

**Package Type**

Designed as a self shielded storage, transport and disposal container for IP-2 and Type B (with overpack) quantities of radioactive material.

Note at present the design has been developed to a conceptual stage level of design.

Certification

The NuSTORE® 3966 design was awarded a Conceptual stage Letter of Compliance (cLoC) by Nuclear Waste Services (NWS) formerly RWM. It is designed to be transported within a Type B Transport overpack, however use of the double lid allows the package to be used as an IP-2 package. The design is available for licensing as either package type to suit specified contents.

Description

The NuSTORE® 3966 is designed as a robust shielded container for storage, transport and disposal of Intermediate Level Waste (ILW). Manufactured from ductile cast iron (DCI), the container structure provides both shielding and enhanced package performance with minimum reliance contribution from the wasteform.

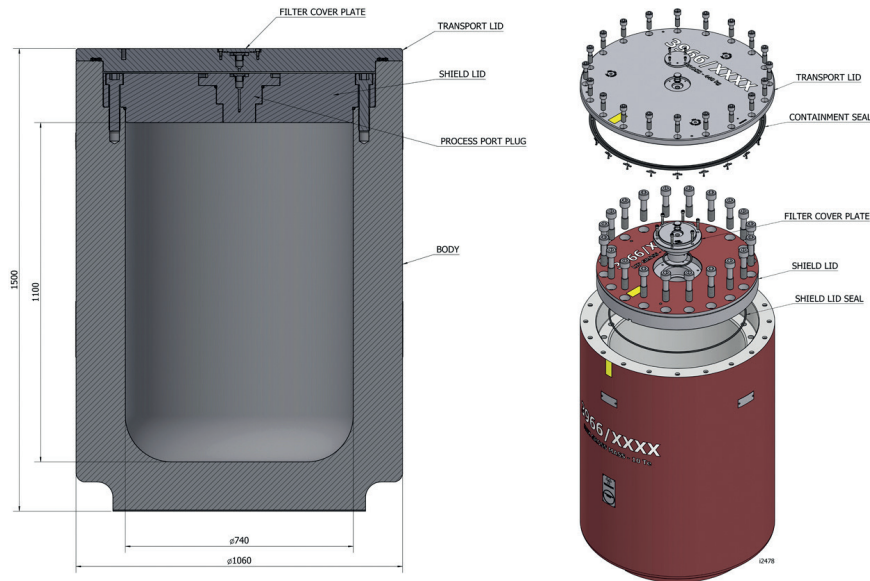
The NuSTORE® is designed to be compatible with the RWM Waste Package Specification WPS/380/01 for a 500 litre robust shielded drum waste package. It is designed to accommodate ILW that is intended for disposal within a geological disposal facility (GDF) without the need for any further packaging or treatment. It is also designed to meet NWS disposability requirements after an extended period of on-site storage. A process port is provided for any post-packaging conditioning of contents (optionally further ports can be provided if required).

The NuSTORE® 3966 shield wall thicknesses is 160 mm minimum additional shielding can be provided with a lead liners (up to 80 mm thick).

For transport as a Type B a re-usable overpack is required to provide thermal and impact protection of the NuSTORE® 3966.



Section through Package Design No 3966 (160mm wall thickness)



Containment / Shielding

- Closure via a double lid system.
- Inner ductile cast iron shielding lid with bolted closure provides the same shielding as the container body.
- Steel outer transport lid with verifiable seals and bolted closure.
- Filtered vent in both lids to allow gas release but prevent particulate escape.
- A process port is provided on the inner shield lid.

Approved Contents

As a non-fissile Type IP-2 transport package, the NuSTORE® 3966 is designed to carry solid radioactive materials that qualify as either Low Specific Activity (LSA) or Surface Contaminated Objects (SCO).

As a Type-B package the NuSTORE® 3966 is designed for a wide range of solid ILW materials (including unconditioned wastes).

Modes of Transport

By road, rail or sea.

Physical Data

Component	Robust Shielded Container Design No 3966
Dimensions	
Shield Wall Thickness (mm)	160
External Dimensions Diameter x Height (mm)	Ø1060 x 1560
Internal Dimensions Diameter x Height (mm)	Ø740 x 1160
Internal Volume (m ³)	0.49
Weights	
Tare Weight (tonne)	6.5