

UNIVERSAL WASTE MANAGEMENT SYSTEM

LIGHTWEIGHT, LOW COST WASTE MANAGEMENT

Available for a multitude of space vehicle platforms

Our compact Universal Waste Management System (UWMS) is configured for storing, venting or routing urine and feces to provide a clean, quiet commode that meets male and female crew expectations. The combination of all rotating equipment onto a single motor enables a novel packaging efficiency never before achieved; resulting in a system configured for government or commercial low earth orbit vehicles, space stations and deep space missions.

We have been developing, manufacturing, and maintaining waste management systems since the Skylab space station flew in the 1970s. Over this period Collins Aerospace has evolved appropriate solutions to maximize cleanliness and ease of use for the crew by developing a system that minimizes crew time, while emulating an on-earth experience.

We can provide a low cost Universal Waste Management System designed for urine venting/storage stand-alone or urine pretreat for urine processor configurations. Solid waste collection is compatible with any vehicle with minimal consumable usage. The UWMS may be launched in a stowed location and installed on-orbit or launched in place for immediate crew use.



KEY FEATURES AND BENEFITS

- Modular Design Adaptable for Specific Ship Integration
- Long Operational Life
- On Orbit Replaceable Components
- Low Acoustic Signature
- Structural Robustness for Launch Environments
- Compliant Materials for Human Spaceflight
- Crew Approved Interface





KEY CHARACTERISTICS

- Compact Design
- Dual Fan Separator
- Weight Minimized
- Volume Minimized
- Acoustic Treatment
- Pretreat Dosing Pump (optional)
- Urine storage (optional)

GENERAL PERFORMANCE CHARACTERISTICS

Voltage:	120 Vdc
EMI:	MIL-STD-461 E
Acoustics:	< 68 dBA
Mass:	<100 pounds
Envelope:	< 2.7 ft ³

MATERIALS

- Aluminum Alloys
- Inconel
- Hastelloy
- Titanium Alloy
- Corrosion Protection
- Inert non-metallics

STRUCTURAL

- Robust Design for Anticipated Launch Environments
- Vibration Mounts Acoustically Isolate the Dual Fan Separator
- Designed for Storage and Deployment or Launch in Place

Specifications subject to change without notice.



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