



WAREHOUSE @ANYWHERE

Digital, Intelligent
Next-Generation Warehousing

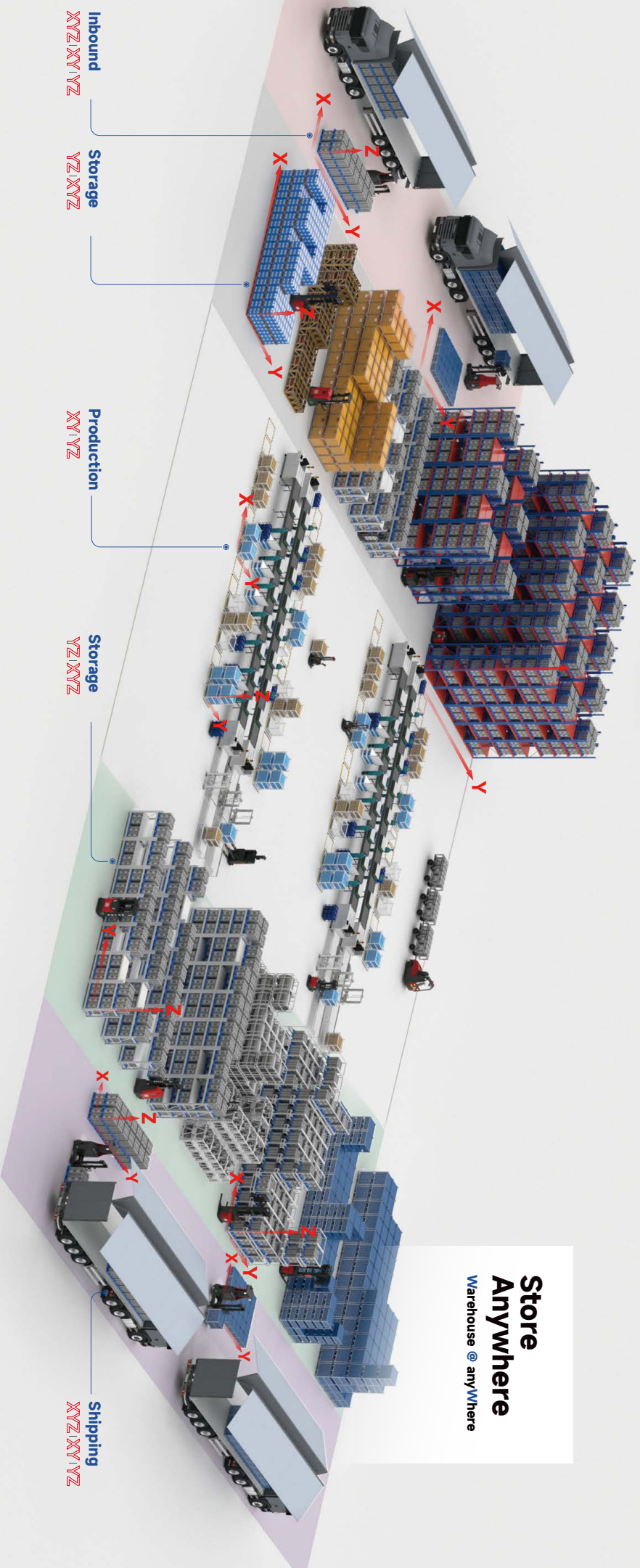
W@W

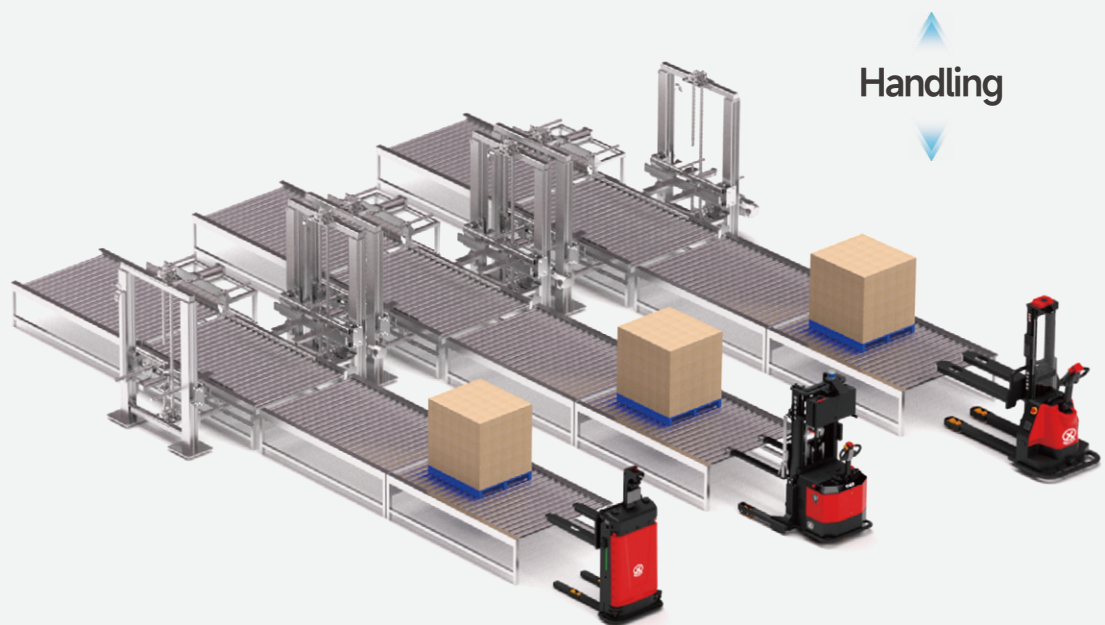


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W@W Distributed Digital Warehouse





2 Small Items



3 Block Stacking



Crates



Specialized Carriers



Pallets



Retainable Storage Frames

4 Cage Stacking



Pallet Cage



Specialised Cage

5 Frame Stacking



Removable Shelf

6 Shelves



Narrow aisle racking



Mid-level shelves



Low-level shelves



High-level shelves

Conventional Warehouse

VS

Digital Autonomous System 3 Levels of Automation

Manual Material Handling

Automatic Material Handling

- Automatic transport
- Automatic stacking

Manual Warehousing

Simple warehousing of goods

Autonomous Intelligent Warehousing

- Automatic inbound, transport and outbound
- Task based robots
- Fleet management
- Load and application specific handling and storage

Warehouse Management

- Physical segregation of warehouses
- Fixed locations and fixed storage method

Warehouse @ Anywhere

- Every location is a warehouse on its own
- Extendable to suppliers and customer locations
- Anywhere and any form of storage
- DAS Digital Autonomous System: WMS, inventory, transport planning and fleet management in 1 system

