

WESTINGHOUSE QUIVER

The simple, safe solution for handling and storing failed fuel rods and fragments

The Westinghouse Quiver is a multifunctional container that can safely handle a leaking fuel rod from the moment the rod is separated from the fuel assembly until its arrival at the final repository. Throughout fuel pool handling, transport and storage, failed fuel in a Westinghouse Quiver can be treated as a normal fuel assembly.

ROBUST DESIGN

- Available in boiling water reactor (BWR) and pressurized water reactor (PWR) designs with the same outer dimensions and design criteria as regular fuel assemblies
- Compatible with applicable cask dimensions
- Made with stainless steel and no organic material

- Uses metallic sealing with HELICOFLEX® seals, similar to dry casks
- Can be resealed using same lid with new gasket
- Provides ample capacity for damaged fuel rods or fuel rod capsules, with 14 to 28 positions in BWR designs and 30 to 60 positions in PWR designs

HELICOFLEX is a trademark or registered trademark of Technetics Group.

FEATURES AND BENEFITS

- Allows handling to be performed completely under water
- Seals with a screw joint with no welding needed
- Can be easily re-opened for inspection, inventory or investigation of rods in fuel pool or at hot cell
- Dries fuel rods in fuel pool according to standard procedures (ASTM C155)
- Enables leak-tight or gas-tight storage in a spent fuel pool, wet intermediate storage facility, dry cask for intermediate storage, or final repository
- Complies with various regulatory environments in different countries
- Allows damaged fuel rods to be consolidated into a single container, eliminating the need for individual handling of each rod

www.westinghousenuclear.com



PROVEN PERFORMANCE

Safe, flexible and cost efficient, Westinghouse Quiver has been used to safely transfer and store failed fuel since 1998. A Westinghouse Quiver loaded with failed fuel in helium-tight conditions according to qualified procedures is considered to meet the same, or more restrictive, requirements as a normal (non-failed) fuel assembly.

The Westinghouse Quiver provides:

- Demonstrable proof of tightness
- New encapsulation – without scratches, corrosion or hydrogen uptake – for failed fuel
- Thicker dimensions (stainless steel) than a standard fuel assembly, and more stability than a fuel rod with fretting marks
- More conservative design than a standard fuel assembly with respect to criticality

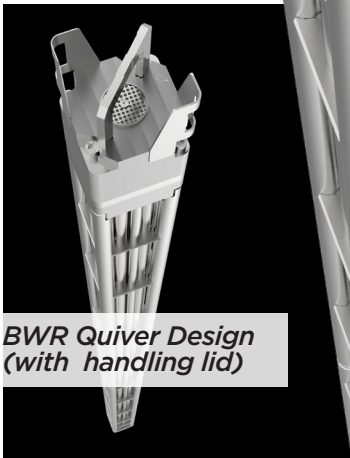
*BWR Quiver Design
(with long-term
storage lid)*



*PWR Quiver Design
(with long-term
storage lid)*



*BWR Quiver Design
(with handling lid)*



*PWR Quiver Design
(with handling lid)*



To learn more about the Westinghouse Quiver, watch the video at <https://youtu.be/SNtSzjtYKzc>.