

Post-Harvest Handling & Storage Technologies Market Forecasts to 2032 - Global Analysis By Crop Type (Cereals & Grains, Fruits & Vegetables, Oilseeds & Pulses, Roots & Tubers, and Flowers & Horticulture Crops), Component, Deployment Mode, Technology, End User and By Geography

<https://marketpublishers.com/r/PAB81DAAF46BEN.html>

Date: January 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: PAB81DAAF46BEN

Abstracts

According to Statistics MRC, the Global Post-Harvest Handling & Storage Technologies Market is accounted for \$23.65 billion in 2025 and is expected to reach \$39.23 billion by 2032 growing at a CAGR of 7.5% during the forecast period. Post-harvest handling and storage technologies refer to the techniques and tools employed to maintain the quality, safety, and longevity of crops after harvest. This includes cleaning, grading, sorting, packaging, refrigeration, and controlled-atmosphere storage to prevent spoilage, microbial growth, and nutrient deterioration. These practices reduce losses, preserve market value, and support food security, enabling farmers to supply both local and international markets efficiently. Proper post-harvest management is essential for sustaining supply chains and optimizing agricultural productivity.

Market Dynamics:

Driver:

Urgency in reducing food waste

Farmers, distributors, and retailers are under pressure to minimize losses across the supply chain, from harvest to consumption. Rising consumer awareness and government initiatives are pushing stakeholders to adopt more efficient preservation

methods. Improved cold chain logistics and controlled atmosphere storage are helping extend shelf life and reduce spoilage. Digital monitoring systems are being integrated to track quality and reduce inefficiencies. As sustainability becomes a priority, reducing food waste is seen as both an environmental and economic imperative. This urgency is driving investment in innovative technologies that ensure better utilization of harvested crops.

Restraint:

High operational & maintenance costs

Sophisticated equipment such as refrigeration units, sensors, and automated warehouses require significant capital investment. Smaller farmers and cooperatives often struggle to afford these technologies, limiting adoption in developing regions. Maintenance expenses, including energy consumption and technical servicing, further add to the financial burden. The complexity of integrating digital tools like IoT and AI into storage systems increases operational overhead. Limited access to financing and subsidies slows down modernization efforts. These cost-related barriers continue to restrain the pace of market expansion.

Opportunity:

Digital transformation & smart farming

Smart farming solutions, including IoT-enabled sensors and AI-driven analytics, are revolutionizing crop monitoring and storage management. Predictive tools allow farmers to anticipate spoilage risks and optimize storage conditions in real time. Blockchain-based platforms are enhancing transparency and traceability across supply chains. Automation in sorting, grading, and packaging is improving efficiency and reducing human error. Cloud-based systems are enabling remote monitoring and decision-making for large-scale operations. Together, these digital innovations are creating a fertile ground for growth in post-harvest technologies.

Threat:

Rising competition & consolidation

Larger companies are acquiring smaller firms to expand their technological capabilities and geographic reach. This consolidation can limit opportunities for new entrants and

reduce diversity in innovation. Intense rivalry is driving price pressures, making it harder for smaller firms to sustain profitability. The rapid pace of technological advancement forces companies to continually upgrade their offerings. Without strong differentiation, many players risk losing market share. Rising competition and consolidation thus pose significant challenges to long-term stability in the sector.

Covid-19 Impact:

The pandemic disrupted agricultural supply chains, leading to delays in storage and distribution of perishable goods. Lockdowns and labor shortages caused inefficiencies in handling and increased food losses. However, the crisis accelerated the adoption of digital monitoring and automation in storage facilities. Farmers and distributors turned to resilient technologies to maintain food quality under uncertain conditions. Governments emphasized food security, prompting investments in decentralized storage solutions. The pandemic highlighted the importance of robust cold chain infrastructure and predictive analytics. Post-Covid strategies now focus on resilience, sustainability, and digital integration across the value chain.

