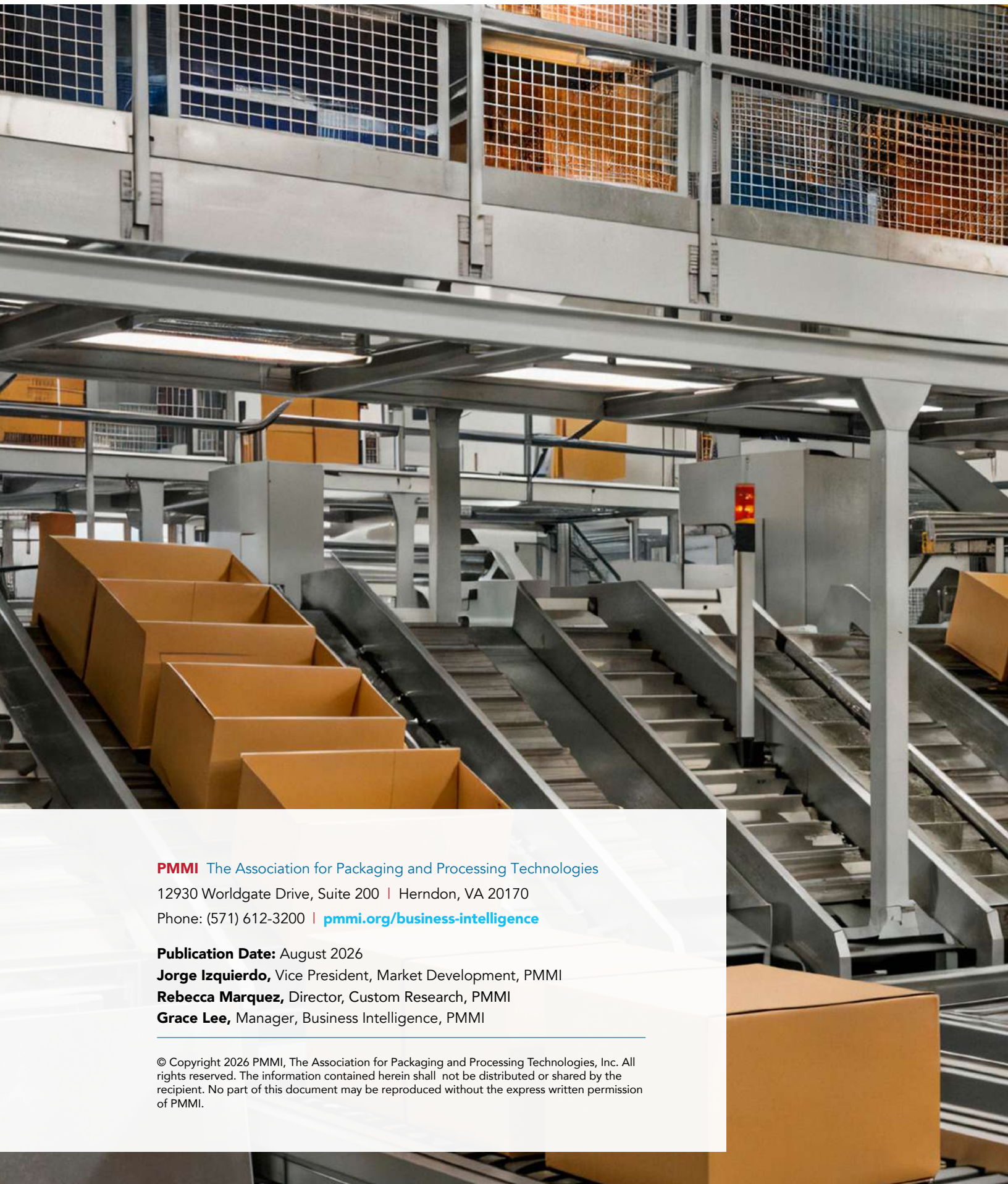


pmmi.org

Packaging State of the Industry Report

20
26



PMMI The Association for Packaging and Processing Technologies

12930 Worldgate Drive, Suite 200 | Herndon, VA 20170

Phone: (571) 612-3200 | pmmi.org/business-intelligence

Publication Date: August 2026

Jorge Izquierdo, Vice President, Market Development, PMMI

Rebecca Marquez, Director, Custom Research, PMMI

Grace Lee, Manager, Business Intelligence, PMMI

© Copyright 2026 PMMI, The Association for Packaging and Processing Technologies, Inc. All rights reserved. The information contained herein shall not be distributed or shared by the recipient. No part of this document may be reproduced without the express written permission of PMMI.

How To Use This Report

Thank you for taking the time to read our State of the Industry Report. This report provides a comprehensive overview of the packaging machinery market, highlighting key statistics and trends by industry segment and machine type. For those interested in a more in-depth analysis, the PMMI Business Intelligence Dashboard provides a powerful tool for exploring the data in greater detail.

The dashboard enables you to filter and analyze the market by end-user industries, machine categories, sub-machine types, and even specific years. You can customize your view to focus on a select number of machines, compare various sub-machine types within an industry, or examine trends across different sectors. This flexibility enables you to view the figures that matter most to you.

PMMI Dashboard Highlight

Looking for more detailed insights? The [PMMI State of the Industry Dashboard](#) complements this report by offering interactive access to the full dataset — with significantly more granularity. Available to PMMI members, the dashboard allows users to:

- **Machine Type and Subcategory** – View shipment values and growth projections by main machine types and their detailed subcategories (e.g., depalletizing, load stabilization).
- **Industry Filters** – Filter by specific industry sectors to view only relevant machine shipments and projections.
- **Country View** – Toggle between U.S. and Canada data.
- **Shipment Value Tables** – Compare shipment values by industry and subcategory side by side.

To access the dashboard, visit the [PMMI State of the Industry Dashboard](#) at: pmmi.org/content/soti-dashboard







CONTENTS

8 • EXECUTIVE SUMMARY

- 8 **Summary of the US Packaging Machinery Industry**
- 9 **End-User Investment Activity Across Market Sectors**
- 10 **US Market Sector Overview**
- 10 US Industry Breakdown
- 11 US Industry Forecast
- 12 **US Packaging Machinery Overview**
- 13 US Machinery Breakdown
- 14 Forecasted Machinery Growth
- 16 **Summary of the Canadian Packaging Machinery Industry**
- 17 **Parts & Services**
- 17 Overview
- 18 Forecast
- 19 **US Imports & Exports**
- 22 **Canada Imports & Exports**
- 22 A Snapshot of 2025
- 23 Canada Reshapes Its Packaging Machinery Import Mix
- 24 **Total US Market**
- 25 **Total Canada Market**
- 25 **Distribution Channels**
- 26 **Trend Overview**

27 • MACROECONOMY & FORECAST

- 27 **The Normalization of Uncertainty**
- 28 **Differences in Forecast Between Editions**
- 29 US Market
- 31 Parts & Services

32 • MARKET TRENDS

- 32 **Market Trends Explored in Detail in this Section**
- 33 **Shifting Buyer Behavior**
- 33 Internal Complexity Meets Investment Hesitation
- 34 Higher Expectations, Less Structure
- 34 Declining Loyalty and Supplier Implications
- 35 **Product Virality**
- 36 **Big Data & AI**
- 36 An Overview
- 37 AI in Internal Operations
- 38 Marketing in the Age of AI
- 39 Structuring Content for AI-Driven Discovery
- 40 **Used Machinery & Asset Preservation**
- 40 A Limited, Opportunistic Market
- 40 Retrofit Over Replace
- 41 Where Used Equipment Adds Value
- 42 **OBBB: Accelerated Depreciation**
- 43 **Carbon Emission Goals by Major Players**

44	US Regulatory Landscape
45	How Regulations are Impacting Machinery
45	States With Regulations Impacting Packaging
46	Rising Cost of Gas
46	Material Reduction As a Cost and Operational Strategy
47	Reducing Material Across Every Level of Packaging
48	END OF LINE DEEP DIVE
48	Introducing a New Focus on End-of-Line Machinery
49	End-of-Line Packaging Machinery
49	End-of-Line Packaging in Warehouse Automation
49	Warehouse Automation Overview
50	Spending Looks at the Downstream Processes
51	Right Fit Packaging
52	Expanding Beyond the End of the Line
52	AMRs and AGVs are Creating New Opportunities for Suppliers
53	Market Growth Makes Pallet Movement the Next Logical Step
54	A Case Study on Robotic Arms
55	Cartoning, Multipacking & Case Packing
55	Case Packing Preferences
56	Flexibility, Automation Tradeoffs, and Material Variability Effects on Machines
57	Bottlenecks and Shrinking Cases
58	Machine Sector Overview
58	US Sub Machines
59	Palletizing & Load Stabilization
59	Steady Demand, Labor-Driven Automation
59	Robotic Systems and Cobots
60	Simplicity vs Flexibility Tradeoffs
61	Machine Sector Overview
62	US Sub Machines
63	INDUSTRY STATISTICS
63	Market Sector Overview
64	Cross-Industry Investment & Closure Landscape
65	Major Announcements Highlights
66	Sector Outlook – Forecast & Trends
66	Food
72	Beverage
81	Household, Industrial, Agricultural Chemicals
85	Pharmaceuticals
92	Personal Care, Toiletries & Cosmetics
95	Other End-User Sectors
97	MARKET STATISTICS BY MACHINERY
97	Bagging, Pouching & Wrapping Equipment
	Form/Fill/Seal (Horizontal, Vertical, Other)
	Pre-made Bag Loading & Sealing
	Wrapping Equipment
99	Cartoning, Multipacking & Case Packing
	Cartoning Equipment
	Multipacking Equipment





Case or Tray Erect/Load/Seal (Integrated)

Case or Tray Erectors & Formers

Case or Tray Loaders

Case Sealers

Case Packing Equipment, Other

100 Coding, Labeling, Printing, & Reading Equipment

Coding & Marking (Ink Jet, Laser, Other)

Labeling Machines

Standalone Printers

102 Conveying, Feeding & Handling

Accumulators

Conveyors (Infeed & Discharge, Modular, Roller, Tabletop, Other)

Product & Package Handling

Feeding & Inserting Equipment

103 Filling, Capping & Closing

Liquid Fillers (Gravity Fillers, Net Weight Fillers, Piston Fillers, Pressure Fillers, Others)

Dry Fillers (Net Weight Fillers, Others)

Cappers

Rigid container closing equipment

105 Inspection & Testing Equipment

Packaging & Material Testing Equipment

Packaging Inspection Equipment

Process Inspection Equipment

QA Lab

106 Palletizing & Load Stabilization

Palletizing, Pallet Conveying, Dispensers & Slip Sheets

Load Stabilization

Depalletizing

107 Specialty Equipment

109 Tray, Clamshell & Blister Packaging Equipment

Thermoform/Fill/Seal Equipment

Pre-made Tray/Cup/Bowl Packaging Equipment

Blister & Clamshell Packaging Equipment

111 • APPENDIX

111 Risks Associated with Forecast

112 Research Methodology

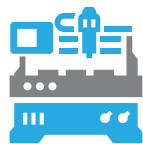
114 Segmentations For Market Sizes and Forecasts

116 Definitions of Machine Types

1

Executive Summary

SUMMARY OF THE US PACKAGING MACHINERY INDUSTRY

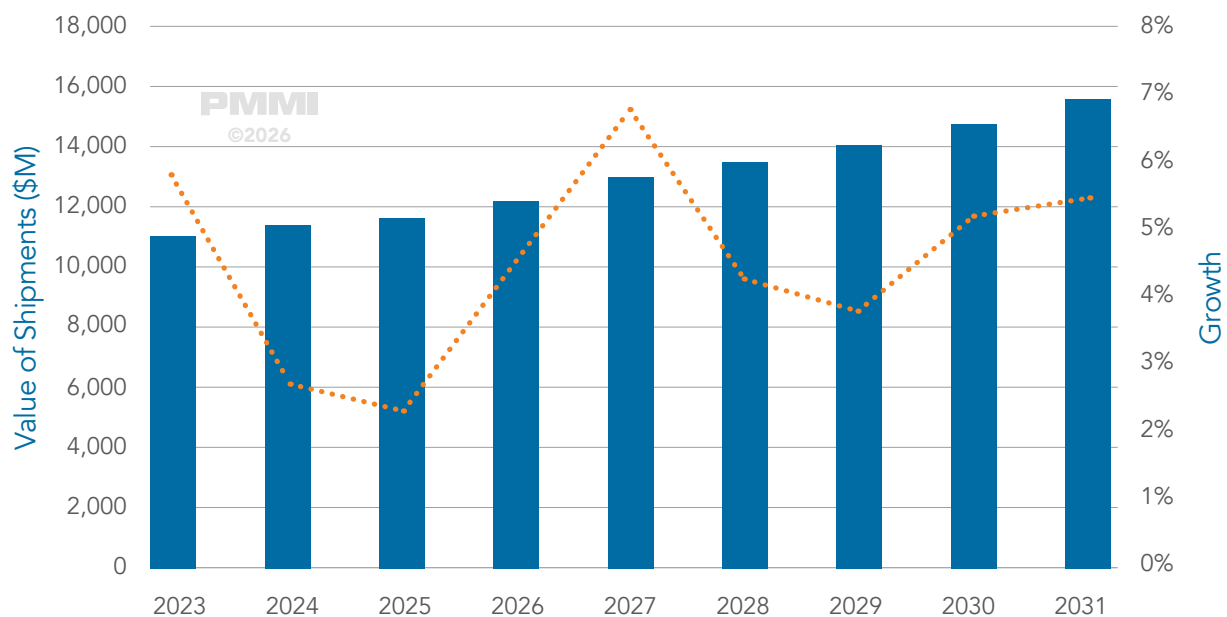


In 2027, US Packaging Machinery sales to reach

\$13bn

Fig. 1 US Packaging Machinery Forecast

■ Value of Shipments %Growth YoY



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

As 2026 closes, the packaging machinery market is showing early signs of recovery following a highly disrupted 2025. While growth remains moderate, market conditions have stabilized enough for companies to begin moving forward with previously delayed investments.

Importantly, this shift does not reflect a fully resolved macroeconomic environment. Ongoing geopolitical tensions, including the conflict in Iran, and continued trade volatility in the US, have prolonged the uncertainty facing manufacturers. As a result, many companies can no longer defer capital decisions and are moving ahead with investment despite these challenges.

Consequently, 2026 activity has been driven less by improving conditions than by a growing need to act. Backlogs accumulated during prior periods are being worked through, and delayed projects are gradually being released. Persistent labor constraints also support demand for automation, particularly solutions that improve efficiency within existing operations. Interviews conducted for this study indicate that buyers remain highly price-sensitive and risk-aware, prioritizing technologies that can be deployed quickly and deliver clear returns within shorter timeframes.

While sentiment has improved compared with 2025, decision-making remains disciplined. Investment is increasingly targeted and incremental, with a continued focus on retrofits, brownfield upgrades, and modular solutions rather than large-scale greenfield expansion.

Looking ahead to 2027, growth is expected to strengthen as this backlog of deferred investment is more fully realized. Projects delayed over the past two years are likely to move forward, supporting a stronger investment cycle. As uncertainty becomes a more normalized operating condition rather than a temporary disruption, investment behavior is expected to shift from reactive to more forward-looking, allowing the market to return to a typical growth trajectory.

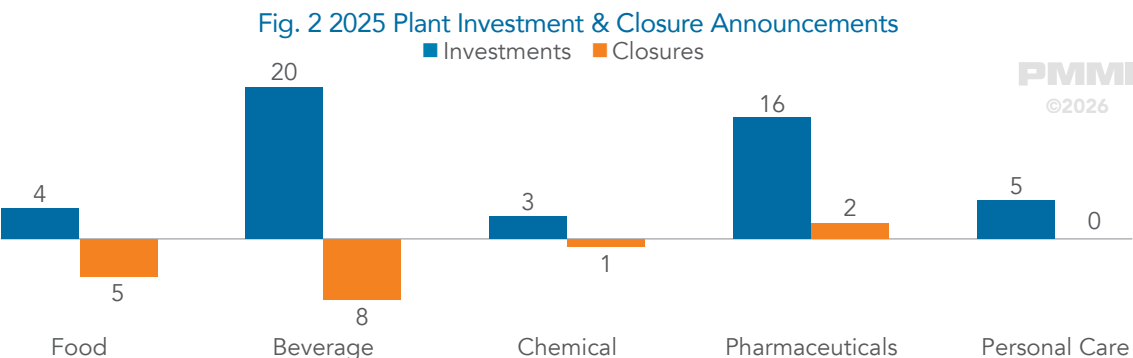
END-USER INVESTMENT ACTIVITY ACROSS MARKET SECTORS

Expansion outpaces contraction

Announced investment activity from major players in 2025 remained positive but increasingly concentrated among large-scale industry players. With 48 investments into new or existing plants compared to 16 closures, expansion continued to outpace contraction; however, activity was uneven across sectors and reflected targeted capital deployment rather than broad-based growth.

Pharmaceutical manufacturing dominated investment activity in dollar terms (see Figure 2), driven by demand for GLP-1 therapies and broader reshoring initiatives, while other sectors showed more mixed dynamics. Food and beverage markets exhibited ongoing consolidation, with major players investing in core facilities and distribution infrastructure while continuing to rationalize legacy assets. Personal care remained relatively stable, whereas investment in chemicals was more cautious, likely due to funding and policy uncertainty.

Overall, the announced activity suggests that leading manufacturers are prioritizing efficiency, scale, and strategic growth areas rather than uniformly expanding capacity. While this dataset reflects the behavior of major players, it highlights a broader shift toward a more focused, capital-disciplined manufacturing environment heading into 2026.



> To see the complete list of company announcements tracked here, see [Market Statistics by Industry](#)

MARKET SECTOR OVERVIEW – INDUSTRY BREAKDOWN



Food

Food was the largest end-market for packaging machinery, accounting for approximately 43.8% of total US shipment value in 2025, estimated at \$5.1 billion. The sector was projected to add roughly \$2.0 billion by 2031, reaching approximately \$7.1 billion, with a CAGR of 5.7% for 2025–2031. Growth was driven by health and wellness shifts toward higher protein and greater product variety, demand for smaller portions and precision packaging, and tighter freshness and shelf-life expectations, even as beef and protein supply dynamics added pressure.



Beverage

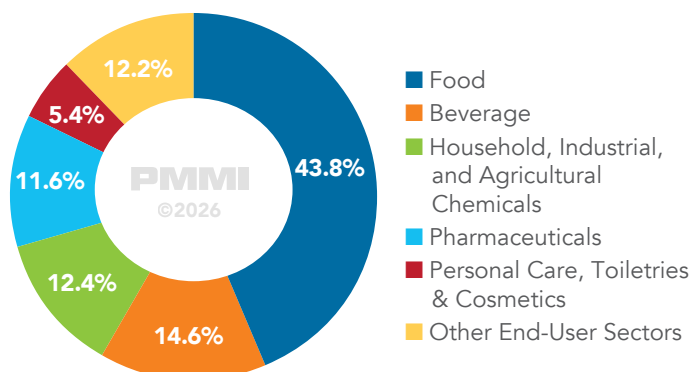
Beverage represented approximately 14.6% of total US shipment value in 2025, equivalent to an estimated \$1.7 billion. Shipments were expected to grow to roughly \$2.4 billion by 2031, adding about \$663 million at a CAGR of 5.6% for 2025–2031. Growth was led by dairy investment and the rise of functional beverages, alongside growing SKU and format complexity and incremental sustainability demands, and was partially offset by softening demand for alcoholic beverages.



Household, Industrial, & Agricultural Chemicals

Household, industrial, and agricultural chemicals accounted for approximately 12.4% of the total US shipment value in 2025, estimated at \$1.5 billion. The sector was projected to reach roughly \$1.8 billion by 2031, an increase of about \$347 million and a CAGR of 3.6% for 2025–2031. Spending was shaped by market volatility, a growing emphasis on safety, and the need for maintenance and reliability in corrosive operating environments, with material-reduction trends gradually changing packaging formats.

Fig. 3 US Packaging Machinery Value by Industry -
2025 (\$11.7B)



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more





Pharmaceuticals

Pharmaceuticals accounted for approximately 11.6% of total US shipment value in 2025, an estimated \$1.4 billion. Shipments were projected to grow to roughly \$1.9 billion by 2031, adding about \$502 million at a CAGR of 5.4% for 2025–2031. Growth was driven by surging GLP-1 demand and the reshoring of production, along with expansion into adjacent nutraceutical and protein-based health markets, while high regulatory barriers to entry kept the sector stable and high-margin.



Personal Care

Personal care, toiletries, and cosmetics represented the smallest end-market at approximately 5.4% of total US shipment value in 2025, an estimated \$628 million. The segment was expected to reach roughly \$801 million by 2031, adding about \$173 million at a CAGR of 4.1% for 2025–2031. Demand was affected by social-media-driven virality and rapid demand shifts that required greater line flexibility and adaptability, alongside persistent price sensitivity.

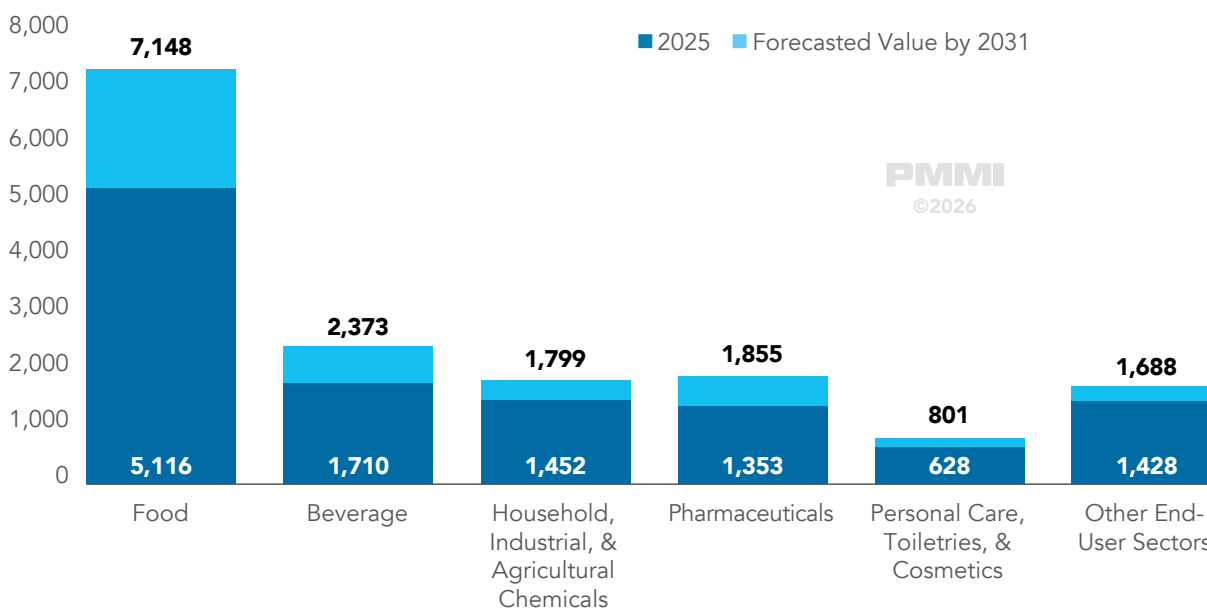


Other End-User Sectors

Other end-user sectors collectively accounted for approximately 12.2% of total US shipment value in 2025, estimated at \$1.4 billion. Shipment value was projected to reach roughly \$1.7 billion by 2031, an increase of about \$260 million and a CAGR of 2.8% for 2025–2031, the slowest pace in the set. Growth was tempered by uncertainty and slowing investment in automotive, with niche opportunities emerging in government and defense, and ongoing consolidation across the cannabis market.

MARKET SECTOR OVERVIEW – INDUSTRY FORECAST

Fig. 4 US Packaging Machinery - Industry Forecast



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

US SECTOR FORECAST

Table 1 - US Total Packaging Machinery Value by End-user Sector - USD M

	2024	2025	2026	2027	2028	2029	2030	2031	CAGR ('25-'31')
Food	\$4,961	\$5,116	\$5,402	\$5,800	\$6,093	\$6,331	\$6,720	\$7,148	5.7%
		3.1%	5.6%	7.4%	5.0%	3.9%	6.2%	6.4%	
Beverages	\$1,688	\$1,710	\$1,782	\$1,917	\$2,008	\$2,100	\$2,234	2,373	5.6%
		1.3%	4.3%	7.6%	4.7%	4.6%	6.4%	6.2%	
Household, Industrial & Agricultural Chemicals	\$1,438	\$1,452	\$1,467	\$1,551	\$1,609	\$1,665	\$1,723	\$1,799	3.6%
		1.0%	1.1%	5.7%	3.8%	3.5%	3.4%	4.4%	
Pharmaceuticals	\$1,305	\$1,353	\$1,419	\$1,516	\$1,595	\$1,686	\$1,772	\$1,855	5.4%
		3.7%	4.9%	6.8%	5.3%	5.7%	5.1%	4.7%	
Personal Care, Toiletries & Cosmetics	\$611	\$628	\$659	\$702	\$725	\$746	\$769	\$801	4.1%
		2.8%	4.9%	6.6%	3.3%	2.9%	3.1%	4.1%	
Other End-User Sectors	\$1,418	\$1,428	\$1,480	\$1,550	\$1,566	\$1,587	\$1,632	\$1,688	2.8%
		0.7%	3.6%	4.8%	1.0%	1.3%	2.9%	3.5%	
Grand total	\$11,420	\$11,686	\$12,210	\$13,035	\$13,596	\$14,114	\$14,850	\$15,664	5.0%
		2.3%	4.5%	6.8%	4.3%	3.8%	5.2%	5.5%	

Source: Interact Analysis

PACKAGING MACHINERY OVERVIEW

US machinery breakdown



Conveying, Feeding, & Handling Equipment

Conveyors, accumulators, and feeding and pick-and-place systems; moderate growth at a 5.0% CAGR for 2025–2031, reaching nearly \$3.4 billion by 2031 as line automation and labor savings drive demand.



Cartoning, Multipacking, & Case-packing Machinery

Cartoners, case erectors, loaders and sealers, and multipackers; solid growth at a 6.0% CAGR for 2025–2031, reaching nearly \$2.9 billion by 2031 as machines consolidate into integrated end-of-line systems and SKU complexity rises.



Bagging, Pouching & Wrapping

Form/fill/seal machines, pre-made bag fillers, and shrink and flow wrappers; moderate growth at a 4.9% CAGR for 2025–2031, reaching nearly \$2.3 billion by 2031, led by flexible-format demand and material-reduction trends in food.



Filling, Capping & Closing

Liquid and dry fillers, cappers, and container-closing equipment; moderate growth at a 4.3% CAGR for 2025–2031, reaching nearly \$1.7 billion by 2031 on steady replacement demand across food, beverage, and chemicals.



Palletizing & Load Stabilization

Palletizers, stretch wrappers, depalletizers, and pallet conveyors; strong growth at a 6.7% CAGR for 2025–2031, reaching roughly \$1.5 billion by 2031, driven by robotic adoption, labor shortages, and tighter load-security requirements.



Inspection & Testing Equipment

Metal detectors, fill-level and package-integrity inspection, and QA lab equipment; the fastest-growing category at a 5.9% CAGR for 2025–2031, reaching nearly \$1.4 billion by 2031 on stricter food-safety and quality requirements.



Coding, Labeling, Printing & Reading

Inkjet and laser coders, labelers, and printers; modest growth at a 3.1% CAGR for 2025–2031, reaching roughly \$1.1 billion by 2031, supported by serialization, traceability, and SKU proliferation.



Specialty Equipment

Specialized and niche packaging equipment outside the core categories; the slowest-growing segment at a 1.7% CAGR for 2025–2031, reaching roughly \$690 million by 2031 as limited automation tailwinds keep gains marginal.



Tray, Clamshell & Blister

Thermoform/fill/seal lines, pre-made tray and cup fillers, and blister and clamshell equipment; moderate growth at a 4.7% CAGR for 2025–2031, reaching roughly \$690 million by 2031 on retail-ready packaging and pharmaceutical blister demand.

