

#### **MAINTENANCE-FREE AIR FILTRATION**

# Donaldson Inertial Particle Separation Technology



Donaldson Strata<sup>™</sup> Tubes offer maintenance-free air filtration for turbines, diesel engines and environmental applications.

Donaldson developed the first air particle separator system in the early 1960s to protect helicopter turbine engines from sand ingestion. Today, this technology is used extensively on ground vehicles, rotorcraft and other critical equipment exposed to harsh environments.



### Solutions to meet your space and efficiency requirements

Donaldson Strata<sup>™</sup> Tubes are available in several configurations using three sizes and two outlet styles.

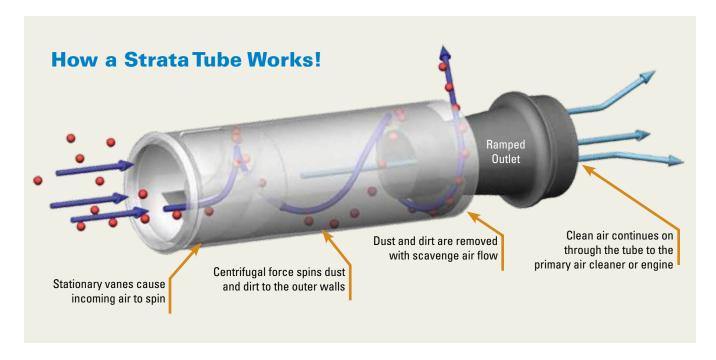
The standard outlet is our original design and is still used in several applications. We recently developed an advanced outlet tube, featuring a ramped-style scavenge discharge. The ramped outlet allows high-density configurations, resulting in a reduced inlet area, while maintaining high-efficiency levels. This is ideal for applications where space is at a premium. Compared to the standard style, the ramped outlet tube requires half the amount of scavenge flow for equivalent efficiency. We also have a zero-scavenge model available for applications without a scavenge airflow source.

Our light-weight Strata Tubes have no moving parts to wear out or break. They are self-cleaning and do not require regular maintenance. They offer low airflow restriction with efficient contaminant removal up to 99%.







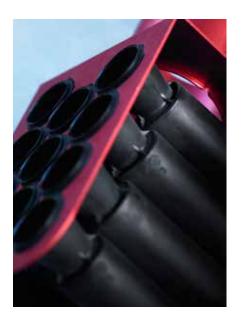


### **Donaldson Strata Tube Combinations Offer Configuration and Packaging Flexibility**

Donaldson Strata Panels are made up of many individual Strata Tubes, arranged either in a single or a series package, depending on the space and efficiency requirements of your application.

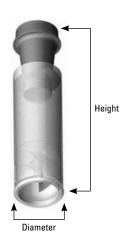
Strata Panels can be easily paired with a variety of other filtration methods to provide a complete filtration system that is light-weight and highly efficient, with minimal maintenance requirements.

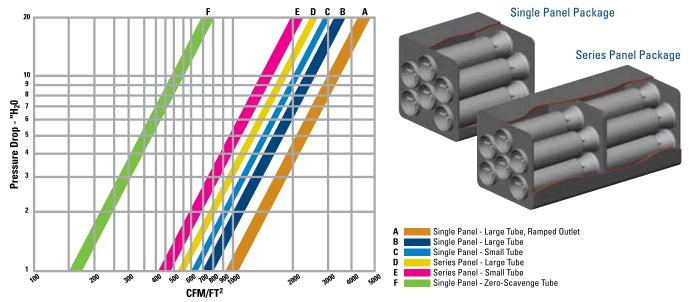
Strata Panels can be configured to meet your specific application requirements. Frame material options include aluminum, steel, stainless steel and composites. Surface coating can also be customized to your specifications, including paint, anodizing or standard military coatings.



#### **Strata Panel Specifications**

Tube Size and Outlet Style	Strata Tube Dimensions	Panel Package	Overall Efficiency (ISO coarse dust test)	Scavenge (% of primary airflow)
Small Tube	0.75" x 2.6" 19mm x 66mm	Single	92-96%	7-10%
		Series	95-99%	15-20%
Large Short Tube	1.5" x 4" 38mm x 102mm	Single	88-94%	5-10%
		Series	90-96%	10-20%
Large Long Tube	1.5" x 6" 38mm x 152mm	Single	92-95%	5-10%
		Series	96-98%	10-20%
Zero-Scavenge Tube	1.4" x 3.9" 36mm x 99mm	Single	87-91%	0%

































## Donaldson Inertial Particle Separation products can be found on numerous military vehicles, including:

#### **Ground Vehicles & Equipment**

- M1A1/M1A2 Abrams Tank
- M2/M3 Bradley Fighting Vehicle
- Stryker Armored Vehicle
- Light Armored Vehicle (LAV) Family
- M109A6 Paladin Self-Propelled Howitzer
- M9 Armored Combat Earthmover (ACE)
- M60 Patton Main Battle Tank
- Family of Medium Tactical Vehicles (FMTV)
- M915 Family of Trucks
- M270 Multiple Launch Rocket System (MLRS)
- M113A3 Armored Personnel Carrier
- Merkava Main Battle Tank
- Logistical Vehicle System Replacement (LVSR)

- Mine Resistant Armor Protected (MRAP) Vehicles
- MRAP All Terrain Vehicle (M-ATV)
- Combat Vehicle Reconnaissance (Tracked)
- Warrior Tracked Vehicle
- Radar
- Tactical Quiet Generator

#### **Rotorcraft**

- MH-60R Seahawk Helicopter
- CH-53 Sea Stallion Helicopter

#### **Marine Vehicles**

- · Landing Craft, Air Cushion (LCAC) Hovercraft
- AAV7A1 Amphibious Assault Vehicle



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