

RoboVent®

Delta3 Inline™

SUPERIOR SPARK SUPPRESSION.
LOW PRESSURE DROP.



Stop sparks in their tracks— without reducing equipment performance.

Delta3 Inline is a powerful centrifugal spark arrester that delivers unbeatable spark control with exceptionally low pressure drop.

- Industry-leading spark control and safety
- Lower pressure drop for energy savings
- Easy inline installation
- High-quality welded construction



Stop Dust Collector Fires

Uncontrolled sparks are a leading cause of fires in the dust collector or ductwork. Delta3 Inline is a centrifugal spark arrester that is placed in line with the ductwork to prevent sparks from entering the dust collector. **Sparks enter Delta3 Inline... but they don't come out.**

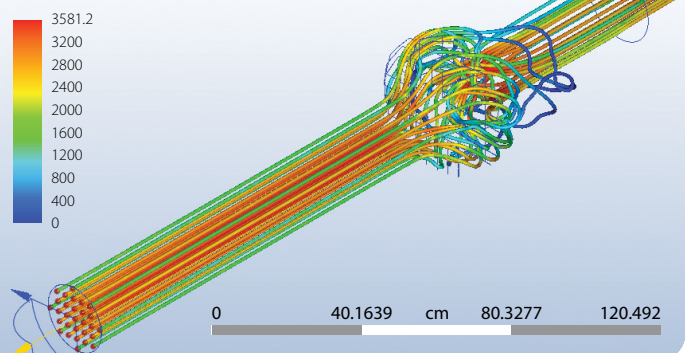
How It Works

- Centrifugal action drives sparks and embers against the outer wall of the device, stripping off the thermal envelope that surrounds the spark so that the sparks are rapidly cooled and extinguished.
- High air velocities are maintained on the surfaces inside the spark arrester, minimizing particulate deposits.
- Internal air turbulence is minimal, which lowers the restriction to airflow. This reduces the energy required for operation and improves filter life.



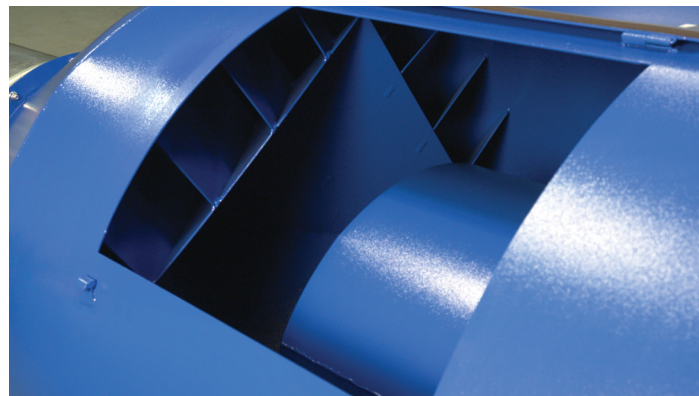
**Watch Delta3
in Action!**

(1) Velocity Magnitude – ft./min.



Superior Spark Control for:

- Welding
- Cutting/Laser Cutting
- Grinding/Filing
- Abrasive Blasting/Wheel Blasting
- Shot Peening/Surface Texturing
- Spark Machining/Electrical Discharge Machining (EDM)
- And more!



Putting Spark Control Technology to the Test

RoboVent developed Delta3 Inline to address one of the biggest problems with spark arrestance technologies: the trade-off between effectiveness and pressure drop. Over two years of development using Computational Fluid Dynamics (CFD) and rigorous testing, we improved the design of the centrifugal collector to ensure effective spark control while reducing unwanted pressure drop.

In head-to-head comparative testing against industry leaders, Delta3 Inline extinguished the competition with the best combination of spark control and efficiency. Delta 3 Inline:

- No sparks passed through at all airspeeds.
- Is the lowest pressure drop among all tested technologies.

RoboVent engineers have dedicated a lot of time to researching, testing and monitoring the production of spark arrestor systems. There is no 100 percent guaranteed solution for spark arrestance on the market today and this includes the Delta3 Inline. RoboVent will work with your team to engineer the best system for your application.

What Kind of Spark Control Do You Need?

There are many options when it comes to spark control. Which one is right for you?

	Dropout Boxes	Strike Plate/ Baffle System	Screen Type/ Metal Mesh	Centrifugal	Detect-and- Suppress Systems
What it is	A larger box between the duct-work and filter chamber; slows airspeed so heavier particulate can fall out. May be combined with baffles/deflectors.	A metal plate or series of baffles placed in the air stream to block sparks and allow air to flow around.	One or more metal mesh screens that block sparks and allow air to flow through. May require multiple screens for maximum control.	Uses centrifugal force to drive sparks against the outer walls and strip off the thermal envelope.	Uses a sensor system to detect sparks and water or a chemical to extinguish them.
Best for...	Coarse, heavy particulate with minimal sparks.	Applications with fewer sparks and less fire risk.	Combustion engines, chimneys, ductwork.	Applications with more sparks, higher fire risk.	Explosive atmospheres, extreme fire or combustion risk.
RoboVent Product(s)	Optional intake for select dust collectors including Senturion.	Standard intake includes baffles.	Pre-filter, metal mesh inserts	Delta3 Inline	Talk to us about our partner options.