



REDUCE LIFE CYCLE COSTS

## Donaldson Self-Cleaning Air Cleaner

# When downtime is not an option...

The self-cleaning Donaldson Pulse Jet Air Cleaner (PJAC™) provides advanced engine protection in the most extreme military environments. Pulses of compressed air automatically clean the air filter, keeping vehicles operational during critical missions.



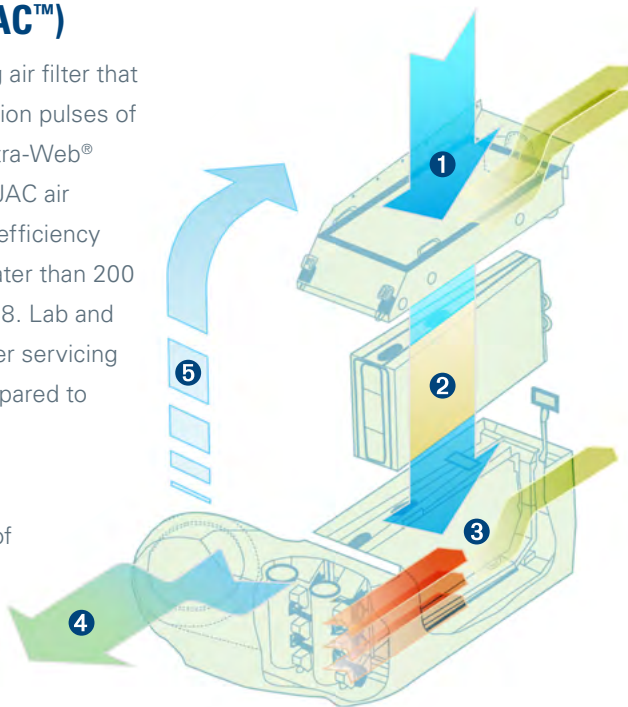
# greater mission

## Pulse Jet Air Cleaner (PJAC™)

The Donaldson PJAC is a self-cleaning air filter that cleans filter elements with short duration pulses of compressed air. Using Donaldson's Ultra-Web® Nanofiber Filtration Technology, the PJAC air cleaning provides the highest level of efficiency (+99.998%) and has a filter life of greater than 200 hours when tested per MIL-PRF-62048. Lab and field tests have demonstrated that filter servicing is reduced to less than one-tenth compared to conventional air cleaners.

## PJAC Advantages

- Longer filter life (10 times the life of conventional filters)
- Easy servicing/filter changeout; no tools required
- Corrosion-resistant air cleaner housings in aluminum or steel
- Reduced vehicle life-cycle maintenance costs
- 2-stage filtration process uses Donaldson Ultra-Web Nanofiber Technology (99.997% efficient)
- Ultra-Web media captures even the smallest dust and direct particles
- Ultra-Web media's surface loading of contaminants provides superior cleaning capability
- High efficiency filtration provides superior engine protection



- 1 Air enters first-stage pre-cleaner where more than 91.5% of the contaminants are expelled outside.
- 2 The pre-cleaned air goes through a second barrier filter which removes +99.998% of contaminants
- 3 At predetermined intervals (time or measured restriction) clean air is pulsed back through the barrier filters to eject dust outside
- 4 +99.998% clean air exits the system and is fed to the engine
- 5 The cleaning cycle is automatically repeated when necessary to maintain a low restriction air supply to the engine

## PJAC Ultra®

Expect Measurable Reductions in Maintenance Costs

The next generation in self-cleaning air filters—the PJAC Ultra®—was designed to protect military combat and support vehicles in the world's harshest environments.



**FIELD TESTED IN HARSH ENVIRONMENTS**  
More than 2,000 units are already in use in Iraq, Afghanistan and other harsh military environments.

