

Horrea Concept STORAGE SYSTEM EVALUATION

Transform Your Storage System Evaluation Process

Horrea Concept automates the complex task of comparing pallet storage alternatives, reducing what currently takes days of manual calculation into a **5-minute automated analysis**. The system generates multiple configurations for each storage technology, calculates comprehensive cost and performance metrics, and provides quantitative scoring to support your design decisions.

Key Benefits

⚡ **Rapid Comparison:** Generate multiple storage system alternatives in just a few minutes. Instantly understand requirement impact through simple recalculation.

📊 **Comprehensive Analysis:** Evaluate solutions across 6 key metrics (CAPEX, OPEX, Footprint, Performance, Capacity, Locations) from comparison overview to detailed system specifications. Drill down from summary tables to individual system estimation details.

🎯 **Quantitative Scoring:** Multi-criteria scoring with customizable weighting eliminates subjective bias. Clear financial vs. technical trade-off analysis with total cost of ownership.

⚙️ **Configuration Optimization:** Automated generation and scoring of multiple configurations per system type. System identifies optimal solutions you might miss manually.

📄 **Professional Results:** Export-ready analysis suitable for client workshops and engineering documentation. Interactive format enables real-time requirement exploration with stakeholders.

Target Applications

Feasibility Studies: Rapid evaluation of storage alternatives and requirement impact.

Technology Selection: Quantitative comparison of competing storage solutions.

Investment Analysis: CAPEX/OPEX comparison with customizable financial weighting.

Client Presentations: Professional results ready for stakeholder meetings.

Tender Preparation: Baseline analysis for detailed engineering specifications.

Transform your next storage system evaluation from days of manual work into a structured, quantitative analysis completed in minutes.



Core Features

Technology & Cost Management

Define your equipment library once, use across multiple projects. Comprehensive cost modelling ensures accurate financial comparisons.

Equipment Library: Define and manage pallet handling technologies with their specific definitions and performance specifications.

Cost Modelling: Complete cost structure including Equipment CAPEX, Building CAPEX, Equipment OPEX, Personnel OPEX, and location-based uplifts.

Load Unit Flexibility: Manage specific pallet dimensions as required by your clients.

Automated Storage System Estimation

From requirements to optimized configurations automatically. System explores all viable design combinations within your constraints.

Requirements Input: Define capacity, throughput, operational hours, and building constraints. Assign cost set and define weights for scoring.

Performance Calculation: Calculates space requirements, equipment needs, and operational capabilities.

Automated Optimization: System generates multiple configurations varying levels, rows, depths, and aisles, scoring each based on metrics and definable weights.

Multi-System Comparison

Compare multiple different systems with their best configuration with each other.

Scoring & Ranking: Automated scoring across Financial (CAPEX/OPEX) and Technical (Performance/Capacity/Footprint/Locations) criteria. Cost of ownership analyses.

Flexible Weighting: Adjust importance of different criteria based on project priorities.

Bulk Estimation: Create estimates for multiple system types (ASRS, Static Racking, Floor Storage, Drive-In) simultaneously.

Results & Documentation

Professional-grade outputs ready for client presentations and engineering handoffs.

Comprehensive Results: Detailed breakdown of dimensions, equipment, costs, and performance metrics supported by visual analyses like radar charts.

Export Capabilities: Copy tables to Excel, export charts as PNG/SVG, export data as CSV

Configuration Details: Full transparency of calculation assumptions and system specifications



Supported Technology

Comprehensive coverage of pallet storage technologies. Each technology type supports multiple equipment variants with specific performance characteristics. For example, Industrial Trucks includes standard forklifts, reach trucks, and VNA trucks - each with different capabilities and costs.

Storage Systems

- Static Storage: Single or multi deep racking
- Channel Storage: Drive-In/Drive-Through Racking
- Floor Storage: Block storage, multiple stack heights

Movement Equipment

- Industrial Trucks: Forklift Trucks, Reacher Trucks, VNA Trucks, AGVs/AMRs
- Stacker Cranes: Single or double deep Forks, Multi Load Handling Unit (LHU/LAM)

Interface Equipment

- Drop-off: Manual hand over station
- ASRS All-in-One Inbound/Outbound Interfaces (per crane)



User Experience Features

Modern web application built for professional consultants. Responsive design works seamlessly across desktop, tablet, and mobile devices.

Platform Features

- No client installation required - browser-based access
- Secure user management and authentication
- Responsive design with multiple layout options (default, condensed, hover)
- Dark mode support
- Advanced table functionality (pagination, sorting, filtering)

Workflow Efficiency

- Streamlined input forms with validation
- Versioning and Group organization for project management
- Cost set management for different locations/projects

Ready to Transform Your Storage System Evaluation?

Contact us for a preview or discuss access to a trial and see Horrea Concept in action.



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