

To make sure its thermal safety, experiments and numerical analysis of the heat transfer for the KN-12 Spent Nuclear Fuel Transfer Cask were done and their results were compared one another. Both results are coincident within the difference of 8.5 % or less. The model of the spent fuel assemblies used in this research is the Westinghouse 17 x 17 PWR fuel assemblies which were used and cooled in Kori #1 Nuclear Power Plant in South Korea. The cask, KN-12 was designed in GNB, was manufactured in Doosan Heavy Industries & Construction Co. Ltd, and was supplied to Korea Hydraulic & Nuclear Power in 2002.