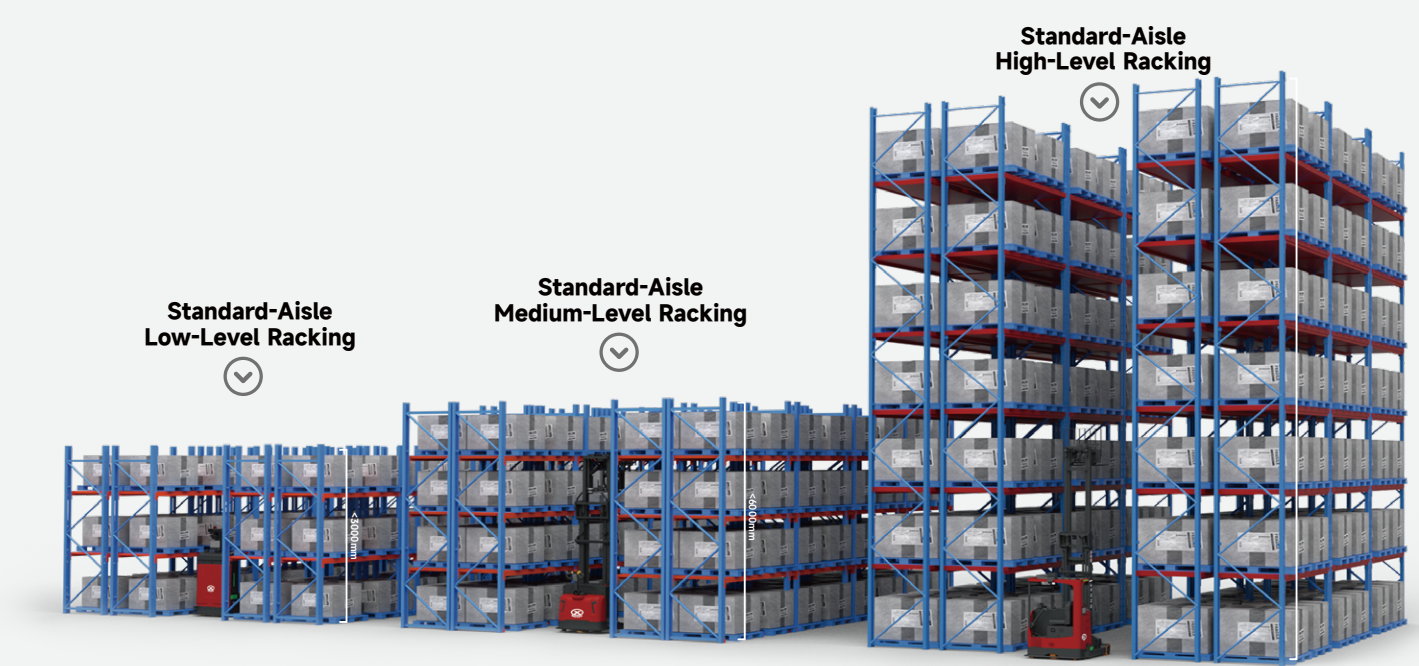
W@W Intelligent Racking Solutions



W@W Intelligent Rack Storage (1)

Standard Racking Aisle

Vehicle Selection Guide for Standard-Aisle Racking by Height						
	Standard-Aisle Low-Level Racking			Standard-Aisle Medium-Level Racking		Standard-Aisle High-Level Racking
Racking Height(m)	<3m			< 6m		< 8.8m
Recommended Vehicle Type	XS1152	XSC081	XSC121	XQE122	XQE151	XQC161
Aisle Width(mm)	2100	2560	2677	2880	2942	3177
Maximum Load Capacity(kg)	1500	800	1200	1200	1500	1600



