

NUHOMS® Ancillary Equipment

Automated Welding System

TN Americas' 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.

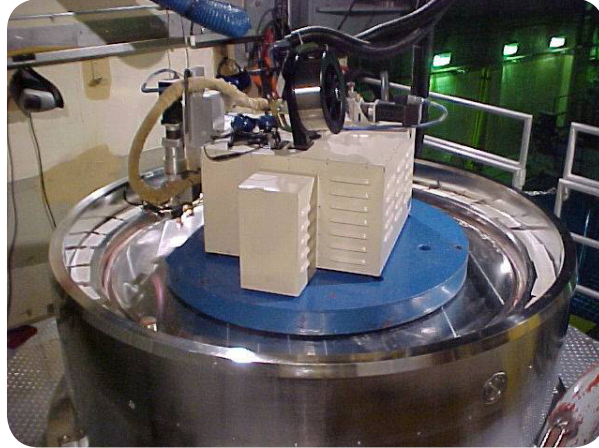
The NUHOMS® System is offered with a gas tungsten arc welding AWS. This computer-driven system incorporates a teach function that remotely locates the weld joint and then programs the weld head to follow. No hands-on alignment of the AAWS is required, and off-the-shelf welding components are used. The 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.

TN Americas 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.

TN Vacuum Drying System

The TN Vacuum Drying System (VDS) is a multifunction tool that performs blowdown (removes 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.



About TN Americas

TN Americas is a leader in the American nuclear market offering innovative total systems solutions for used fuel and radioactive waste management and transportation. More than 50 percent of American nuclear plant operators use TN's used fuel storage or transport solutions, irradiated waste removal and processing, and pool to pad services.

TN Americas' track record of providing safe storage and transportation of used fuel is driven by state-of-the-art products and services, innovative engineering solutions, and integrity in meeting customer expectations for low-dose and error-free campaigns. TN Americas customers include utilities, reactor operators, research reactors and the U.S. government.

TN Americas' products are marked by the highest standard of safety, uncompromising commitment to quality and operational dependability, and "as promised" service integrity.

Technical Features

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

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 and proven Vacuum Drying System
- Designed and built with high reliability in mind
- All ancillary equipment is available for purchase or lease

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