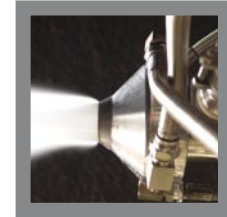


## The Airborne and Surface Decontamination Solution

Pursuit Dynamics' revolutionary PDX<sup>®</sup> BASILISK<sup>®</sup> mist system uses novel gas driven supersonic technology to deliver unsurpassed performance in both airborne and surface decontamination duties. It provides a solution for your chemical, biological, radiological and nuclear (CBRN) decontamination needs.

# PDX Basilisk Decontamination System



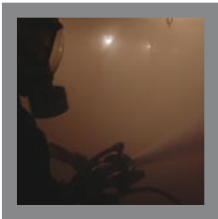
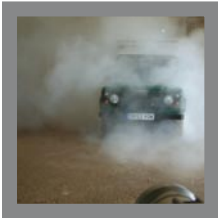
The PDX Basilisk technology delivers a step change in process capabilities within both military and civilian arenas.

The PDX Basilisk technology has proven capabilities in airborne and surface decontamination, disinfection and detoxification, addressing the needs for personnel, transport, particle scrubbing and sensitive equipment.

The unique combination of continuous high flux turbulent flow with super fine droplet sizes down to 2.5 microns, offers an augmentation of capabilities providing total solutions for both airborne and surface decontamination applications.

PDX technology is robust and easy to use, it has full scalability, both up and down, and is capable of delivering a wide range of materials whether liquid, slurry, powders or polymers through the option of fixed or mobile systems.

Designed for ultimate flexibility, the PDX Basilisk fits comfortably in a trailer towable via a Land Rover and can operate autonomously. Protected against extreme weather conditions the PDX Basilisk can operate at -30 degrees and at over 48 degrees, giving you worldwide usage.



The PDX Basilisk system instantaneously produces a continuous high flux super-fine droplet mist that exhibits gas-like behaviour delivered with high non-uniform inherent turbulence.

This ensures high collision probabilities with suspended contaminant material causing coalescence/nucleation, neutralisation and precipitation. The high flux of super-fine droplets enables surface contaminant material to be neutralised via the high refresh rate and uniform deposition caused by the high inherent turbulence. The system is characterised by unrivalled volume fill rates and turbulent mixing. It is demonstrably scalable, can be fully integrated into a diverse range of customer super-systems and remains easy to use.

#### **PDX Basilisk Mist Technical Summary**

- Droplet size is controllable – typical systems have  $Df90 < 2.5$  microns – with both absolute controllability, scalability and adaptability
- Produces  $3 \times 10^{14}$  droplets per second\* at 30 ltr/min water flow/decontaminant agent flow
- Projection distance is up to 30 metres\*
- Velocity of delivery is 12 – 30 m/s
- Continuously operational, no time limit on usage
- Minimal personnel needed for operation (1 to 2 people)
- Highly mobile – designed with flexibility for worldwide usage & independent operation
- Resilient to extreme weather conditions
- Robust technology
- Does not require filtered water
- Proven total surface contact, even for non line-of-sight areas
- Post atomisation results in chemical activity delivered at 80% compared with 25% from conventional thermal foggers
- Environmentally friendlier – lower decontamination chemicals needed and reduced disposal requirements.

\* Subject to size, driving gas and process fluid

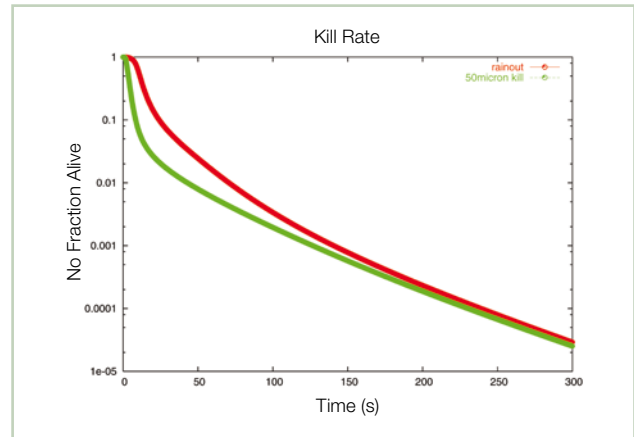
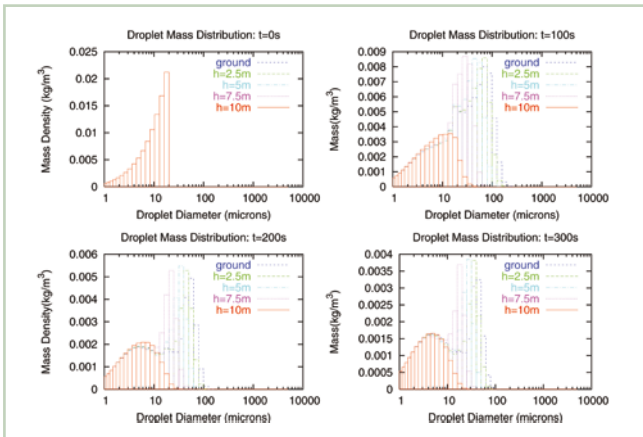
In support of the technology, Pursuit Dynamics uses advanced mathematical modelling to design and optimise the system for given scenarios. The PDX Basilisk technology is backed by soundly engineered detail design and system testing.

