



PROJECT CASES FROM FOOD

WORLD RACK
INTELLIGENCE STORAGE EQUIPMENT CO., LTD.



01



Customer Requirements

Shandong Yinlu Food Co., Ltd. plans to invest in 12 production lines with an annual production capacity of 500,000 tons, equivalent to 2 billion RMB in annual output value. By March 2009, 9 production lines had gradually commenced operations, including 6 Tetra Pak packaging lines, 1 aseptic cold-filling line, 1 high-speed porridge beverage line, and 1 mineral water line. Current main products include Yinlu Eight-Treasure Porridge, Yinlu Peanut Milk, and Yinlu Mineral Water. In recent years, Yinlu Eight-Treasure Porridge has captured over 50% of the national market, while Yinlu Peanut Milk maintains rapid growth momentum with continued capacity expansion. Increased storage needs have heightened demands for warehouse facilities.

Customer Basic Information

Warehouse Area: 20,000 sqm

Operating Environment: Ambient temperature

Warehouse Height: 9m

Packaging Type: Cartons

Current Pallet Type: Plastic pallets

Current Pallet Dimensions: 1200(W)mm ×

1000(D)mm × 150(H)mm

Current Cargo Dimensions: 1200(W)mm ×

1000(D)mm × 150(H)mm (including pallet height)



Customer Needs

Based on the company's current development status, there is a critical need to significantly increase storage capacity to improve warehouse space utilization rate while enhancing corporate image.

1. Elevate logistics level and improve efficiency
2. Increase storage capacity and optimize space utilization rate
3. Clear categorization for flexible and convenient storage/retrieval
4. Accommodate palletized transportation
5. Enhance digital warehouse management
6. Upgrade overall corporate image



WAP Solution

To address the requirements of Shandong Yinlu project, WAP recommended a shuttle racking storage system:

1. Racking design combines shuttle and beam racking for semi-automated storage
 2. Shuttle racking aisles are configured for 9-pallet and 21-pallet depths
 3. Capacity for 10,500 pallets and 620 SKUs
 4. Beam racking capacity for 150 pallets and 150 SKUs
 5. Forklift operators: 4 per shift (routine), 3 per shift (peak periods)
- ✓ Forklift lifting height: $\geq 6250\text{mm}$
 - ✓ Forklift aisle width: $\geq 4380\text{mm}$
 - ✓ Shuttles: 10
 - ✓ Storage levels: 5
 - ✓ Load per pallet: 1200kg

Phase 1 + Phase 2 Combined Total: 20,790 pallets



Project Effect



After loading



Before loading

02



Customer Requirements

Uni-President China Holdings Ltd. is one of China's leading beverage and instant noodle manufacturers. The Uni-President Group, Taiwan's largest food and beverage conglomerate and one of Asia's top F&B enterprises. It is located in Aksu East Industrial Park. Phase I includes one PET hot-filling beverage production line, one bottle manufacturing line, and auxiliary facilities. Upon completion, annual beverage output will reach 90,000 tons with a production value of 230 million RMB.

Customer Profile

Previous Warehouse Status

Ground Stacking

Product packaging susceptible to damage

Disorganized storage engenders difficult goods-finding problems

Hidden financial losses

Negative corporate image impact

Difficult batch/positioning control

Manual Stacking

Low inbound/outbound efficiency

Bottleneck for production expansion

High labor/management costs

Storage Problems

Low space utilization rate (<35%)

Insufficient capacity during peak seasons



Customer Needs

With the continuous expansion of enterprise scale, the existing warehousing model is gradually unable to meet the rapid development needs of the company. The current warehousing model is ground stacking, and the storage capacity of the warehouse is only about 7000 pallets.