Product

XS1152

XSC081

XSC121

XQE122

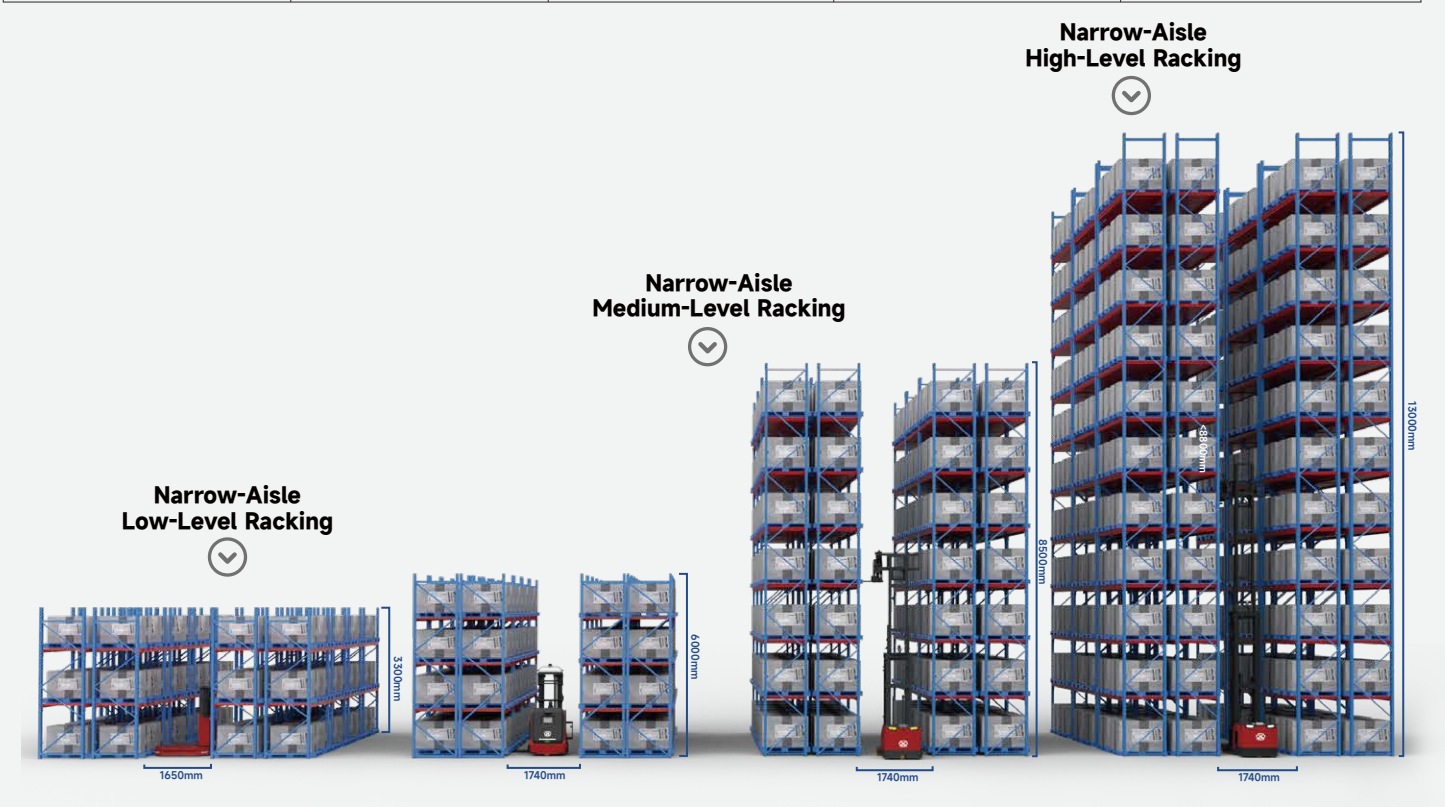
XQE151E

XQC161

W@W Intelligent Rack Storage (2)

Narrow-Aisle Rack Stacking

Vehicle Selection Guide for Narrow-Aisle Racking by Height				
	Narrow-Aisle Low-Level Racking	Narrow-Aisle Medium-Level Racking		Narrow-Aisle High-Level Racking
Racking Height(m)	<3.3m	< 6m	< 8.5m	< 13m
Recommended Vehicle Type	XSF101	XNA101	XNA121	XNA151
Aisle Width(mm)	1650	1740	1740	1740
Maximum Load Capacity(kg)	1000	1000	1200	1500



