ultra-Web and the color blue are marks of Donaldson Company, Inc. All other marks belong to their respective owners.

Important Notice: Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.