

NUHOMS® Transfer System

TN Americas' NUHOMS® transfer trailer is used to transfer the loaded Transfer Cask (TC) from the fuel building to the Independent Spent Fuel Storage Installation (ISFSI) site for placement of the loaded Dry Shielded Canister (DSC) into the Horizontal Storage Module (HSM).

Integrated with the trailer is the support skid assembly, which aligns the transfer cask with the storage module at the ISFSI prior to inserting the canister into the module. The support skid provides axial and transverse alignment, while hydraulic jacks on the transfer trailer provide vertical alignment.

The hydraulic RAM system, which is also integrated with the trailer, inserts or retracts the loaded canister into or out of the storage module. A three-stage RAM minimizes space requirements. The RAM requires a 480V, 3-phase, 30A (minimum) power source.

The patented operation of the transfer trailer spreads the weight of the loaded cask over 32 tires (over 200 ft²) and prevents overloading the truck bay floor. The trailer load distributed over its 32 tires poses no challenges to the haul route.

The trailer/RAM can be easily shipped between sites as TN Americas does regularly with our leased equipment.

The tow vehicle may be furnished by TN Americas or by the customer. The vehicle is used to move the transfer trailer from the fuel building to the ISFSI site. To properly interface with the NUHOMS® trailer, the tow vehicle must have a pintle hook height of 25 inches - 30 inches and be rated for towing the fully loaded trailer. A rubber-tracked tow vehicle such as the FMC aircraft tow vehicle or the Caterpillar Challenger 95E is recommended.



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

Payload:

Trailer (rated payload) Capacity – 300,000 lbs

Materials of Construction:

Structural Steel – ASTM A572-50 (or similar)

Welding – AWS D1.1-92

Physical Data:

Width – 10 feet 6 inches

Deck Length – 22 feet

Deck Height – 35 inches – 42 inches

Empty Weight – 22 tons

Design Parameters:

Outside Turn Radius – 235 inches

Inside Turn Radius – 66 inches

Max Pulling Speed – 3 mph

Max Grade (while towing) – 7%

Max Tire Pressure – 150 psi

Weight per Wheel (32 wheels) – 10,000 lbs

8 (4x2) Axle Sets

Features and Benefits

- Fully integrated transfer, insertion, retrieval system
- Transfer loaded transfer cask from the Fuel Building to the ISFSI
- Spreads the weight of the loaded cask over 32 tires preventing floor overload

TN Americas

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