The hardware segment is expected to be the largest during the forecast period

The hardware segment is expected to account for the largest market share during the forecast period, due to its essential role in storage and preservation. Equipment such as refrigeration units, silos, and controlled atmosphere chambers form the backbone of post-harvest infrastructure. These systems are critical for maintaining freshness and preventing spoilage across diverse crops. Rising demand for durable and energy-efficient hardware is driving innovation in design and materials. Farmers and distributors are increasingly investing in modernized storage facilities to meet global food demand. Hardware adoption is further supported by government subsidies and infrastructure programs in emerging economies.

The food & beverage companies segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the food & beverage companies segment is predicted to witness the highest growth rate, due to these firms require reliable storage solutions to ensure consistent supply and quality for processing. Rising consumer demand for packaged and processed foods is pushing companies to invest in advanced preservation systems. Integration of smart monitoring tools helps maintain safety standards and reduce waste in production lines. Global players are adopting automation

and digital platforms to streamline logistics and inventory management. Sustainability goals are encouraging investments in eco-friendly storage and packaging solutions.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, driven by its vast agricultural output and growing population. Countries such as China, India, and Japan are investing heavily in modern storage infrastructure. Government initiatives are promoting cold chain development and reducing post-harvest losses. Rising urbanization and consumer demand for fresh produce are fueling adoption of advanced technologies. Regional players are collaborating with global firms to enhance technology transfer and market penetration. The region's diverse climate conditions necessitate specialized storage solutions, further boosting demand.

Region with highest CAGR:

Over the forecast period, the Middle East & Africa region is anticipated to exhibit the highest CAGR, owing to rapid modernization of agricultural practices. Governments are investing in cold chain infrastructure to reduce reliance on imports and improve food security. Rising urban populations are increasing demand for fresh and processed foods. Technological adoption is accelerating, with smart farming and digital monitoring gaining traction. International partnerships are supporting knowledge transfer and infrastructure development. Climate challenges in the region make efficient storage solutions critical for reducing waste.

Key players in the market

Some of the key players in Post-Harvest Handling & Storage Technologies Market include Americold Logistics, Carrier Transicold, Lineage Logistics, Cold Chain Technologies, Inc., NewCold, Pace International LLC, AgroFresh Solutions, Inc., Sensitech Inc., B?hler Group, BASF SE, John Bean Technologies Corporation, Syngenta AG, TOMRA Systems ASA, Daifuku Co., Ltd., and Key Technology, Inc.

Key Developments:

In November 2025, AgroFresh Solutions, Inc., a global leader in post-harvest freshness solutions, continues to expand its FreshCloud? digital ecosystem through two strategic global partnerships. Collaborations with Aerobotics, a leader in orchard and packhouse analytics, and Neolithics?, a pioneer in AI-powered quality inspection, position

FreshCloud to be the most comprehensive digital produce quality and supply chain management platform in the fresh produce industry.

In October 2025, NewCold has announced the construction on its latest state-of-the-art facility in Flen, Sweden. This will be the company's second warehouse in the country, following the success of its first Nordic site in Helsingborg, which has been in operation since 2015 and offers 71,000 pallet positions.

Crop Types Covered:

Cereals & Grains

Fruits & Vegetables

Oilseeds & Pulses

Roots & Tubers

Flowers & Horticulture Crops

Components Covered:

Hardware

Software & Analytics

Services

Deployment Modes Covered:

On-Premise Solutions

Cloud-Based Solutions

Technologies Covered:

Cold Storage & Refrigeration Solutions

Modified Atmosphere Storage

Hermetic Storage Solutions

Packaging Technologies

Material Handling Equipment

Cold Chain Monitoring & IoT Platforms

End Users Covered:

Farmers & Growers

Cold Storage Operators

Agro Processors

Distributors & Retailers

Food & Beverage Companies

Institutional Buyers

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Technology Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL POST-HARVEST HANDLING & STORAGE TECHNOLOGIES MARKET, BY CROP TYPE

