

Airbus EC135

ENGINE INLET BARRIER FILTER



Aerometals

Manufacturing Excellence

EC135 Inlet Barrier Filter

Aerometals introduces its newest Inlet Barrier Filter (IBF) system for the Eurocopter EC135 light twin helicopter. The innovative light weight design provides complete engine inlet protection in any operating environment. The advanced system is designed for ease of installation and boasts an ample and efficient filter surface area with maintenance tailored to your operations.

- Prevents premature erosion
- Eliminates FOD
- Extends engine life
- Preserves power margins
- Reduces engine overhaul cost
- Reduces aircraft down time

Advantages of IBF System:

- Eliminates 99% of microscopic particles (99.3 capture efficiency-SAE Test Dust)
- Prevents premature compressor/turbine blade erosion
- Reduces corrosion due to ingestion of airborne salt nuclei present in coastal operations
- Prevents premature governor, bleed valve and fuel nozzle contamination
- Protects the labyrinth seals and all components impacted by cooling airflow
- Prevents ash compaction on turbine wheels and resulting hot spots
- Prevents centrifugal coating of internal shafts and resulting imbalance
- Decreases wear in oil path and bearings



Performance Characteristics:

The EC135 IBF certification is a result of comprehensive testing in desert and mountainous regions.

- No performance penalty
- Certified for use with basic performance charts
- Certified for CAT-A operations
- Certified for flight in falling and blowing snow

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Filter Health Monitor



The Aerometals EC135 IBF system features a Filter Health Monitor (FHM) system that displays filter status to the pilot. If maximum allowable blockage level is

reached, the FHM transmits a signal to panel mounted indicator switches, alerting the pilot to activate the bypass doors. For maintenance, the FHM is useful for planning element cleaning.

Estimated Installation Time: 100 hours

The EC135 IBF system is designed for ease of installation and service. No major modifications to the airframe are required. Installation can usually be performed by maintenance personnel with our expert support engineers available to assist if required.

The kit consists of a main housing, filter elements (2), bypass doors (2), oil cooler ducts, rotor mast seal, filter health monitor system and bypass switches. A complete wiring harness, hardware kit, and all consumables are supplied along with cut and drill templates.

Service

The filter elements are serviced at practical intervals that can be tailored to your maintenance cycle, typical 100 – 300 hours or as required. A water-soluble cleaner is sprayed onto the elements and then rinsed with clean water, allowed to dry, re-oiled and returned to service. Element life is “on-condition” – not time or cleaning cycle limited. Aerometals’ large filter surface area means longer times between cleaning cycles.



Specifications

- STCs: FAA – SR02059SE
EASA – 10038920
- System Weight: 55 lbs.
- Eligible for installation: EC135 P2, P2+, P2i, P2e
T2, T2+, T2i, T2e

50 years of field experience has shown performance degradation and premature failure in turbine engine components and accessories are directly related to filtration efficiencies. By nature, rotorcraft operate in low level “nap-of-the-earth” altitudes (1,000 feet AGL or less). Turbine helicopters operating within this environment are unavoidably subjected to high levels of erosive and corrosive airborne particles. The resultant costs of increased maintenance and reduced aircraft productivity can be staggering. Aerometals provides a proven solution.

The Aerometals filter provides superior engine protection, reduced maintenance costs, and greater installed performance.

Hundreds of thousands of flight hours in many environments including mining, agricultural, forestry, law enforcement, military, and air medical have shown excellent results. Inspection and overhaul results show Aerometals systems deliver a substantial reduction in overhaul costs, hourly operating costs and increased reliability.

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Engine Inlet Barrier Filtration
Systems for Pure Air in
Any Environment.

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We do it ALL.

DESIGN • FLY • CERTIFY • MANUFACTURE

Aerometals is a full-service aerospace manufacturer offering a full range of production services including CNC machining and turning, sheet metal fabrication, welding, autoclave, composites, and precision assembly.



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