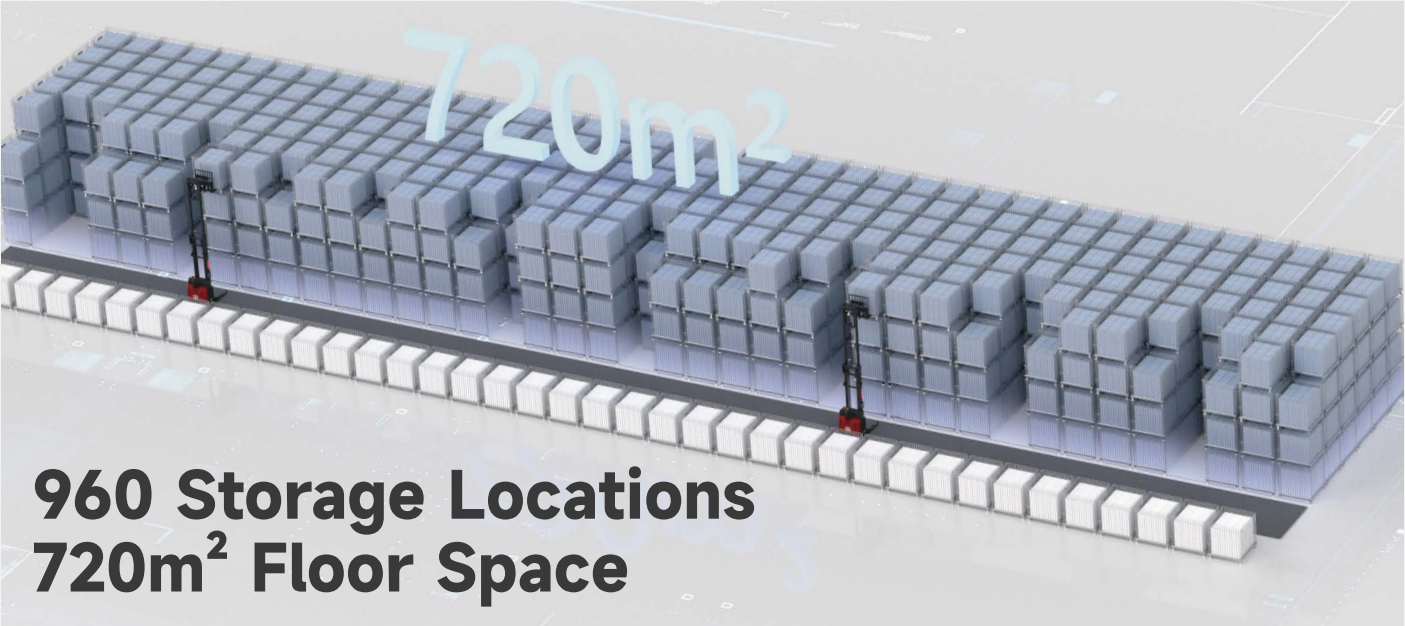


W@W Intelligent Dense Stacking Solutions

W@W Intelligent dense stacking

960-Storage Location High-Density Stacking Parameters

Parameter Name		Unit	Value
Storage Locations		units	960 (96 locations × 10units)
Site Information	Total Footprint		720
	Achievable Layout		6 rows × 4 levels × 40 columns [(6 rows × 4 levels × 4 columns) ×10 units]
	Average Outbound Time	min	6
Stacking Robots	Designation		Indoor Reach Truck, Counterbalanced Stacker
	Model		XQE122, XQC201, XSC151
	Quantity Required	units	2 (1 robot per 500 storage locations)
	Maximum Load Capacity	KG	2000
Carrier			Warehouse Cage, Mesh Container, Demountable Rack, Wooden Crate, Pallet, Customized Carrier
Sales Model	Recommended Initial Sales Quantity (Storage Locations)	units	960 (96 locations × 10units)
	"Analysis shows that high-density storage achieves maximum customer benefit at 960 locations and above."		
	Recommended Expansion Reduction Quantity (Storage Locations)	units	96
	"Note: Customers can add or remove storage locations in increments of 96 units."		



3 Level Shelving

W@W Intelligent dense stacking

960 Locations
Five-Year Cost Comparison Table

3-Level Shelving

High-Density Stacking



Comparison Item

3-Level Shelving

Floor Area
Eg.Rental:34 USD/m²/year
5-Years-Cost

DAS System

Cost: 14 USD /Location
Digital Management Cost