- 5.1 Introduction
- 5.2 Cereals & Grains
- 5.3 Fruits & Vegetables
- 5.4 Oilseeds & Pulses
- 5.5 Roots & Tubers
- 5.6 Flowers & Horticulture Crops

6 GLOBAL POST-HARVEST HANDLING & STORAGE TECHNOLOGIES MARKET, BY COMPONENT

- 6.1 Introduction
- 6.2 Hardware
- 6.3 Software & Analytics
- 6.4 Services
 - 6.4.1 Installation & Commissioning
 - 6.4.2 Maintenance & Support
 - 6.4.3 Consulting & Training

7 GLOBAL POST-HARVEST HANDLING & STORAGE TECHNOLOGIES MARKET, BY DEPLOYMENT MODE

- 7.1 Introduction
- 7.2 On-Premise Solutions
- 7.3 Cloud-Based Solutions

8 GLOBAL POST-HARVEST HANDLING & STORAGE TECHNOLOGIES MARKET, BY TECHNOLOGY

- 8.1 Introduction
- 8.2 Cold Storage & Refrigeration Solutions
 - 8.2.1 Walk-in Cold Storage
 - 8.2.2 Transport Refrigeration
 - 8.2.3 Cryogenic Storage
- 8.3 Modified Atmosphere Storage
- 8.4 Hermetic Storage Solutions
 - 8.4.1 Drying Technologies

- 8.4.2 Grain Cleaning & Sorting Equipment
- 8.5 Packaging Technologies
 - 8.5.1 Vacuum Packaging
 - 8.5.2 Active Packaging
 - 8.5.3 Biodegradable Packaging
- 8.6 Material Handling Equipment
 - 8.6.1 Conveyors
 - 8.6.2 Elevators & Stackers
 - 8.6.3 Palletizing Solutions
- 8.7 Cold Chain Monitoring & IoT Platforms

9 GLOBAL POST-HARVEST HANDLING & STORAGE TECHNOLOGIES MARKET, BY END USER

- 9.1 Introduction
- 9.2 Farmers & Growers
- 9.3 Cold Storage Operators
- 9.4 Agro Processors
- 9.5 Distributors & Retailers
- 9.6 Food & Beverage Companies
- 9.7 Institutional Buyers
- 9.8 Other End Users

10 GLOBAL POST-HARVEST HANDLING & STORAGE TECHNOLOGIES MARKET, BY GEOGRAPHY

- 10.1 Introduction
- 10.2 North America
 - 10.2.1 US
 - 10.2.2 Canada
 - 10.2.3 Mexico
- 10.3 Europe
 - 10.3.1 Germany
 - 10.3.2 UK
 - 10.3.3 Italy
 - 10.3.4 France
 - 10.3.5 Spain
 - 10.3.6 Rest of Europe
- 10.4 Asia Pacific

- 10.4.1 Japan
- 10.4.2 China
- 10.4.3 India
- 10.4.4 Australia
- 10.4.5 New Zealand
- 10.4.6 South Korea
- 10.4.7 Rest of Asia Pacific
- 10.5 South America
 - 10.5.1 Argentina
 - 10.5.2 Brazil
 - 10.5.3 Chile
 - 10.5.4 Rest of South America
- 10.6 Middle East & Africa
 - 10.6.1 Saudi Arabia
 - 10.6.2 UAE
 - 10.6.3 Qatar
 - 10.6.4 South Africa
 - 10.6.5 Rest of Middle East & Africa

11 KEY DEVELOPMENTS

- 11.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 11.2 Acquisitions & Mergers
- 11.3 New Product Launch
- 11.4 Expansions
- 11.5 Other Key Strategies

12 COMPANY PROFILING

- 12.1 Americold Logistics
- 12.2 Carrier Transicold
- 12.3 Lineage Logistics
- 12.4 Cold Chain Technologies, Inc.
- 12.5 NewCold
- 12.6 Pace International LLC
- 12.7 AgroFresh Solutions, Inc.
- 12.8 Sensitech Inc.
- 12.9 B?hler Group
- 12.10 BASF SE