Forecasted machinery growth

Fig. 5 US Packaging Machinery - Machinery Forecast

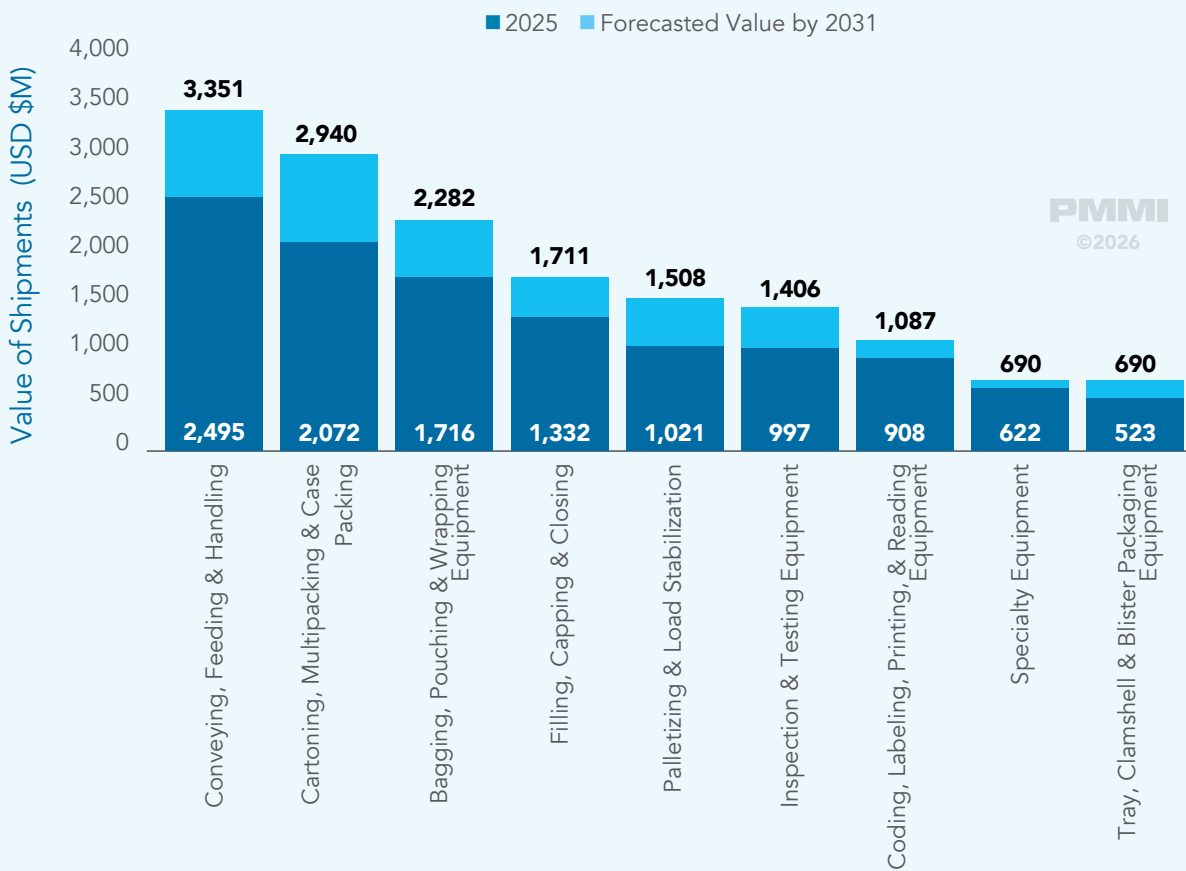


Table 2: US Total Packaging Machinery Value by Machine Category - USD M

	2024	2025	2026	2027	2028	2029	2030	2031	CAGR ('25-'31)
Conveying, Feeding & Handling	\$2,431	\$2,495	\$2,619	\$2,792	\$2,916	\$3,030	\$3,183	\$3,351	5.0%
		2.6%	5.0%	6.6%	4.5%	3.9%	5.0%	5.3%	
Cartoning, Multipacking & Case Packing	\$2,033	\$2,072	\$2,184	\$2,356	\$2,479	\$2,596	\$2,760	\$2,940	6.0%
		1.9%	5.4%	7.9%	5.2%	4.7%	6.3%	6.5%	
Bagging, Pouching & Wrapping Equipment	\$1,722	\$1,716	\$1,790	\$1,910	\$1,989	\$2,058	\$2,165	\$2,282	4.9%
		-0.4%	4.3%	6.7%	4.1%	3.5%	5.2%	5.4%	
Filling, Capping & Closing	\$1,307	\$1,332	\$1,371	\$1,458	\$1,509	\$1,557	\$1,630	\$1,711	4.3%
		1.9%	2.9%	6.3%	3.5%	3.2%	4.7%	5.0%	
Palletizing & Load Stabilization	\$1,007	\$1,021	\$1,084	\$1,177	\$1,248	\$1,316	\$1,407	\$1,508	6.7%
		1.4%	6.2%	8.6%	6.0%	5.5%	6.9%	7.2%	
Inspection & Testing Equipment	\$932	\$997	\$1,056	\$1,135	\$1,195	\$1,251	\$1,325	\$1,406	5.9%
		6.9%	5.9%	7.5%	5.3%	4.7%	5.9%	6.1%	
Coding, Labeling, Printing, & Reading Equipment	\$872	\$908	\$936	\$979	\$1,004	\$1,023	\$1,054	\$1,087	3.1%
		4.2%	3.1%	4.6%	2.5%	2.0%	3.0%	3.2%	
Specialty Equipment	\$614	\$622	\$623	\$647	\$653	\$657	\$672	\$690	1.7%
		1.3%	0.2%	3.9%	0.9%	0.6%	2.3%	2.6%	
Tray, Clamshell & Blister Packaging Equipment	\$502	\$523	\$546	\$582	\$605	\$625	\$656	\$690	4.7%
		4.1%	4.5%	6.4%	4.0%	3.4%	4.9%	5.2%	
Grand total	\$11,420	\$11,686	\$12,210	\$13,035	\$13,596	\$14,114	\$14,850	\$15,664	5.0%
		2.3%	4.5%	6.8%	4.3%	3.8%	5.2%	5.5%	

SUMMARY OF THE CANADIAN PACKAGING MACHINERY INDUSTRY



In 2027, Canada Packaging Machinery sales to reach

\$1.4bn

Fig. 6 Canada Packaging Machinery Value by Industry - 2025 (\$1.2B)

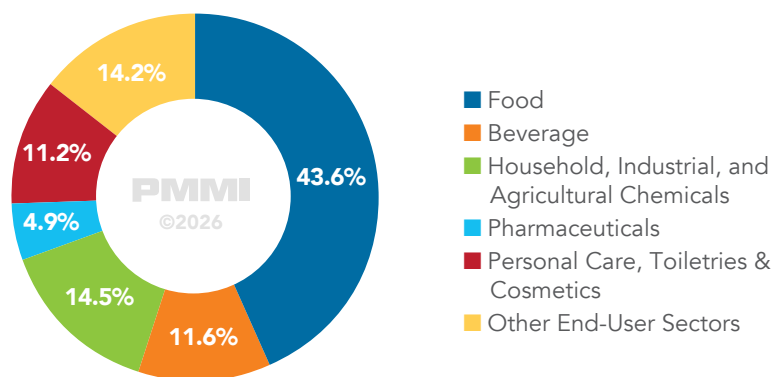
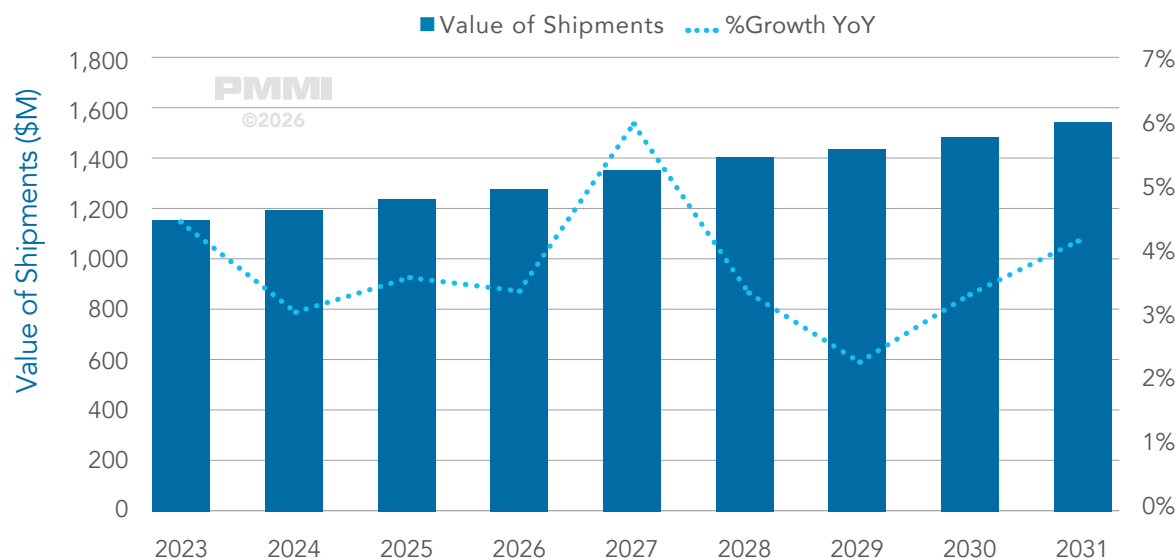


Fig. 7 Canada Packaging Machinery Forecast



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

The value of packaging machinery sold in Canada is expected to reach nearly \$1.3 billion in 2026. Overall, Canada has performed steadily compared with the US, with some companies describing their Canadian business as stable and even more predictable in terms of growth when supported by local manufacturing and supply capabilities.

Tariff volatility between the US and its trading partners caused significant disruption to cross-border equipment flows, particularly in 2025, as customers delayed large capital purchases amid pricing uncertainty. However, these same dynamics also benefited Canada in several ways. Interviewees noted a shift toward domestically sourced equipment, with buyers increasingly favoring Canadian-made solutions to avoid tariff risk and stabilize pricing. In addition, Canada was, in some cases, better positioned to trade with other regions, including Europe, without facing the same tariff burdens as the US, creating a relative advantage for companies sourcing or supplying internationally. As a result, 2025 represented growth of 3.6% over 2024, supported by this shift toward local production and diversified trade relationships.

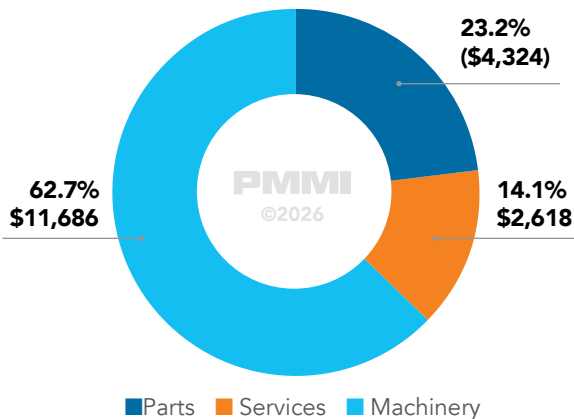
Looking ahead, delayed spending is expected to translate into stronger near-term growth, with 2027 anticipated to mark a peak as companies move forward with projects deferred in 2025 and 2026. This rebound reflects underlying demand that has been postponed rather than eliminated, as businesses continue to evaluate timing and capital allocation. At the same time, Canada faces many of the same structural pressures as the US, particularly ongoing labor shortages, which are reinforcing the need for automation and contributing to more cautious, phased investment decisions.

PARTS & SERVICES - OVERVIEW

Parts

In 2025, the market for parts for packaging machinery in the US is measured to be at \$4.3 billion. By 2031, the market is projected to reach \$6.2 billion, reflecting a CAGR of 6.2% for 2025–2031. Parts revenue remained stable to moderately strong across interviewees, with most reporting steady year-over-year growth. In several cases, demand was driven by customers delaying new equipment purchases and instead investing in spare parts, retrofits, and retooling of existing machines to extend asset life.

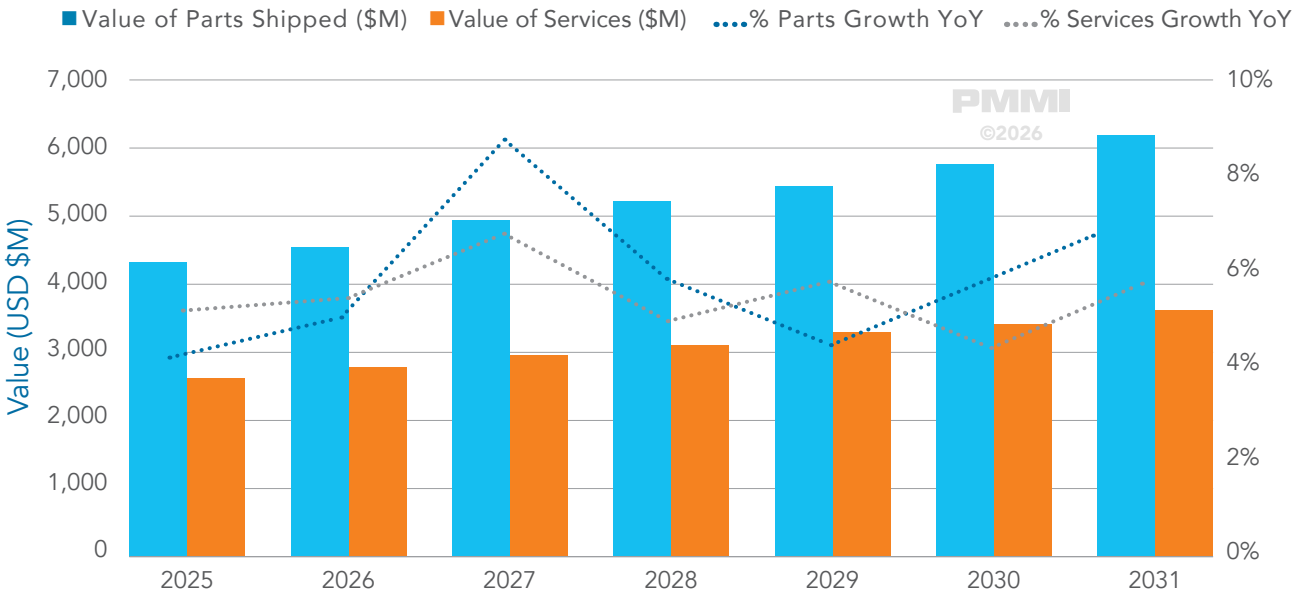
Fig. 8 US Machinery, Parts, & Services 2025 (\$18.6B)



Service

In 2025, the market for services for packaging machinery in the US is measured to be nearly \$2.8 billion. By 2031, the market is projected to reach \$3.6 billion, reflecting a CAGR of 5.5% for 2025–2031. Service activity saw stronger growth relative to parts, with multiple interviewees highlighting increased demand for installation, maintenance, and troubleshooting support. This trend is largely tied to labor shortages and declining in-house technical expertise, leading customers to rely more heavily on OEMs for ongoing operational support. There is also a notable shift toward more proactive and structured service models, including preventative maintenance programs and service agreements, as companies seek to improve uptime and reduce unplanned downtime.

Fig. 9 US Packaging Parts & Services Forecast



PARTS & SERVICES - FORECAST

Table 3 - Parts, Services, & Machinery Forecasts for Packaging Machinery Market – USD M

United States	2025	2026	2027	2028	2029	2030	2031	'25-'31 CAGR
Parts	\$4,324	\$4,542	\$4,941	\$5,230	\$5,459	\$5,774	\$6,193	6.2%
Annual Growth Rate		5.0%	8.8%	5.8%	4.4%	5.8%	7.3%	
Services	\$2,618	\$2,759	\$2,946	\$3,091	\$3,269	\$3,412	\$3,609	5.5%
Annual Growth Rate		5.4%	6.8%	4.9%	5.7%	4.4%	5.8%	
Parts, Services, & Machinery	\$18,628	\$19,511	\$20,923	\$21,918	\$22,842	\$24,037	\$25,466	5.3%
Annual Growth Rate		4.7%	7.2%	4.8%	4.2%	5.2%	5.9%	

Canada	2025	2026	2027	2028	2029	2030	2031	'25-'31 CAGR
Parts	\$452	\$471	\$493	\$511	\$524	\$541	\$564	3.7%
Annual Growth Rate		4.1%	4.7%	3.7%	2.4%	3.3%	4.2%	
Services	\$278	\$290	\$308	\$321	\$336	\$347	\$365	4.7%
Annual Growth Rate		4.3%	6.2%	4.3%	4.6%	3.4%	5.1%	
Parts, Services, & Machinery	\$1,970	\$2,043	\$2,159	\$2,236	\$2,296	\$2,373	\$2,477	3.9%
Annual Growth Rate		3.7%	5.7%	3.6%	2.7%	3.4%	4.4%	

Source: Interact Analysis

US IMPORTS & EXPORTS

A snapshot of 2025

Fig. 10 US Packaging Machinery Imports by Country - 2025 (\$3.8B)

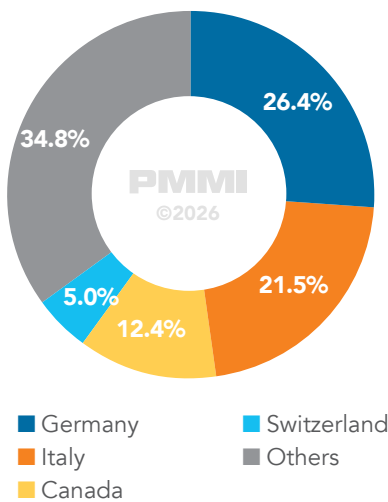
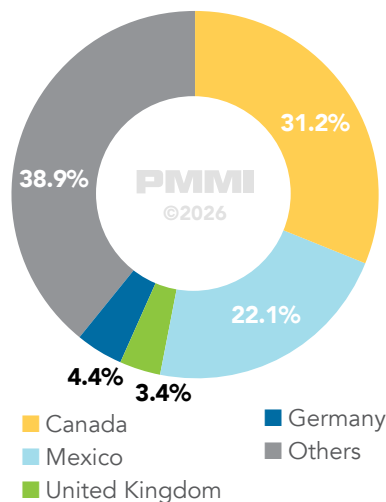


Fig. 11 US Packaging Machinery Exports by Country - 2025 (\$688M)

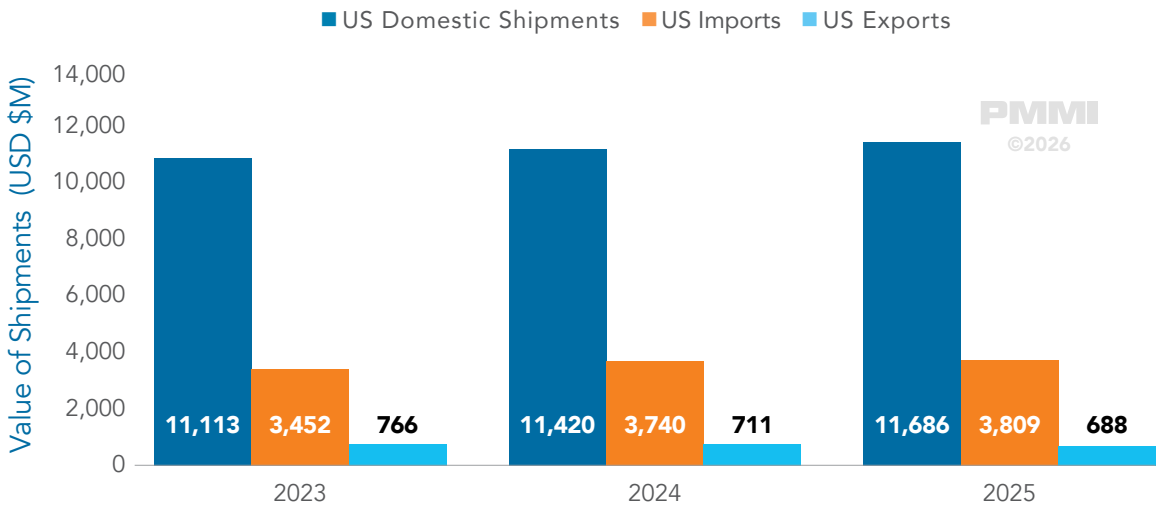


In 2025, US domestic shipments of packaging machinery were valued at \$11.7 billion, with imports totaling \$3.8 billion and exports at just under \$688 million. Combined, domestic shipments and imports amounted to an estimated \$16.2 billion of packaging machinery sold into the US market in 2025, with imports accounting for about 23% of the total.

The largest share of US packaging machinery imports in 2025 came from Germany, totaling \$1.0 billion (26%), followed by Italy at \$819 million (22%), Canada at \$472 million (12%), and Switzerland at \$189 million (5%). The remaining \$1.3 billion (35%) came from other countries.

On the export side, the US shipped approximately \$688 million in packaging machinery abroad in 2025. The two largest destinations were Canada, \$215 million (31%), and Mexico, \$152 million (22%), together accounting for just over half of total US exports.

Fig. 12 US Packaging Machinery Values: Domestic, Imports, Exports



Tariffs reshape trade and investment behavior

In 2025, tariffs emerged as a dominant factor shaping import and export strategies for machine builders. A surge in tariff-related announcements throughout early 2025 introduced a high degree of uncertainty, with many companies indicating that they lacked clarity on how rates would ultimately be applied across different regions and components.

This uncertainty created hesitation across the market. Many machine builders reported that customers delayed or paused projects, particularly those involving international sourcing decisions, as they worked to better understand potential cost impacts. The lack of predictability also made it difficult to maintain margins and plan capital expenditures, especially for companies reliant on globally sourced components.

Impact on Trade Flows and Competitive Dynamics

Tariffs influenced both trade flows and the competitive balance between domestic and imported equipment. In markets where imports had previously held a significant price advantage, tariff-related cost increases reduced that gap, shifting purchasing dynamics. At the same time, the impact was uneven, with differences in tariff application across regions and materials creating variability in how companies were affected.

Trade relationships between key markets were also affected. Some suppliers indicated that customers became less willing to source equipment across borders due to increased costs and uncertainty, while others adjusted by shifting production or assembly locations to mitigate tariff exposure. In these cases, regional manufacturing strategies helped reduce pricing uncertainty and supported project execution.

Tariff volatility

Market Adaptation and Emerging Stability

One year later, tariffs remain a central theme, but the industry's response has evolved. Rather than reacting to each individual policy change, many companies now operate under the assumption that tariffs will remain a persistent feature of the business environment. As a result, tariffs are increasingly incorporated into pricing strategies, supply chain decisions, and investment planning.

There are also signs that the market has begun to stabilize. While uncertainty has not fully disappeared, companies now report having a clearer understanding of the likely range of tariff impacts, enabling more informed decision-making and the progression of previously delayed projects. This shift has been supported in part by pent-up demand following the earlier slowdown.

As shown in Figure 13, tariff-related activity has remained elevated into 2026, indicating that ongoing policy changes have not slowed market engagement. Instead, companies are increasingly moving forward with projects despite continued volatility, reflecting a broader transition from caution to adaptation.

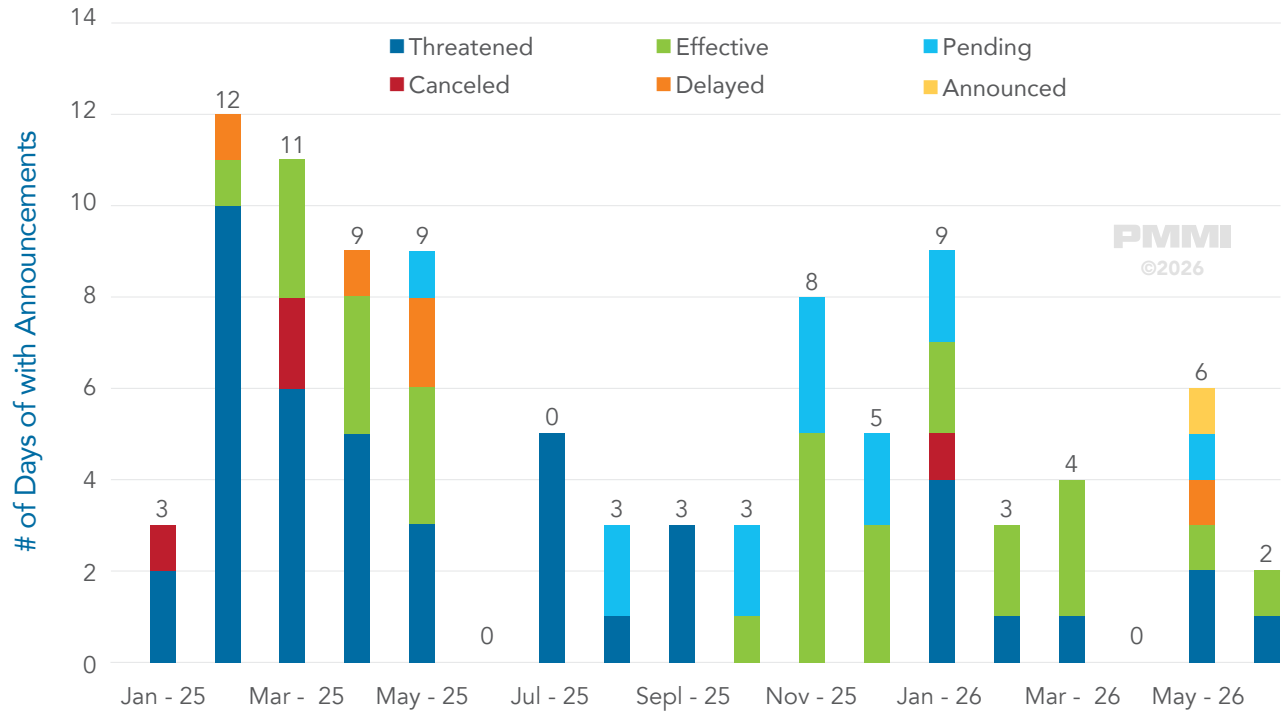
These tariff policies have had a notable and uneven effect on trade in packaging machinery, with some regions benefiting from shifting demand patterns while others have faced reduced competitiveness in export markets.

Stay Current with PMMI Business Intelligence

Continue tracking the packaging and processing industry throughout the year with PMMI's **How's Business, Tariffs Quickie Survey**, and **Economic Outlook** reports.



Fig. 13 Days with US Tariff Announcemnets by Month



Source: Atlantic Council, Trump Tariff Tracker

Note: Multiple tariff actions may have occurred on a single date. This Figure tracks the count of individual days with announcements categorized by status (e.g., Effective, Pending, Canceled)

Trade diversification reshapes US machinery imports

Growth in India, South Korea, and Vietnam offset declines from China and other suppliers.

Fig. 14 US Packaging Machinery Import Shifts by Country (2025 vs. 2024)

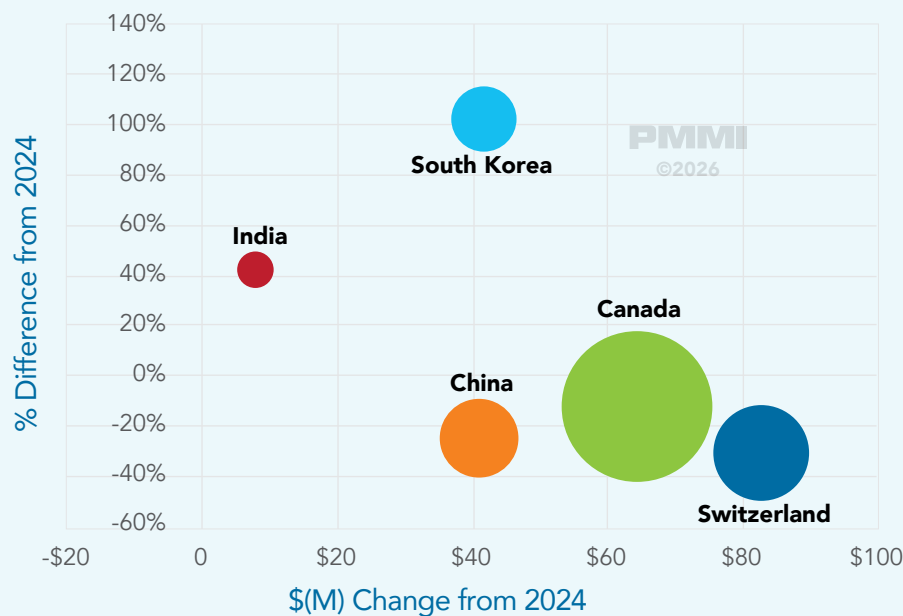


Figure 14 highlights the largest shifts in US packaging machinery imports during 2025. Several countries emerged as beneficiaries of changing sourcing strategies, while others experienced notable declines as buyers adjusted to an increasingly uncertain trade environment.

Among major suppliers, South Korea and India recorded some of the strongest growth rates, with imports increasing approximately 100% and 40%, respectively, compared to 2024. Vietnam also posted significant gains, albeit from a smaller base, with import value increasing from less than

\$0.5 million in 2024 to over \$7 million in 2025. This outsized growth is not shown in Figure 14, as it would distort the chart scale. These increases coincided with escalating tariffs on Chinese imports, which raised costs for US buyers and encouraged many companies to diversify their supplier networks. Interviews conducted for this study suggest that equipment purchasers became increasingly willing to evaluate alternative sourcing options, particularly for price-sensitive machinery segments.

China experienced one of the most significant declines among major trading partners, with import value falling roughly 24% year-over-year. While China remains an important supplier of packaging machinery to the US market, higher tariff exposure and ongoing trade uncertainty appear to have reduced its competitiveness relative to alternative sourcing locations across Asia.

Outside of Asia, Canada and Switzerland also recorded declines in import value during 2025. Canadian imports fell approximately 12%, reflecting broader trade friction and shifting procurement strategies. Switzerland likewise experienced a decline, suggesting that sourcing changes extended beyond China alone as buyers reassessed supplier relationships and equipment costs.

CANADA IMPORTS & EXPORTS

A snapshot of 2025

Fig. 15 Canadian Packaging Machinery Imports by Country - 2025 (\$504M)

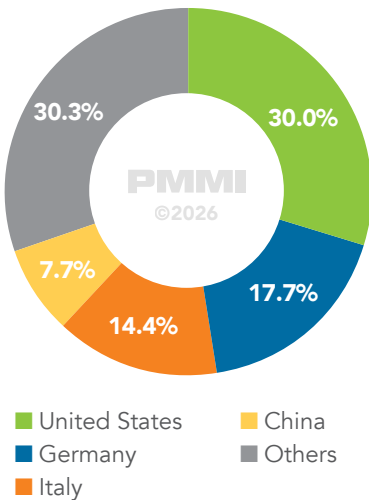
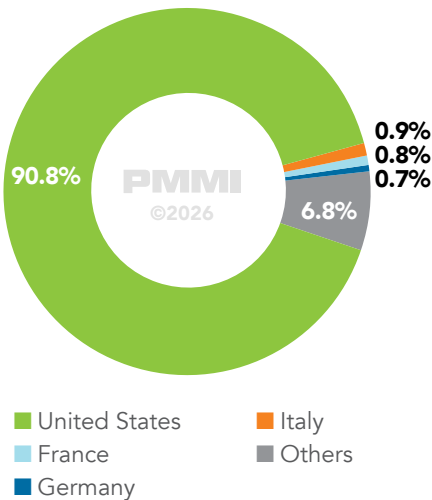


Fig. 16 Canadian Packaging Machinery Exports by Country - 2025 (\$550M)

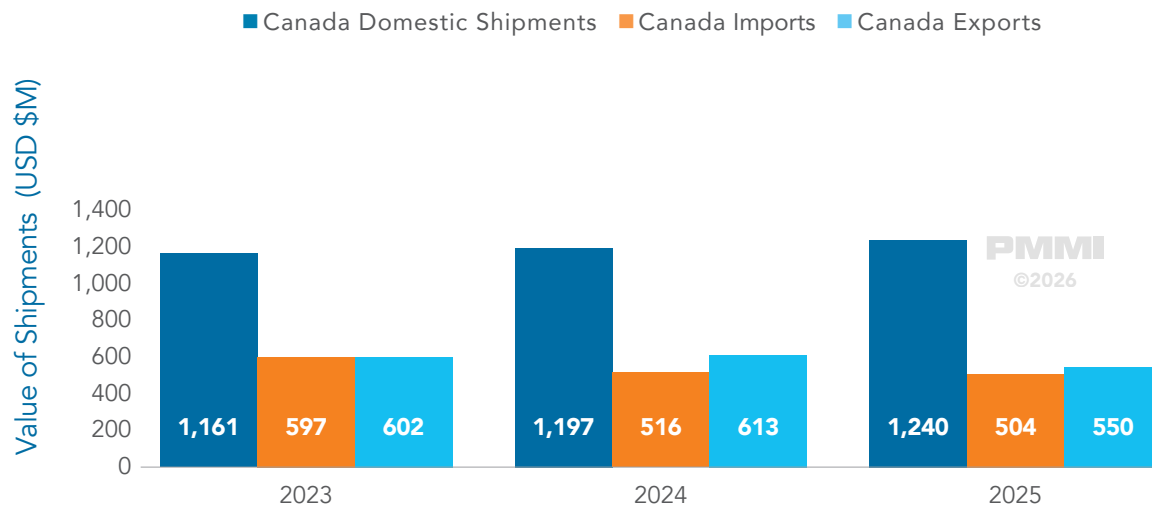


In 2025, Canada's domestic shipments of packaging machinery were valued at \$1.2 billion, with imports totaling \$504 million and exports at \$550 million. Combined, domestic shipments and imports amounted to an estimated \$2.3 billion of packaging machinery sold into the Canadian market in 2025, with imports accounting for about 29% of the total.

The largest share of Canadian packaging machinery imports in 2025 came from the United States, totaling \$151 million (30%), followed by Germany at \$89 million (18%), Italy at \$72 million (14%), and China at \$39 million (8%). The remaining \$153 million (30%) came from other countries.

On the export side, Canada shipped approximately \$550 million in packaging machinery abroad in 2025. The largest destination by far was the United States \$499 million (91%), accounting for the vast majority of total Canadian exports.

Fig. 17 Canada Packaging Machinery Values: Domestic, Imports, Exports



Canada reshapes its packaging machinery import mix

Gains across European and APAC suppliers offset a pullback from the US amid tariff pressures

Fig. 18 Canada Packaging Machinery Import Shifts by Country (2025 vs. 2024)

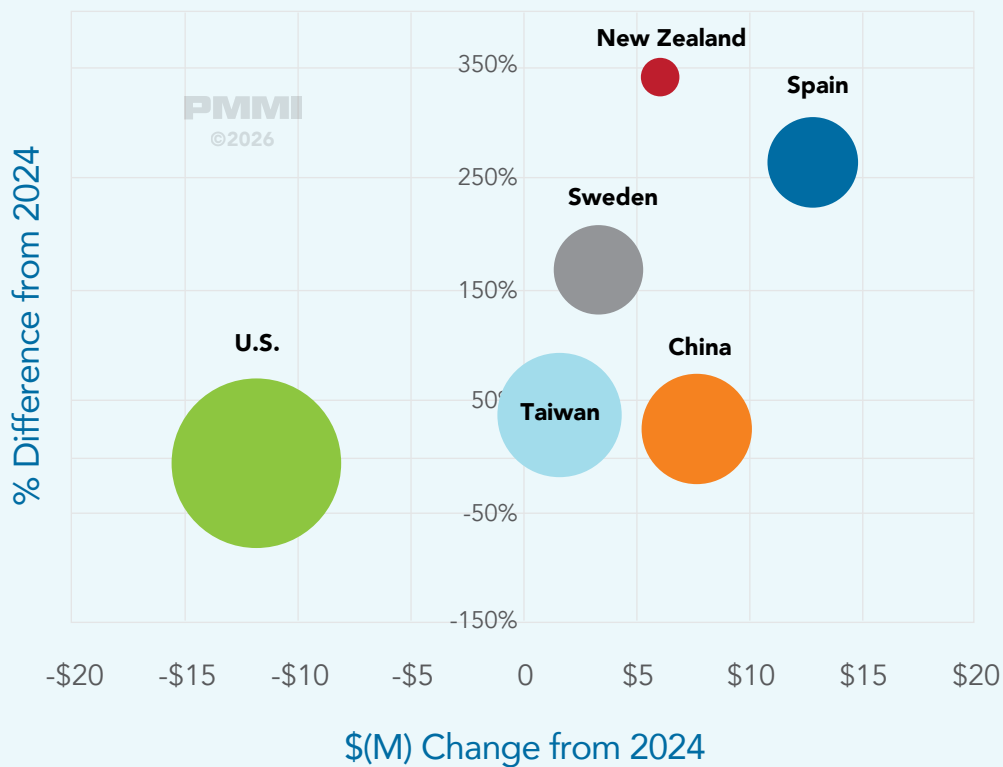


Figure 18 highlights the largest shifts in Canada’s packaging machinery imports in 2025, revealing a mix of supplier diversification and early signs of trade rebalancing in response to tariff pressures.

