WMG FLTRSTOR™ System Overview

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Introduction

WMG's FLTRSTOR™ system provides a proven, practical solution for the efficient handling, storage, and shipment of irradiated filters and velocity limiters (VLs) in support of nuclear plant operations. With successful implementations at many sites, the system is recognized for saving time, reducing personnel dose, and cutting overall waste handling costs. Our satisfied and returning FLTRSTOR™ customers include:

- Brunswick
- Fermi
- Grand Gulf
- McGuire
- Palisades
- Prairie Island
- River Bend
- Sequoyah
- STP
- Surry
- Vogtle
- Waterford
- Watts Bar

High Capacity, Modular Design

At the core of the FLTRSTOR™ system are four standalone stainless-steel racks, which can accommodate up to 104 standard Tri-Nuclear type filters (6" diameter x 30" length) in a single, purpose built, 8-120 sized open-top liner. Two racks fit on the bottom and two on top, all securely contained in WMG's custom liner. The racks can be staged directly on the pool floor (24" x 58" footprint) or curb-hung from a robust hanger system rated for 500 lbs.

The system also supports mixed configurations of filters and VLs using modular baskets, allowing utilities to consolidate multiple waste types into a single liner and shipment—reducing logistical complexity and minimizing the number of cask movements.

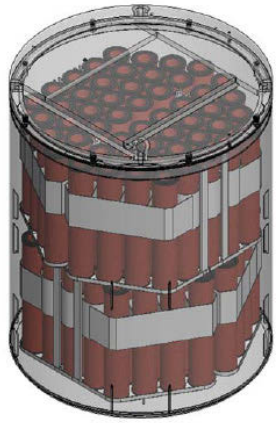

Fig. 1: a liner loaded with the FLTRSTOR™ system.

Time Savings in the Pool

By enabling direct underwater loading of spent filters into pre-positioned racks, the FLTRSTOR™ system eliminates repetitive lifting and handling steps typically required in traditional processes. Operators benefit from streamlined staging and real-time tracking of loaded components. When fully loaded, the racks are transferred as a unit into the open-top liner, minimizing transfer steps and boosting throughput.

Radiation Dose Reduction

Personnel exposure is substantially lowered through dose-optimized handling and strategic filter placement. One utility site reported a greater than 50% dose savings compared to their previous filter handling process.

The system design allows high-dose-rate filters to be loaded centrally within the container, using surrounding filters as shielding during transport. All loading occurs fully underwater, avoiding exposure to elevated dose areas near the surface and maintaining ALARA practices.

Fig. 2: a FLTRSTOR™ rack.

Economic and Operational Efficiency

By optimizing each liner's capacity, the FLTRSTOR™ system often eliminates the need for a second liner, reducing:

- ✓ Cask rental and transportation costs
- ✓ Liner and hardware procurement
- ✓ Personnel hours for container prep and shipment
- ✓ Final disposal volumes

This level of consolidation improves efficiency and enables utilities to redirect resources to higher-priority operational activities.

Regulatory Alignment and Compliance

The FLTRSTOR™ system is designed with full consideration of regulatory standards such as the 8-120B Safety Analysis Report (SAR). Strategic loading helps ensure dose rate compliance while simplifying documentation and shipment preparation.

Flexible Integration and Site Support

WMG works closely with utility engineering and operations teams to customize loading strategies that fit each site's unique constraints. Whether loading filters, velocity limiters, or both, FLTRSTOR™ enables flexible deployment while supporting long-term waste management goals.

Fig. 3. Top view of a liner loaded with the FLTRSTOR™ system.

Field Feedback

- ✓ "FLTRSTOR™ is well designed. It is easy to use and understand."
- ✓ "A well-manufactured unit. It comes ready to use."
- ✓ "It is more efficient than our current process of drumming filters for disposal."
- ✓ "We don't have any negatives that go against the FLTRSTOR™."

Conclusion

WMG's FLTRSTOR™ is a straightforward, field-proven tool for plants seeking to improve safety, reduce exposure, and lower costs in radioactive filter and VL management. Its design reflects decades of practical nuclear operations experience, tailored to meet the real needs of today's utilities.

Visit wmginc.com/fltrstor for more information!

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