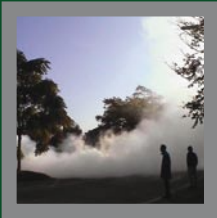
**Ultra fast**

In today's world performance matters, and the PDX Basilisk system delivers unrivalled rapid volume fill rates, turbulent mixing and uniform surface deposition.

Using a single system, a 21,000 ft<sup>3</sup> (600m<sup>3</sup>) chamber can be filled in 15 seconds using a single PDX T2 Basilisk unit.

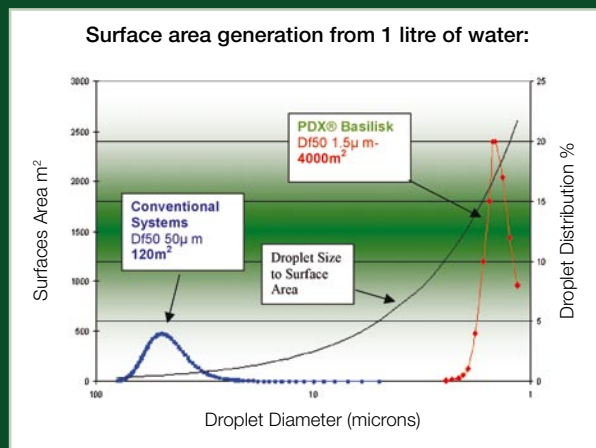
The driving gas is injected through the unit with chemical entrainment through additional ports in the casing of the unit, this results in the PDX Basilisk system providing instant atomisation of water and decontaminates, eliminating wasted time, product and cost.





Due to the small droplet size, the PDX Basilisk system creates gas-like behaviour of the mist plume, which, in addition to the controllable turbulent flow, ensures coverage across the entire volume of the space required. The system requires less de-contaminant material to be used, providing further advantages for logistics and disposal of chemicals.

High local turbulence levels ensure enhanced mixing and contact between mist droplets and airborne contaminants resulting in the acceleration of the hygroscopic nucleation. It also increases the rate of coalescence through the precipitation of the droplets/particles.



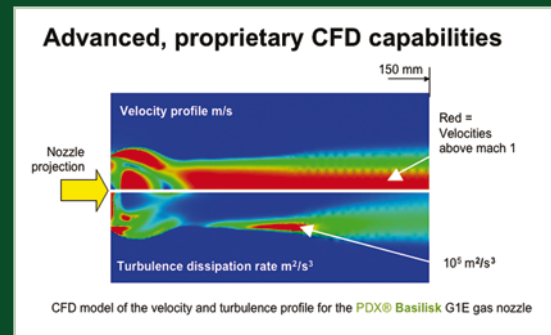
### Complex Surfaces

The revolutionary combination of the turbulence and small particle size results in total wetting of the required areas including complex surfaces and cavities. The PDX Basilisk system has been proven to provide total surface contact even on non line-of-sight surfaces such as ducting or pipe works.

### Types of Activities

Personnel Decontamination	✓
Vehicle Decontamination	✓
Small Equipment e.g. Helmets/Personal Weapons	✓
Helicopter Interior & Exterior	✓
Tank Interior & Exterior	✓
Optical & Radio Equipment	✓
Electrical Equipment	✓
Aeroplane Interiors and Exteriors	✓

The revolutionary PDX Basilisk is the ultimate decontamination solution, with ideal particle sizes, the highest available mist production and unparalleled projection.



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