

CASTOR® 440/84 mvK

CASTOR® 440/84 mvK is a cask for the transport and storage of spent PWR fuel assemblies. Its basket is designed to accommodate 24 fuel assemblies from the German NPP Obrigheim.

Transport and Interim Storage

It is planned to load the 342 fuel assemblies of Obrigheim NPP into 15 casks of this type and transport them on the river Neckar to Neckarwestheim NPP in summer 2017, where the cask are to be stored within the on-site interim storage facility. The license for this transport was issued on Mai 16th 2017. The first transport was performed on June 28th 2017. Additional information on this transport (in German) here.

Cask Design

The CASTOR® 440/84 mvK cask is roundabout 4 m long and 2.5 m wide. The empty cask weight is about 96 t, while the loaded cask weighs about 107 t.

The cask consists of:

- A monolithic cask body made of ductile cast iron with machined cooling fins to improve the heat removal and deep-drilled bore holes filled with polyethylene as neutron moderator
- A double lid system the primary lid and the secondary lid with metal seals, both bolted and the leak-monitored space between the lids
- Stainless steel Trunnions for handling and lifting
- A basket inside the cask cavity to accommodate the fuel assemblies

Licenses

The CASTOR® 440/84 mvK has the necessary licenses for transport, long-term interim storage as well as for handling in nuclear facilities. The design complies with the international regulations from the IAEA (International Atomic Energy Agency) for type B(U)F package designs for the transport on public transport ways (roads, rail and shipping).