12.11 John Bean Technologies Corporation

12.12 Syngenta AG

12.13 TOMRA Systems ASA

12.14 Daifuku Co., Ltd.

12.15 Key Technology, Inc.

List Of Tables

LIST OF TABLES

Table 1 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Crop Type (2024-2032) (\$MN)

Table 3 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Cereals & Grains (2024-2032) (\$MN)

Table 4 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Fruits & Vegetables (2024-2032) (\$MN)

Table 5 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Oilseeds & Pulses (2024-2032) (\$MN)

Table 6 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Roots & Tubers (2024-2032) (\$MN)

Table 7 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Flowers & Horticulture Crops (2024-2032) (\$MN)

Table 8 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Component (2024-2032) (\$MN)

Table 9 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Hardware (2024-2032) (\$MN)

Table 10 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Software & Analytics (2024-2032) (\$MN)

Table 11 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Services (2024-2032) (\$MN)

Table 12 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Installation & Commissioning (2024-2032) (\$MN)

Table 13 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Maintenance & Support (2024-2032) (\$MN)

Table 14 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Consulting & Training (2024-2032) (\$MN)

Table 15 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Deployment Mode (2024-2032) (\$MN)

Table 16 Global Post-Harvest Handling & Storage Technologies Market Outlook, By On-Premise Solutions (2024-2032) (\$MN)

Table 17 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Cloud-Based Solutions (2024-2032) (\$MN)

Table 18 Global Post-Harvest Handling & Storage Technologies Market Outlook, By

Technology (2024-2032) (\$MN)

Table 19 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Cold Storage & Refrigeration Solutions (2024-2032) (\$MN)

Table 20 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Walk-in Cold Storage (2024-2032) (\$MN)

Table 21 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Transport Refrigeration (2024-2032) (\$MN)

Table 22 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Cryogenic Storage (2024-2032) (\$MN)

Table 23 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Modified Atmosphere Storage (2024-2032) (\$MN)

Table 24 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Hermetic Storage Solutions (2024-2032) (\$MN)

Table 25 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Drying Technologies (2024-2032) (\$MN)

Table 26 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Grain Cleaning & Sorting Equipment (2024-2032) (\$MN)

Table 27 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Packaging Technologies (2024-2032) (\$MN)

Table 28 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Vacuum Packaging (2024-2032) (\$MN)

Table 29 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Active Packaging (2024-2032) (\$MN)

Table 30 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Biodegradable Packaging (2024-2032) (\$MN)

Table 31 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Material Handling Equipment (2024-2032) (\$MN)

Table 32 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Conveyors (2024-2032) (\$MN)

Table 33 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Elevators & Stackers (2024-2032) (\$MN)

Table 34 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Palletizing Solutions (2024-2032) (\$MN)

Table 35 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Cold Chain Monitoring & IoT Platforms (2024-2032) (\$MN)

Table 36 Global Post-Harvest Handling & Storage Technologies Market Outlook, By End User (2024-2032) (\$MN)

Table 37 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Farmers & Growers (2024-2032) (\$MN)

Table 38 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Cold Storage Operators (2024-2032) (\$MN)

Table 39 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Agro Processors (2024-2032) (\$MN)

Table 40 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Distributors & Retailers (2024-2032) (\$MN)

Table 41 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Food & Beverage Companies (2024-2032) (\$MN)

Table 42 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Institutional Buyers (2024-2032) (\$MN)

Table 43 Global Post-Harvest Handling & Storage Technologies Market Outlook, By Other End Users (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

I would like to order

Product name: Post-Harvest Handling & Storage Technologies Market Forecasts to 2032 - Global Analysis By Crop Type (Cereals & Grains, Fruits & Vegetables, Oilseeds & Pulses, Roots & Tubers, and Flowers & Horticulture Crops), Component, Deployment Mode, Technology, End User and By Geography

Product link: <https://marketpublishers.com/r/PAB81DAAF46BEN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/PAB81DAAF46BEN.html>