Several smaller European and APAC suppliers recorded outsized growth. Spain and New Zealand saw the most dramatic increases, with imports rising, while Sweden also posted strong gains. Although these increases came from relatively smaller bases, they point to a clear broadening of Canada’s supplier mix as buyers explored alternative sourcing options.

China showed growth, with imports increasing roughly 25% over 2024. This trend contrasts with the US market, where Chinese imports declined, suggesting that Canada may be absorbing a greater share of Chinese exports as trade flows adjust across North America.

Among larger trading partners, the United States saw a decline, with import value falling approximately 7%. Given the scale of US–Canada trade, this pullback is particularly significant and may reflect effects of tariff retaliation or shifting procurement strategies as Canadian buyers reassess cross-border sourcing costs.

Overall, these shifts suggest that Canada’s import landscape is undergoing a transition, expanding into other supplier markets while simultaneously adjusting relationships with traditional partners.

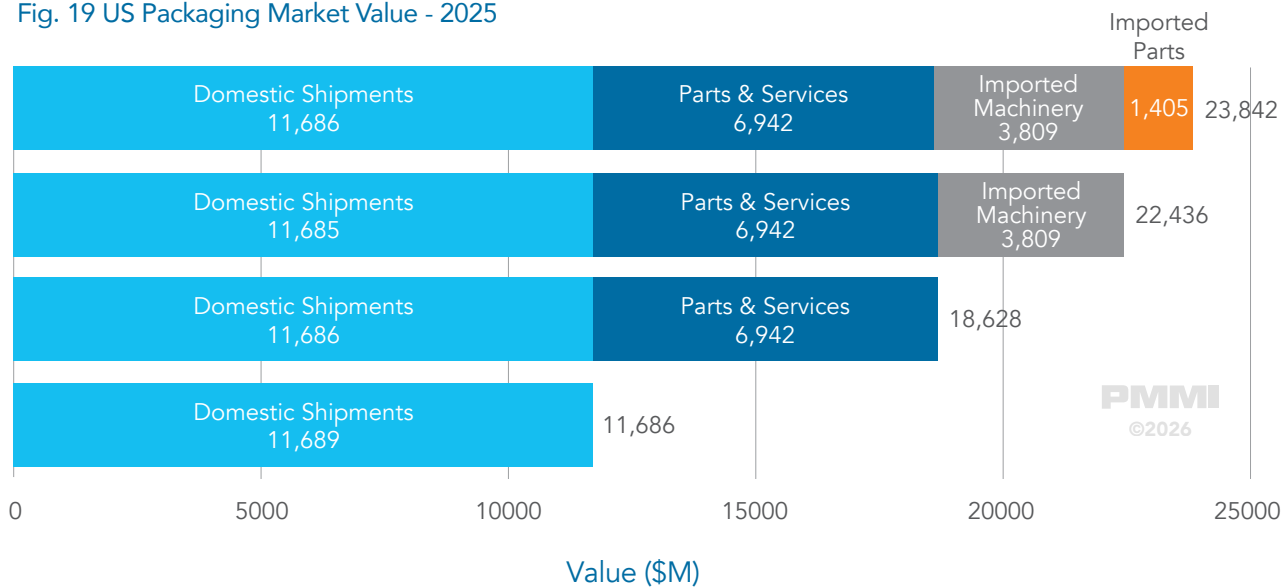


TOTAL US MARKET

Domestic, parts & services, and imports

The total US market nearly doubles, building from ~\$11.7B in domestic shipments to ~\$23.8B as parts, services, and imports are added.

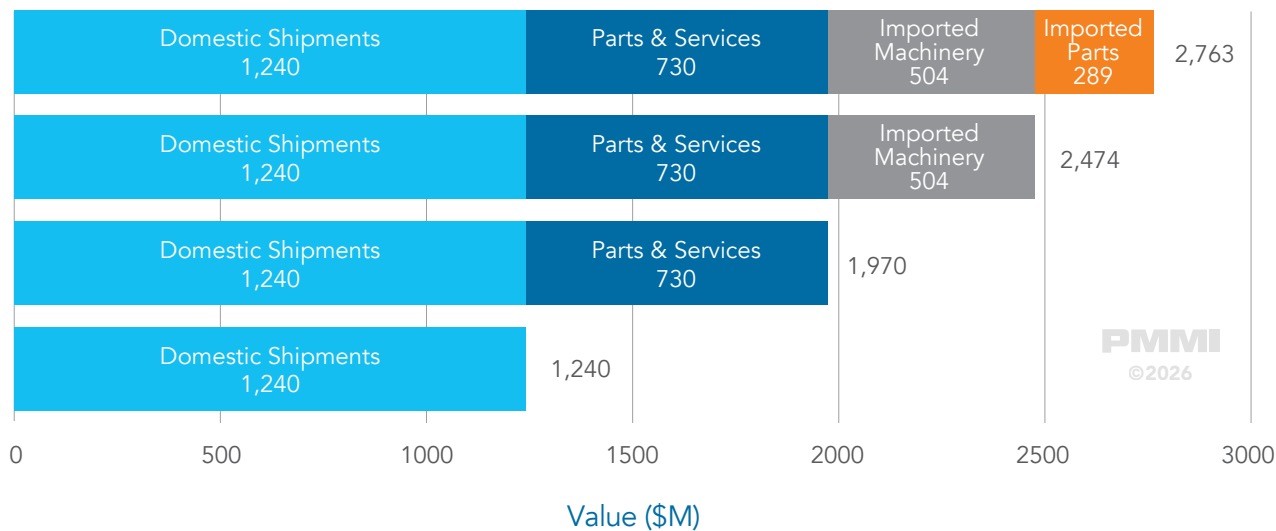
Fig. 19 US Packaging Market Value - 2025



TOTAL CANADA MARKET

Domestic, parts & services, and imports

Fig. 20 Canada Packaging Market Value - 2025



DISTRIBUTION CHANNELS

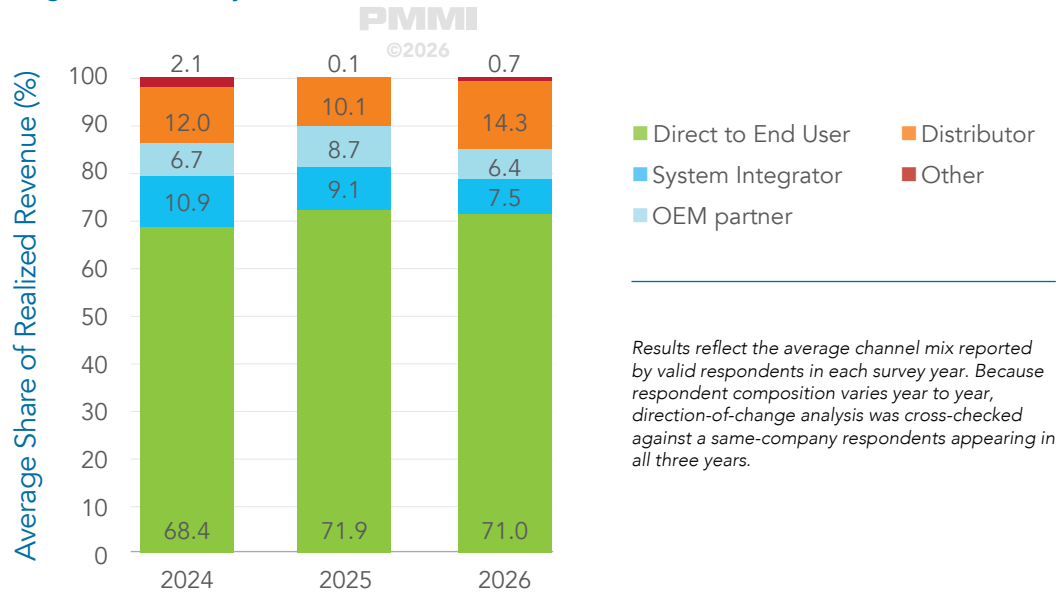
Direct to end user remains preference

When investigating distribution channels used by packaging machinery OEMs, it becomes clear that direct-to-end-user sales remain both the most common and the most preferred route to market. As can be seen in Figure 21, survey data over the past three years indicates that there has been little structural change in this channel mix, with direct sales consistently accounting for the majority of revenue across respondents. This stability is reinforced by what we are hearing qualitatively, where companies repeatedly describe direct engagement as the foundation of their commercial strategy and the primary way they interact with customers.

In interviews, OEMs emphasized the advantages of selling direct, particularly around control and clarity. Several companies described intentionally moving away from third-party representatives and toward internal sales teams, citing issues with capability, alignment, and consistency in external channels. One interviewee noted a shift over the past decade toward a more direct model after finding that manufacturers’ representatives were no longer effective, ultimately replacing them with a dedicated field sales team that could better manage relationships and drive opportunities. Others highlighted that direct engagement allows for tighter control over pricing, messaging, and solution development, reducing the risk of miscommunication or losing influence during the sales process.

Outside of direct sales, system integrators and other indirect channels continue to play a role, though typically in a more situational capacity. Integrators are often involved in larger or more complex projects where full-line solutions are required, and in some cases they maintain preferred vendor relationships that influence equipment selection. However, OEMs expressed mixed sentiment toward these partnerships, noting that integrators can introduce pricing pressure through markups or by presenting multiple competing suppliers to the end customer. Distributor channels show even more variability and, in some cases, decline, with companies reporting reduced reliance or weaker performance through traditional partners. Where they do remain, these channels are often specialized or embedded in specific arrangements, such as material suppliers bundling equipment into broader solutions. Overall, while indirect channels persist, they are most often used to complement direct sales rather than replace them.

Fig. 21 Revenue by Sales Channel, 2024–2026



TREND OVERVIEW

Table 4 - Key trends shaping the packaging machinery market

Trend	Summary	Impact through 2031
Shifting Buyer Behavior	Faster expectations, less hands-on engagement, group decision-making, and price sensitivity are lengthening and complicating sales cycles.	Medium
Product Virality	Social-media-driven demand spikes accelerate SKU and variety-pack growth, raising the need for fast changeovers and flexible lines.	Medium
Big Data & AI	Early use cases span knowledge capture, specification development, troubleshooting, and content generation, augmenting rather than replacing expertise.	High
Used Machinery & Asset Preservation	A limited secondary market keeps focus on retrofits, preventative maintenance, and lifecycle extension to preserve capital amid uncertainty.	Low
OBBD: Accelerated Depreciation	The One Big Beautiful Bill has allowed for some suppliers to use as a selling lever as machinery can be depreciated 100% in the first year.	Low
Carbon Emission Goals by Major Players	Major consumer-goods firms' public commitments are reshaping packaging formats and material choices, even as economics increasingly drive decisions.	Low
US Regulatory Landscape	Extended Producer Responsibility (EPR), single-use plastic bans, and recycled-content rules concentrated in a few states set a <i>de facto</i> national standard, fueling demand for flexible, modular machinery.	High
Rising Cost of Gas	Rising petroleum-based input costs are driving a "use less" strategy, optimizing film, strapping, and corrugate across primary, secondary, and tertiary packaging.	Medium

Source: Interact Analysis

2

Macroeconomy & Forecast

THE NORMALIZATION OF UNCERTAINTY

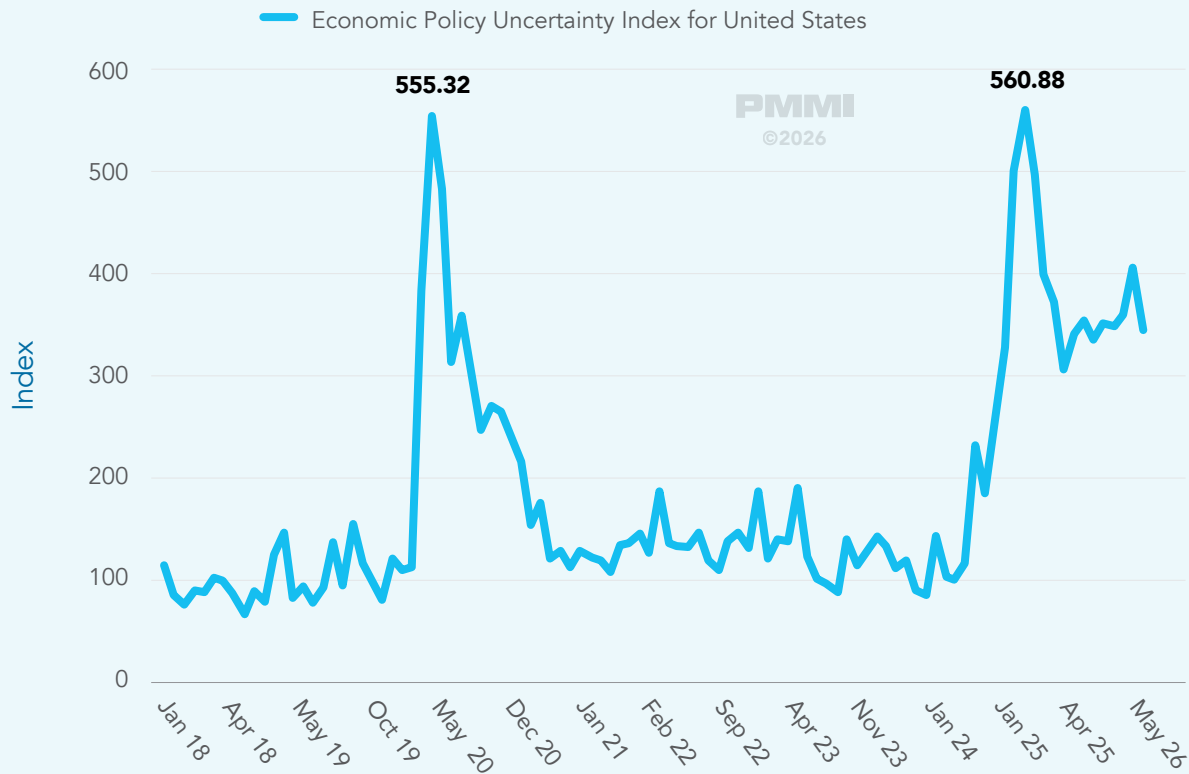
How persistent volatility is reshaping capital investment

Reflecting on the past several years, the US packaging machinery market has been shaped by a sequence of external pressures that have consistently pushed customers to delay or prolong capital equipment investments, despite a growing underlying need to replace equipment and initiate new projects. Interviewees repeatedly emphasized that projects were not lost, but rather postponed, as uncertainty made it difficult for companies to confidently commit to large expenditures.

In 2024, elevated interest rates contributed to a more cautious investment environment, limiting companies' willingness to take on large capital commitments. While conditions began to stabilize, the onset of tariff disruptions in 2025 once again created uncertainty, as shown in Figure 22, leading many organizations to reassess spending priorities, delay orders, and evaluate broader strategic decisions such as sourcing and reshoring. This uncertainty had a direct impact on purchasing behavior, with some projects delayed by several months and overall capital expenditures slowing materially.

Macroeconomic volatility continued into 2026, with geopolitical tensions including the conflict in Iran, contributing to fluctuations in fuel prices and increasing shipping and input costs. These dynamics further disrupted supply chains and added complexity to planning and forecasting. As a result, a key theme that emerged across interviews is the normalization of uncertainty itself: in an environment where future conditions are increasingly unpredictable, buyers are adapting by taking a more measured, phased approach to investment, extending decision timelines and prioritizing flexibility in capital allocation.

Fig. 22 US Economic Uncertainty Index



Source: Baker, Bloom, and Davis; US Economic Policy Uncertainty Index (USEPUINDXD), retrieved from the Federal Reserve Bank of St. Louis (FRED).

DIFFERENCES IN FORECAST BETWEEN EDITIONS

Machinery

For the 2026 State of the Industry report, only modest revisions have been made to the previous forecast. The most notable update is an upward revision to the estimated market size for 2025. This year's analysis included a deeper assessment of the end-of-line sector, where Load Stabilization was identified as previously underrepresented. As a result, this category has been adjusted to more accurately reflect current market conditions (see Figure 23).

Despite this revision, the overall outlook remains largely unchanged, with growth projections across the forecast period tracking closely with those in the prior edition and only minor variations in year-over-year growth rates.

As shown in Figure 24, the Palletizing & Load Stabilization category has been revised upward by approximately \$94 million, bringing the total market size to roughly \$1 billion in 2025.



Fig. 23 US Palletizing & Load Stabilization - Forecast Changes

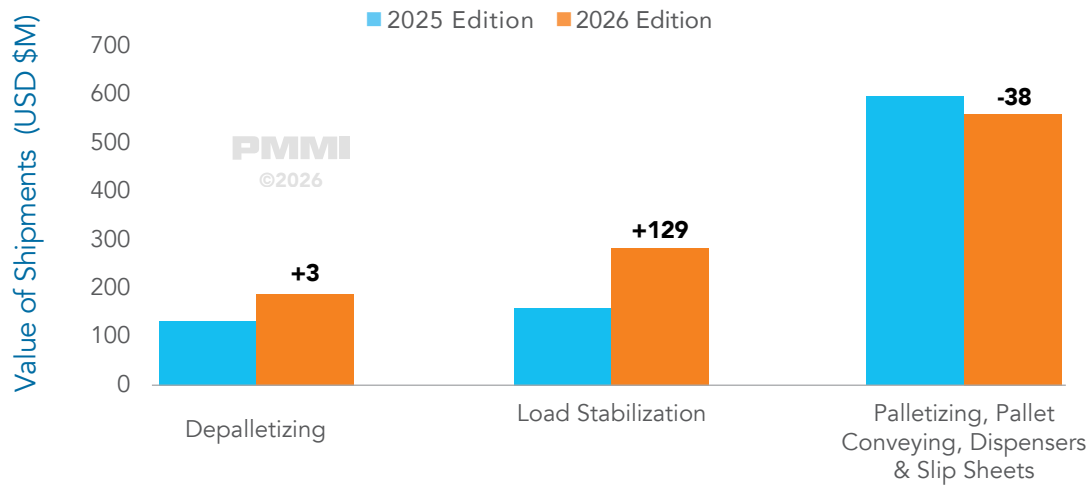
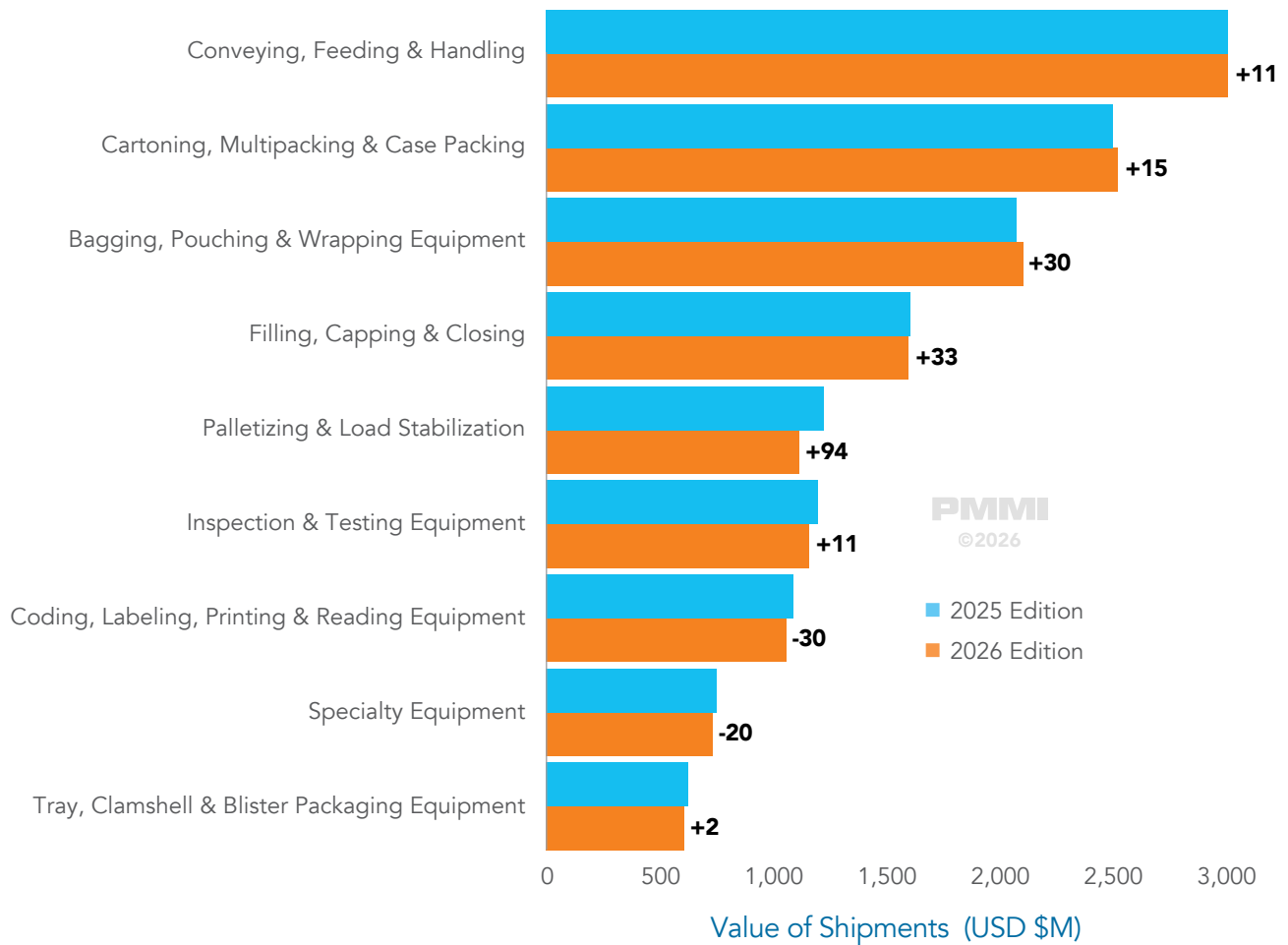


Fig. 24 US Packaging Machinery - Machinery Forecast



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

Table 5 - The US Market Variance for Packaging Machinery (by edition)

2026 Edition	2024	2025	2026	2027	2028	2029	2030	'24-'30 CAGR
Value of Shipments (\$M)	\$11,420	\$11,686	\$12,210	\$13,035	\$13,596	\$14,114	\$14,850	4.5%
Annual Growth (YOY %)		2.3%	4.5%	6.8%	4.3%	3.8%	5.2%	
2025 Edition								
Value of Shipments (\$M)	\$11,294	\$11,540	\$12,041	\$12,866	\$13,461	\$13,950	\$14,606	4.4%
Annual Growth (YOY %)		2.2%	4.3%	6.8%	4.6%	3.6%	4.7%	
Differences								
Value of Shipments (\$M)	125	147	169	170	135	164	245	
Annual Growth (YOY %)		0.2%	0.1%	-0.1%	-0.3%	0.2%	0.5%	

PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

DIFFERENCES IN FORECAST BETWEEN EDITIONS

Parts & services

Fig. 25 US Parts Forecast Changes

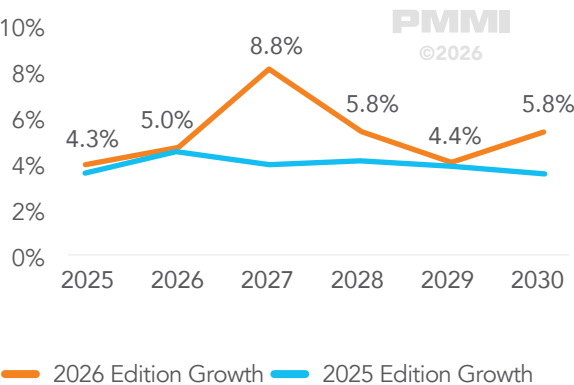
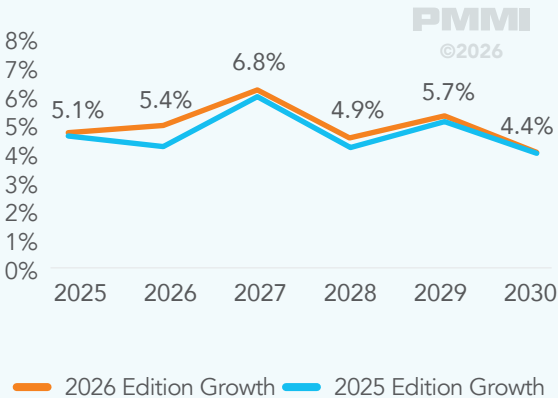


Fig. 26 US Services Forecast Changes



Parts

The US parts forecast has been revised to better reflect the stronger growth trends observed across interview insights and survey inputs in this year's edition. As shown in Figure 25, projected parts growth has been increased over the forecast period. Parts continue to represent a key area of expansion, driven by the growing installed base of machinery and a greater emphasis among end users on extending the lifespan of existing equipment. This dynamic is further supported by increased demand for maintenance and retrofitting activities as companies delay new capital investments and maintain current assets.

Looking ahead, 2027 is expected to represent a peak year for parts, as underlying demand builds alongside anticipated increases in equipment investment.



Services

For the services forecast, modest adjustments have been made, with the most notable being an upward revision to growth expectations for 2026. As workforce shortages continue to challenge machine users, reliance on OEM and third-party service providers is expected to increase, supporting continued growth in service demand. This trend reflects both the limited in-house technical capabilities at customer facilities and the increasing complexity of machinery, which require more specialized support.

While we expect these dynamics to persist throughout the forecast period, service growth is projected to remain relatively steady beyond 2026, with only minor fluctuations year over year.

Market Trends

MARKET TRENDS EXPLORED IN DETAIL IN THIS SECTION

A short summary of the key themes derived from interviews with suppliers

This year, interviews with industry participants point to several themes shaping the packaging machinery market: evolving buyer behavior and SKU proliferation, early but expanding use of AI amid ongoing workforce constraints, tighter capital discipline, and rising external pressure from sustainability goals, regulation, and input costs. The following sections explore these dynamics.



Shifting Buyer Behavior

Faster expectations, less hands-on engagement, group decision-making, and rising price sensitivity are lengthening and complicating sales cycles. Buyers arrive more informed but less loyal, weighing lower-cost options, even international equipment, that shift competition away from traditional relationships.



Product Virality

Social-media-driven demand spikes are often short-lived, but they accelerate lasting SKU and variety-pack proliferation as brands chase shifting preferences. This raises the need for flexible lines built for fast, frequent changeovers and emerging formats like single-serve and grab-and-go.



Big Data & AI

Early use cases span knowledge capture from retiring staff, specification development from past projects, real-time troubleshooting, and content generation, augmenting rather than replacing expertise. Suppliers are also rethinking digital visibility, shifting from traditional search optimization toward structuring content so AI tools can surface it.



Used Machinery & Asset Preservation

A limited, opportunistic secondary market keeps focus on retrofits, preventative maintenance, and lifecycle extension to preserve capital amid uncertainty. Rather than buying secondhand, firms extend installed assets, sometimes for decades, while older machines find niche value in hands-on training as technical knowledge grows scarce.



OBBB: Accelerated Depreciation

The 2025 One Big Beautiful Bill lets firms write off 100% of newly installed machinery in year one, strengthening the business case for equipment purchases. Few suppliers are yet using it as a selling lever, but those weaving it into customer conversations may pull investment decisions forward.



Carbon Emission Goals by Major Players

Major consumer-goods firms' public commitments are shaping packaging formats and material choices, even as economics increasingly drive decisions. Although several players have pushed net-zero targets out to 2050, emissions reduction remains a priority, and end users increasingly favor suppliers that supply the tools and transparency to meet evolving requirements.



US Regulatory Landscape

EPR, single-use plastic bans, and recycled-content rules concentrated in states like California set a *de facto* national standard, as firms standardize packaging to meet the most stringent regulations rather than maintain regional formats. This is fueling demand for modular, upgradeable machinery that handles a wider range of substrates, from plastics to fiber-based alternatives.



Rising Cost of Gas

Rising petroleum-based input costs are driving a “use less” strategy, optimizing film, strapping, and corrugate across primary, secondary, and tertiary packaging. Companies are eliminating excess, right-sizing cases, and tuning wrap patterns for immediate savings, with flexible formats gaining interest as a lower-material alternative.

SHIFTING BUYER BEHAVIOR

Internal complexity meets investment hesitation

Across interviews, several participants described changes in buyer behavior. Interviewees frequently framed these changes as making the buying process more complex and less predictable, with customers approaching purchasing decisions in different, and in some cases more demanding, ways than in the past. This section highlights several anecdotes shared during this year’s interviews.



Increased Price Sensitivity

A number of interviewees described situations where cost considerations appear to be playing a more prominent role in purchasing decisions. Participants noted that some buyers are more actively comparing options and, in certain cases, are willing to prioritize lower-cost or faster-available solutions, even when these may involve trade-offs in performance or service. Several participants suggested that this dynamic can make it more challenging to compete on value alone, particularly where lifecycle benefits must be weighed against higher upfront costs.

In a few interviews, participants also described instances where companies opted for significantly lower-cost equipment despite known trade-offs in quality, support, or lifespan. Some interviewees pointed to examples where internationally sourced equipment could be substantially cheaper than North American alternatives, influencing how buyers evaluate capital investments. In these cases, participants described buyers sourcing lower-cost machinery and modifying it internally to meet operational requirements, reflecting a decision-making approach that prioritizes minimizing upfront capital spending.



Variability in Buyer Preparedness

Interview feedback also highlighted mixed views regarding how prepared buyers are when engaging with suppliers. Some participants described situations where customers began discussions with limited specifications or incomplete requirements, which could lead to revisions later in the design process. One interviewee noted that missing or incorrect details in initial project scopes can contribute to extended development timelines.

Conversely, other interviewees reported encountering customers who appeared more informed at the outset, having conducted independent research or already formed views on potential solutions. Taken together, these perspectives suggest that buyer preparedness is becoming more variable, with some customers entering discussions at a more advanced stage while others rely more heavily on supplier expertise.

Higher expectations, less structure

Expectations for Speed, Simplicity, and Reduced Collaboration

Several interviewees reported that, in their experience, customers increasingly expect faster and more streamlined engagement with suppliers. Rather than engaging in extensive early-stage collaboration, some participants described interactions where buyers provided limited information and relied on suppliers to define the solution.

As one interviewee explained, customers may “schedule a Teams meeting, throw you a couple of drawings, and say ‘here it is, you do the rest,’” instead of participating in a more iterative development process. While participants noted that this approach can accelerate initial discussions, some also highlighted that it may lead to challenges later if requirements are not fully defined at the outset.

Interviewees also described what they perceived as a shift away from traditionally hands-on, in-person engagement. Some participants noted that, historically, buyers were more likely to visit facilities, bring product samples, and work directly with suppliers to test and refine solutions.

In contrast, several interviewees suggested that more of this process now takes place remotely. While not universal, participants indicated that this change may reduce opportunities for early validation and shared understanding. One interviewee emphasized that close collaboration remains important for successful system implementation, suggesting that reduced interaction can make it more difficult to fully assess application requirements.

Alongside these shifts, interviewees described changes in how customers engage throughout the sales process. Some participants noted that buyers may be highly responsive at the initial inquiry stage, but less engaged during later, iterative phases when additional input is required. Several interviewees linked this pattern to broader changes in communication preferences, with greater reliance on digital channels. Participants reported that, in some cases, this can make it more difficult to maintain consistent engagement across the full buying cycle.

More Competitive Supplier Selection

Interview evidence also suggests that customers may be evaluating a broader range of suppliers during the purchasing process. Rather than relying solely on established relationships, some interviewees described buyers comparing multiple suppliers based on factors such as price, availability, technical fit, or responsiveness for a given project. Participants suggested that this dynamic may be increasing competition throughout the sales process and, in some cases, reducing the historical advantage associated with long-term supplier relationships.

Declining loyalty and supplier implications

Implications for Suppliers

Taken together, these shifts point to a more complex and less predictable buying environment. Buyers are simultaneously more informed, more cost-conscious, and less engaged in traditional sales processes, creating new challenges for suppliers throughout the purchasing cycle. Early-stage alignment is becoming harder to achieve, while internal customer decision-making is becoming more prolonged and fragmented.