Handling Equipment

Manual Equipment: 17,000 USD/unit
Robotic Equipment: 21,000 USD/unit
Auxiliary Equipment: 1,400 USD/unit

Shelving Installation

Cost: 55 USD /Location

Load Carriers

Plastic Pallet: 25 USD each
Wire-Mesh Container:40 USD each

Labor

Eg.10,000 USD/person/year
5-Years-Cost

1,440m², 244,800USD
1,440m²*34 USD/m²*5
years=244,800USD

None

3 units, 21,000 USD
3units* 7,000 USD= 21,000 USD

52,800 USD

960 Locations*55 USD /unit=52,800 USD

31,200USD

480 Locations* 25 USD/Pallet + 480 units* 40
USD/Container = 31,200USD

3 persons, 150,000 USD

3 persons * 10,000 USD/year * 5
years = 150,000 USD

Floor Area

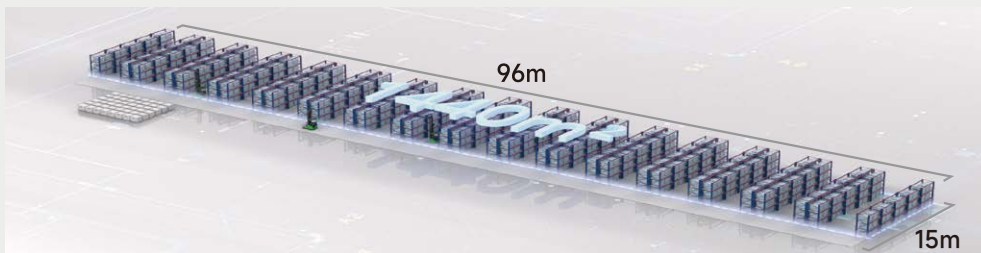
Handling Equipment

Shelving Installation

Load Carriers

Labor

Total 499,800 USD
3-Level Shelving



High-Density Stacking

Comparison Item

720m², 122,400USD
720m²*34 USD/m²*5years=122,400 USD

Digitalized Goods Management

960 locations *14 USD = 13,440 USD

2 units,43,400USD

2units*21,000USD+1,400 USD
Auxiliary Equipment

None

38,400USD

960Locations* 40 USD
/Container = 38,400USD

1.5persons,75,000 USD

1.5 persons * 10,000 USD/year * 5
years = 75,000 USD

Floor Area
Eg.Rental:34 USD/m²/year
5-Years-Cost

DAS System

Cost: 14 USD /Location
Digital Management Cost

Handling Equipment

Manual Equipment: 17,000 USD/unit
Robotic Equipment: 21,000 USD/unit
Auxiliary Equipment: 1,400 USD/unit

