

AMFM-S300 Filtration System

Description

Similar to DEI's family of submersible AMFM™ filtration systems (AMFM-B500, -P500 and -X1500), the AMFM-S300 filtration system uses a patented ultrasonic regeneration process to refresh the capacity of its AMFM™ filters so this system can be reused many times. The main difference is that the AMFM-S300 is a portable skid-mounted system designed for use outside of the spent fuel pool.

Applications

The AMFM-S300 is a compact, portable system that is ideal for applications such as cleaning of tank bottoms, sumps, torus and suppression pools. DEI also supplies ultrasonic, hydraulic and robotic cleaning and vacuuming tools for these and similar applications, allowing for deployment of turn-key cleaning, decontamination, vacuuming and filtration solutions. After the cleaning is complete, the AMFM-S300 filters are ultrasonically backwashed to an AMFM-B500 or other external vessel to remove activated particulate, and the AMFM-S300 is then stored until its next use.



AMFM-S300 skid-mounted filtration system



AMFM-S300 installation at BWR site

Feature and Benefits

- Eliminates disposable plastic filters through the use of reusable AMFM™ filter elements
- Compact and portable
- System can be regenerated in real-time during cleaning operation
- After cleaning, onboard filters can be backwashed to an AMFM-B500 or other external vessel to remove activated particulate

Industry Experience

- Utilized during undervessel sump cleaning at LaSalle Station
- Credited with 40% reduction in radiological exposure during undervessel activities
- Integrated shielding package effective in shielding workers from AMFM-S300 filters during active cleaning operations
- After cleaning, AMFM-S300 filters effectively backwashed to AMFM-B500 system (>98% reduction in filter dose rates)
- Skid-mounted AMFM™ systems deployed for Fukushima and DOE waste cleanup efforts