

Abstract #597

Spent Nuclear Fuel Forced Gas Drying Technology

Rick Springman.

Holtec International, Marlton, NJ, USA.

The Forced Gas Dehydrator System (FGD) is a standalone piece of equipment designed for efficient removal of water from sealed casks and canisters loaded with spent nuclear fuel or other activated debris. FGD has advantages compared to Vacuum Drying Systems (VDS) commonly used for such drying operations, including drying time repeatability, enhanced drying capability for damaged fuel and debris, and the ability to dry at a controlled, steady temperature (nominally 250°C) regardless of heat load. As an autonomous piece of equipment, the FGD can be used to replace a VDS currently in use with little or no modification to the cask/canister license. An overview of the FGD system will be presented, including an industry case study for the Chernobyl dry storage project.