As a result, suppliers are under increasing pressure to respond quickly, provide clearer guidance with less input, and maintain engagement across longer and more variable sales cycles. Success in this environment may increasingly depend on suppliers’ ability to deliver structured, accessible information, adapt to changing communication preferences, and help customers navigate increasingly complex internal requirements.



Table 6 - Overview of Buyer Behavior Shifts

Underlying Shift	Observed Behavior	Market Impact
Pressure for speed, simplicity, and lower-effort engagement	Buyers provide limited input, rely more on remote engagement, and expect suppliers to define solutions quickly	Greater pressure on OEM responsiveness, more consultative selling, and higher risk of project misalignment
Greater organizational and purchasing complexity	More stakeholders, longer approval cycles, delayed capital decisions, and inconsistent engagement during projects	Longer and less predictable sales cycles, increased pipeline volatility
Increased cost sensitivity and ROI scrutiny	Greater focus on pricing, vendor comparison, and lower-cost alternatives	Margin pressure, intensified competition, and increased pressure to justify lifecycle value

Source: Interact Analysis

PRODUCT VIRALITY



Cottage cheese as a case study

As digital channels continue to reshape consumer behavior, product virality is emerging as an important factor influencing demand within the packaging industry. Across interviews, suppliers pointed to examples where social media trends rapidly accelerated product adoption, with items such as cottage cheese gaining renewed attention through online platforms and experiencing sharp increases in demand.

While these viral trends can create sudden pressure to scale production, their direct impact is often short-lived. Suppliers noted that the unpredictability and temporary nature of these demand spikes make it difficult to justify large, long-term capital investments based solely on a single trend.

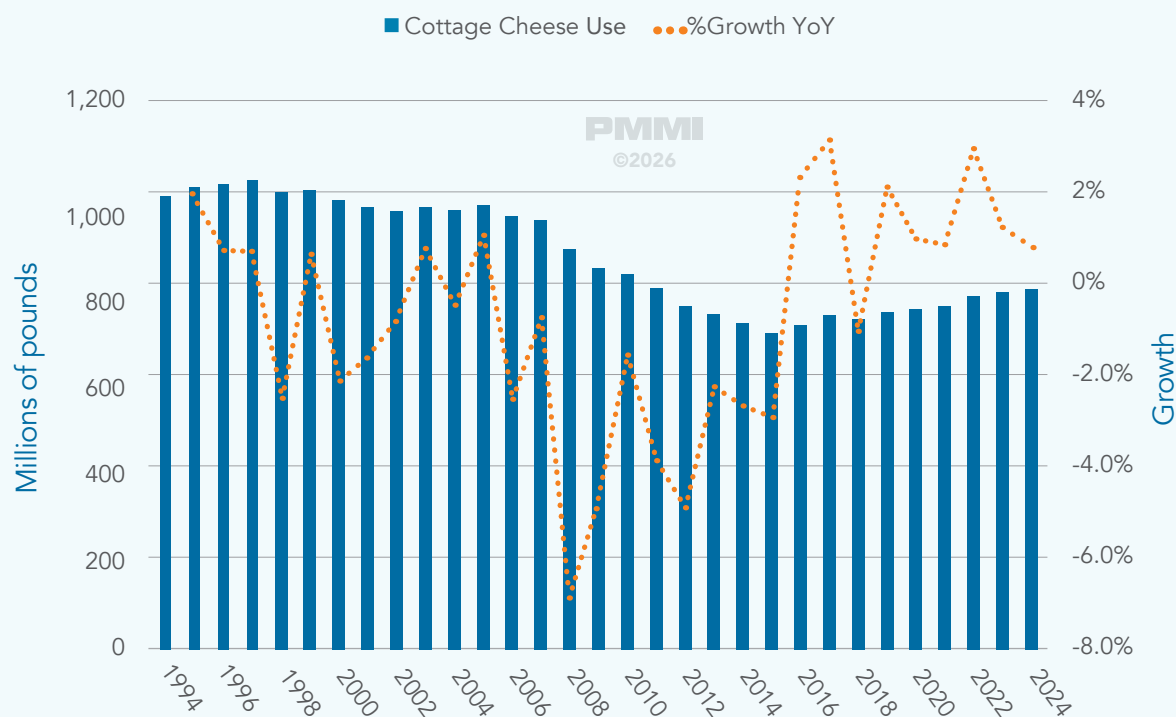
However, the more lasting impact of virality lies in how it reshapes product strategies. Rather than simply increasing volume, viral trends often contribute to a rapid expansion

in product variety. As consumer preferences shift, manufacturers respond by introducing new flavors, formats, and configurations to capture demand and maintain relevance. This has led to a proliferation of SKUs and an increase in offerings such as variety packs, which continue to see sustained growth beyond the initial trend cycle.

This shift toward greater product diversity places new demands on packaging operations. Instead of running high-volume, single-product lines, manufacturers increasingly require equipment capable of handling frequent changeovers, multiple SKUs, and varying package formats. Interviewees highlighted a growing need for flexible packaging systems that can adapt quickly to new products, including emerging formats such as single-serve or grab-and-go packaging driven by viral consumption behaviors.

As a result, the impact of virality is less about sustained volume growth and more about increased variability. For suppliers, this reinforces the importance of flexibility, speed, and adaptability in packaging equipment design, where the ability to respond quickly to shifting trends is becoming a key differentiator in serving evolving customer needs.

Fig. 18 US Cottage Cheese Consumption



Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service; USDA, Foreign Agricultural Service; USDA, Agricultural Marketing Service; and US Department of Commerce, Bureau of the Census.

BIG DATA & AI

An overview

Table 7 - Overview of AI use cases

AI Use Case	Emerging Trend	Operational Impact
Knowledge Transfer	Companies are capturing institutional knowledge from experienced employees using recorded walkthroughs and AI-generated documentation.	Reduces risk of knowledge loss and improves onboarding/training consistency.
Specification Development	AI is being used to reference prior projects and configurations during specification development.	Speeds up engineering workflows and reduces the need to start projects from scratch.
Internal Knowledge Retrieval	Organizations are experimenting with AI systems that aggregate documents, emails, and project history into searchable internal knowledge bases.	Improves access to information and reduces time spent searching across systems.

Table 7 - Overview of AI use cases *(continued)*

AI Use Case	Emerging Trend	Operational Impact
Documentation & Manuals	AI tools are being used to generate operator manuals and structured documentation from templates.	Reduces time spent on repetitive documentation tasks.
Assistant-Style Work Support	AI is increasingly being used as an internal “assistant” or “intern” to generate first drafts of documents, communications, and workflows.	Accelerates administrative work while maintaining human review processes.
Marketing & Content Generation	Some companies are using AI to convert technical engineering documentation into customer-facing marketing content.	Enables faster content creation and improves translation of technical information for broader audiences.
Workflow Automation	AI is being used to automate internal administrative tasks such as routing leads and managing workflow steps.	Reduces manual effort and improves operational efficiency.
Meeting Summaries	Companies are using AI transcription and summarization tools during meetings.	Helps teams capture key takeaways and improves information sharing.
Troubleshooting Support	AI is beginning to be integrated into machine interfaces to support operators during troubleshooting.	May reduce downtime and lessen dependence on specialized expertise.

Source: Interact Analysis

AI in internal operations

The following section outlines how companies are beginning to apply AI in practical ways, based on themes that surfaced across interviews. It begins with internal applications, including capturing institutional knowledge, supporting day-to-day workflows, and a broader set of emerging use cases, to the external shifts reshaping marketing and digital visibility, where AI is changing how suppliers are discovered and ultimately selected.

AI in Knowledge Transfer and Workflow Support

Across interviews, several early-stage use cases for AI emerged, particularly in how companies are capturing and applying internal knowledge.

One company described using AI to support knowledge transfer as senior employees approach retirement. In this case, experienced team members walk through processes and procedures, which are recorded and then processed using AI tools. These tools transcribe and condense the discussions into structured documentation, allowing the company to convert experience-based knowledge into reusable training materials and internal guides.

Another example focused on the use of AI in developing specifications for customer projects. The company is building an internal system that draws from historical project data, including machine configurations and performance details. When a new request comes in, the system can reference similar past projects and provide a starting point for the specification. This allows teams to avoid starting from scratch and helps newer employees align their recommendations with previous solutions.

A related use case involves broader internal knowledge retrieval. Some organizations are exploring AI tools that aggregate information across documents, emails, and prior projects, allowing employees to quickly search and synthesize relevant data. This enables faster access to institutional knowledge, particularly for employees who may not have deep experience with past projects or systems.

These examples illustrate how companies are beginning to apply AI in practical ways to address knowledge gaps and improve internal workflows. Rather than replacing expertise, these tools are being used to capture and extend it, making institutional knowledge more accessible across the organization.

Marketing in the age of AI

A New Layer of Digital Visibility

The rise of AI is beginning to reshape how suppliers approach marketing and digital visibility. While still early, interviews suggest that companies are starting to rethink how they present information online, particularly as AI-driven tools become a more common entry point for research and discovery.

Rather than representing a complete shift away from traditional marketing, this change is emerging as an extension of existing digital strategies. However, it introduces a new challenge: ensuring that information is not only searchable, but also structured in a way that can be easily interpreted and surfaced by AI systems.

Early Success in Optimizing for AI-Driven Discovery

One supplier noted initial efforts to adjust how its content is structured to improve visibility in AI-driven environments. Rather than focusing solely on traditional search engine optimization, the company began monitoring how its content appeared within AI-driven tools such as ChatGPT and Copilot and experimenting with how information was surfaced in those environments.

As part of this process, the company restructured portions of its website to better align with how AI systems extract and present information. This included restructuring content using tables, bullet points, and other formatting techniques that made key information easier for AI systems to parse and summarize. While these changes were relatively incremental, the company noted that this approach had been effective in increasing its visibility within AI-generated responses.

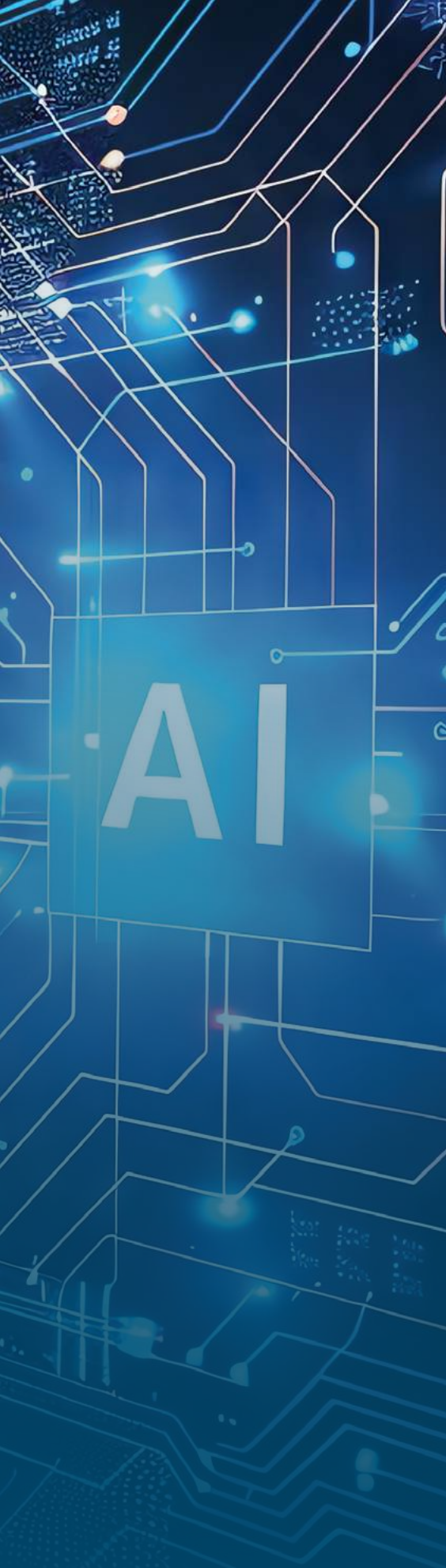
AI as a Tool for Marketing Efficiency

Beyond external visibility, AI is also being used internally to support marketing workflows. Interview feedback highlighted the use of AI tools for content generation, particularly to translate technical engineering documentation into customer-facing collateral. This has allowed marketing teams to produce content more quickly, while still relying on human oversight to refine and validate outputs.

Stay Current with PMMI Business Intelligence



For readers seeking a deeper understanding of AI in packaging and processing equipment, PMMI's **Building An AI Advantage In Packaging Equipment** provides additional analysis and use-case examples relevant to this space.



More broadly, this reflects a shift in how marketing content is created and delivered. AI is not replacing traditional functions, but it is enabling faster content development, improved consistency, and more efficient handling of inbound opportunities. In some cases, this extends into lead management, where AI-supported workflows can help route and prepare leads for sales teams more quickly.

Structuring content for AI-driven discovery

A Growing Industry Response

Suppliers are beginning to respond to changes in how buyers discover and evaluate solutions, particularly as AI-driven search and research tools gain traction. While still in the early stages, some interviewees suggest initial efforts to adapt their digital presence to these shifts, including experimenting with how information is structured, presented, and surfaced online.

A key theme emerging from interviews is a move away from traditional search engine optimization practices, which historically focused on repeating keywords to improve rankings. Instead, there is a growing emphasis on developing content that helps users solve specific problems or make purchasing decisions. One interviewee noted that content is increasingly expected to “help people solve a problem,” rather than simply prioritize keyword density.

This shift reflects broader changes in buyer behavior. As purchasers conduct more independent research and often arrive with a clearer understanding of their needs, suppliers face increasing pressure to provide information that is directly relevant, practical, and easy to interpret.

In response, some companies are experimenting with new types of content designed to address use-case-driven questions. Rather than focusing exclusively on product pages or technical specifications, these efforts include materials such as buyer guides and explanatory content that outline what types of solutions are needed for specific applications. This approach aligns more closely with how users seek information, particularly as queries become more natural language-based.

Alongside changes in content type, there is also an emerging awareness of how information is structured. Some interview signals suggest that content formatted in a clear, organized manner—such as straightforward explanations, segmented sections, or structured summaries, may be better suited for AI—driven environments, where information needs to be easily extracted and interpreted.

From Being Found to Being Selected

Taken together, these developments point toward a gradual shift in digital marketing strategy. Ranking in search results remains important, but it may no longer be sufficient on its own. Increasingly, content must also be structured in a way that allows AI systems to extract, summarize, and deliver it in response to user queries.

For suppliers, this adds a new layer of consideration. Marketing is not only about attracting traffic, but also about ensuring that content is structured in a way that allows it to be accessed and utilized within AI-driven discovery environments. As these tools continue to evolve, this may become an increasingly important component of digital strategy.

USED MACHINERY & ASSET PRESERVATION

A limited, opportunistic market

The secondary market for packaging machinery exists across the industry but does not play a central role in equipment procurement. Interviews consistently indicate that used machinery is rarely purchased as part of a structured sourcing strategy. Instead, it is typically acquired opportunistically, such as following facility closures, acquisitions, or ownership transfers associated with broader transactions.

Challenges Encountered with Used Equipment in the Field

While purchasing activity is limited, interviews revealed several recurring challenges when used machinery is encountered in operations.

The most common issues include:



Performance and capability gaps

Older machines often cannot match the speed, flexibility, or precision of newer systems, particularly as product formats and SKU complexity increase.



Integration complexity

When machines are introduced into new environments, mismatches in layout, throughput, or upstream/downstream systems can create operational inefficiencies.



Technological obsolescence

Controls, automation platforms, and software interfaces frequently become outdated, making integration into modern production lines difficult or costly.



Limited institutional knowledge

As workforce experience declines, fewer operators and technicians are familiar with older systems, increasing reliance on OEMs or third parties for support.



Uncertain condition and reliability

Even when refurbished, used equipment introduces variability in performance and maintenance needs, requiring careful evaluation and operator awareness.

As a result, even when used equipment is available, many companies approach it cautiously, particularly in high-throughput or mission-critical applications.

Retrofit over replace

Asset Preservation

Rather than engaging heavily in the secondary market, most companies are prioritizing the extension of existing asset lifecycles. Interviews consistently indicate increased demand for retrofits, preventative maintenance, spare parts, and targeted system upgrades.

This approach allows companies to maintain operational continuity while delaying capital expenditures, particularly in an environment characterized by economic uncertainty and cost sensitivity. In practice, organizations are often modifying machines that have been in operation for decades, restoring performance and extending usability for several additional years.

This trend is not driven by a preference for used equipment, but by a broader emphasis on capital efficiency. Companies are choosing to maximize the value of installed assets rather than replacing them outright or sourcing secondhand alternatives.

Niche Applications and Secondary Uses

Although the broader used machinery market remains limited, several niche applications have emerged where older equipment retains value. One such application is refurbishment for redeployment in cost-sensitive environments. In these cases, equipment may be reconditioned and placed with customers who have lower performance requirements or tighter budget constraints. However, suppliers emphasize that these scenarios require careful alignment around expectations, particularly regarding speed, flexibility, and long-term reliability.

Another, more unconventional use case involves retaining or reacquiring older machines for internal purposes. In some instances, legacy equipment has been brought back not for production use, but for training, demonstration, or development activities.

This reflects a growing recognition within the industry that hands-on technical knowledge is becoming increasingly scarce. Older machines, which are often more mechanically transparent and less complex than modern automated systems, can provide a valuable platform for operator and technician training.

Where used equipment adds value

Who Benefits from Used Machinery

While used equipment is not widely adopted for production, certain segments of the industry are better positioned to benefit from it.

Smaller manufacturers and companies with lower throughput requirements may find value in refurbished or secondhand equipment, particularly when cost constraints outweigh the need for cutting-edge performance. These organizations are more likely to operate in environments with simpler production requirements and fewer SKU or throughput demands, making it feasible to repurpose or retool existing equipment rather than invest in highly specialized new systems.

Internally, OEMs and larger manufacturers can benefit from retaining older equipment for training and workforce development. As technical skill gaps widen, having physical machines available for hands-on learning can support onboarding, troubleshooting education, and maintenance training.

There is also potential for collaboration with external stakeholders. Trade schools, technical programs, and workforce development initiatives could leverage used or retired equipment as part of structured training environments. Such collaboration could provide students with real-world exposure to industrial machinery while helping the industry rebuild its technical talent pipeline.

Implications for the Industry

The role of used machinery in the packaging industry is best understood within the context of broader structural trends. It does not represent a major alternative to new equipment purchasing, nor does it significantly disrupt OEM demand.

Instead, its importance lies in what it reveals about industry behavior. Companies are not broadly shifting toward secondhand equipment, but they are becoming more focused on asset longevity, incremental improvement, and capital preservation.

Used machinery remains a secondary and situational component of the market. However, its potential value in training, refurbishment, and lower-cost applications suggests that, while limited in scale, it could play a more strategic role in supporting workforce development and extending the lifecycle of industrial assets moving forward.

OBBB: ACCELERATED DEPRECIATION

Few suppliers are actively leveraging accelerated depreciation, despite its potential to strengthen the business case for equipment purchases

In July 2025, the “One Big Beautiful Bill” (OBBB) was enacted, introducing a range of policy measures with limited direct relevance to the packaging and wider machinery sector, except for one significant provision: accelerated depreciation. This clause allows businesses to depreciate 100% of the value of machinery purchased and installed after January 2025 within the same fiscal year. As a result, companies can reduce their taxable income by the full cost of the machinery in the year of installation, providing an immediate financial incentive.

The goal of this financial benefit is to influence investment behavior across the manufacturing and retail sectors, particularly among companies that have delayed capital expenditures due to ongoing uncertainty. By lowering the effective cost of automation investments, the policy aims to provide an additional incentive for companies already considering equipment purchases to move forward more quickly.

However, interview evidence suggests that the impact of this provision on the packaging machinery sector has, to date, been limited. Very few suppliers referenced accelerated depreciation as a meaningful driver of demand, and there was little indication that it is being explicitly incorporated into purchasing decisions or sales conversations. In practice, while the policy improves ROI on paper, it does not yet appear to be a widely leveraged factor in how buyers evaluate investments.

That said, there are early signs of vendor-led activation. One supplier noted that they are proactively educating customers on how to utilize the provision, encouraging potential buyers to work with their accounting teams to better understand how the tax benefit could apply to their specific situation. In this case, the policy is being positioned not as a standalone driver, but as a supporting element within the broader business case for investment.

This behavior remains the exception rather than the norm. Across the broader supplier base, there is limited evidence of proactive communication around the policy, suggesting a gap between the availability of financial incentives and how they are translated into customer value.

Historically, similar accelerated depreciation measures have acted as catalysts for short-term investment cycles rather than sources of new demand. Rather than generating entirely new purchasing activity, they tend to bring forward decisions already under consideration, resulting in temporary increases in equipment orders followed by periods of normalization.

Taken together, this suggests that while the OBBB provision has the potential to serve as a tailwind for packaging machinery investment, its real impact will depend on how effectively it is incorporated into customer discussions and the broader business case for investment. Suppliers that actively incorporate this mechanism into customer discussions may be better positioned to influence decision timing, particularly in a market where capital spending remains constrained. At present, however, most suppliers appear to be passively benefiting from the policy, rather than actively using it as a commercial lever.



CARBON EMISSION GOALS BY MAJOR PLAYERS

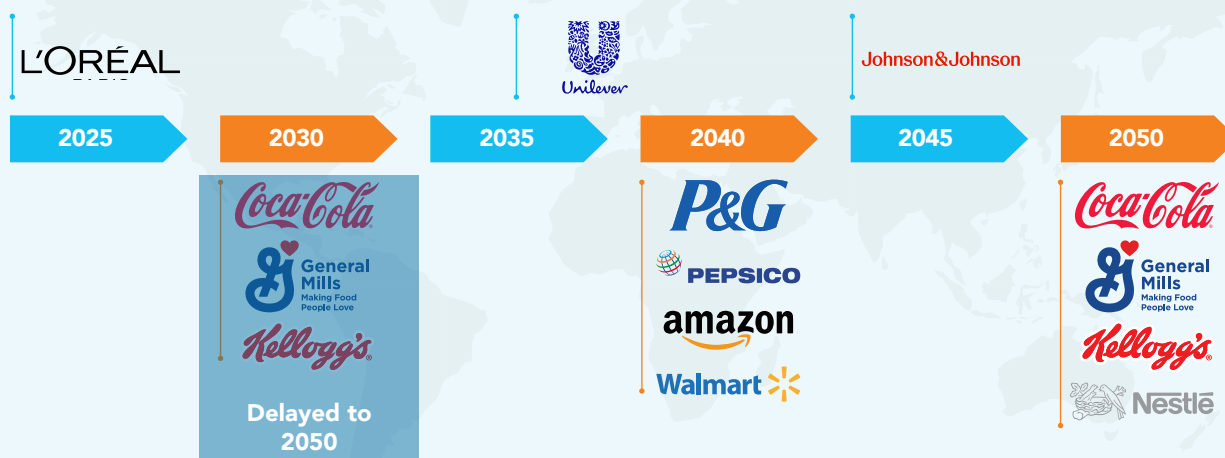
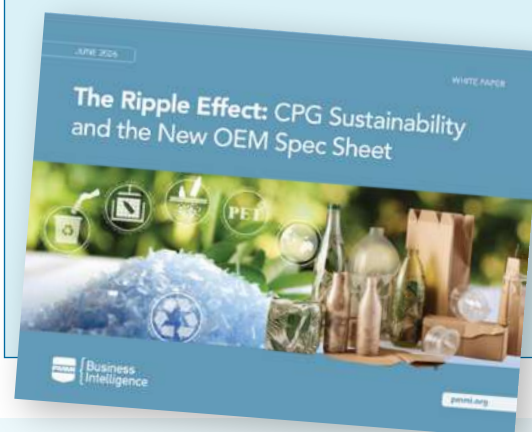
While a number of major players have pushed their emissions targets out to 2050, many others continue to actively pursue their sustainability goals. Although the timelines have been extended, reducing emissions remains a priority for large end users. In practice, however, companies are taking a more measured and pragmatic approach, focusing on incremental improvements such as material reduction, efficiency gains, and waste minimization as they balance sustainability ambitions with cost and operational realities.

At the same time, progress has become less visible. Rather than broad public commitments, many organizations are shifting toward internal initiatives and preparation for evolving regulatory requirements, particularly as policies like EPR continue to take shape. This is placing new expectations on the supplier base. Companies are increasingly seeking suppliers that can not only support these initiatives, but also provide the tools, flexibility, and transparency needed to track and meet sustainability requirements as they evolve.

These dynamics are contributing to a growing disconnect between sustainability ambition and operational reality, particularly when it comes to packaging equipment.

Learn More!

Learn more about how sustainability pressures are reshaping equipment requirements in PMMI's report, **The Ripple Effect: CPG Sustainability and the New OEM Spec Sheet**, which explores material transitions, evolving regulations, and the growing need for OEM-CPG collaboration.



US REGULATORY LANDSCAPE

Plastic reduction policy in the United States remains fragmented, with the majority of legislative activity concentrated in a handful of states, including California, Maine, and New Jersey, as shown in Figure 28. While this creates a patchwork regulatory environment, the practical impact extends well beyond those state borders.

Large consumer goods companies typically operate nationally and avoid maintaining multiple packaging configurations across regions. As a result, packaging strategies are often standardized to meet the most stringent requirements, particularly those emerging from California due to its size and economic influence. Industry participants consistently noted that maintaining state-specific packaging formats is cost-prohibitive, leading companies to adopt a single, compliant solution across the US.

From Material Bans to System Accountability

Current regulatory activity is focused on two primary areas: restrictions on single-use plastics and the expansion of Extended Producer Responsibility (EPR) frameworks. Together, these policies represent a shift from isolated material bans toward broader system-level accountability.

Single-use plastic restrictions are directly influencing packaging design by targeting specific materials and formats, particularly in consumer-facing applications. In parallel, EPR policies are introducing new financial and operational requirements, placing responsibility on producers for the collection, recycling, and reporting of packaging materials.

Across interviews, EPR emerged as a significant driver of change. Companies are actively evaluating how fee structures and reporting obligations will impact material selection and overall packaging costs. However, many are delaying major redesigns until these frameworks are fully defined, particularly as fee levels remain uncertain in key markets such as California.

Implications for Packaging Machinery

The evolving regulatory landscape is directly influencing demand for packaging machinery and system design.

As material requirements become more variable and region-specific regulations continue to evolve, there is increasing demand for equipment that can accommodate a wider range of substrates and packaging formats. This includes the ability to handle both traditional plastic materials and emerging alternatives such as fiber-based packaging.

Alongside this, the preference for incremental change is driving increased demand for modular, upgradeable systems that can be adapted over time. Rather than investing in entirely new lines, many companies are seeking flexible solutions that allow them to remain compliant while preserving optionality as regulations continue to develop.

Finally, growing variability in materials and formats is increasing complexity at the line level, reinforcing the need for machinery that can maintain performance across a broader range of conditions and packaging characteristics.



States with regulations impacting packaging

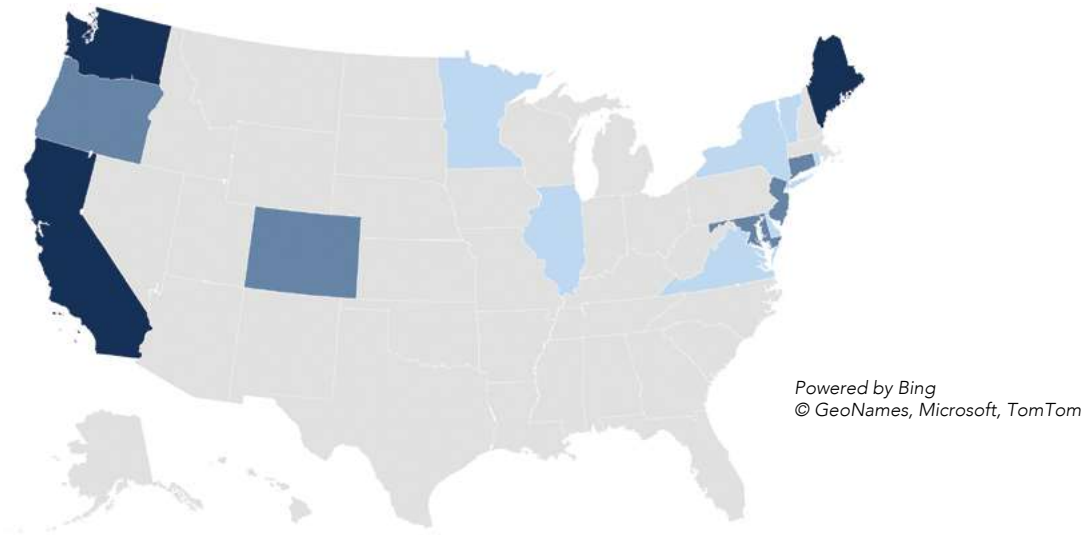
US plastic packaging regulation is still a state-led patchwork, but its reach is national. A handful of states are setting the rules, and as producer-responsibility frameworks take hold, manufacturers are rethinking materials, compliance, and the machinery that has to keep up.

Table 8 - States with Regulations Impacting Packaging

State	EPR	SUP	RC
California	✓	✓	✓
Colorado	✓	✓	
Connecticut		✓	✓
Delaware		✓	
Illinois		✓	
Maine	✓	✓	✓
Maryland	✓	✓	
Minnesota	✓		
New Jersey		✓	✓
New York		✓	
Oregon	✓	✓	
Rhode Island		✓	
Vermont		✓	
Virginia		✓	
Washington	✓	✓	✓

EPR - Extended Producer Responsibility
SUP - Single-use plastics
RC - Recycled Content

Fig. 28 US Map of States with Regulations Impacting Packaging



RISING COST OF GAS

Material reduction as a cost and operational strategy

As companies continue to face rising operating costs, there is increasing pressure to identify opportunities for cost reduction across packaging operations. While sustainability remains an important long-term priority, interviewees consistently emphasized that the current focus on material reduction is being driven as much by economics as by environmental goals.

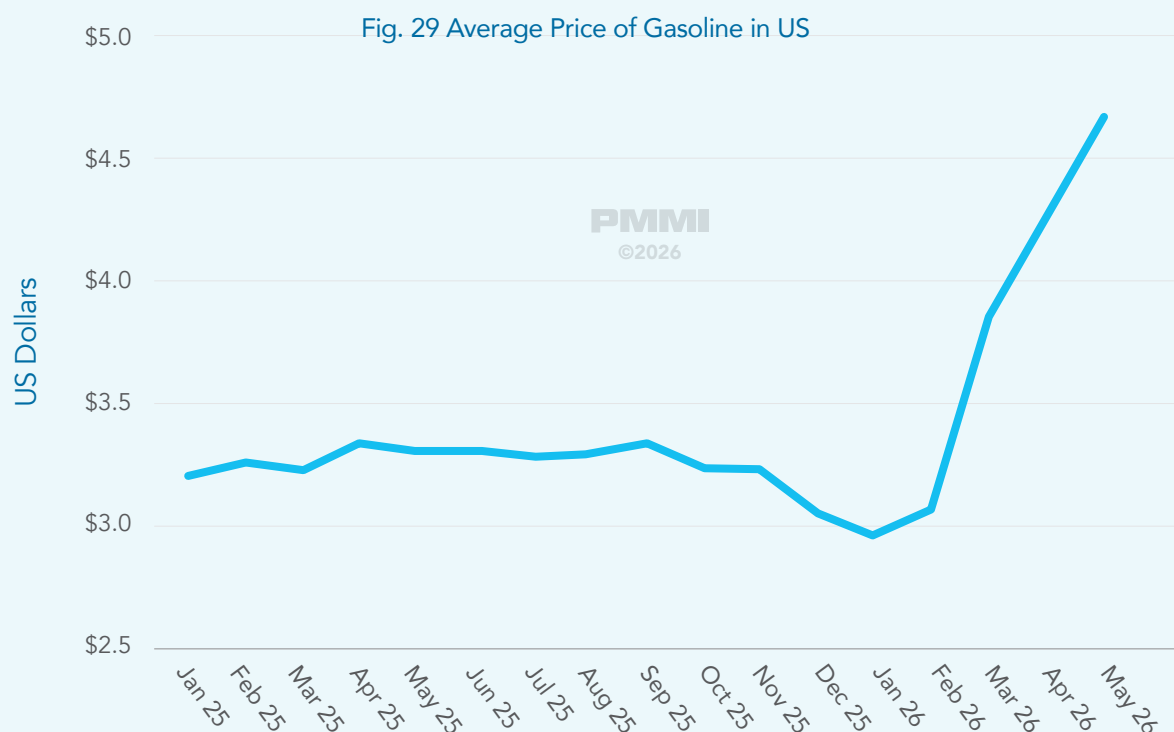
One of the most immediate drivers of this shift is the rising cost of petroleum-based inputs. Because materials such as plastics, films, and strapping are derived from petroleum, increases in fuel and energy costs have had a direct impact on packaging material costs. For example, higher petroleum costs have led to higher prices for consumables such as strapping materials used in end-of-line packaging.

