



Pegasus

Delivering the future
of nuclear energy

Safe. Secure. Sustainable.

Pegasus is licensable as a **Type AF** or **Type B(U)F** transport package designed to support next-generation front-end fuel materials, specifically High-Assay Low Enriched Uranium (HALEU). It combines safety, efficiency, and sustainability to enable secure transport and temporary storage of high-fissile products.

Key features

- **Optimised payload efficiency:** Maximises material payload to reduce shipments and carbon emissions.
- **Modular and reusable design:** Configurable for multiple product types, extending lifecycle and minimising waste.
- **Facility interface optimisation:** Seamless integration with diverse handling systems, reducing bespoke infrastructure needs.
- **Sustainable materials:** Multiple Water Barrier (MWB) system reduces number of construction materials, simplifying manufacturing and strengthening supply chain resilience.
- **Environmental, Social and Governance (ESG) alignment:** Supports UK clean energy transition by enabling HALEU transport for advanced reactors with lower waste and higher efficiency.

Regulatory Assurance

- **Certified for confidence:** Designed to meet IAEA SSR-6 and NRC 10 CFR Part 71 standards.
- **Safety and security:** Robust containment and shielding to protect people and the environment.
- **Future-ready:** Adaptable for next-generation nuclear technologies.

Pegasus dimensions	Metres
Overall diameter, over body	1.02
Shock absorber diameter	1.02
Fork-lift dimensions	1.05 x 1.05

Overall length:

Without shock absorber	0.82
With shock absorber	0.99
Cavity diameter (MWB)	0.48
Cavity length (MWB)	0.49
Cavity diameter (SWB)	0.53
Cavity length (SWB)	0.61

Component	Weight (kg)
Pegasus body	509
Pegasus lid	113
Pegasus shock absorber	768
Tare weight	1546
Max contents (including basket)	368
Maximum gross laden weight	1854

Note: all dimensions/masses quoted are subject to change, as the design matures.

Uses and interfaces

- **Transport:** Type AF or Type B(U)F for HALEU and other high-fissile products.
- **Temporary storage:** Compact, stackable design for ISO container or on plant storage.
- **Flexible configuration:** MWB/SWB variations for intermediate and finished fuel products.
- **Manufacturing flexibility:** Standard fabrication techniques using readily available materials.
- **Multi-Modal handling:** Forklift-compatible; stackable in 20ft ISO containers for road, rail, and sea transport.

Scan QR code for more details

Talk to our experts today, or visit nucleartransportsolutions.com/HALEU for more information/