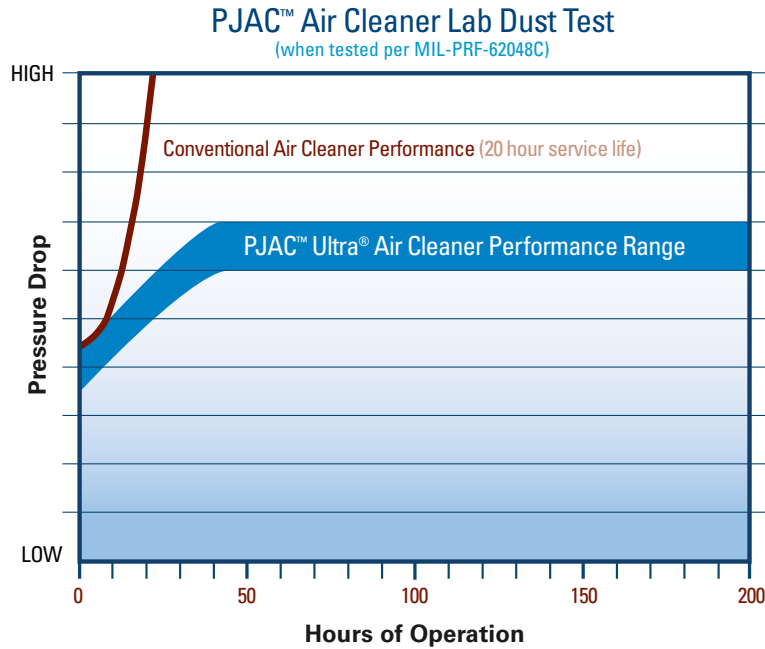
## PJAC Ultra Features

- Small overall size allows for under hood applications
- Ideal for vehicles in high-dust conditions—with airflow requirements of 400 CFM (11.33 m<sup>3</sup>/min) to 1400 CFM (39.66 m<sup>3</sup>/min)
- Available in scalable sizes from 11" to 16" diameter
- Scavenge or scavenge-free options are available
- Customizable to fit space claim

# availability

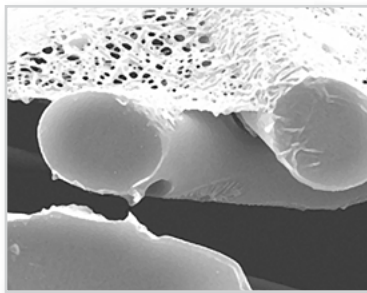
## Ten Times the Life

PJAC Self-Cleaning Air Cleaner provides more than 10 times the service life of a conventional air cleaner.

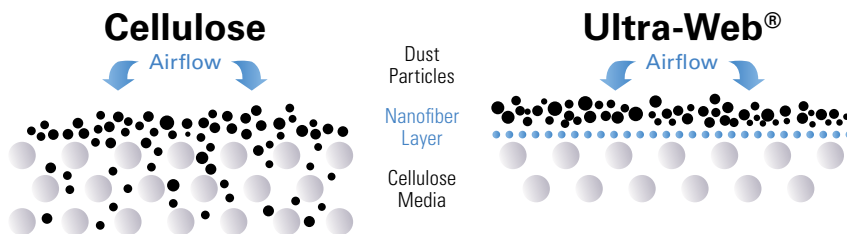


## Advanced Media

Surface loading Ultra-Web nanofiber media is the key to Donaldson's field-proven pulse cleaning technology.



Ultra-Web nanofiber media has submicron diameters and small interfiber spaces, resulting in the contaminant being captured on the surface of the media, greatly improving filtration efficiency and making effective pulse cleaning possible

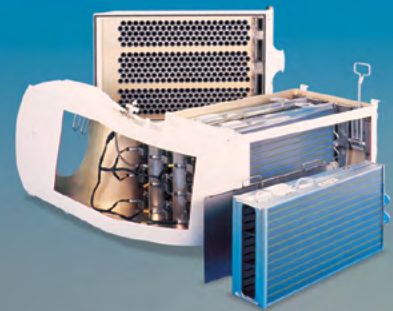


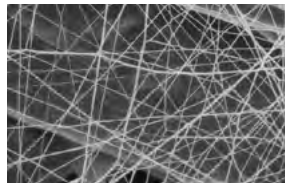
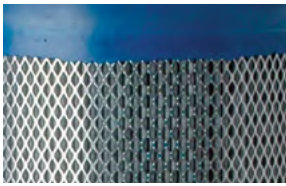
**“Extreme conditions require prepositioned ground fleet to be equipped with PJAC.”**

—PM Combat Systems, U.S. Army speaking about lessons learned with tanks and other equipment in Operation Iraqi Freedom.

## Innovative and Original

Proven Pulse Jet Air Cleaner technology has been used for decades on heavy-duty military equipment. Now the same PJAC technology is available as the PJAC Ultra for medium- and light-duty vehicles.





