**NUHOMS® Ancillary Equipment**

**Automated Welding System**
Transnuclear’s AREVA Automated Welding System (AAWS) is a third-generation, fully-integrated, remotely-operated automated welding system, including remote viewing and motion control. The AAWS welds the Dry Shielded Canister (DSC) top closure plates to the DSC shell after fuel loading.

The NUHOMS® System is offered with a gas tungsten arc welding AWS. This computer-driven system incorporates a teach function that remotely locates the weld joint and then programs the weld head to follow. No hands-on alignment of the AAWS is required and off-the-shelf welding components are used. The NUHOMS® AAWS is simply placed onto the canister and the teaching cycle is initiated at the remote console. “On the fly” changes to the welding parameters are done in real time based on operator observations on the remote video system. The software is user-friendly and takes less than an hour of instruction for the welding operators to make satisfactory welds. The AAWS is designed and built with high reliability in mind.

Transnuclear employs a mechanical cutter to safely remove welded lids in the event of a need to remove fuel. This cutter has demonstrated that it does not damage the canister which improves the potential for re-use and re-weld. During these demonstrations, both covers have been successfully cut off and removed from the canisters to provide full access to the contents.

The simplicity and inventiveness of the NUHOMS® welding design assures that closure and retrieval operations are very high quality, field fit-up is minimized and operations are both ALARA, and cost-effective.

**Features and Benefits**
- Fully-integrated, remotely-operated Automated Welding System
- Closure and retrieval operations are very high quality, ALARA, and cost-effective
- Highly efficient, versatile, proven Vacuum Drying System
- Designed and built with high reliability in mind
- All ancillary equipment is available for purchase or lease

**TN Vacuum Drying System**
The TN Vacuum Drying System (VDS) is a multifunction tool that performs blowdown (remove bulk water), vacuum drying, and helium backfill (inerting) operations after fuel loading of the DSC and prior to final closure. The VDS is built, tested and delivered ready for use.

**More About Transnuclear, Inc.**
For over 40 years, Transnuclear has provided the nuclear industry with premier dry storage and transportation products and services.

In the U.S. today, more used fuel is stored in Transnuclear systems than all other systems combined. By the middle of 2011, more than 700 casks housed over 25,000 assemblies at 31 sites. Customers include utilities, reactor operators and the U.S. government.

In the transportation arena, AREVA operates the largest fleet of transportation casks in the world. AREVA organizes more than 3,000 multi-model shipments of nuclear material each year; more than 70 shipments are in progress at any given time.

Transnuclear’s products are marked by the highest standard of safety, uncompromising commitment to quality, and operational dependability. The company is a wholly-owned subsidiary of AREVA Inc., a member of the AREVA Group, the leading worldwide nuclear energy products and services supplier.
Technical Features

AREVA Automated Welding System

Physical Data:
- AAWS with radiation shield, weight 2,000 lbs
- AAWS console weight 1,000 lbs

Support Requirements:
- Power: 480 V, 3 Phase, 20 Amps
- Laydown area:
  - 6 feet x 6 feet for weld head
  - 4 feet x 12 feet for weld console

TN Vacuum Drying System

Physical Data:
- Weight 300 lbs

Support Requirements:
- Power: 480 V, 3 Phase, 10 Amps
- Laydown area: 4 feet x 6 feet for VDS Skid