Drying Facility KETRA

Irradiated core components have to be cut to size in order to be packaged for disposal. This can be done with one of the GNS underwater scrap shears. The packages must not exceed certain levels of water content (e.g. to prevent a gas build-up from radiolysis). Therefore the packages have to be dried which can be done using the mobile drying unit KETRA designed and manufactured by GNS. The facility can easily be adapted to local terms because of its modular composition.

Process

The KETRA facility is using the vacuum drying principle. It is able to dry four casks (e.g. MOSAIK® casks) at a time.

Before drying loaded MOSAIK® casks are at first being de-watered in a tilting frame. Subsequently the casks are being connected to the KETRA facility. The casks are dried at a pressure of less than 50 mbar. Heating jackets accelerate the drying process and prevent freezing of the water. After determination of the remaining humidity and leak test the packages are ready for interim storage or disposal. All data required to describe the drying process are collected and made available by a data acquisition unit. The facility KETRA is equipped with a PLC, which allows to operate the facility in auto mode.