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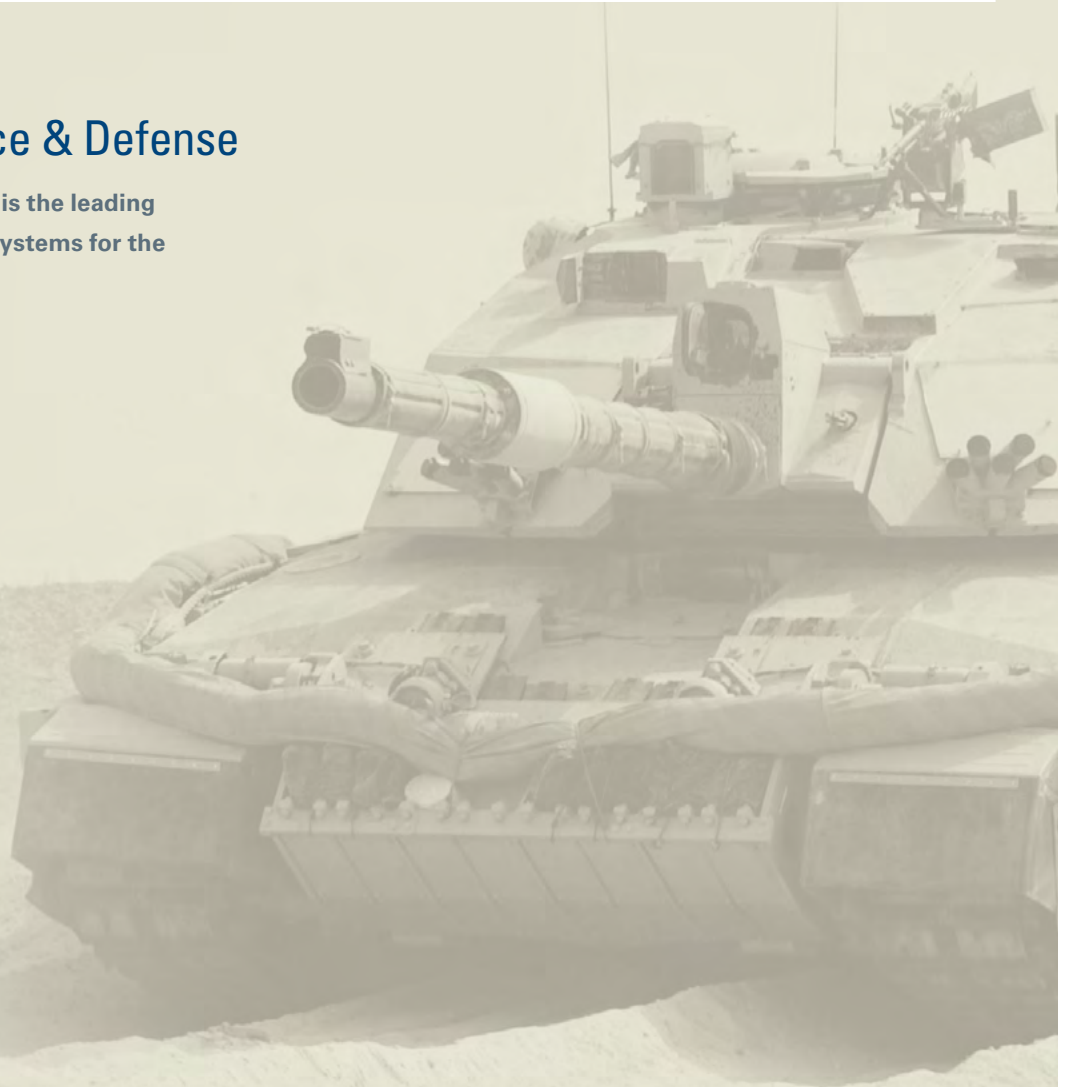
On a 1,560 mile dust course at Yuma Proving Grounds a non-pulse jet equipped M1A1 had to stop and clean barrier filters ten times.  
**The pulse jet equipped M1A1 never stopped to clean barrier filters.**

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## Donaldson Aerospace & Defense

Donaldson Aerospace & Defense is the leading worldwide provider of filtration systems for the aerospace and defense industry.

- Donaldson filtration solutions protect fixed wing aircraft, rotocraft, military ground vehicles, electronic equipment, space vehicles, missiles, military shipboard systems and amphibious vehicles
- Committed to advancing filtration technology, providing quality products and prompt customer service
- Serves customers from sales, engineering and manufacturing locations around the world



Donaldson Company, Inc.  
PO Box 1299  
Minneapolis, MN  
55440-1299

[www.DonaldsonAerospace-Defense.com](http://www.DonaldsonAerospace-Defense.com)

Aerospace & Defense  
952-887-3435  
Toll-free 866-323-0394

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