Shelving Installation

Cost: 55 USD /Location

Load Carriers

Plastic Pallet: 25 USD each
Wire-Mesh Container:40 USD each

Labor

Eg.10,000 USD/person/year
5-Years-Cost

Cost Reduced by

41%

Total 207,160 USD

100%
Digitalization
&
intelligence
Integration

Floor Area

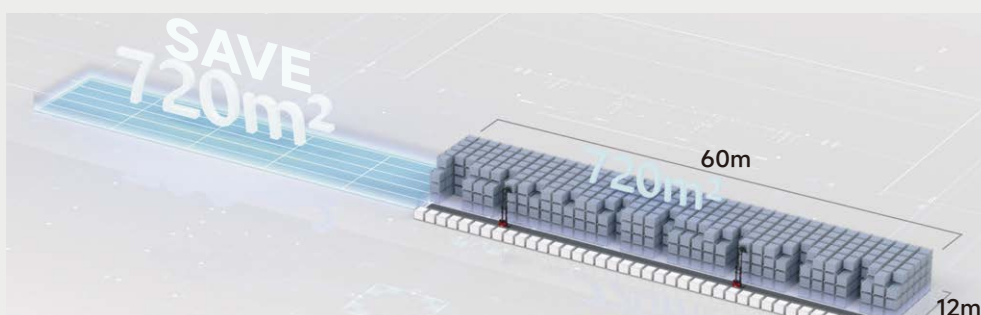
DAS

Intelligent Handling
Equipment

Load Carriers

Labor

Total Cost: 292,640 USD
High-Density Stacking



4 Level Shelving

W@W Intelligent dense stacking

960 Locations
Five-Year Cost Comparison Table

4-Level Shelving

High-Density Stacking



Comparison Item

Floor Area
Eg.Rental:34 USD/m²/year
5-Years-Cost

DAS System
Cost: 14 USD /Location
Digital Management Cost

Handling Equipment
Manual Equipment: 17,000 USD/unit
Robotic Equipment: 21,000 USD/unit
Auxiliary Equipment: 1,400 USD/unit

Shelving Installation
Cost: 55 USD /Location

Load Carriers
Plastic Pallet: 25 USD each
Wire-Mesh Container:40 USD each

Labor
Eg.10,000 USD/person/year
5-Years-Cost

4-Level Shelving

1080m²,183,600USD
1080m²*34 USD/m²*5
years=183,600USD

None

2 units, 34,000 USD
2units*17,000 USD=34,000 USD

52,800 USD
960 Locations*55 USD /unit=52,800 USD

31,200USD
480 Locations* 25 USD/Pallet + 480 units* 40
USD/Container = 31,200USD

3 persons, 150,000 USD
3 persons * 10,000 USD/year * 5
years = 150,000 USD



Floor Area

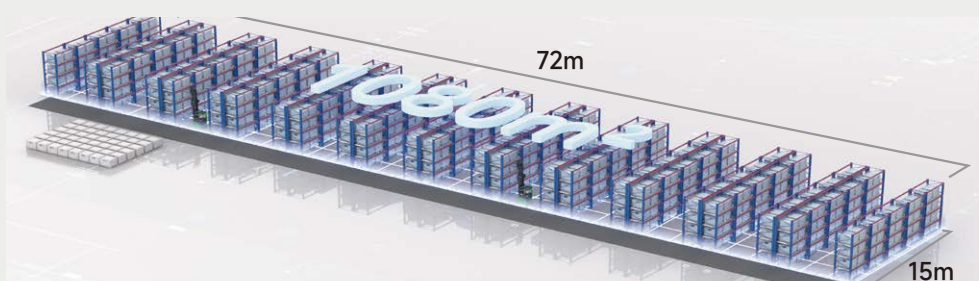
Handling Equipment

Shelving Installation

Load Carriers

Labor

Total 451,600 USD
4-Level Shelving



High-Density Stacking

720m², 122,400USD
720m²*34 USD/m²*5years=122,400 USD

Digitalized Goods Management
960 locations *14 USD = 13,440 USD

2 units,43,400USD
2units*21,000USD+1,400 USD
Auxiliary Equipment

None

38,400USD
960Locations* 40 USD
/Container = 38,400USD

1.5persons,75,000 USD
1.5 persons * 10,000 RMB/year * 5
years = 75,000 USD

Comparison Item

Floor Area
Eg.Rental:34 USD/m²/year
5-Years-Cost

DAS System
Cost: 14 USD /Location
Digital Management Cost

Handling Equipment
Manual Equipment: 17,000 USD/unit
Robotic Equipment: 21,000 USD/unit
Auxiliary Equipment: 1,400 USD/unit