As a result, companies are increasingly prioritizing strategies that reduce overall material usage as a way to manage these cost pressures.

The Industry Shift Toward “Reduce”

In response to these conditions, the industry has shifted toward a “reduce” strategy. Rather than investing in large-scale material substitutions, companies are focusing on using less of their existing packaging materials.

Interview discussions highlighted that this approach allows companies to achieve more immediate and measurable savings while avoiding the complexity associated with adopting new materials or packaging formats. In many cases, suppliers are supporting this shift by helping customers optimize material usage rather than replace materials entirely, for example, by identifying opportunities to reduce stretch film usage while maintaining load stability.



Source: US Bureau of Labor Statistics, Average Price: Gasoline, Unleaded Regular (Cost per Gallon/3.785 Liters) in US City Average [APU000074714], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/APU000074714>, June 10, 2026.

Reducing material across every level of packaging

Primary and Secondary Packaging: Eliminating Excess

At the primary and secondary packaging levels, material reduction is most often achieved through the elimination of unnecessary components and the optimization of packaging design.

Companies are reducing the use of additional liners, minimizing excess plastic films, and redesigning packaging formats to use less material overall. In secondary packaging, this is also reflected in efforts to reduce corrugate usage through tighter case designs and right-sizing initiatives. These changes are typically incremental but highly impactful at scale, allowing companies to reduce costs without fundamentally altering their packaging systems.

Tertiary Packaging: Optimizing Film and Strapping

At the tertiary level, material reduction efforts are focused on load stabilization. Rather than eliminating materials entirely, companies are working to optimize material application.

This includes reducing the amount of stretch film used, adjusting wrap patterns, and minimizing excess material application. Suppliers are increasingly offering monitoring tools and optimization systems that help identify overuse and improve consistency across shifts, resulting in measurable reductions in material consumption.

These efforts are particularly important given that materials such as stretch film and strapping are directly impacted by fluctuations in petroleum-based input costs.

Emerging Format Shifts: Flexible Packaging

Alongside these operational improvements, there is growing interest in packaging formats that inherently require less material. Flexible packaging, in particular, is gaining attention as a lower-material alternative to rigid formats. While adoption varies by product category, this shift reflects a broader industry trend to favor packaging solutions that reduce total material intensity. As cost pressures persist, flexible formats may continue to gain traction as both an economic and operational strategy.

Implications for Packaging Machinery

As companies reduce film usage, eliminate packaging layers, and adopt thinner materials, there is increasing demand for equipment capable of maintaining performance across a wider range of material conditions. Interviewees suggested that thinner films and lighter-weight materials can create tighter operating tolerances, increasing the importance of machine precision, consistency, and adaptability. This is reinforcing demand for systems capable of handling multiple film types and packaging formats without sacrificing throughput or load stability.

At the same time, suppliers described growing customer interest in technologies that help reduce consumable usage over time. In tertiary packaging, for example, the ability to optimize stretch wrap application while maintaining pallet stability may become an increasingly important competitive differentiator for equipment suppliers.

In some cases, reducing packaging layers or simplifying packaging formats may also reduce the amount of equipment required within a packaging line, particularly where certain wrapping or containment stages can be minimized or eliminated altogether.



4

End of Line Deep Dive

INTRODUCING A NEW FOCUS ON END-OF-LINE MACHINERY

This year's edition introduces a new dedicated section focused on end-of-line machinery. This addition is intended to provide greater insight into this segment, with a particular focus on the factors influencing demand, performance, and investment across specific machine types.

By incorporating this section, the report expands its coverage to include a more granular view of end-of-line equipment. This allows for clearer visibility into the dynamics shaping these machines, including the operational and market factors that impact different categories.

This new focus is part of a broader approach for future editions, where different stages of the packaging line will be explored in greater depth. By rotating focus across the line over time, the report will build a more comprehensive view of the factors impacting machinery at each stage of the process.

In this report, end-of-line machinery includes the following equipment categories:

Table 9 - End of Line Machinery

Machine	Sub-machine
Cartoning, Multipacking & Case Packing	Case or Tray Erect/Load/Seal (Integrated)
	Case or Tray Erectors & Formers
	Case or Tray Loaders
	Case Sealers
	Case Packing Equipment, Other
Palletizing & Load Stabilization	Palletizing, Pallet Conveying, Dispensers & Slip Sheets
	Load Stabilization
	Depalletizing

Source: Interact Analysis

END-OF-LINE PACKAGING MACHINERY

Overview of trends

Warehouse Automation Convergence

End-of-line packaging is becoming increasingly integrated with warehouse automation, with right-fit packaging integrated earlier into system design. As core warehouse functions mature, automation attention is shifting downstream to packing and pallet handling.

Beyond the Line: AMRs & AGVs

Suppliers are extending automation into material movement, where mobile robot revenue is set to grow, and AGV forklifts are emerging as a high-value segment by 2030. Labor shortages and safety concerns are accelerating adoption, with forklift AGVs commanding outsized revenue relative to their unit share.

Case Packing Integration

Case erecting, packing, and sealing are converging into unified end-of-line systems rather than standalone machines. Buyers increasingly favor integrated erect-load-seal configurations that cut footprint, handoffs, and operator touchpoints.

Flexibility & Changeover Efficiency

Demand is shifting from dedicated lines toward flexible systems that handle multiple SKUs and frequent changeovers, narrowing the gap between

rated and real changeover times. Shorter runs and variety packs are pushing suppliers toward digital feedback and reduced operator intervention to speed ramp-up.

Robotic Palletizing

Robotic palletizers are gaining share for high SKU variability and changing pallet patterns, though cost and integration keep adoption selective. They excel in applications where case sizes and pallet configurations change frequently, conditions that fixed mechanical systems often struggle to accommodate.

Load Stability & Regulation

EU Directive 2014/47 and the EUMOS 40509 test protocol are shifting load-security liability and raising the bar for pallet containment. With responsibility extending beyond the carrier, shippers face stronger pressure to validate wrapping and containment performance.

Retail-Ready & Mixed Pallets

Growth in mixed-case, shelf-ready pallets and stretch wrapping is reshaping palletizing as SKU variety rises and order sizes shrink. Grocery and discount retailers' planogram and display standards are raising precision requirements across the supply chain.

END-OF-LINE PACKAGING IN WAREHOUSE AUTOMATION

Warehouse automation overview

For suppliers active in end-of-line machinery, warehouse automation represents an adjacent area of investment and growth.

What Is Warehouse Automation?

Warehouse automation refers to the use of technology to improve the efficiency, speed, and accuracy of operations within distribution and fulfillment environments. This includes a wide range of systems, from storage and retrieval and material transport to picking, sortation, and packaging.

Historically, investment has been concentrated in workflows such as picking, storage, and sortation, where labor demands and operational costs are highest.

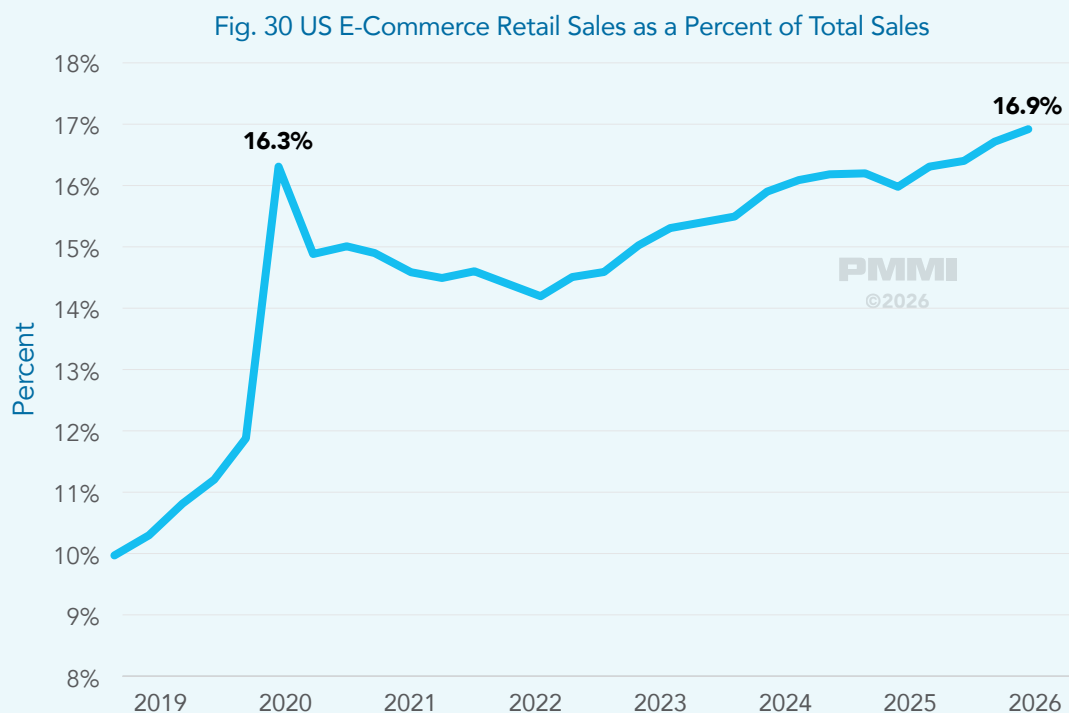


Key Drivers of Warehouse Automation

Several structural factors continue to drive investment in warehouse automation.

The growth of e-commerce has significantly increased order volumes while shifting order profiles toward smaller, more fragmented shipments. This has increased operational complexity and placed greater pressure on fulfillment centers to process orders quickly and efficiently. As shown in Figure 30, E-commerce retail sales have surpassed the pandemic peak and continue to increase.

Compounding this, persistent labor challenges, including rising wages and difficulty recruiting workers for physically demanding roles, have reinforced the business case for automation across a range of workflows.



Source: US Census Bureau, E-Commerce Retail Sales [ECOMPCTSA], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/ECOMSA>, June 11, 2026.

Spending looks at the downstream processes

Shift Toward Downstream Processes

As automation in core warehouse functions has matured, attention is shifting toward areas that have historically received less investment. As shown in Figure 31, depalletizing, palletizing, and packing represented lower spend in 2025. These downstream packaging and pallet-handling workflows are now emerging as priority targets for automation, driven by their continued reliance on manual labor and their growing share of overall operational costs.

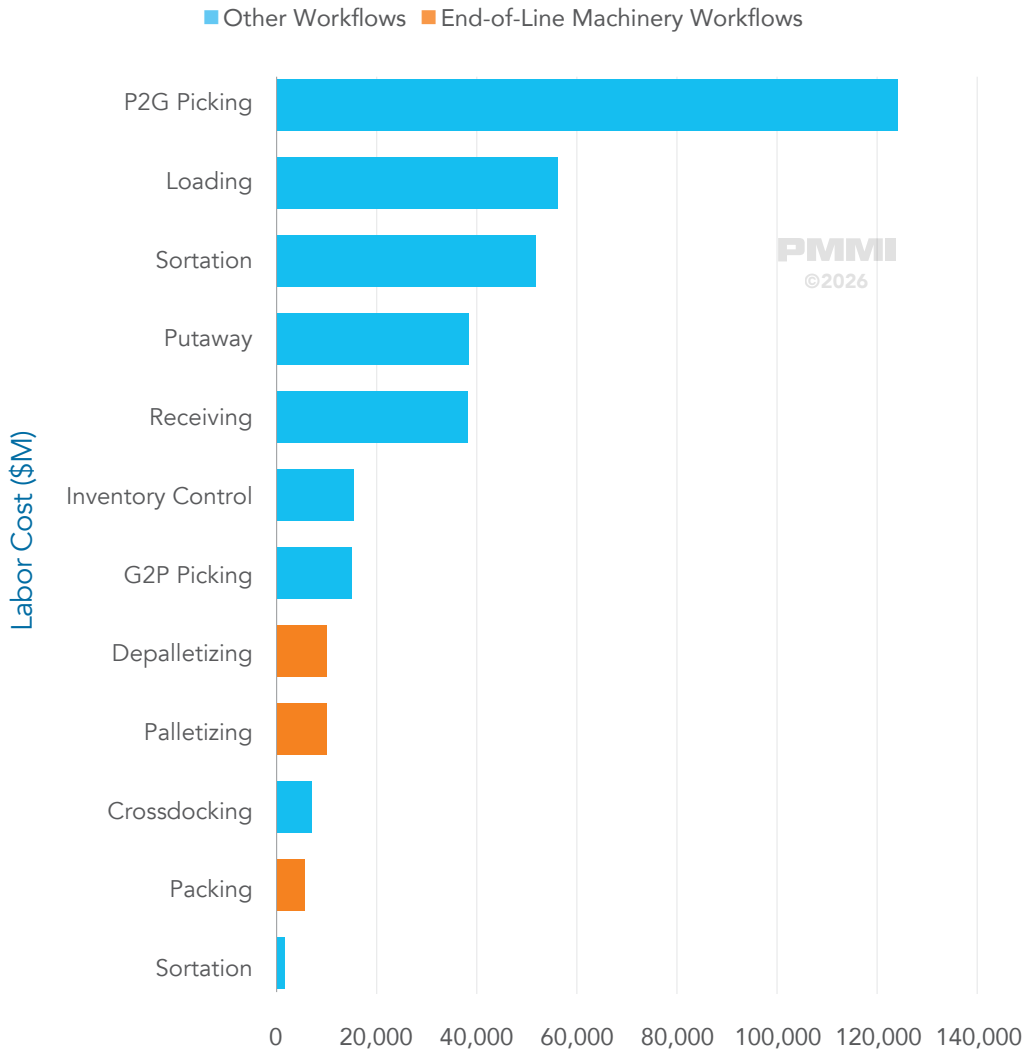
The Role of End-of-Line Machinery

Within this context, end-of-line machinery plays a key role in enabling automation at the final stages of warehouse operations.

- Packing equipment (case erecting, loading, sealing) supports order preparation, particularly in e-commerce environments
- Palletizing and depalletizing systems enable efficient movement of goods, especially in mixed-SKU environments
- Equipment for load stabilization and unitizing ensures that products are securely prepared for transport

These systems are becoming increasingly important as warehouses look to improve throughput, reduce labor dependency, and manage more complex order profiles.

Fig. 31 2025 Global Labor Spend by Workflow in Warehousing



Source: Interact Analysis' Warehouse Building Stock Database Q1 2026, quarterly updated and available by country, verticals, and state.

RIGHT FIT PACKAGING

An emerging market

One area of innovation within end-of-line packaging is the development of right-fit packaging solutions, which are increasingly being deployed in warehouse environments.

What Is Right-Fit Packaging?

Right-fit packaging refers to automated systems that create or adjust packaging to closely match the dimensions of the product being shipped. These solutions measure, cut, and form packaging in real time, producing a "right-sized" box or bag with minimal excess space.

This approach differs from traditional packaging systems, which rely on a limited set of predefined box sizes. Instead, right-fit solutions enable greater flexibility by adapting packaging dimensions to the specific requirements of each order.

Why Right-Fit Packaging Is Gaining Importance

Right-fit packaging is emerging as a key area of innovation within warehouse automation, particularly in e-commerce and fulfillment environments.

One of the primary drivers is the shift toward smaller, more fragmented orders. Fulfillment centers handling individual items require packaging systems that can accommodate a high degree of variability in product size and shape. Right-fit solutions are well-suited to these environments, as they can dynamically adjust packaging dimensions without relying on standardized formats.

In addition to operational flexibility, these systems address several cost and efficiency challenges. By reducing excess packaging material and minimizing void space, right-fit solutions can improve shipping efficiency and increase parcel density, enabling better utilization of transport capacity.

Role Within Warehouse Automation

As warehouse automation strategies evolve, right-fit packaging is becoming more closely integrated into broader system design. Historically treated as a downstream or standalone process, packaging is now being incorporated earlier in automation planning, aligning more closely with upstream workflows such as picking and order sequencing.

This shift reflects a broader move toward end-to-end automation, where packaging is optimized alongside other processes to improve overall system performance. In this context, right-fit solutions represent a more advanced form of end-of-line automation, enabling greater responsiveness to changing order profiles and operational requirements.

Key Drivers of Adoption

Several factors are contributing to the growing adoption of right-fit packaging:



E-commerce growth: Increasing volumes of small, individualized orders require more flexible packaging solution



Shipping optimization: Improved parcel density reduces transportation costs while enhancing logistics efficiency



Material efficiency: Reducing packaging waste and excess void fill is becoming a greater priority



Regulatory pressure: Legislation focused on packaging waste, such as state-level EPRs and the EU's PPWR, is encouraging the adoption of right-sized packaging systems

EXPANDING BEYOND THE END OF THE LINE

AMRs and AGVs are creating new opportunities for suppliers

Historically, end-of-line automation has focused on packaging functions such as case packing, palletizing, and load stabilization. Increasingly, however, suppliers are extending automation beyond the packaging line and into material movement. Automated Guided Vehicles (AGVs) and Autonomous Mobile Robots (AMRs) are becoming a natural extension of end-of-line systems as manufacturers look to automate the transportation of finished pallets between production, staging, and warehouse areas.

Drivers Behind Automation Adoption

Several factors are driving this shift. Labor shortages continue to affect manufacturing and distribution operations, while improving workplace safety remains a priority in environments where employees regularly move heavy palletized loads. Pallet transportation is often viewed as a necessary but relatively low-value activity, making it an attractive target for automation. By automating these repetitive tasks, companies can reallocate labor to higher-value activities while reducing operator exposure to potentially hazardous material handling processes.

Integration of Mobile Robotics in Material Flow

The adoption of mobile robotics also reflects a broader evolution in how companies approach automation investments. Rather than deploying isolated technologies to address individual bottlenecks, end users increasingly seek solutions that connect multiple stages of production and logistics. Mobile robots serve as a bridge between packaging operations and downstream warehouse activities, enabling automated pallet transport, staging, and warehouse transfers without requiring manual forklift intervention. As a result, automation is expanding beyond individual machines toward more integrated material flow systems.

Opportunities for Equipment Suppliers

For end-of-line equipment suppliers, this trend presents an opportunity to expand their role within customer facilities. Suppliers that historically focused on packaging and palletizing equipment are increasingly exploring mobile robotics as a way to automate a broader portion of the production workflow. By incorporating pallet movement into their offerings, suppliers can extend automation beyond the packaging line, expand project scope, and provide more comprehensive solutions. This aligns with growing customer interest in working with fewer suppliers capable of delivering larger, more integrated automation systems.

Market growth makes pallet movement the next logical step

Fig. 32 Global Units Shipped for Mobile Robots

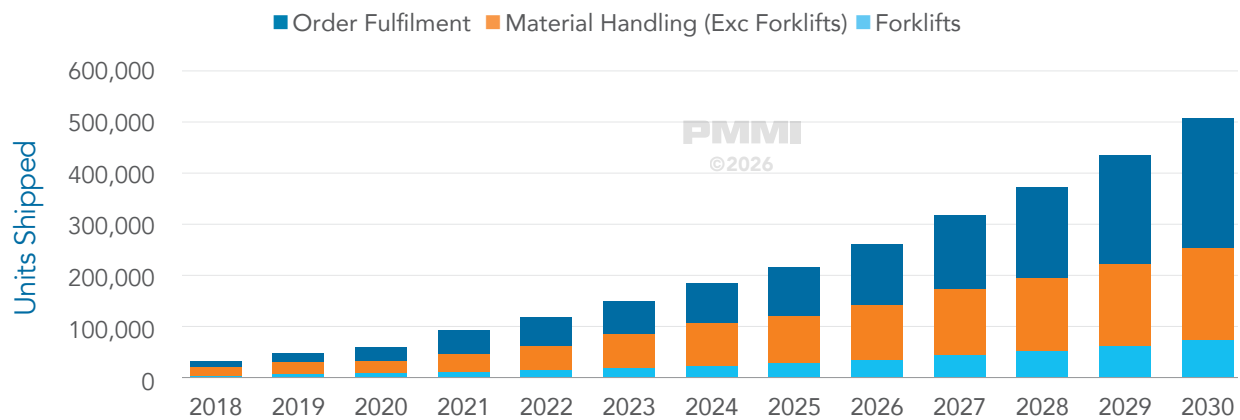
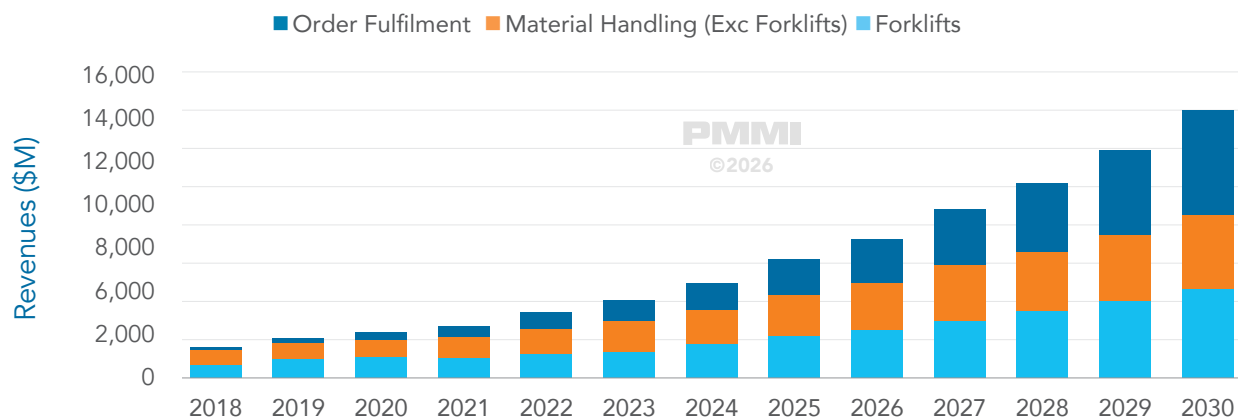


Fig. 33 Global Revenues for Mobile Robots



Source: Interact Analysis' Mobile Robots 2025, annually updated and available by robot type, industry, and facility type.

Market Outlook and Revenue Potential

The market outlook further reinforces the attractiveness of this opportunity. Global mobile robot revenue is expected to grow significantly over the coming years, reflecting increasing investment across manufacturing, warehousing, and logistics applications. While order-fulfillment robots are projected to account for the largest share of unit shipments, as can be seen in Figure 32, forklift AGVs represent a particularly attractive segment for packaging automation suppliers. By 2030, AGV forklifts are expected to account for roughly one-third of mobile robot revenue (see Figure 33) while representing a much smaller share of total shipments. This disproportionate revenue contribution highlights the higher value associated with forklift automation and helps explain why suppliers are increasingly adding these solutions to their portfolios.

Pallet Movement: A Next Step

As mobile robotics adoption continues to expand, pallet movement is emerging as one of the most logical adjacent opportunities for end-of-line automation. What was once considered a separate material handling function is increasingly becoming part of a broader automation strategy that connects packaging operations with warehouse execution. For equipment suppliers, this creates an opportunity to capture additional value while strengthening their position as providers of integrated automation solutions rather than standalone machines.

A case study on robotic arms

One supplier highlighted a case where an existing customer interaction led to the identification of a new automation opportunity outside of the supplier's core machine offering. During a site visit for installed equipment, the supplier observed a labor-intensive process in which workers were manually stacking layered building materials. The task involved repetitive handling of heavy components and presented both operational inefficiencies and ergonomic risks.

Recognizing this, the supplier proposed the integration of robotic arms to automate the stacking process. The solution allowed the customer to improve consistency and throughput while reducing reliance on manual labor for a physically demanding task. Rather than requiring a full overhaul of the production line, the robotics were introduced as a targeted enhancement to an existing process.

This example illustrates how suppliers can expand beyond traditional equipment offerings by identifying adjacent automation opportunities during customer engagements. For suppliers with robotics capabilities, these incremental applications can provide an additional revenue stream while strengthening customer relationships through practical, problem-specific solutions.



CARTONING, MULTIPACKING & CASE PACKING

Case packing preferences

The following section examines how the end-of-line is evolving across two closely linked areas: cartoning, multipacking, and case packing, followed by palletizing and load stabilization. For case packing, three themes stand out: a shift toward integrated end-of-line systems, a growing emphasis on flexibility and faster changeovers to handle greater SKU variability, and mounting bottlenecks that are pushing companies to automate more proactively. Palletizing remains a stable, baseline function, but it is seeing similar momentum toward flexible and robotic systems, including collaborative robots, as companies weigh ongoing tradeoffs between the simplicity of traditional equipment and the flexibility of newer automation.

Shift Toward Integrated Case Packing Systems

Case or Tray Erect/Load/Seal (Integrated) systems are gaining traction compared with standalone case-erecting, loading, and sealing equipment (see Figure 34). Rather than purchasing and integrating separate case erectors, case packers, and case sealers, buyers are increasingly favoring integrated systems that can consolidate these functions within a single machine.

Interviewees pointed to wraparound case packers as a common example of this trend, as these systems can consolidate erecting, loading, and sealing into one machine while reducing footprint, handoffs, and integration complexity. In some cases, participants also noted that portions of the packing process had previously been performed manually, making integrated systems an attractive way to simplify line design while increasing automation levels.

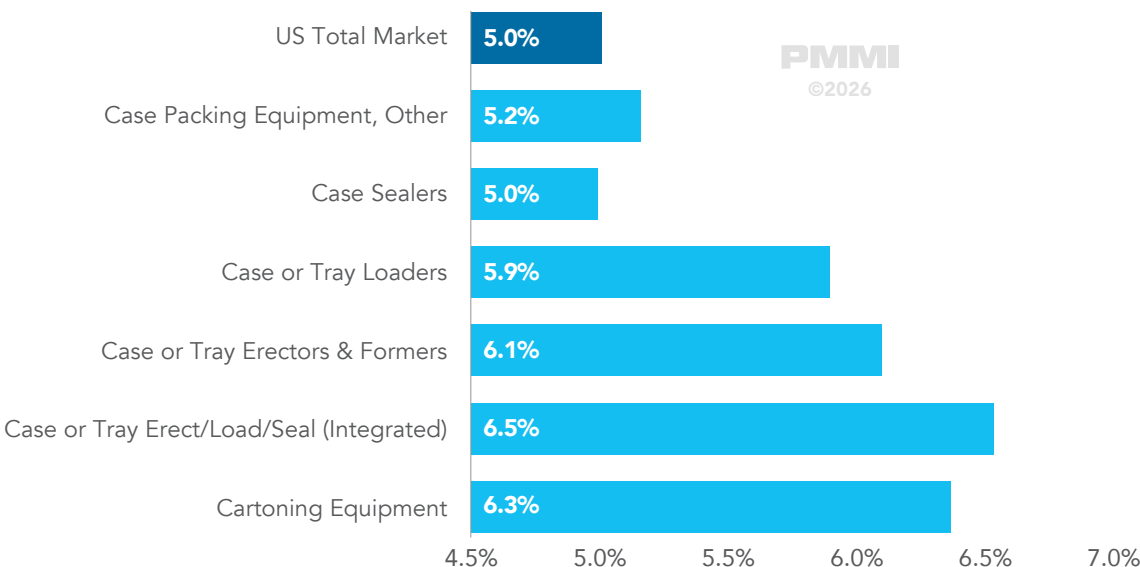
Case Packing Selection Driven by Speed, Format, and SKU Complexity

The selection of case packing technology continues to be highly application-specific. Interviewees consistently pointed to speed requirements, product format, and SKU complexity as the primary drivers of machine selection.

In more standardized environments, such as beverage applications, top-load and drop packing methods remain prevalent due to their reliability and alignment with existing packaging formats. In contrast, wraparound and side-load solutions are increasingly used in applications where automation efficiency or material optimization is prioritized.

The growing role of robotics also reflects this shift. Robotic systems are being introduced to improve flexibility and manage greater SKU variability, although this typically involves higher initial costs and greater system complexity.

Fig. 34 US EOL Packaging Machinery - Cartoning, Multipacking & Case Packing CAGRs '25-'31



Flexibility, automation tradeoffs, and material variability effects on machines

Growing Emphasis on Flexibility and Changeover Efficiency

A major shift in customer expectations is the move away from dedicated, single-product lines toward more flexible systems capable of handling multiple SKUs and frequent changeovers. Interviewees noted that this change is being driven by increasing product variety, shorter production runs, and the rise of variety packs.

While many machines are designed with quick changeovers in mind, there remains a gap between theoretical changeover time and actual operational performance. The time required to stabilize production after a change, including setup validation and ramp-up, continues to be a challenge in practice.

As a result, there is growing emphasis on simplifying adjustments, introducing digital feedback mechanisms, and reducing reliance on operator intervention. These improvements are seen as critical to maintaining efficiency in high-mix production environments.

Operational Tradeoffs Between Automation and Resilience

Interviews highlighted a consistent tradeoff between increasing automation and maintaining operational resilience. Highly automated systems, such as wraparound case packers, deliver clear benefits in terms of speed, efficiency, and material reduction. However, they also reduce the ability to fall back on manual processes when issues arise.

In contrast, more traditional case formats allow for manual intervention if a machine goes down, enabling production to continue in a degraded but functional state.

This dynamic not only shapes end-user decision-making but also introduces new requirements for equipment suppliers. As automation levels increase, machine performance and reliability become more critical, particularly in environments where downtime has a direct impact on production continuity. The ability to ensure uptime, simplify troubleshooting, and provide responsive service may become increasingly important differentiators for suppliers.

Material and Process Variability as Persistent Challenges

Material variability remains an ongoing source of complexity in case packing and sealing operations. Interviewees pointed to factors such as corrugate quality, board weight, and environmental conditions, including humidity, as influencing machine performance.

In some cases, these variations require adjustments during operation, which are often made manually by operators. However, these adjustments can introduce inconsistency, particularly when different operators modify machine settings based on individual judgment rather than standardized processes.

Interviewees emphasized that a significant portion of service calls are not caused by machine failures, but rather by deviations in setup or operating parameters. This highlights the importance of standardization, training, and system safeguards to maintain consistent performance.

Bottlenecks and shrinking cases

End-of-Line Bottlenecks Driving Adoption

Interviewees also noted that case packing and sealing are often addressed reactively rather than proactively. As upstream processes become more automated and higher throughput is achieved, bottlenecks frequently shift downstream to the end-of-line.

This creates situations where companies are forced to invest in case packing solutions after constraints emerge, rather than incorporating them into initial system design. Interviewees noted that improvements in primary packaging often expose inefficiencies in downstream operations, accelerating demand for automation in case packing and sealing.

As a result, many implementations occur in brownfield environments, with companies seeking solutions that can be integrated into existing lines with minimal disruption.

