CASTOR® 1000/19

The CASTOR® 1000/19 cask is designed for the transport and storage of spent fuel assemblies (SFA) of the type VVER 1000. 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
- Trunnions (4 lid-end and 2 bottom-end) for handling and lifting
- A basket inside the cask cavity to accommodate the fuel assemblies

The cask cavity is dried and filled with helium.

Licenses

In combination with shock absorbers, the CASTOR® 1000/19 cask design complies with the international regulations of the IAEA for type B(U) package designs. The cask also fulfills the requirements for long-term interim storage for a minimum of 60 years.

References

For the new cask type CASTOR® 1000/19, a license as a dual purpose cask for storage and transportation in the Czech Republic was issued in June 2010. So far, 31 casks have been successfully loaded in Temelín (CZ).