1. Reduce packaging damage
2. Increase storage capacity
3. Improve digital management
4. Lower labor/operational costs
5. Clear categorization with highly accurate operation



WAP Solution

WAP recommends a shuttle racking system:

First-in-first-out and first-in-last-out are combined to achieve maximum utilization of the warehouse. The shuttle racking includes 15, 16, 18, 22, 23, 24, and 25 pallet depths, totaling 588 aisles; meanwhile, the racking is designed as four-layer storage, which realizes a total of 12,820 pallet positions.

Storage Capacity Increased by 2 Times

Post-Renovation Warehouse Data

Total Storage Positions: 12,820

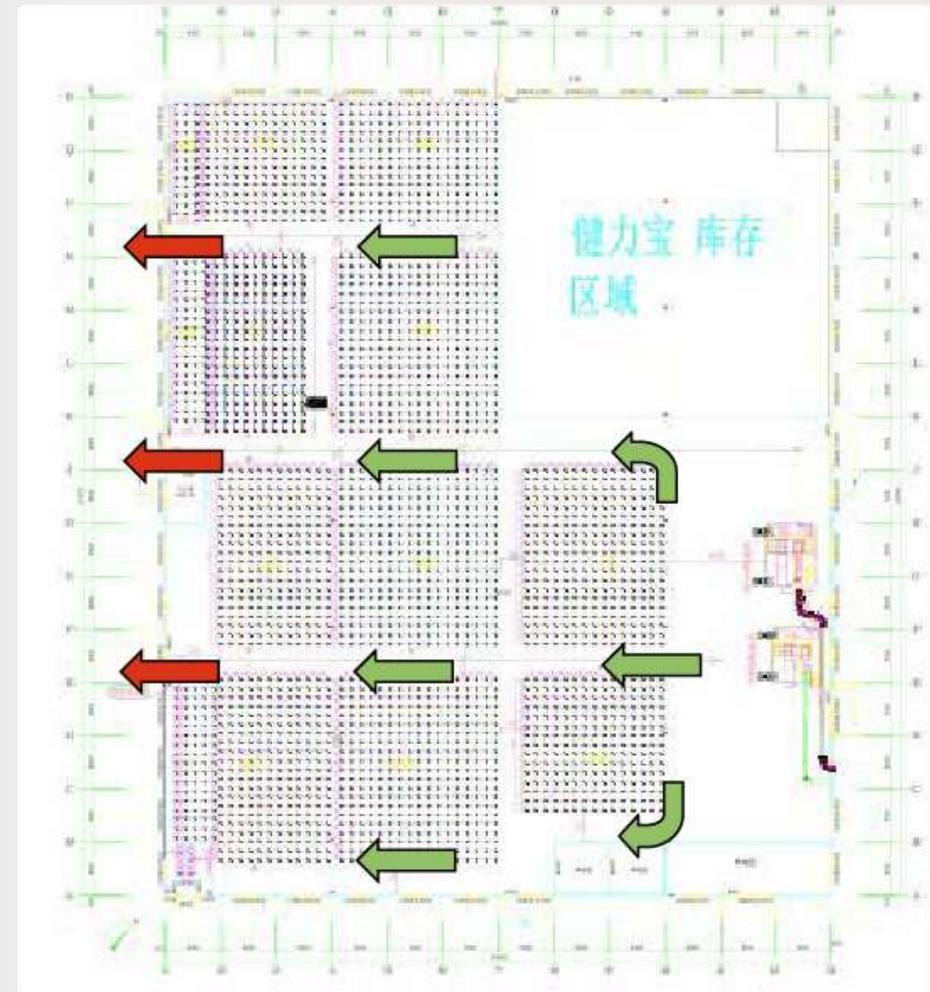
Goods Specifications: 1250 (W) mm × 1050 (D) mm × 1500 (H) mm
(including pallet height)

Goods Access Mode: Combined operation of FIFO and FILO

Total Racking Height: 6500 mm

Number of Storage Layers: 4 layers

Load Capacity/Pallet: 1000 KG



Project Effect





The End

Thank you for listening.

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