Shelving Installation
Cost: 55 USD /Location

Load Carriers
Plastic Pallet: 25 USD each
Wire-Mesh Container:40 USD each

Labor
Eg.10,000 USD/person/year
5-Years-Cost



Floor Area

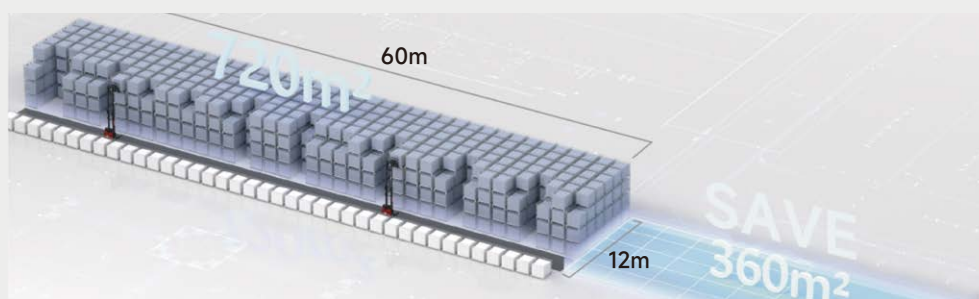
DAS

**Intelligent Handling
Equipment**

Load Carriers

Labor

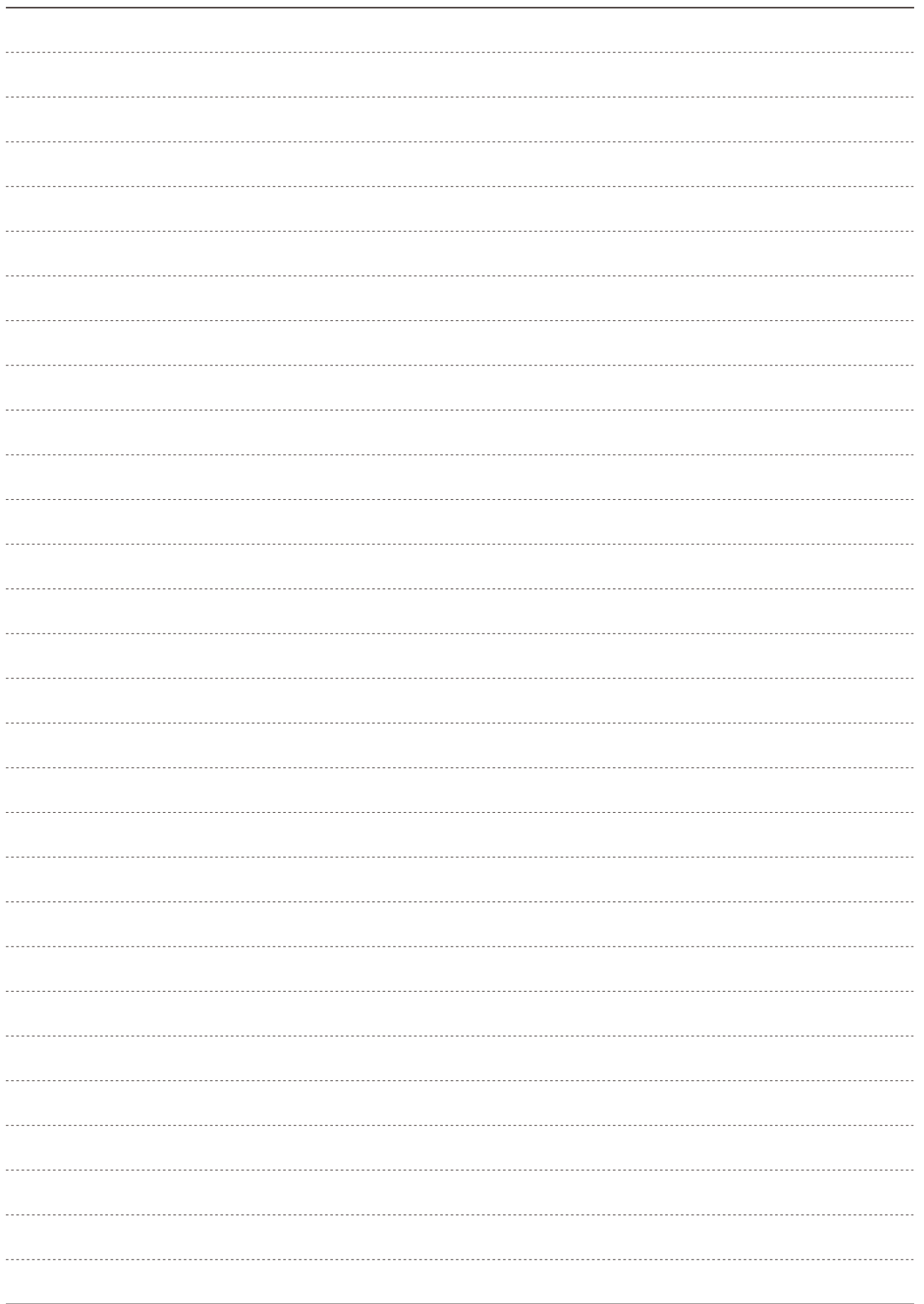
Total Cost: 292,640 USD
High-Density Stacking