Evolving Role of Case Sealing Within Integrated Systems

While case sealing was discussed less frequently as a standalone category, its role is evolving as part of more integrated system architectures. Increasingly, sealing is incorporated directly into case packing solutions, particularly

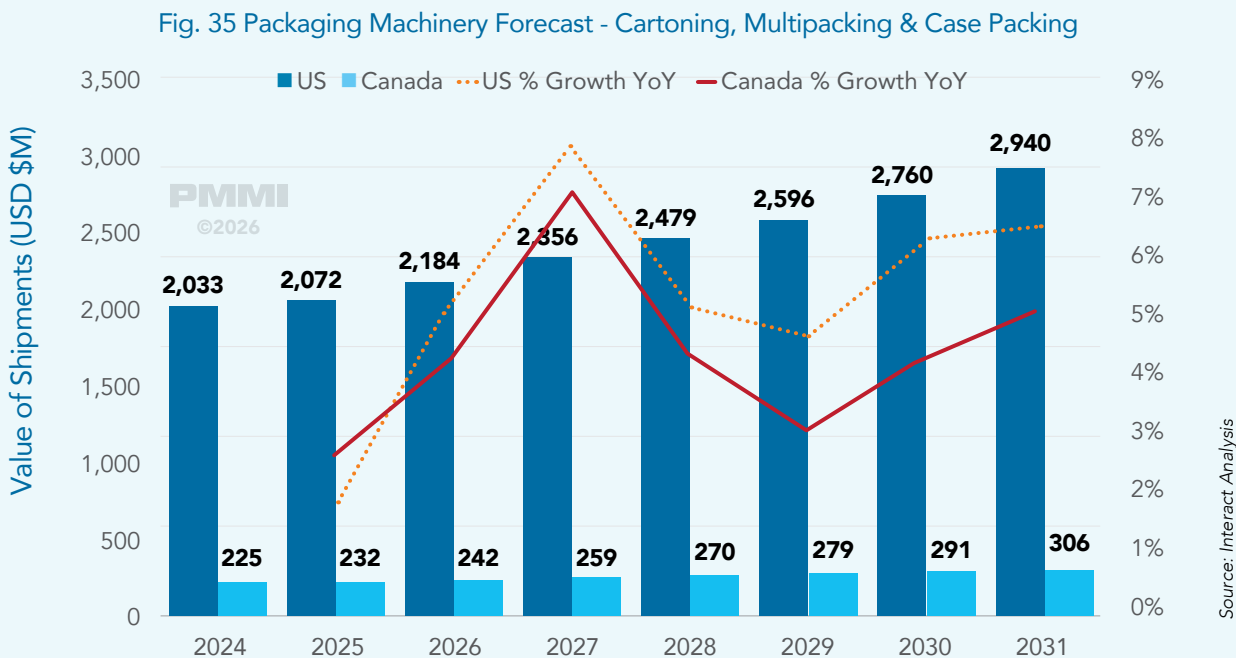
in wraparound systems where forming, loading, and closing are handled within a single process. Even so, tape-based sealing remains common where format flexibility is needed, while glue-based sealing, typical of wraparound formats, suits higher-automation lines. This evolution suggests that case sealing is becoming less of an independent purchasing decision and more of a functional component within broader end-of-line system design.

Case Sizes Shrinking

At the same time, manufacturers are facing shifting requirements for case sizes. Both retail and e-commerce dynamics are contributing to the trend toward smaller cases. On the retail side, competition for shelf space has intensified, driving companies to offer greater SKU variety in smaller volumes. Instead of sending a full pallet of a single product, manufacturers may now be asked to send a few cases of multiple variants, each in different quantities. On the e-commerce side, customer orders are smaller and more fragmented, which can consist of two items ordered online instead of a full case bought in-store, driving the need for packaging flexibility. These changes introduce added complexity. As case sizes shrink, more cycles are required to keep pace with the same level of throughput. Smaller cases may need to be packed and sealed more frequently, placing additional strain on end-of-line equipment.

Machine sector overview

In 2025, the total estimated value of shipments within the cartoning, multipacking, and case packing equipment sector in the US was \$2.1 billion. The food sector remained the largest end market, accounting for roughly 45% of US shipments in 2025, followed by beverage (17%) and other end-user sectors (12%). This machinery is forecast to grow by about 5.4% in 2026 in the US. By 2031, we expect the value of shipments to reach nearly \$2.9 billion, reflecting an overall CAGR of about 6.0% from 2025 to 2031. In Canada, the cartoning, multipacking, and case packing equipment market totaled \$232 million in 2025. Food again led the end-market mix at 44%, followed by other end-user sectors (15%) and beverage (13%). Shipments are forecast to grow by about 4.5% in 2026 and reach roughly \$306 million by 2031, an overall CAGR of about 4.8% from 2025 to 2031.



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

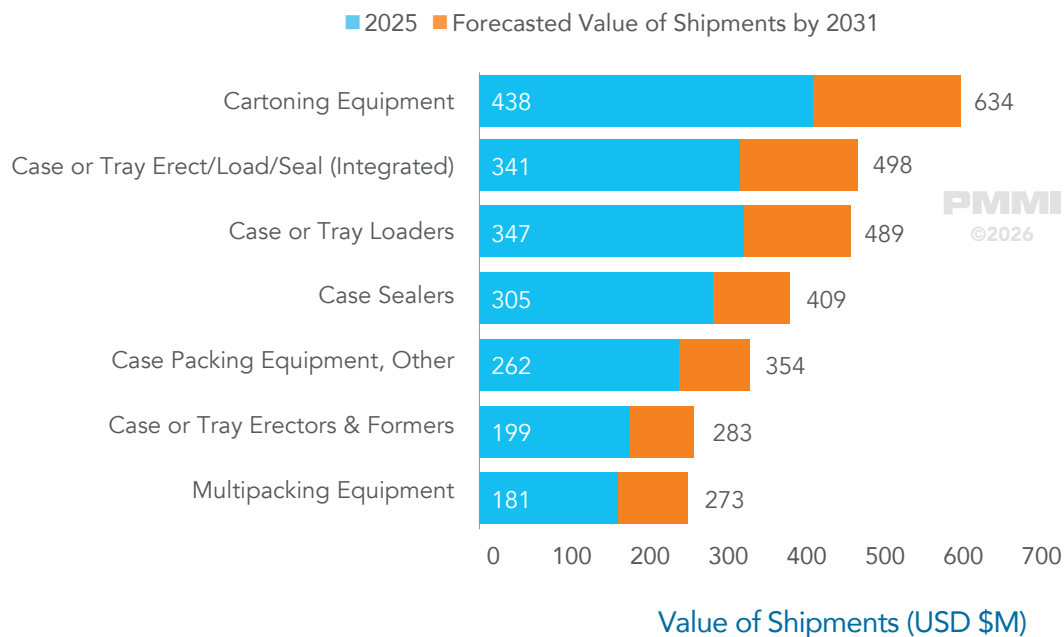
Table 10 - Cartoning, Multipacking & Case Packing

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$931	45%	\$102	44%
Beverage	\$347	17%	\$30	13%
Household, Industrial, & Agricultural Chemicals	\$193	9%	\$27	12%
Pharmaceuticals	\$230	11%	\$11	5%
Personal Care, Toiletries, & Cosmetics	\$115	6%	\$27	12%
Other End-User Sectors	\$256	12%	\$34	15%
Total	\$2,072		\$232	

Source: Interact Analysis

US sub machines

Fig. 36 US Packaging Sub-Machinery Forecast - Cartoning, Multipacking & Case Packing



PMMI members can visit <https://www.pmmi.org/content/soti-dashboards> to explore interactive forecast data by machine type, subcategory, industry, and more

PALLETIZING & LOAD STABILIZATION

Steady demand, labor-driven automation

This section explores the evolving role of palletizing within end-of-line packaging operations. Drawing on insights from industry interviews, it examines the key trends, challenges, and technology shifts shaping this area. Topics covered include the demand for palletizers, the drivers of automation, the rise of robotic and collaborative systems, and the operational tradeoffs faced by manufacturers as they adapt to a changing labor and production landscape.

Core End-of-Line Function with Consistent Demand

Palletizing remains one of the most stable and essential components of the end-of-line. Across interviews, it was consistently described as a baseline requirement for nearly all production environments, regardless of product type or packaging format.

Alongside case packers and stretch wrappers, palletizers are considered foundational equipment needed to complete the packaging process. As a result, demand tends to remain steady even during periods of broader market volatility.

However, while the function itself has not changed significantly, the way it is being executed is evolving rapidly, particularly as companies reconsider how labor and automation are deployed at the end-of-line packaging operations.

Labor and Ergonomics as Primary Drivers of Automation

More than any other end-of-line function, palletizing is being reshaped by labor constraints and ergonomic considerations. Interviews repeatedly highlighted that palletizing tasks are physically demanding, repetitive, and difficult to staff, making them one of the first areas targeted for automation.

Companies are increasingly replacing manual palletizing operations not only to reduce headcount, but also to improve safety by removing workers from heavy lifting and repetitive motions. This is particularly important in applications involving large or heavy cases, where manual handling introduces both injury risk and inconsistency in stacking quality.

Since COVID, labor shortages have accelerated this shift. Many companies that previously relied on manual processes are now prioritizing palletizing automation as a way to stabilize operations and ensure consistent throughput.

Robotic systems and cobots

Shift Toward Flexible and Robotic Palletizing Systems

The transition toward robotic palletizing is a notable change in this segment. While traditional palletizers remain widely used, robotic systems are gaining traction due to their flexibility and adaptability.

Interviewees noted that robotic palletizers are particularly well suited for environments with:



Multiple SKUs



Varying Case
Sizes



Frequently Changing
Pallet Configurations

In these settings, robots offer a level of flexibility that fixed mechanical systems cannot easily match. Adjustments to pallet patterns, product mix, or case dimensions can be made with less physical reconfiguration, aligning with the broader industry shift toward greater SKU variability.

That said, adoption remains selective. Some companies continue to weigh the higher upfront costs and integration complexity associated with robotics, particularly in facilities without existing experience managing automated systems. In certain cases, growth in robotic palletizing has been uneven as companies balance flexibility needs against capital constraints.

Role of Cobots in Palletizing

In addition to traditional mechanical and robotic palletizing systems, interviewees also highlighted emerging interest in collaborative robots (cobots) as an incremental step toward automation. Cobots are often positioned as a more accessible entry point, offering lower upfront investment, simplified setup, and a smaller footprint compared to conventional robotic systems. These attributes make them particularly attractive for facilities with limited automation experience or space constraints.

Cobot adoption is most prevalent in lower-speed, entry-level palletizing applications, where throughput requirements are modest and operational flexibility remains important. In these environments, cobots can effectively handle repetitive tasks while reducing ergonomic strain on workers and lowering barriers to automation adoption.

However, interview feedback consistently emphasized that cobots are not universally applicable. Their performance is typically constrained by lower speeds and payload limitations, making them less suitable for high-volume or more complex palletizing operations. In these cases, traditional industrial robots or mechanical systems remain more effective. Several interviewees noted that cobots are sometimes over-requested by customers who view them as a simple solution, despite not always being the best fit for the application.

Additionally, collaborative systems often operate at reduced speeds to meet safety requirements when working alongside human operators, which can further limit throughput. Their perceived cost advantage may also be less pronounced than expected, as added sensing and safety features can offset some of the initial savings.

Despite these limitations, cobots continue to gain traction in targeted use cases, particularly where modularity, ease of deployment, or the ability to serve multiple lines is valued. For certain operations, they provide a practical way to introduce automation without the complexity of fully engineered robotic cells, contributing to a broader spectrum of palletizing solutions available to end users.

Simplicity vs flexibility tradeoffs

Operational Tradeoffs: Simplicity vs Flexibility

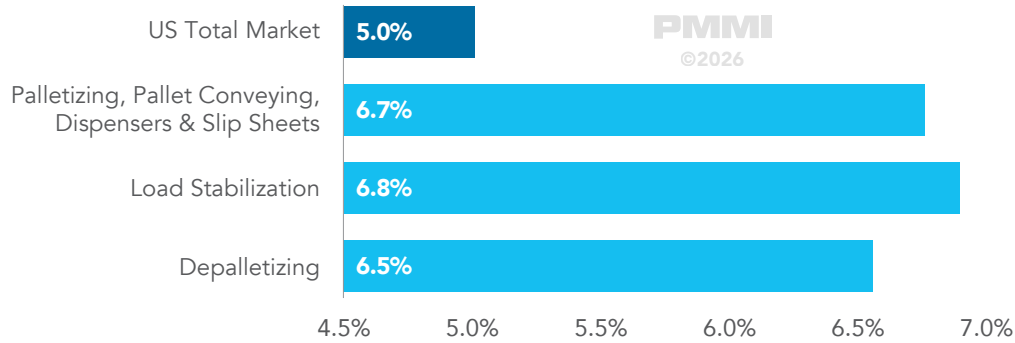
Similar to other areas of the end-of-line, palletizing involves tradeoffs between simplicity and flexibility. Traditional palletizers are often valued for their reliability and ease of operation, particularly in high-volume, low-variation environments.

In contrast, robotic systems offer greater flexibility but introduce additional complexity in programming, maintenance, and operator training. Interviewees noted that some customers remain cautious about adopting more advanced systems, particularly when internal technical expertise is limited.

This creates a spectrum of adoption, where companies select palletizing solutions based on their specific operational needs, workforce capabilities, and long-term production strategies.



Fig. 37 US EOL Packaging Machinery - Palletizing & Load Stabilization '25-'31 CAGRs



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

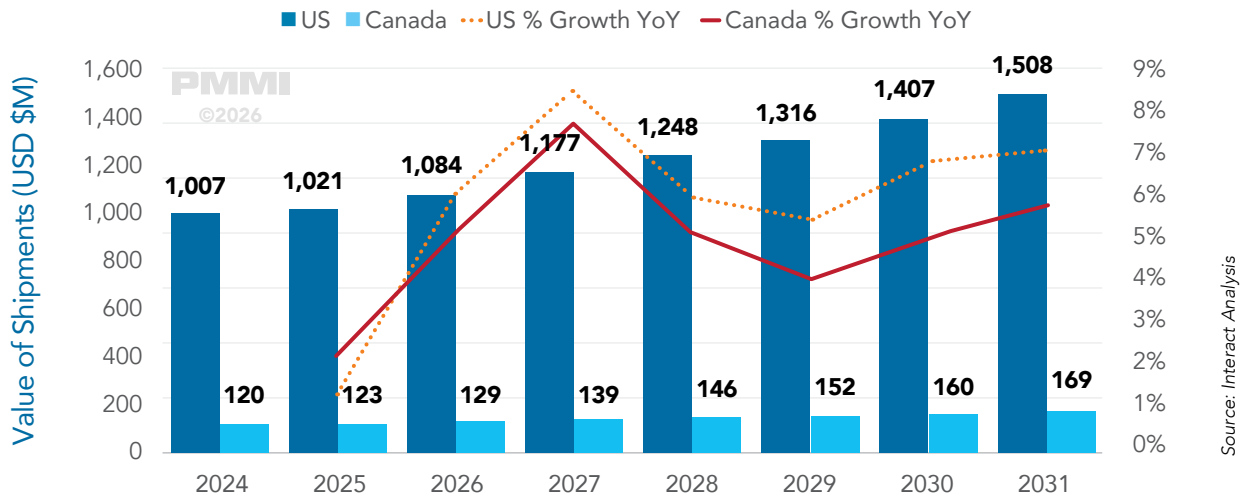
Machine sector overview

In 2025, the total estimated value of shipments within the palletizing and load stabilization equipment sector in the US was \$1.0 billion. The food sector remained the largest end market, accounting for roughly 39% of US shipments in 2025, followed by beverage (18%) and household, industrial, and agricultural chemicals (17%).

This machinery is forecast to grow by about 6.2% in 2026 in the US. By 2031, we expect the value of shipments to reach \$1.5 billion, reflecting an overall CAGR of about 6.7% from 2025 to 2031.

In Canada, the palletizing and load stabilization equipment market totaled \$123 million in 2025. Food again led the end-market mix at 38%, followed by household, industrial, and agricultural chemicals (19%) and beverage (14%). Shipments are forecast to grow by about 5.2% in 2026 and reach roughly \$169 million by 2031, an overall CAGR of about 5.5% from 2025 to 2031.

Fig. 38 Packaging Machinery Forecast - Palletizing & Load Stabilization



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

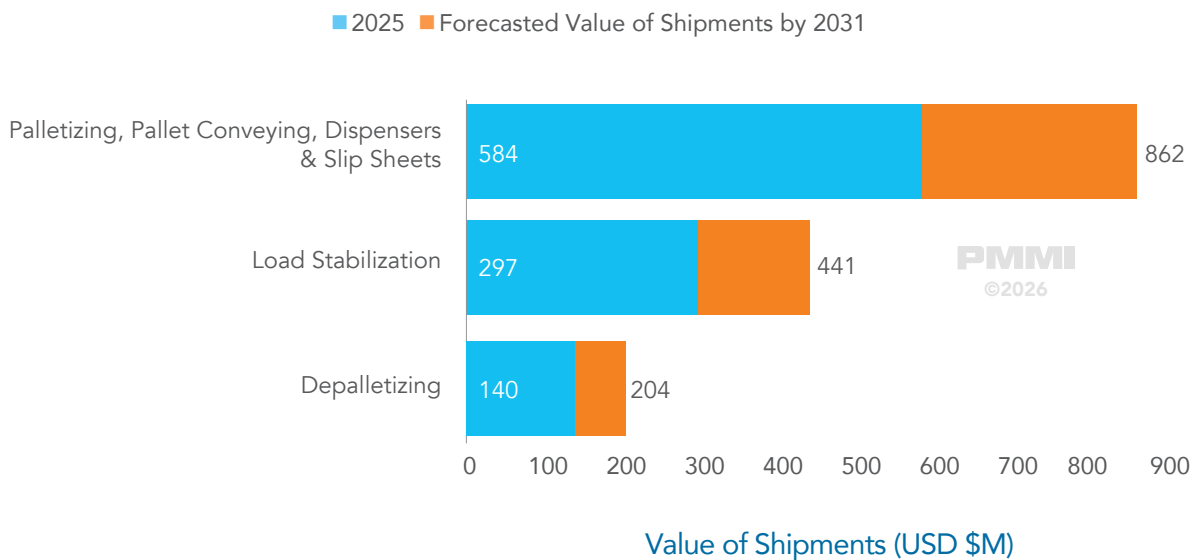
Table 11 - Palletizing & Load Stabilization

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$400	39%	\$47	38%
Beverage	\$187	18%	\$18	14%
Household, Industrial, & Agricultural Chemicals	\$172	17%	\$23	19%
Pharmaceuticals	\$89	9%	\$5	4%
Personal Care, Toiletries, & Cosmetics	\$49	5%	\$12	10%
Other End-User Sectors	\$124	12%	\$18	14%
Total	\$1,021		\$123	

Source: Interact Analysis

US sub machines

Fig. 37 US Packaging Sub-Machinery Forecast - Palletizing & Load Stabilization



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

Industry Statistics

MARKET SECTOR OVERVIEW

Summary of factors impacting each sector



Food

GLP-1 uptake and the wider wellness shift are splintering demand into more SKUs, smaller pack sizes, and protein-forward options, putting a premium on packaging accuracy and line flexibility. Buyers increasingly expect longer freshness windows, and tight beef and protein supplies are steering volume toward poultry and fish.



Beverage

Steady, reliability-driven dairy operations keep attracting capital, while functional drinks open a modest new growth lane carried largely by emerging brands. Progress on sustainability stays incremental, alcohol is cooling, and a widening mix of SKUs and pack formats is redirecting where money goes.



Household, Industrial, & Agricultural Chemicals

Spending stays unpredictable as buyers routinely postpone or scrap capital projects, even while safety, upkeep, and uptime grow more critical. Aggressive, corrosive conditions and a push to use less material keep nudging formats away from rigid containers toward pods, sheets, and concentrates.



Pharmaceuticals

Booming GLP-1 volumes are driving fresh lines, added capacity, and reshoring, with neighboring nutraceutical and protein-health categories riding the same wave. Tough FDA oversight, equipment-cleaning demands, and well-established serialization suppliers keep newcomers out, sustaining a steady, high-margin business.



Personal Care

Demand is increasingly shaped by rapid, viral-driven shifts that are hard to predict and short-lived, pushing manufacturers toward flexible equipment, rapid changeovers, and multi-product capability. With lighter regulatory constraints, the sector is more price-sensitive and more open to used equipment and retrofitting existing lines.



Other End-User Sectors

This mixed group moves to its own sector-specific currents. Automotive is held back by tariff uncertainty and the EV shift, defense and government work delivers dependable niche gains, and cannabis is consolidating after its boom as falling prices squeeze margins.

CROSS-INDUSTRY INVESTMENT & CLOSURE LANDSCAPE

Across the tracked announcements from major CPGs, 2025 brought 48 investment announcements against 16 closures, with pharmaceuticals accounting for the vast majority of announced capital. 2026 year-to-date adds 11 investments and 5 closures, signaling continued momentum.

Industry	2025 Investments	2025 Closures	Capital Announced (\$M)	Notable Companies
Pharmaceuticals	16	2	\$216,771	Eli Lilly, Bristol Myers Squibb, Gilead, Merck
Beverages	20	8	\$3,297	Red Bull, Coca-Cola, Anheuser-Busch
Food	4	5	\$5,554	Mars, Kraft Heinz, General Mills
Personal Care, Toiletries, & Cosmetics	5	0	\$2,958	Kimberly-Clark, Johnson & Johnson
Household, Industrial, & Agricultural Chemicals	3	1	\$380	PPG
TOTAL (2025)	48	16	\$228,960	

> To see the complete list of company announcements tracked here, see [Market Announcements by Industry](#).

MAJOR ANNOUNCEMENTS HIGHLIGHTS

Investments & closures overview

Investments

Pharmaceuticals

Pharmaceutical players are driving the largest commitments by a wide margin. Eli Lilly announced more than \$44 billion toward new US production sites, Bristol Myers Squibb committed \$40 billion to domestic manufacturing and R&D, Gilead pledged \$32 billion, and Merck is investing over \$75 billion in US capacity. Johnson & Johnson added a \$55 billion, four-year US expansion spanning pharmaceutical and medtech operations.

Food

In food, Mars is investing \$2 billion in US manufacturing through 2026, while Kraft Heinz committed \$3 billion to upgrade roughly 30 domestic factories, its largest manufacturing investment in a decade. General Mills added a \$54 million expansion of its James Ford Bell Technical Center to deepen research and development capacity.

Beverages

Beverage investment is concentrated in distribution and capacity expansion. Red Bull is funding a \$1.7 billion buildout, Coca-Cola and its bottling partners are committing more than \$900 million to distribution and production, and Anheuser-Busch is putting over \$370 million into its US facilities.

Personal Care & Chemicals

Personal care continues to reshore, led by Kimberly-Clark's roughly \$2 billion US manufacturing plan. In chemicals, capital is more measured. PPG committed about \$380 million, while Eastman has delayed a \$1.3 billion project, reflecting a more cautious posture.

Closures & Consolidation

Beverages

Beverages saw the most closures of any sector in 2025, with eight, driven largely by craft-beer contraction and consolidation as Anheuser-Busch and others rationalized brewery footprints amid shifting distribution economics.

Food

Food closures, five in 2025, reflect capacity optimization rather than retreat. General Mills is closing three plants with about \$82 million in restructuring charges. And Kraft Heinz is splitting into two companies a decade after its megamerger, part of a broader move to streamline portfolios and manufacturing footprints.

Pharmaceuticals

Pharmaceutical closures were minimal, just two in 2025, and occurred alongside record investment, underscoring selective consolidation as companies retire older capacity while standing up new domestic production lines.

Personal Care & Chemicals

Chemicals registered a single closure plus Eastman's delayed \$1.3 billion project, signaling caution on new capital. Personal care recorded zero closures in 2025 — the most resilient profile in the set, with investment continuing to flow in.

SECTOR OUTLOOK – FORECAST & TRENDS

Food

Overview

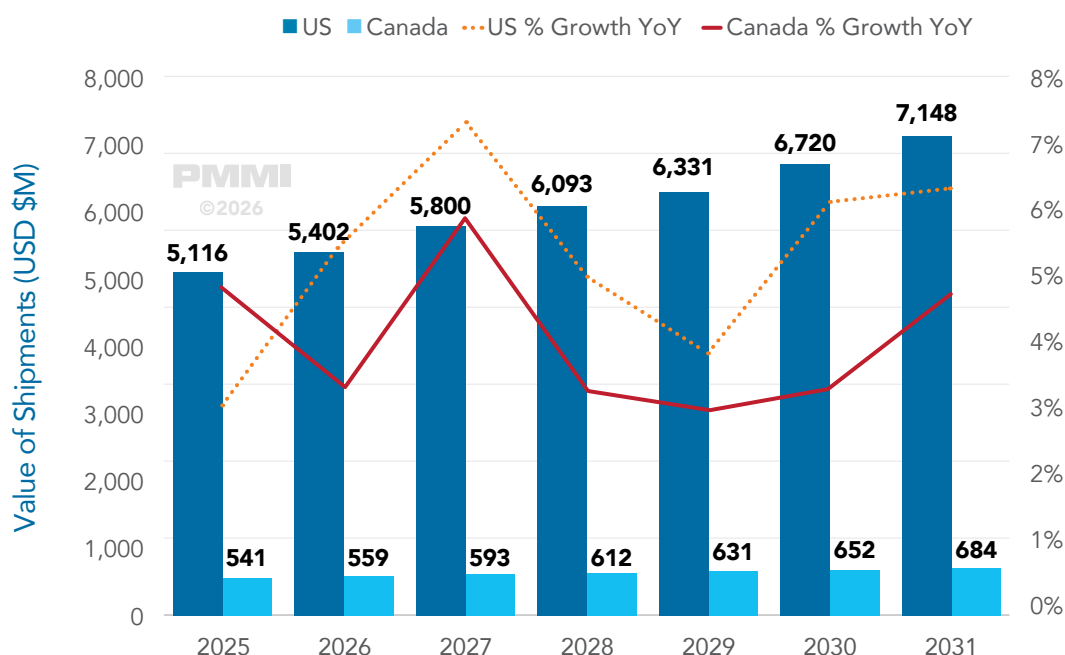
In 2025, the value of domestic shipments of packaging machinery within the food sector in the US reached an estimated \$5.1 billion. This sector is projected to grow to \$7.1 billion by 2031, reflecting a CAGR of 5.7% for 2025-2031.

In Canada, the food sector's machinery shipments were valued at an estimated \$541 million in 2025. This Figure is expected to increase to \$684 million by 2031, with a CAGR of 4.0%

Trends

Health and wellness-driven consumption, amplified by GLP-1 adoption, is fragmenting the food landscape and driving higher SKU counts, smaller portions, and snack-oriented formats that demand greater line flexibility and tighter precision rather than throughput alone. Protein remains a central driver, expanding variety across savory snacks, shelf-stable and refrigerated products, fruit- and vegetable-based formats, and premium "human-grade" pet food. At the same time, growing preference for less-processed foods is shortening shelf lives and elevating the role of material selection and sealing technologies in preserving freshness.

Fig. 39 Packaging Machinery Forecast - Food



PMMI members can visit <https://www.pmmi.org/content/soti-dashboards> to explore interactive forecast data by machine type, industry, and more

Health and Wellness Drive Changing Consumption Patterns

Shifting consumer preferences toward health-focused consumption are introducing more fragmentation into the food landscape, placing new demands on packaging operations even in the absence of major product or format overhauls. Increased attention to protein intake, combined with growing preference for foods perceived as less processed, is reshaping how existing products are developed and positioned. One of the more recent drivers of this shift is the growing adoption of GLP-1 medications, which is contributing to smaller portion sizes and more selective consumption patterns. While this shift has not fundamentally changed core product formats, it is driving an increase in product variety. Brands are introducing extensions of familiar items with adjusted nutritional

profiles rather than launching entirely new formats. As a result, SKU counts are increasing even when underlying packaging formats remain largely the same. This creates additional complexity for packaging operations, as lines must accommodate more frequent changeovers and shorter production runs. Flexibility, rather than throughput alone, is becoming increasingly important in maintaining efficiency.

Smaller Portions and Precision Packaging Requirements

The impact of GLP-1 adoption is also visible in changing portion sizes. Reduced consumption per sitting is reinforcing demand for smaller portion sizes and snack-oriented formats, which are often introduced alongside existing products rather than replacing them.

This further expands SKU counts while increasing operational complexity. Packaging smaller quantities introduces challenges in maintaining accuracy and consistency at lower fill weights. Smaller formats require tighter tolerances in filling, sealing, and handling, increasing sensitivity to variability on production lines. While packaging formats themselves are not materially changing, performance requirements are increasing. Lines must balance higher unit volumes with greater precision under tighter operational constraints.

Freshness Expectations and Shelf-Life Pressures

In tandem, broader health-driven preferences are shifting demand toward foods perceived as less processed, often associated with simpler and more recognizable ingredient lists. This aligns with the broader cultural focus on food quality and transparency, which continues to gain visibility in public discourse. These products may rely less on preservatives, resulting in shorter shelf lives and placing greater pressure on supply chain timing. Products must move more quickly from production to shelf, reducing flexibility in distribution. This dynamic increases the role of packaging in preserving freshness. Greater emphasis is placed on material selection, sealing technologies, and packaging formats that can extend shelf life without altering product composition.

Protein Demand Driving Variety

Protein demand is another key outcome of this shift and is closely tied to both GLP-1 use and broader health preferences. As consumers prioritize satiety and nutritional value, protein is being incorporated across a wider range of products. Rather than driving entirely new packaging formats, this demand is expanding product variation within existing categories. Shelf-stable, protein-enhanced products are increasing in number, while refrigerated categories such as yogurt and cottage cheese continue to see strong demand. These trends reinforce the need for packaging systems that can manage higher SKU complexity and more frequent transitions between products. Separately, supply-side constraints in certain protein categories, such as cattle availability, may shift consumption patterns, though these effects are more pronounced in processing than packaging.

Growth in Fruit and Vegetable-Based Products

In parallel, demand for fruit and vegetable-based products is expected to increase. This includes both fresh and processed formats, particularly as these ingredients are incorporated into beverages and on-the-go offerings. These products align with broader consumer trends focused on convenience and perceived health benefits, supporting continued expansion across multiple product formats.

Pet Food Premiumization

Pet food was also identified as an area of growth, with particular emphasis on premium and “human-grade” offerings. Interview insights suggest increasing demand for higher-quality formulations, including refrigerated products. This is expected to drive greater use of packaging formats such as stand-up pouches and chub packaging, as manufacturers respond to both product requirements and evolving consumer expectations in the category.

Savory Snacks

Interviewees noted a shift within the snack category away from traditional sweet products and toward more savory, protein-based options. One example frequently cited was the rise of snack sticks, such as beef or other protein-based alternatives. This shift appears to be driven in part by changing consumer preferences, including a reduced focus on sugar and an increased emphasis on protein intake.

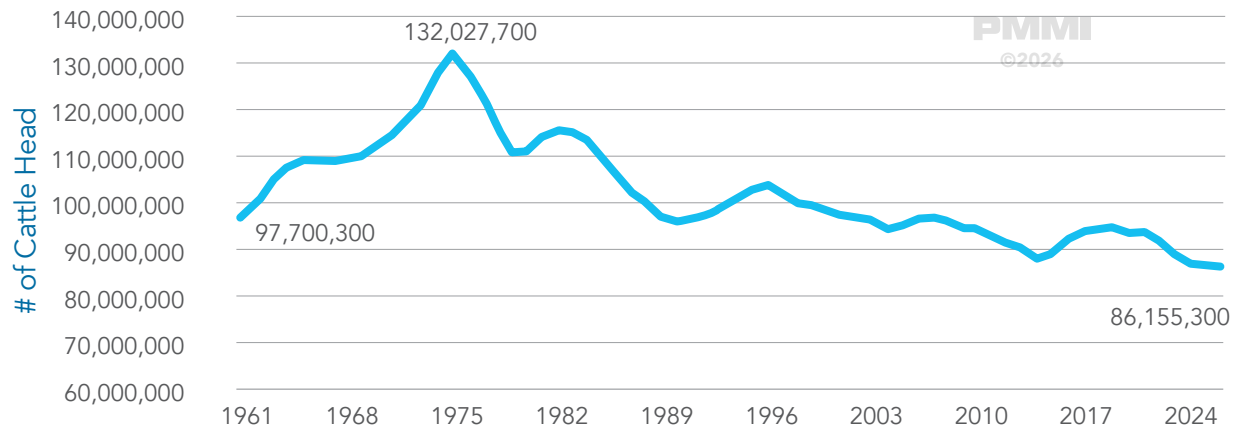


Pressure on Beef and Protein Supply Dynamics

At the same time, the beef sector is facing ongoing challenges. Rising cattle prices (Figure 41) and declining herd sizes (Figure 40) are contributing to supply constraints, which have already impacted processing activity, including plant closures.

