

Supply Chain Systems Engineer (Packaging Engineer Focus)

Company: CakeBoxx Technologies

Location: McLean, VA (On-site; not a remote or work-from-home position)

Salary: 120K–140K

Job Type: Full-time

About CakeBoxx Technologies

CakeBoxx Technologies designs engineered supply chain solutions that protect and move the world's most valuable, complex, and mission-critical cargo. From our patented two-piece containers and modular transport platforms to specialized vibration-controlled and temperature-managed enclosures, we do not manage freight – we engineer how cargo moves. We design the physical systems that eliminate risk, streamline logistics, and strengthen the U.S. supply chain for aerospace, defense, energy, and high-tech industries.

Position Summary

CakeBoxx Technologies is seeking a highly motivated, detail-oriented Systems Engineer with strong supply chain and packaging expertise to support the development of new integrated systems in container-type enclosures. Working closely with Mechanical and Electrical Engineers, the Supply Chain Systems Engineer will guide the continued development of these enclosures from design through integration and test events and will provide system-level trade-space assessments, partnering with the Project Manager to evaluate the benefits of different technical approaches. At CakeBoxx, this role will help shape the selection of key technologies, support future proposals and IR&D, and contribute to strategic development activities across our defense, aerospace, energy, and high-tech programs.

This role requires direct, hands-on experience across the full product lifecycle, including planning, material sourcing, supplier management, fabrication, packaging, logistics, delivery, and post-delivery support, with a clear understanding of how a product physically moves from concept to customer. In addition, you will take ownership of packaging and load-securing aspects of CakeBoxx cargo solutions, engineering how high-value equipment is protected, restrained, and integrated inside CakeBoxx containers and platforms to withstand shock, vibration, environmental exposure, and multi-modal transport.

Job Responsibilities

- Support planning activities including estimates, BOM development, scheduling, routing, and early technical scoping.
- Create and maintain 2D and 3D models using PTC Creo, Autodesk Inventor, SolidWorks, and Windchill.
- Translate customer cargo requirements into engineered packaging and load-securing solutions integrated with CakeBoxx systems.
- Provide technical guidance for packaging, storage, and readiness requirements so high-value equipment is protected, restrained, and transport-ready inside CakeBoxx systems for multimodal moves (shock, vibration, environmental exposure).
- Engineer integrated load-securing solutions—cradles, dunnage, tie-downs, shock isolation, thermal liners—and validate via fit-ups, dimensional checks, and transport testing to qualification standards.

- Evaluate suppliers, support vendor qualification, and define technical requirements for procurement.
- Manage sourcing activities including pricing, lead times, purchase orders, compliance documentation, and vendor performance.
- Monitor end-to-end workflow across design, fabrication, integration, packaging mock-loads, and shipment, review progress, and enforce quality standards and deadlines for each build and move plan.
- Support fabrication processes including welding, machining, coatings, inspections, and NDE.
- Define or support transport validation testing including shock, vibration, compression, and environmental exposure.
- Coordinate inbound materials, oversized shipments, port handling, and final delivery.
- Create load plans, bracing schemes, and handling guides tailored to each cargo/system configuration to ensure safe port handling, inland transit, and final delivery.
- Track supply chain risks, packaging-related damage, quality issues, and corrective actions.
- Partner closely with Program Management to manage resources originating from acquisition programs; develop, execute, and adjust budgets tied to packaging engineering, logistics, testing, and vendor activities supporting CakeBoxx platforms.
- Distribute and track work across internal and supplier teams based on specialization and priority, ensuring methods, milestones, and compliance objectives are consistently met.
- Serve as the technical bridge between Business Development, Engineering, suppliers, logistics partners, and customers.

Required Skills

- Strong analytical mindset with demonstrated systems engineering experience in hardware or packaging environments.
- Ability to gather customer requirements and decompose them into system and subsystem design requirements, maintaining clear requirement traceability.
- Proficiency with 3D CAD tools (e.g., Creo, SolidWorks, Inventor) and associated PLM tools (e.g., Windchill).
- Working knowledge of shock, vibration, transport, and environmental protection principles, including how they inform packaging design and validation.
- Familiarity with manufacturing processes such as welding, machining, structural fabrication, and coatings.
- Experience planning and executing integration, packaging trials, and validation testing for mechanical or packaging systems.
- Solid understanding of supply chain fundamentals, including sourcing, supplier evaluation, logistics, and inventory flow.
- Ability to work effectively in cross-functional teams across engineering, operations, supply chain, and program management.
- Strong organizational, documentation, and communication skills with a high attention to detail and ownership mindset.
- Ability to manage multiple projects and priorities in a fast-paced environment and travel up to 25% as needed.

Education and Experience

- Bachelor's degree in Mechanical Engineering, Systems Engineering, Industrial Engineering, Packaging Engineering, Supply Chain Engineering, or a closely related field is required.
- Master's degree in a related engineering or supply chain discipline is preferred.
- 8+ years of relevant experience with a BS degree or 6+ years with an MS degree in systems, mechanical, industrial, or supply chain engineering roles supporting physical products.
- Experience in aerospace, defense, energy, or heavy industrial equipment environments is strongly preferred.
- Experience in Program Management preferred.
- U.S. citizenship is required.

Benefits

- Health, Dental, and Vision Insurance
- 401K with company match
- Paid Time Off
- Short- and Long-Term Disability Insurance
- Revenue and performance-based incentives

How to Apply Interested candidates should send their resume and cover letter, with at least two (2) professional references, to Daine Eisold, CEO at Daine.Eisold@cakeboxx.com and Rico Millarez, Executive Assistant at Rico.Millarez@cakeboxx.com Please include "Supply Chain Systems Engineer – Packaging Focus" in the subject line of your email.

For any questions about the position, please email Emilie Eisold, General Manager at Emilie.Eisold@cakeboxx.com