

SAFETY ALERT

- TECHNICAL No. 20

ANSUL MICRO-K MODEL 11K-E CONDENSED AEROSOL FIRE EXTINGUISHING GENERATORS

It has recently been brought to our attention that a pilot vessel, operating under the Code of Practice for the Safety of Small Workboats and Pilot Boats, suffered a small fire in the machinery space, protected by a fixed aerosol fire suppression system which failed to operate correctly.

The fire suppression system consisted of three Ansul Micro-K Model 11K-E Condensed Aerosol generators and one Stat-X Model G500 Condensed Aerosol generator connected in a series circuit, with a diode across each generator to allow for continuity should one generator become open circuit.

Investigation showed that the three Micro-K units had failed to operate, but the Stat-X unit operated correctly to extinguish the fire.

Close inspection of the Micro-K units showed deficiencies in the firing electrical wiring and connections, and displacement of the plastic cover on one unit, which may allow moisture to contaminate the aerosol compound which is hygroscopic (moisture absorbent).

As a result of this investigation, we strongly recommend that all Micro-K Model 11K-E Condensed Aerosol generator systems are inspected at the earliest opportunity, and at regular intervals thereafter, for the following:-

- Visual inspection of the generator to ensure that the plastic cover is in place and the tamper seal tape is intact, see below.
- If system is electrically operated - physical inspection of the firing wiring and electric connections to ensure they are secure, with no corrosion.
- If system is activated by a manual/mechanical release system - physical inspection of the manual firing cable to ensure it is secure, with no damage.
- If system is a self-contained generator - physical inspection of the integral glass detector bulb to ensure it is not damaged.
- If system is fitted with fusible link or electric thermal detection – check that they are in place, not damaged or coated with dirt, grease, paint or any contaminating substance.
- Check that the generator mounting brackets are secure and in the proper position.
- Check to ensure the generator is not obstructed from discharging properly.
- Generators should be renewed at five yearly intervals after date of manufacture.

Plastic cover and tamper seal tape



ANSUL MICRO-K STANDARD AEROSOL GENERATOR

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