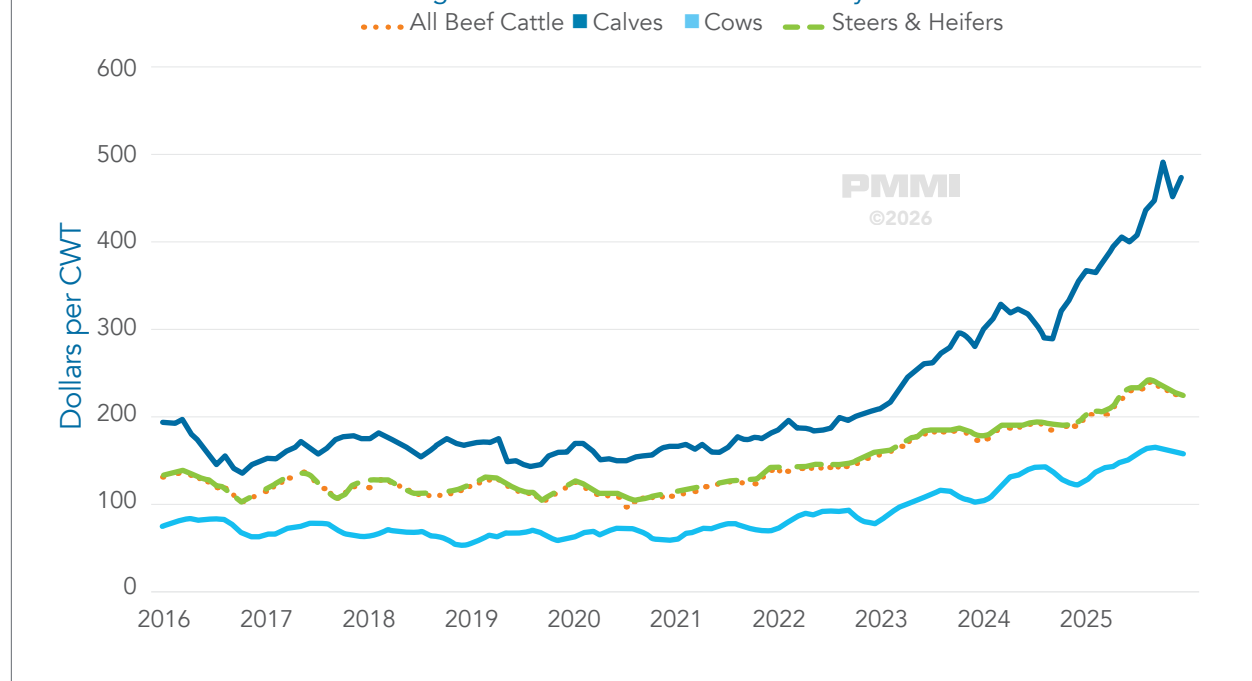
In response, the market is expected to continue shifting toward alternative protein sources such as chicken, turkey, and fish. This transition aligns with the broader consumer move toward higher-protein diets, suggesting that demand for protein will remain strong, even as the mix of protein sources evolves.

Fig. 40 US All Cattle & Calves Inventory



Source: USDA Cattle INCL Calves - Inventory 1961-2026

Fig. 41 US Prices Received for Cattle by Month



Source: USDA - National Agricultural Statistics Service - Charts and Maps - Prices Received: Cattle Prices Received by Month, US

MAJOR ANNOUNCEMENTS FROM FOOD MANUFACTURERS

Table 12 - Major Announcements in Food

Company	Announcement	Type	Year	Summary
General Mills	General Mills invests \$54M in expansion of James Ford Bell Technical Center	Investment	2025	General Mills announced a \$54M investment to expand its James Ford Bell (JFB) Technical Center, a key hub for the company's innovation, technology and quality capabilities. This expansion will add a new 35,000-square-foot, two-story pilot plant wing, increasing pilot plant space by more than 20 percent and providing state-of-the-art facilities for its research and development teams.
General Mills	General Mills to close three plants	Closure	2025	In an 8-K filing with the Securities and Exchange Commission, released Oct. 1, General Mills said it aims to close its North America Foodservice pizza crust production plant in St. Charles, MO, as well as two North America Pet manufacturing facilities in Joplin, MO. Plans call for the TNT Crust plant in St. Charles to shut down by the end of June 2026 and for production at the two Joplin facilities to end by July 2026. General Mills said in the filing that it expects to incur about \$82M in restructuring charges.
Kraft Heinz	DeKalb, IL centerpiece of Kraft Heinz \$3B US investment	Investment	2025	Kraft Heinz is investing \$3B to upgrade its 30 factories across the US, the company's biggest manufacturing investment in ten years. The food giant said the goal is to make its plants more efficient, lower costs, and bring new products to market faster. In July 2023, Kraft Heinz announced a \$400M plan to build a large automated distribution center in DeKalb, IL. That project is part of the \$3B total.
Kraft Heinz	Kraft Heinz to split a decade after megafood merger	General	2025	Kraft Heinz is splitting into two, a decade after a merger of the brands created one of the biggest food companies on the planet. One of the companies, currently called Global Taste Elevation Co., will include shelf-stable meals and include brands such as Heinz, Philadelphia cream cheese and Kraft Mac & Cheese. The other, currently called North American Grocery Co., will include brands such as Oscar Mayer, Kraft Singles and Lunchables. The official names of the two companies will be released later.
Mars	Mars to invest \$2B into US manufacturing through 2026	Investment	2025	The \$2B investment in US-based manufacturing will enable increased capacity and further innovation across its diverse portfolio of brands. This investment is supporting a new, \$240M facility for Nature's Bakery in Salt Lake City, UT. Earlier this year Mars also opened a \$450M Royal Canin® dry pet food facility in Lewisburg, OH.

Table 12 - Major Announcements in Food

Company	Announcement	Type	Year	Summary
PepsiCo	PepsiCo to close US PopCorners plant in New York	Closure	2025	PepsiCo to close a snacks plant that manufactures the PopCorners brand, with more than 200 employees expected to lose their jobs. The facility in the town of Liberty, NY, is operated by PepsiCo Foods US.
PepsiCo	PepsiCo closes a FL Frito-Lay plant after 60 years, layoffs hit	Closure	2025	PepsiCo has shuttered its Frito-Lay plant in Orlando, FL, a facility that operated for 60 years before closing on November 18, 2025.
PepsiCo	PepsiCo shuts down Frito-Lay plant in California	Closure	2025	PepsiCo, Inc., has shut down manufacturing operations at a Frito-Lay, Inc. plant in Rancho Cucamonga, CA. The warehouse, distribution and transportation employees will continue to operate at the location. The company did not report how many jobs were cut.
Tyson Foods	Tyson Foods to close major US beef plant as cattle supplies dwindle	Closure	2025	Tyson Foods will close a major beef plant in Lexington, NE, with about 3,200 employees in January after US cattle supplies dropped to their lowest level in nearly 75 years.
WK Kellogg Co	WK Kellogg's \$500M supply chain plan	Investment	2025	WK Kellogg Co. has unveiled a \$500M supply chain modernization plan aimed at hoisting margin growth into double digits by the end of 2026. Under the plan, expected to cost \$450M to \$500M, WK Kellogg said it will invest in new infrastructure, equipment, technology, and capabilities at its manufacturing plants in Battle Creek, MI; Lancaster, PA; and Belleville, ON, with a goal of boosting production at those sites as well. WK Kellogg said the up to \$500M price tag for the supply chain modernization includes capital expenditures of up to \$390M, along with one-time cash restructuring and non-restructuring costs of about \$110M.
Campbell Soup Co	Campbell's to consolidate potato chip production as part of ongoing snacks network optimization strategy	Closure	2026	The Campbell's Company plans to close a potato chip plant in MA, shifting production to other facilities in an effort to boost efficiency. Plans to cease operations in April 2026.

Table 12 - Major Announcements in Food

Company	Announcement	Type	Year	Summary
Kraft Heinz	Kraft Heinz pauses split as new CEO says problems are “fixable”	General	2026	Kraft Heinz’s new CEO Steve Cahillane decided to reverse the plans to split Kraft Heinz, with plans to invest \$600M on marketing, sales, research and development, as well as on improving “product superiority” and potentially lowering prices.
Tyson Foods	Lexington, NE’s Tyson Foods plant set to shutter	Closure	2026	Lexington, NE, faces a major economic turning point as its largest employer, a Tyson Foods meatpacking plant, closed in January.
Tyson Foods	Tyson Foods closing Georgia prepared foods plant	Closure	2026	Tyson Foods Inc. plans to cease operations at a prepared foods facility in Rome, GA. Tyson was a contract manufacturer making Nature Valley Granola Bars at the site in Rome.
Unilever	Unilever announces the combination of Unilever Foods with McCormick to create a global flavor powerhouse with a superior growth profile	General	2026	Unilever and McCormick announced that they have entered into an agreement to combine Unilever’s Foods business with McCormick. The separation of Unilever Foods will position Unilever as a leading pureplay HPC company.

Source: Interact Analysis

BEVERAGE SECTOR OUTLOOK – FORECAST & PACKAGING TRENDS

Overview

In 2025, the value of domestic shipments of packaging machinery within the beverage sector in the US reached an estimated \$1.7 billion. This sector is projected to grow to \$2.4 billion by 2031, reflecting a CAGR of 5.6% for 2025-2031.

In Canada, the beverage sector’s machinery shipments were valued at an estimated \$144 million in 2025. This figure is expected to increase to \$178 million by 2031, with a CAGR of 3.6% for 2025-2031.

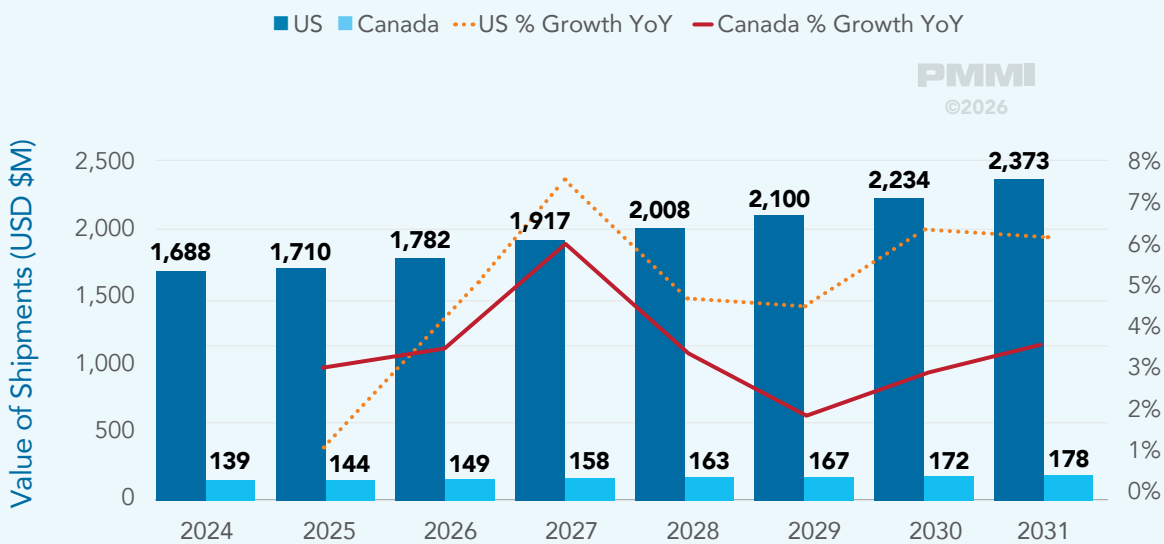
Trends

A few distinct shifts are reshaping the beverage market. Sustainability is nudging packaging forward, alcoholic drinks are cooling as functional beverages heat up, and dairy is drawing investment.

Sustainability Influencing Packaging, but Incrementally

Sustainability continues to shape decision-making in beverage packaging, particularly through efforts to reduce material usage and explore alternative formats such as paper-based solutions. However, interviewees suggest that these changes tend to be incremental rather than transformative. Companies are often focused on optimizing existing materials and processes rather than undertaking wholesale shifts.

Fig. 42 Packaging Machinery Forecast - Beverage



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

Alcoholic Beverages Facing Downward Pressure

Across interviews this year, the alcoholic beverage sector was frequently noted as experiencing a slowdown in demand. Interviewees pointed to softer activity compared to other beverage categories, reinforcing that this is one of the few segments currently under pressure within the market.

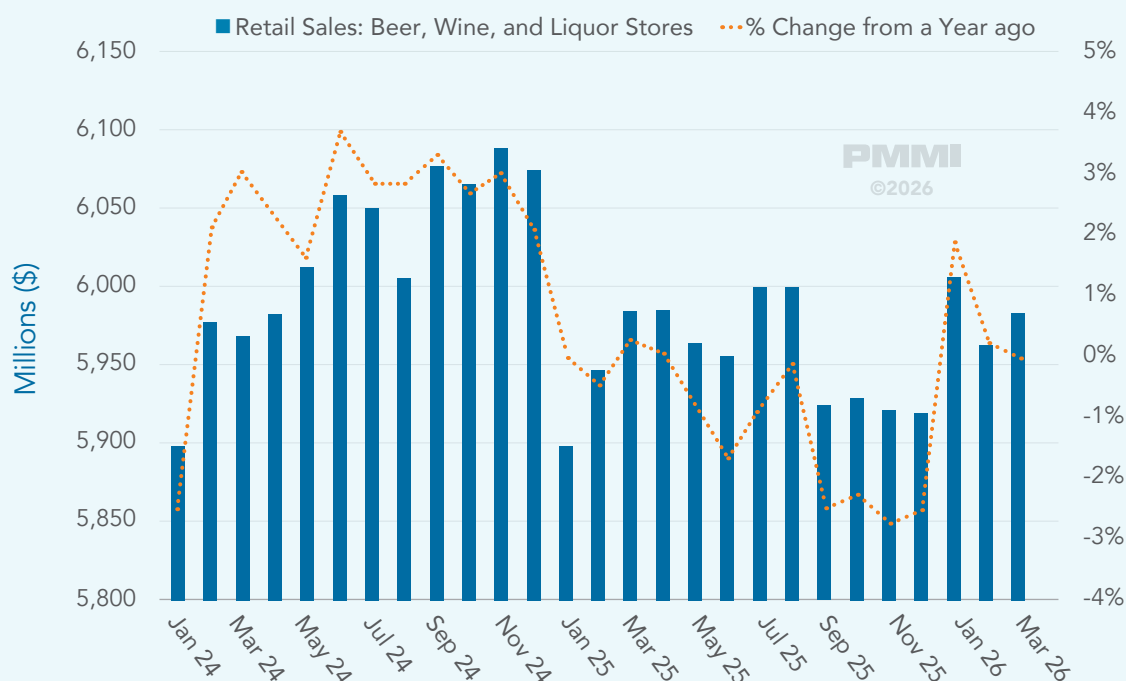
As illustrated in Figure 43, 2025 marks the beginning of a decline in alcohol sales in the United States, with volumes remaining below prior-year levels. This shift signals a departure from the steady performance historically associated with the category.

Two primary factors appear to be influencing this trend. First, broader economic headwinds are shaping consumer purchasing behavior. While interview participants emphasized that consumers are likely to continue drinking alcohol in both strong and challenging economic environments, they also noted that what consumers choose to drink is shifting.

Second, a growing emphasis on health and wellness is beginning to impact alcohol consumption patterns. Interviewees highlighted a rise in alternative beverages positioned to deliver similar experiences to alcohol, but with a healthier or more functional profile. This shift is contributing to declining demand in certain alcoholic segments while creating new competition from adjacent categories.

Further analysis in the Processing State of the Industry report explores additional dynamics at play, including the reduction of microbreweries and softening in premium product segments. Together, these factors illustrate a market in transition, where traditional consumption patterns are evolving and competitive pressures are expanding beyond the category itself.

Fig. 43 Retail Sales: Beer, Wine, and Liquor Stores



Source: US Census Bureau, Retail Sales: Beer, Wine, and Liquor Stores [MRTSSM4453USS], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/MRTSSM4453USS>.

Functional Beverages Emerging

As noted previously, consumers are increasingly turning to alternative beverage options, driven by evolving preferences around health, wellness, and overall lifestyle. While protein-based drinks appear to be the most visible area of growth, other categories are beginning to gain traction, including fiber-based beverages and a broader set of products positioned around mood, relaxation, or general well-being.

Products such as fiber sodas and beverages incorporating botanical ingredients, adaptogens, or other functional compounds are entering the market with claims tied to digestive health, stress support, or enhanced relaxation. These offerings reflect a growing interest in beverages that go beyond basic hydration, instead positioning themselves as part of a broader wellness routine.

Much of this innovation is being led by smaller and emerging brands rather than large, established CPGs. Many of these companies initially enter the market through limited-scale production or contract manufacturing before scaling their operations. In several cases, successful brands have attracted significant attention from larger players, creating acquisition opportunities or prompting the development of competing product lines within established portfolios. Recent examples illustrate how emerging beverage brands can quickly transition from niche products to mainstream offerings through strategic acquisitions or brand extensions.

From an operational perspective, however, functional beverages are not yet universally driving large-scale capital investment. Instead, they appear as incremental growth opportunities, contributing to increased SKU counts and greater product variety. While their long-term impact remains uncertain, these products are clearly contributing to a more fragmented and dynamic beverage landscape, where innovation is increasingly occurring at the edge of the market before being absorbed into larger systems.

RELAXATION



Source: Recess

Source: hiyo

PROBIOTIC/FIBER



Source: OLIPOP

Source: Simply Pop

PROTEIN



Source: Oikos

Source: Fairlife

Dairy Driving Investment Through Operational Demands

Within this landscape, dairy stands out as a clear source of momentum. As shown in Figure 44, milk sales in the US have returned to their previous peak in 2020. Interviewees attribute recent performance improvements directly to activity in dairy applications, particularly in segments such as yogurt and other liquid dairy products.

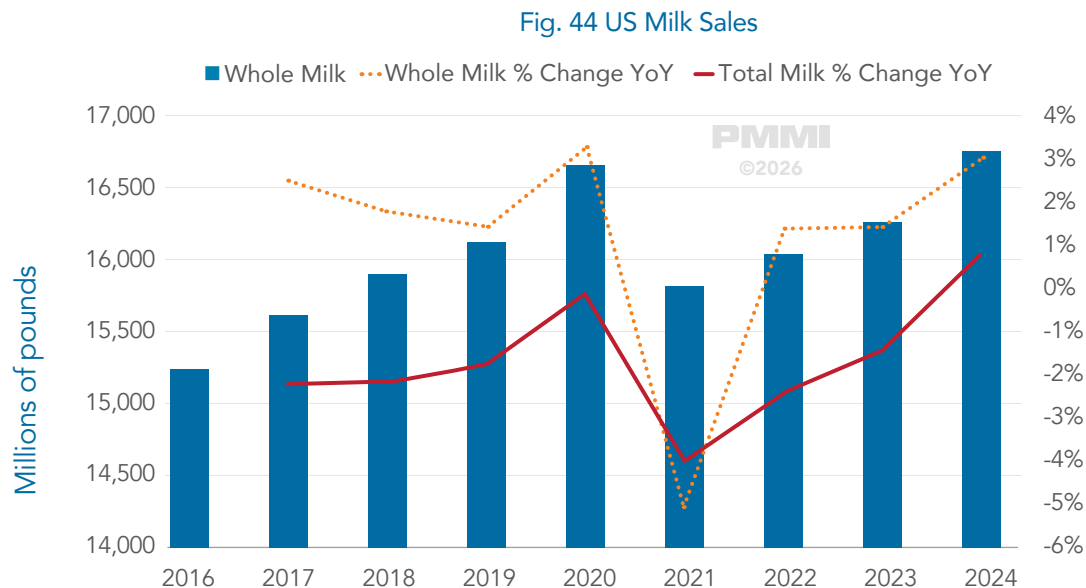
What distinguishes dairy is not simply demand, but the operational intensity required to support it. Production environments must run continuously, with little tolerance for downtime, and they require strict hygiene controls that elevate the complexity of equipment.

This combination of steady demand and stringent operating requirements has made dairy an attractive segment for suppliers, as it consistently drives investment in higher-specification systems rather than commoditized solutions. In this sense, dairy's importance extends beyond volume; it influences the type and sophistication of equipment being deployed across beverage lines.

Growing Complexity

The beverage sector is becoming increasingly complex from an operational standpoint as consumers' preferences for variety increase. Interviewees describe a shift toward greater product variety, more SKUs, and evolving packaging formats, all of which place pressure on production systems.

This shift is gradually changing the nature of investment within the sector. Rather than prioritizing maximum throughput on a limited number of products, producers are placing greater emphasis on flexibility and adaptability. Equipment must accommodate more frequent changeovers and a wider range of formats, even as overall demand remains steady.



Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service; USDA, Foreign Agricultural Service; USDA, Agricultural Marketing Service; and US Department of Commerce, Bureau of the Census.

MAJOR ANNOUNCEMENTS FROM BEVERAGE MANUFACTURERS

Table 13 - Major Announcements in Beverage

Company	Announcement	Type	Year	Summary
Anheuser-Busch	Anheuser-Busch invests \$4.2M in Williamsburg, VA brewery to drive local economic growth	Investment	2025	This latest investment in its Williamsburg, VA brewery will ensure A-B remains at the forefront of brewing excellence in the region and continues to create and sustain good-paying manufacturing jobs in the American beer industry.
Anheuser-Busch	Anheuser-Busch to cease production at NH craft brewery	Closure	2025	Anheuser-Busch announced it will shutter a brewery in Portsmouth, NH, as it plans a \$1M investment in its craft brewing capabilities. The company will shutter the 104,000-square-foot brewery operated by Craft Brew Alliance, which produced Kona and Omission beers.
Anheuser-Busch	Anheuser-Busch announces new \$300M investment in manufacturing operations across the US	Investment	2025	Anheuser-Busch, a leading American manufacturer and maker of Michelob ULTRA, Busch Light, Budweiser and Bud Light, proudly expanded its commitment to creating and sustaining US manufacturing jobs by announcing it will invest \$300M in its facilities across the US.
Anheuser-Busch	Anheuser-Busch announces new investment in Houston, TX brewery	Investment	2025	Anheuser-Busch on Tuesday announced yet another multi-million-dollar investment in its Houston, TX brewery. The brewing giant said that it would spend \$17M on the facility through its "Brewing Futures" initiative.
Anheuser-Busch	Anheuser-Busch invests \$9M in New York state brewery	Investment	2025	Anheuser-Busch is investing \$9M in its Baldwinsville, NY, brewery. The money will support beer production at the facility while also expanding the brewery's capacity to produce Anheuser-Busch's "Beyond Beer" offerings.
Anheuser-Busch	AB InBev lays out latest cash injection into next US brewery	Investment	2026	Anheuser-Busch has confirmed a \$15 million investment in its flagship St. Louis, MO brewery, including funding for supply chain infrastructure.
Anheuser-Busch	Anheuser-Busch investing \$9.2M in Cartersville, GA brewery to drive local economic growth & meet increased demand for Michelob ULTRA	Investment	2025	Anheuser-Busch, a leading American manufacturer and maker of Michelob ULTRA, Busch Light, Budweiser, Bud Light, Stella Artois and Cutwater Spirits, announced a new \$9.2M investment in its Cartersville, GA Brewery. The investment will go toward upgrading brewing equipment to fuel increased production of Michelob ULTRA.

Table 13 - Major Announcements in Beverage

Company	Announcement	Type	Year	Summary
Anheuser-Busch	Anheuser-Busch to invest more than \$9M in Atlanta, GA brewery	Investment	2025	Anheuser-Busch announced that it will spend more than \$9M to upgrade brewing equipment at its facility outside Atlanta, GA. The brewing giant said that the project would enable increased production of Michelob Ultra.
Anheuser-Busch	Anheuser-Busch investing \$7.4M in Los Angeles, CA brewery to drive local economic growth & fuel production of Michelob ULTRA	Investment	2025	Anheuser-Busch announced a new \$7.4M investment in its Los Angeles, CA Brewery. The investment will go toward upgrading brewing and packaging equipment to fuel increased production of Michelob ULTRA, America's #1 top-selling and fastest-growing beer.
Anheuser-Busch	Anheuser-Busch to close Fairfield, CA Budweiser plant	Closure	2025	Fairfield, CA City Manager David Gassaway said in an email to city council members that Anheuser-Busch would be closing the plant in early 2026, with no specific date given.
Anheuser-Busch	Anheuser-Busch to close Newark, NJ brewery after nearly 75 years	Closure	2025	The Anheuser-Busch brewery is selling its location along Routes 1 & 9 to the real estate developer Goodman Group. "We will be shifting production from these three facilities to our other US facilities," the spokesperson said, "and these changes will enable us to invest even more in our remaining operations and in our portfolio of growing, industry-leading brands."
Anheuser-Busch	Anheuser-Busch to shutter its Merrimack, NH facility in early 2026	Closure	2025	Anheuser-Busch will shutter its brewery operations in Merrimack, NH early next year along with facilities in CA and NJ. The company confirmed the closing Thursday morning, but has not filed any paperwork under the federal WARN Act, according to the US Department of Labor.
Anheuser-Busch	Anheuser-Busch to invest \$30M in its Northside Jacksonville, FL plant for upgrades, increased production	Investment	2026	Anheuser-Busch said it will invest \$30M in its Jacksonville, FL brewery and can plant to upgrade brewing and packaging equipment and increase production of Michelob ULTRA. The investment is part of the company's Brewing Futures initiative, through which Anheuser-Busch said it invested more than \$300M in US facilities in the past year to create and sustain American manufacturing jobs.

Table 13 - Major Announcements in Beverage

Company	Announcement	Type	Year	Summary
Anheuser-Busch	Anheuser-busch to close 50-year-old CA brewery	Closure	2026	Anheuser-Busch is set to close its brewery in Fairfield, CA. The Fairfield brewery is one of three US facilities the brewer plans to shut or sell as it modernizes its production footprint and shifts output to other sites.
Coca-Cola	Coca-Cola to begin \$42M warehouse expansion in San Antonio, TX	Investment	2025	Arca Continental Coca-Cola Southwest Beverages will begin construction on a \$42M expansion project at 1 Coca-Cola Place on March 5. The investment includes the expansion of the warehouse and parking lot, totaling about 170,000 square feet. More upgrades will consist of a new can line to increase production.
Coca-Cola	Arca Continental Coca-Cola Southwest Beverages opens new 120,000 square-foot distribution center in Waco, TX	Investment	2025	Arca Continental Coca-Cola Southwest Beverages, the local Coca-Cola bottler for TX and parts of OK, NM and AR, opened its new distribution center at 2600 TX Central Parkway in Waco, TX. The 120,000-square-foot facility is designed to enhance CCSWB's day-to-day operations and services. The facility represents a multi-million-dollar investment to support growth.
Coca-Cola	Coca-Cola UNITED hosts grand opening for new \$19M Jasper, AL facility	Investment	2025	The 26,000-square-foot facility, which sits on three acres off Hugh Mullins Court, includes a sales and distribution center, warehouse, fleet shop and office space.
Coca-Cola	Coca-Cola Consolidated invests \$15M in Monroe, NC facility	Investment	2025	Coca-Cola Consolidated announced the \$15M expansion of its Regional Operations Center in Monroe, NC. The expansion includes a new 42,000 square foot warehouse to enhance service efficiency for customers and house the Coca-Cola Consolidated Technical Academy.
Coca-Cola	Arca Continental Coca-Cola Southwest Beverages begins expansion of OK City, OK distribution center	Investment	2026	Arca Continental Coca-Cola Southwest Beverages, one of the largest Coca-Cola bottlers in the US., has begun construction on an expansion project at its OK City, OK distribution center.
Coca-Cola	Coke Florida hosts grand opening for new Tampa distribution center	Investment	2026	The \$300M plus investment sits on the company's 156-acre site, located at US 301 and the Selmon Expressway, and features a new 800,000 square foot, fully automated warehouse facility and a 250,000 square foot state-of-the-art fleet maintenance facility.

Table 13 - Major Announcements in Beverage

Company	Announcement	Type	Year	Summary
Coca-Cola	Heartland Coca-Cola celebrates grand opening of state-of-the-art production campus in Olathe, KS	Investment	2025	Heartland Coca-Cola Bottling Company opened a new state-of-the-art facility in Olathe, KS. The new 700,000 square foot campus sits on 150 acres and houses four state-of-the-art production lines. Some investment has been made into laser-guided vehicles (LGVs) for intra-facility transport, and automated trailer loading systems to streamline logistics and warehouse operations.
Coca-Cola	Coca-Cola shuts down 5 factories nationwide	Closure	2025	The closures span CA, FL, and MA, impacting everything from long-running bottling facilities to regional distribution hubs. In each case, the company says it's part of a broader shift: streamlining operations, leaning into automation, and outsourcing parts of its supply chain to external bottlers.
Coca-Cola	Coca-Cola Consolidated invests \$35M in Twinsburg, OH facility	Investment	2025	Coca-Cola Consolidated is pleased to announce a \$35M investment in a new can line at its facility in Twinsburg, OH. The expansion is part of the campus located at 1882 Highland Road.
Coca-Cola	After 65 years, Coca-Cola is closing its only Hawaii bottling plant	Closure	2025	Coca-Cola's only HI bottling plant is set to close. The 65-year-old plant at 949 Mapunapuna St. in Honolulu "reached its operational life, and significant upgrades would be required to continue production," said Joe Carter, the vice president and general manager of Coca-Cola Bottling of HI.
Coca-Cola	Coca-Cola manufacturer to build \$475M plant	Investment	2025	Swire Coca-Cola will break ground on the \$475M facility in 2026. The 620,000-square-foot bottling facility in CO Springs, CO, will produce more than 230 beverages across 60 brands.
Coca-Cola	Coca-Cola closes \$50M US plant as mass layoffs hit	Closure	2025	Coca-Cola is unwinding parts of its US manufacturing footprint, closing a major plant worth tens of \$M. The move is part of a broader restructuring that is shifting production to outside partners.
Coca-Cola	Coca-Cola to expand Michigan Fairlife plant	Investment	2026	The \$650M project would add about 245,000 square feet of space to the plant, along with two high-speed production lines and about 150 jobs.
Coca-Cola	Swire Coca-Cola breaking ground on new manufacturing facility in Colorado Springs, CO	Investment	2026	The 620,000-square-foot facility will bring in 170 new jobs and \$475M in capital investment to the Pikes Peak, CO region.

Table 13 - Major Announcements in Beverage

Company	Announcement	Type	Year	Summary
Constellation Brands	California winery closure points to deepening North American wine crisis	Closure	2026	Constellation Brands is to shut the Mission Bell winery in Madera County, CA as a result of rapidly shrinking demand for commodity brands.
Danone	Danone invests into america's heartland, creating 30 new full-time jobs through Minster, OH yogurt plant expansion	Investment	2025	Danone US makes multi-\$M investment into its Minster, OH yogurt facility to expand capacity and support growth in the yogurt business. The investment supports a ~48,000 square-foot expansion, new production line and upgrades to existing lines – bringing 30 new full-time jobs to the region.
Danone	Danone invests \$4M to expand Texas plant amid yogurt boom	Investment	2026	Danone plans to spend \$4M to expand its facility in Fort Worth, TX, as the dairy giant looks to keep pace with the demand for protein-packed yogurts. The project, which is expected to be completed on Sept. 1, would increase production capabilities at a facility that makes Danimals, Activia and YoCrunch.
Nestlé	Nestle expands US manufacturing footprint with new \$675M Arizona site	Investment	2025	First announced in March 2022, Nestle has invested around \$675M in the new site. Spanning nearly 58,500 sqm (630,000 square feet), it will reportedly add around 300 jobs to the local community. Nestle's new facility will produce creamers for several popular brands, including 'Coffee Mate', 'Natural Bliss', and 'Starbucks'. Additionally, it has the potential to expand to other beverages.
PepsiCo	PepsiCo to shut manufacturing operations at US drinks plant	Closure	2025	PepsiCo plans to shut down manufacturing, transport and maintenance operations at its Detroit, MI site in the US. In a statement send to just drinks, PepsiCo's Beverages division in the US said: "Our warehouse, fleet, delivery, sales and field service teams will continue to operate at this location. We are committed to supporting those impacted through this transition, and we are offering pay and benefits to impacted employees."
Red Bull	Red Bull moves ahead with \$1.7B factory after delay	Investment	2025	Red Bull broke ground on a new \$1.7B facility in Concord, NC, following a four-year delay. The 2.36 million-square-foot facility is expected to begin operations in 2028 and reach its maximized capacity by 2031, a spokesperson said. It will fill up to 3 billion cans annually and is expected to create 700 jobs.

SECTOR OUTLOOK – FORECAST & TRENDS

Household, industrial & agricultural chemicals

Overview

In 2025, the value of domestic shipments of packaging machinery within the household, industrial & agricultural chemicals sector in the US reached an estimated \$1.5 billion. This sector is projected to grow to \$1.8 billion by 2031, reflecting a CAGR of 3.6% for 2025-2031.

In Canada, the sector's machinery shipments were valued at an estimated \$179 million in 2025. This figure is expected to increase to \$217 million by 2031, with a CAGR of 3.2% for 2025-2031.