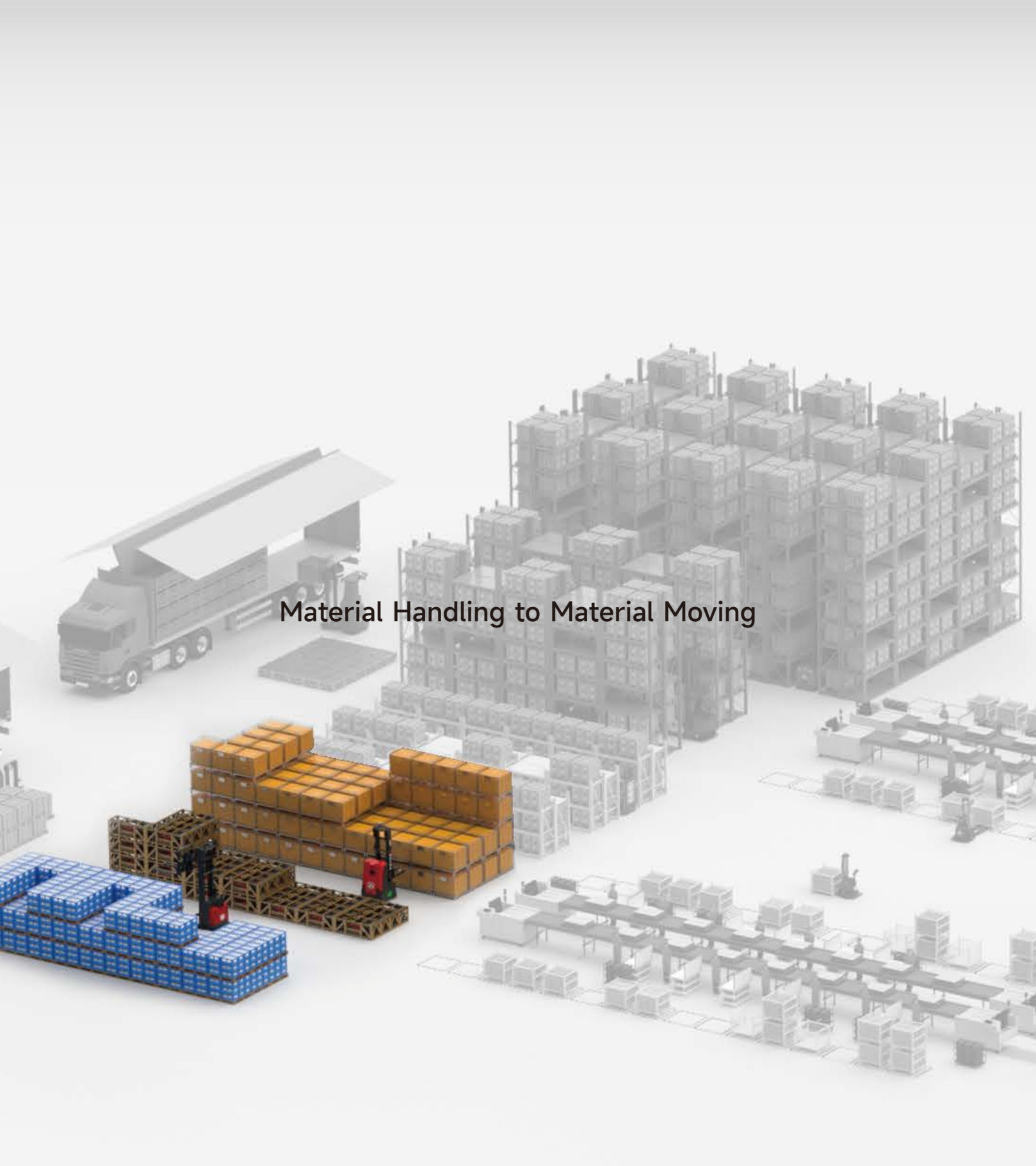
Cost Reduced by
35%
Total 158,960 USD

100%
Digitalization
&
intelligence
Integration









Material Handling to Material Moving

EP EQUIPMENT CO.,LTD

V2509.04

www.ep-equipment.com/amr/

Email: info@ep-equipment.com

EP Industrial Park, Xiaquan Village, Lingfeng Street, Anji County, Huzhou City, Zhejiang Province

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