



Connected Solutions

Donaldson iCue™ Connected Filtration Service FAQ

for Environmental Health & Safety Managers

1. What is the iCue connected filtration service?

The iCue connected filtration service monitors dust collectors, using industrial IoT technology. The solution tracks dust collector status and alerts you when performance thresholds are breached; stores and exports historical data to help identify machine problems and optimize performance; and automates data capture for compliance reporting.

2. How does it work?

The iCue service is comprised of four key components that work together to deliver a comprehensive set of benefits:

- **Sensor-integrated gateway:** Captures sensor data from the collector and sends it to Donaldson's secure cloud, where our predictive analytics turn the data into actionable insights.
- **Online dashboard:** Shows equipment status in near real-time, as well as historical trend data for each connected collector in your facility or enterprise.
- **Alarms and notifications:** Sends email alerts to you when a dust collector's performance deviates from pre-set parameters so action can be taken.
- **Weekly status report:** Provides condition summaries of all connected dust collectors across your operation for reporting purposes.

3. How will it make my job easier?

Monitoring your facility's dust collector provides four advantages to EH&S teams:

- Saves time by replacing manual readings and logs with fast, accurate digital data sent directly to you
- Helps facility maintenance teams identify and address potential equipment malfunctions before they can escalate into larger issues
- Monitors emissions levels by tracking particulate trends and alerting you when concentrations rise beyond pre-set levels
- Tracks relative airflow to help track collector performance

4. How can the iCue service help me keep my facility within emissions limits?

The particulate trend monitor senses particulate levels on the clean side of the dust collector. You set a baseline level for emissions for your application and standards and set alarm thresholds. If the particulate count exceeds these thresholds, designated users receive an alert. By setting the thresholds below emission limits, you can check the dust collector and resolve issues before a breach occurs.

5. Will the iCue service help me manage employee exposure levels?

Yes. One important aspect of managing exposure levels is understanding airflow, or dust capture velocity. Dust collection systems are designed to operate at a specific airflow. If the airflow drops below the designed levels, the capture velocity at the hoods may not be sufficient to capture particulate at intended levels. The iCue service tracks relative airflow in near real-time and send alerts when airflow moves above or below pre-set thresholds.

6. If we already do emissions testing, what value does the iCue service add?

If you're required to do periodic stack testing, the particulate trend sensor in the iCue service can alert you to rising emissions between tests; allowing you to address issues before they escalate into a failed compliance check. Also, by using data to show that particulate trends are remaining stable, you may be required to perform fewer emissions tests, which can help save you both time and money.

7. Why is continuous monitoring important?

Dust collectors can develop small dust leaks, filter damage, or other issues before dust noticeably begins to accumulate in the plant. Continuous monitoring can help provide early detection and enable corrective actions on a preventative basis.

8. What data does the iCue service provide for permits and reports?

All functions monitored by the iCue service can also generate data for compliance reports. For example, differential pressure (DP) is commonly required by regulatory agencies. While most dust collectors have a standard differential pressure gauge, the data must be manually collected and recorded. The iCue service automatically captures the DP data multiple times per day helping with compliance documentation.

9. Can I adjust alarm thresholds for my specific operation?

Absolutely. You establish baselines and alarm thresholds specific to your process. Deviations from those ranges will trigger an alert. For example, if your air permit requires you to change filters at 6 inches w/c (w/c stands for water column, a measurement of pressure) you can set an alarm at 5 inches w/c to inform you that a filter change is needed shortly. You can also set a higher priority alarm at 6 inches w/c to notify you when you are out of compliance.

10. Is the iCue service device difficult to install and use?

No. The components are designed for easy installation. The wireless gateway mounts to the collector with a magnet, and sensors are adhered to key points inside the unit. Because it's web-based, there's no software to install. You just need to login to the system, configure the dashboard settings and alarm thresholds, and designate team members to receive reports and alerts.

For more detail on system requirements and compatibility, see the **Technical FAQ for the Donaldson iCue Connected Filtration Service**.

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.



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