Trends

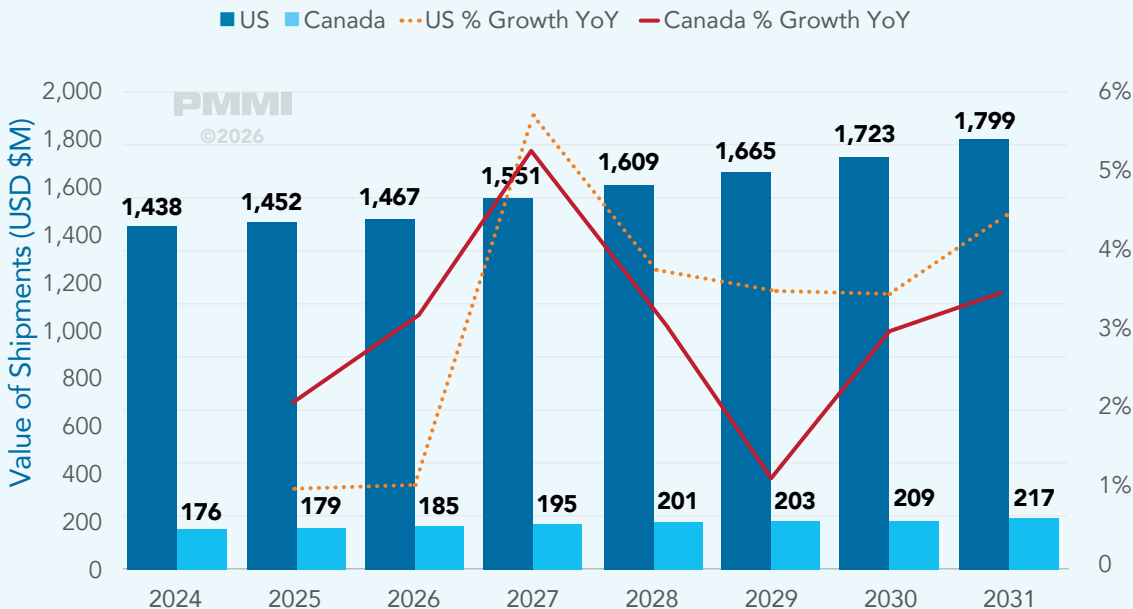
A few distinct dynamics are shaping the chemicals market. Demand remains volatile, safety is taking on greater importance, and material reduction is reshaping packaging formats. These trends are explored in the following sections.

Chemical Sector Volatility

The chemical sector continues to exhibit a high degree of demand variability compared to other end markets, with interviewees describing spending patterns as uneven and difficult to predict, particularly in petrochemical and industrial chemical segments.

Participants noted that investment timing is often highly sensitive to internal budgeting decisions, commodity price fluctuations, and broader macroeconomic conditions. As a result, capital projects are frequently delayed or canceled, limiting visibility into future demand.

Fig. 45 Packaging Machinery Forecast - Household, Industrial, & Agricultural Chemicals



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

Increasing Emphasis on Safety

Despite this volatility, safety remains a consistent and growing priority across all chemical subsegments. Interviewees emphasized that chemical processing and packaging environments frequently involve hazardous materials, including flammable liquids, heavy containers, and potentially dangerous substances.

As a result, companies are increasingly investing in automation and system design improvements to reduce risk exposure. In applications such as petrochemical packaging, automation is often driven not only by productivity considerations but also by the need to eliminate manual handling of heavy or hazardous goods. Reducing operator interaction with these materials is viewed as a key safety advantage.

Safety requirements also extend to equipment design, where reliability and containment are critical. Failures such as leaks, component wear, or system breakdowns can have significant safety and operational consequences. This has led to greater attention on system robustness, monitoring, and controlled operation within chemical environments.

Maintenance Intensity and System Reliability

Closely tied to safety is the increasing importance of preventative maintenance and system reliability. Interviewees highlighted that chemical applications place significant stress on equipment, making proactive maintenance essential to avoid costly downtime and operational risk.

In particular, components such as seals, gaskets, and joints must be closely monitored and replaced at regular intervals to prevent leakage or failure. Companies are therefore placing greater emphasis on maintenance schedules, lifecycle management, and service support to ensure consistent performance.

This focus reflects the broader reality that equipment failure in chemical environments can have more severe consequences than in other industries, reinforcing the need for disciplined maintenance strategies.

Corrosive and Harsh Operating Environments

A defining characteristic of the chemical sector is the challenging nature of its operating environments. Many applications involve exposure to aggressive substances, salts, or reactive materials that can degrade equipment over time. Interviewees repeatedly described these conditions as corrosive, requiring specialized materials of construction and careful system design.

Corrosion and environmental wear introduce additional complexity for equipment suppliers.



Machines must be engineered to withstand prolonged exposure to harsh conditions, and design decisions around materials, coatings, and sealing systems become critical. These environments also accelerate wear on components, increasing maintenance requirements and reinforcing the need for durable, high-quality equipment. In combination, corrosive exposure and continuous or high-intensity operation create demanding conditions that differentiate the chemical sector from more stable, less aggressive industries such as food and beverage.

Material Reduction Driving Format Change

As noted earlier, the rising cost of petroleum-based inputs has contributed to increased focus on material reduction, including a shift away from rigid plastic and toward more material-efficient formats.

One example of this shift can be seen in the laundry detergent category. As illustrated with Tide, newer detergent formats are emerging, moving away from traditional rigid plastic containers and toward flexible and lower-material designs. For instance, some products are now offered in flexible stand-up pouches, which significantly reduce the amount of plastic required compared to rigid tubs.

In addition, alternative product formats such as detergent pods, sheets, and concentrated forms further reduce material usage by minimizing packaging needs altogether. These formats are often paired with lighter secondary packaging, such as cartons, which reduces both overall material input and package weight.

Beyond material savings, these changes also have implications for transportation efficiency. Smaller and more compact packaging formats can improve space utilization during shipping and storage, allowing for more units per shipment. Lighter packaging may also reduce total shipment weight, particularly in distribution and e-commerce channels.

Taken together, this example illustrates how material reduction is not only a response to rising input costs, but also a broader strategy to improve efficiency across both packaging and logistics.



Source: Tide

MAJOR ANNOUNCEMENTS FROM HOUSEHOLD, INDUSTRIAL & AGRICULTURAL CHEMICALS MANUFACTURERS

Table 14 - Major Announcements in Household, Industrial & Agricultural Chemicals

Company	Announcement	Type	Year	Summary
BASF	BASF strengthens its commitment to the biopharma and pharmaceutical ingredients industries through a new investment in North America	Investment	2025	BASF has opened its new Good Manufacturing Practice (GMP) Solution Center, in Wyandotte, MI. Featuring state-of-the-art clean room packaging and high-sensitivity analytical testing.
DuPont	DuPont spinoff Qnity expands semiconductor production to Delaware	Investment	2026	Qnity, a subsidiary of DuPont, opened a 385,000-square-foot semiconductor manufacturing facility in Newark, DE.
Eastman Chemical Co.	Eastman delaying recycling facility construction	Investment	2025	The planned chemical recycling facility in Longview, TX, is on hold for two years following the loss of federal funding. Eastman lost a \$375M US Department of Energy (DOE) grant in May as part of the termination of a number of similar awards totaling \$3.7B.
PPG Industries	PPG to invest \$380M to build new US Manufacturing facility in Shelby, NC for aerospace coatings and sealants	Investment	2025	PPG announced that it will invest \$380M to build a new aerospace coatings and sealants manufacturing facility in Shelby, NC Construction on the 62-acre site, which will initially include manufacturing and warehousing units, is set to commence in October 2025 and is expected to be completed in the first half of 2027. The 198,000-square-foot facility will enable the company to continue meeting the growing demands of the aerospace industry.
PPG Industries	PPG Industries closing Pennsylvania facility	Closure	2025	PPG Industries, Inc. announced that it will be winding down operations at its PA facility. Per the WARN Notice, this closure is expected to begin on August 18, 2025, and conclude on December 31, 2026.
PPG Industries	PPG to invest \$280M in Delaware expansion, add 100 jobs	Investment	2025	PPG will invest more than \$280M to expand its existing manufacturing site in DE, OH, building a new 100,000-square-foot facility dedicated to automotive original equipment manufacturer (OEM) coatings production. Construction is planned to begin in 2026 with production starting in 2028.

SECTOR OUTLOOK – FORECAST & TRENDS

Pharmaceuticals

Overview

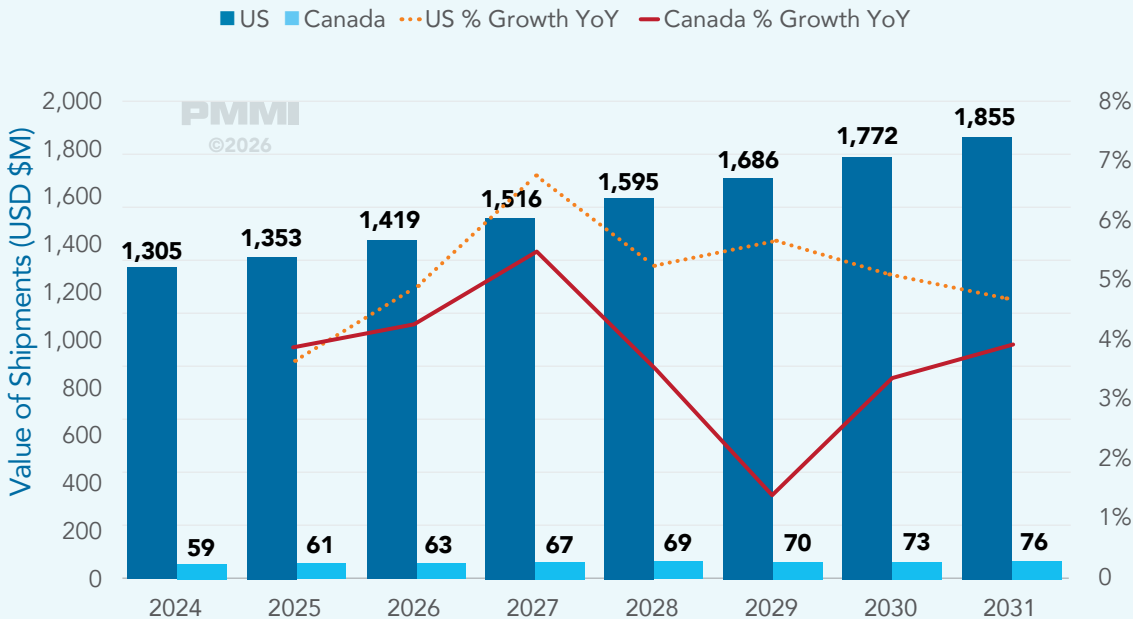
In 2025, the value of domestic shipments of packaging machinery within the pharmaceutical sector in the US reached an estimated \$1.4 billion. This sector is projected to grow to \$1.9 billion by 2031, reflecting a CAGR of 5.4% for 2025-2031.

In Canada, the pharmaceutical sector's machinery shipments were valued at an estimated \$61 million in 2025. This figure is expected to increase to \$76 million by 2031, with a CAGR of 3.7% for 2025-2031.

Trends

Surging demand for GLP-1 therapies is fueling new production lines, capacity expansion, and a wider move to onshore manufacturing, with an emerging shift from injectable to tablet formats reshaping equipment needs. This growth is extending into adjacent nutraceutical and protein-driven health categories that share pharmaceutical-grade precision and handling while bringing greater product variability. Yet heavy FDA regulation, demanding validation requirements, and established players in areas like serialization keep barriers to entry high, preserving the sector's standing as a stable, high-margin market.

Fig. 46 Packaging Machinery Forecast - Pharmaceuticals



PMMI members can visit <https://www.pmmi.org/content/soti-dashboards> to explore interactive forecast data by machine type, subcategory, industry, and more

GLP-1 Growth Driving New Investment and Reshoring Activity

One of the most notable developments within the pharmaceutical sector is the rapid growth of GLP-1 therapies, which has contributed to increased production demand and new investment activity. Interviewees highlighted that growth in this space has been tied directly to new facility buildouts, new production lines, and expanded capacity, particularly as companies scale to meet rising demand.

At the same time, this growth is occurring alongside a broader shift toward onshoring pharmaceutical manufacturing. Following supply chain disruptions in recent years, companies are increasingly investing in domestic production capacity, a trend further supported by government policy and tariff structures.

An additional layer of complexity is emerging as GLP-1 therapies evolve in format. While early growth has largely been driven by injectable products, interviewees noted a shift toward tablet-based formulations, which may alter equipment demand profiles. For example, injectable formats have historically driven demand for inspection and liquid handling systems, whereas tablet formats may shift demand toward alternative packaging solutions, such as blister packs.

Taken together, these dynamics position GLP-1 therapies as a major catalyst for pharmaceutical investment, influencing not only demand levels but also the type and location of production capacity being developed.

Nutraceuticals Expanding Alongside Pharmaceutical Demand

Adjacent to the pharmaceutical sector, interviewees also described growing activity across the broader vitamin and nutraceutical landscape. This includes products such as supplements, dietary formulations, and other health-focused goods that share production and packaging requirements with traditional pharmaceuticals.

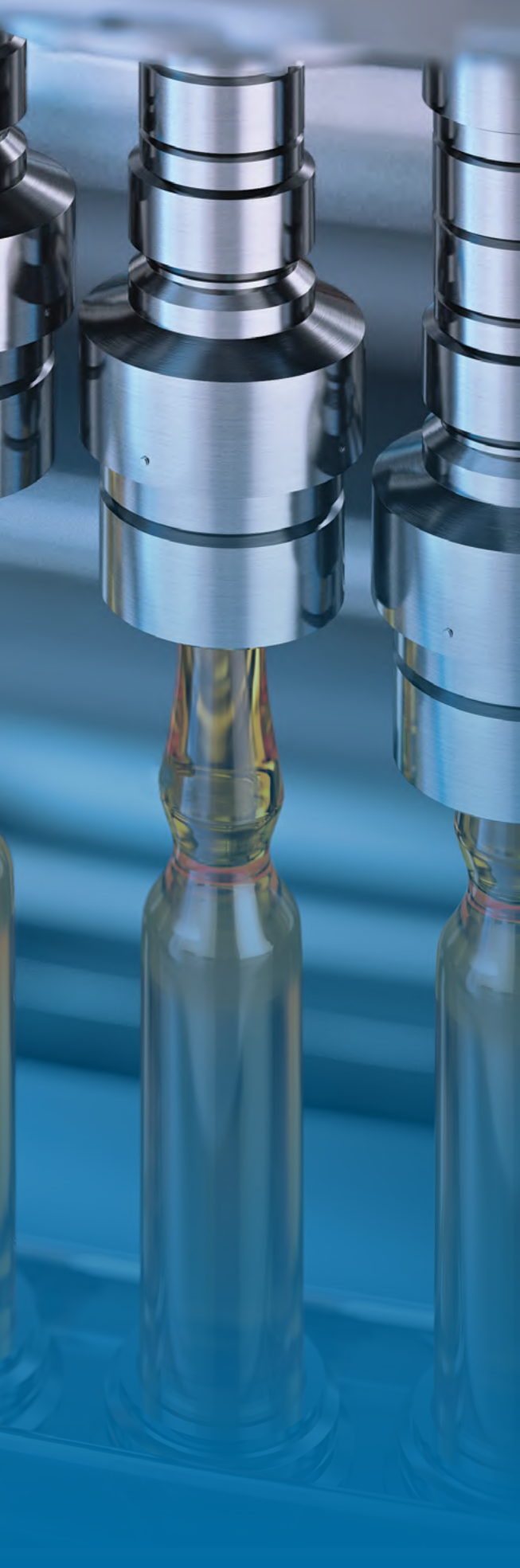
While not always the primary focus for all suppliers, nutraceuticals were positioned as a complementary and growing area of interest, particularly as consumer-driven health trends continue to influence product development. These products often require similar levels of precision, sanitation, and handling, while also introducing higher SKU variability and faster product cycles.

This places nutraceuticals in a unique position within the broader ecosystem, acting as a bridge between highly regulated pharmaceutical products and more consumer-driven health offerings.

Rising Protein Demand Influencing Adjacent Health Markets

Alongside pharmaceutical innovation, interview insights point to a broader shift toward health-oriented consumption, with protein playing an increasingly central role. While this trend is most visible in food and beverage markets, it is also influencing activity in adjacent sectors such as nutraceuticals and medical nutrition products.





Interviewees highlighted that growing consumer focus on protein, driven both by general wellness trends and the behavioral changes associated with GLP-1 therapies, is contributing to increased demand for protein-enriched formats and supplements. This, in turn, is shaping product pipelines and contributing to the expansion of health-focused categories that sit alongside traditional pharmaceutical products. Although interviewees did not explicitly describe a formal supply shortage, they consistently pointed to heightened demand for protein-based products, reinforcing the idea that pharmaceutical growth is increasingly intertwined with broader health and nutrition trends.

Barriers to Entry Limit Participation and Shape Market Structure

Despite strong growth drivers, the pharmaceutical sector remains one of the more difficult markets for suppliers to enter and scale within. Interviewees consistently emphasized that participation in this space is constrained by a combination of regulatory complexity, operational requirements, and the significant internal resources needed to support projects.

One of the most frequently cited barriers is the level of regulatory oversight. Pharmaceutical manufacturing is governed by strict FDA requirements and global compliance standards, which shape nearly every aspect of equipment design, validation, and implementation. Interviewees noted that the sector is “much more into procedure, process, and FDA regulation,” requiring significantly more documentation, testing, and oversight than other industries.

This level of scrutiny extends into equipment design itself. Machines must meet stringent requirements for cleanability, material finish, and ease of disassembly, particularly for aseptic applications. In some cases, additional systems such as isolators are required to meet evolving standards, further increasing complexity and cost.

Beyond regulatory requirements, the commercial and operational burden associated with pharmaceutical projects also limits participation. Interviewees highlighted that onboarding a new pharmaceutical customer often requires substantial upfront effort, including extensive paperwork, validation processes, and project management resources. For some smaller suppliers, this level of commitment is prohibitive, leading them to focus on maintaining existing relationships rather than actively pursuing new business in the sector.

Additionally, the market structure itself creates barriers to entry. Certain areas, such as serialization and track-and-trace systems, are already dominated by established players, making it difficult for new entrants to compete without significant investment or specialization.

As a result of these factors, the pharmaceutical sector tends to favor companies with deep technical expertise, established compliance capabilities, and the resources to support complex, long-cycle projects. While this limits the number of participants, it also reinforces the sector’s position as a high-value market, where suppliers that are able to meet these requirements can benefit from more stable demand and higher-margin opportunities.

MAJOR ANNOUNCEMENTS FROM PHARMACEUTICALS MANUFACTURERS

Table 15 - Major Announcements in Pharmaceuticals

Company	Announcement	Type	Year	Summary
Amgen	Amgen announces \$900M manufacturing expansion, creation of 350 new jobs in Ohio	Investment	2025	Amgen announced a \$900M expansion of its OH manufacturing facility, bringing the total number of jobs created to 750 and the total investment in Central OH to over \$1.4B.
Amgen	Amgen investing more than half a billion dollars in new, state-of-the-art center for science and innovation at US global headquarters	Investment	2025	Amgen announced plans to invest more than \$600M in a new, state-of-the-art center for science and innovation at its global headquarters in Thousand Oaks, CA.
Bristol Myers Squibb	BMS to close Illinois site as part of cell therapy manufacturing consolidation	Closure	2025	Bristol Myers Squibb is set to close down its viral vector production facility in Libertyville, IL — a site it acquired from Novartis two years ago — as part of a consolidation of its cell therapy manufacturing operations.
Bristol Myers Squibb	Bristol Myers Squibb to invest \$40B in US R&D and manufacturing	Investment	2025	Bristol Myers Squibb has announced plans to invest \$40B in the US over the next five years, focusing on expanding its domestic research, development, and manufacturing capabilities. The investment will be directed toward advancing US-based research and development, building out domestic manufacturing infrastructure, and incorporating emerging technologies such as artificial intelligence and machine learning to accelerate drug discovery and development.
Bristol Myers Squibb	RayzeBio's new hub revolutionizes cancer treatment with next-gen RPTs	Investment	2025	On July 11, the company held a ribbon cutting event for the new 77,000-square-foot facility in Indianapolis, IN, that will support the operations of San Diego-based biotech RayzeBio, acquired by BMS in February 2024, that develops and manufactures actinium-based RPTs.
Gilead Sciences	Gilead US Investment to create \$43B in value to US Economy	Investment	2025	Gilead to invest \$32B in US. manufacturing and R&D through 2030 and create more than 3,000 direct and indirect jobs by 2028. Details of the overall investment include a newly announced \$11B in capital and operational investments in the US. to supplement an already planned spend of \$21B in US. manufacturing and R&D through 2030.

Table 15 - Major Announcements in Pharmaceuticals

Company	Announcement	Type	Year	Summary
Gilead Sciences	Gilead Sciences breaks ground on new manufacturing hub, a cornerstone of its US Growth and innovation strategy	Investment	2025	It is part of Gilead's planned \$32B investment in US. innovation through 2030. The five-story, 180,000 square foot facility will serve as a hub for innovation and collaboration across technical development and manufacturing teams.
Lilly	Eli Lilly plans at least \$27B in new US Manufacturing investments	Investment	2025	Eli Lilly said it will invest at least \$27B to build four new manufacturing sites in the US. At the time of this announcement, Eli Lilly had not decided on where the four new US. sites will be located.
Lilly	Eli Lilly picks Virginia for \$5B drug manufacturing plant	Closure	2025	The \$5B manufacturing facility will be Eli Lilly's first "dedicated, fully integrated" active pharmaceutical ingredient (API) and drug product facility. Lilly expects the building to be completed within the next five years.
Lilly	Eli Lilly picks Houston to build \$6B API manufacturing facility	Investment	2025	Eli Lilly has revealed the location of the second of its four large-scale manufacturing facilities that it plans to build in the US., selecting Houston as home to a \$6B plant that will produce active pharmaceutical ingredients for oral drugs.
Lilly	Lilly to build \$6B facility to manufacture active pharmaceutical ingredients in Alabama	Investment	2025	Eli Lilly announced plans to invest more than \$6B in a new manufacturing facility in Huntsville, AL. This next-generation synthetic medicine active pharmaceutical ingredient (API) facility, the third of four new US. sites Lilly plans to announce, will produce small molecule synthetic and peptide medicines.
Lilly	Lilly selects Pennsylvania as home for its newest injectable medicine and device manufacturing facility	Investment	2026	Eli Lilly announced plans to invest more than \$3.5B in a new manufacturing facility in the Lehigh Valley, PA. Construction is expected to begin in 2026, with the site being operational in 2031.
Merck	Merck unveils new facility to increase vaccine production capacity	Investment	2025	Merck announced the opening of a new, \$1B, 225,000-square-foot facility dedicated to vaccine manufacturing at its Durham, NC, site.

Table 15 - Major Announcements in Pharmaceuticals

Company	Announcement	Type	Year	Summary
Merck	Merck to close Pennsylvania plant	Closure	2025	Pharmaceutical giant Merck will close its plant in Northumberland County, PA. According to a WARN Notice filed with the state's Department of Labor and Industry, three rounds of layoffs are planned at the facility in Riverside, PA , which the company refers to as its Cherokee, PA manufacturing site.
Merck	Merck invests \$1B in Delaware drug manufacturing facility	Investment	2025	Merck broke ground on its 470,000-square-foot biologics center of excellence, which will have laboratory, manufacturing and warehouse capacity to produce and scale next-generation medicines. The site will also be the future home for producing Merck's Keytruda cancer treatment drugs for US patients, according to a news release. The lab portion is slated to be fully operational by 2028, with drug production to start by 2030.
Merck	Merck breaks ground on \$3B pharmaceutical manufacturing facility in Virginia	Closure	2025	Merck has broken ground on a \$3B pharmaceutical manufacturing facility in VA. Located in Elkton, VA, Merck has begun construction of the 400,000 sqft facility— dubbed a center of excellence designed to redefine how medicines are made, scaled and delivered. The facility is part of a \$70B global investment launched this year to expand Merck's manufacturing and R&D footprint across the US.
Merck	Merck & Co commits over \$70B to US R&D center	Investment	2025	The Center of Excellence for Pharmaceutical Manufacturing is part of a more than \$70B investment beginning in 2025 to expand domestic manufacturing and research and development - not including any future business development transactions in R&D - to drive its long-term growth and strengthen the status of the US as a global leader in biopharmaceutical innovation.
Novartis	Novartis plans to expand its US-based manufacturing and R&D footprint with a total investment of \$23B over the next 5 years	Investment	2025	Novartis announced a planned \$23B investment over 5 years in US-based infrastructure, ensuring all key Novartis medicines for US patients will be made in the US. Over the next 5 years, Novartis will: Establish 1 biomedical research innovation hub in San Diego, CA, its second global R&D hub in the US; Build 4 new manufacturing facilities in soon-to-be-determined states, including 3 that will make biologics drug substances, drug products, device assembly and packaging, and 1 facility that will make chemical drug substances, oral solids dosage forms and packaging; Build 2 new radioligand therapy (RLT) manufacturing facilities in FL and TX; Expand 3 RLT manufacturing facilities in Indianapolis, IN, Millburn, NJ, and Carlsbad, CA.

Table 15 - Major Announcements in Pharmaceuticals

Company	Announcement	Type	Year	Summary
Novartis	Novartis to build manufacturing hub in North Carolina with \$771M investment	Investment	2025	Novartis said it will create a 700,000-square-foot flagship manufacturing hub in NC. Total investment is expected to be \$771M and is scheduled to open as early as 2027. The facility will manufacture biologics, sterile packaging, solid dosage tablets and capsules. This represents part of the company's \$23B US investment announced in April 2025.
Novartis	Novartis to add radioligand therapy manufacturing facility in Winter Park, FL, fourth in US to serve patients and advance \$23B investment	Investment	2025	The new 35,000-square-foot facility in Winter Park, FL, will come online by 2029 and will strengthen Novartis' specialized supply chain and manufacturing capabilities across its network of RLT production facilities. US. This represents part of the company's \$23B US investment announced in April 2025.
Novartis	Novartis plans \$280M facility in Denton, TX to produce 'next-generation' cancer treatments	Investment	2026	Novartis Gene Therapies' new 46,000-square-foot facility represents an investment of \$280M. This represents part of the company's \$23B US investment announced in April 2025.

SECTOR OUTLOOK – FORECAST & TRENDS

Personal care, toiletries & cosmetics

Overview

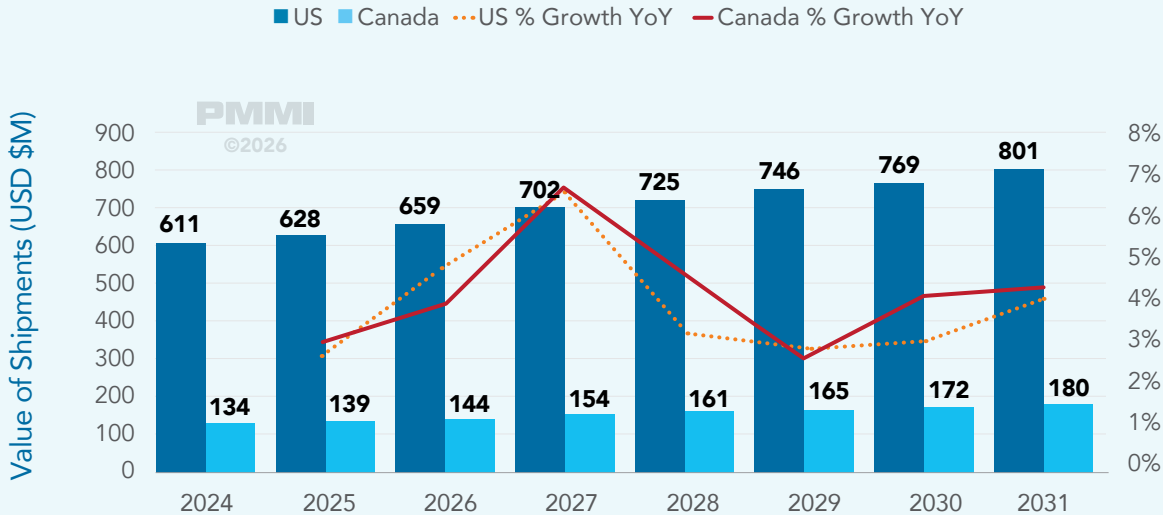
In 2025, the value of domestic shipments of packaging machinery within the personal care, toiletries & cosmetics sector in the US reached an estimated \$628 million. This sector is projected to grow to \$801 million by 2031, reflecting a CAGR of 4.1% for 2025-2031.

In Canada, the personal care sector’s machinery shipments were valued at an estimated \$139 million in 2025. This figure is expected to increase to \$180 million by 2031, with a CAGR of 4.4% for 2025-2031.

Trends

Personal care and cosmetics are increasingly shaped by rapid, often viral-driven demand shifts, requiring manufacturers to respond quickly to short-lived product cycles. At the same time, high product variability is driving a strong need for flexible equipment capable of handling frequent changeovers and multiple formats. Compared to more regulated sectors, this market is also more price-sensitive, with companies showing greater willingness to use refurbished equipment or retrofit existing lines to manage costs.

Fig. 47 Packaging Machinery Forecast - Personal Care, Toiletries, & Cosmetics



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

Virality and Rapid Demand Shifts Reshaping Production Needs

Demand within personal care and cosmetics is increasingly influenced by rapid product cycles, often driven by social media and influencer-led trends. Interviewees noted that viral products can create sudden spikes in demand, where a specific item, such as a skincare or beauty product, can require immediate scale-up in production volumes.

These demand spikes are difficult to predict and often short-lived, creating pressure on manufacturers to respond quickly without overcommitting to long-term capacity. As a result, production strategies are shifting toward greater responsiveness, with companies needing to balance speed-to-market with the risk of demand tapering off once trends fade.

This dynamic reinforces a shift in the sector, where production is not only driven by traditional brand pipelines but also by external consumer momentum, requiring more agile manufacturing approaches.

Flexibility and Adaptability

A defining trend across interviews is the growing need for flexibility in personal care manufacturing, driven by high product variability and shorter product lifecycles. Unlike some industries, this sector must accommodate a wide range of product viscosities, packaging formats, and container types, often within the same production environment.

In response, manufacturers are moving toward equipment designed for rapid changeovers and multi-product capability, including the adoption of more flexible and, in some cases, robotic production lines. These systems enable producers to switch between SKUs with minimal downtime and manage a broader mix of products on a single line.

This shift is particularly relevant for co-packers and contract manufacturers, where uncertainty around product runs is common. In these environments, the ability to handle varied packaging formats and quickly adapt to new product specifications is becoming a key competitive requirement rather than a differentiator.

Price Sensitivity

Compared to more highly regulated sectors such as pharmaceuticals, personal care, and cosmetics operate in a less restrictive environment, which shapes how companies approach capital investment. Interview insights indicate that this segment is more cost-sensitive, with purchasing decisions often driven by pricing considerations and return on investment.

One outcome of this is a greater openness to used equipment and retrofitting existing lines, particularly in lower-end cosmetic applications. In these cases, companies may prioritize cost savings over acquiring new machinery, especially when equipment requirements are relatively standardized.

This contrasts with sectors where regulatory compliance necessitates new, validated equipment and highlights a key distinction in how capital is deployed. In personal care, investment strategies are often more flexible and opportunistic, with companies balancing performance needs against cost constraints.



MAJOR ANNOUNCEMENTS FROM PERSONAL CARE, TOILETRIES & COSMETICS MANUFACTURERS

Table 16 - Major Announcements in Personal Care, Toiletries & Cosmetics

Company	Announcement	Type	Year	Summary
Church & Dwight Co.	Church & Dwight invests \$28M to expand detergent production in Ohio	Investment	2025	Church & Dwight, in partnership with JobsOhio, has announced a significant \$28M expansion at its manufacturing facility in Old Fort, Seneca County, OH. This investment is focused on producing unit-dose detergent power paks, a new product line within Church & Dwight's long-standing portfolio of personal care, household, and speciality products.
Johnson & Johnson	Johnson & Johnson increases US. Investment to more than \$55B over the next four years	Investment	2025	Johnson & Johnson announced manufacturing, research and development, and technology investments of more than \$55B in the US over the next four years. This represents a 25% increase in investment compared to the previous four years.
Johnson & Johnson	Johnson & Johnson announces second \$2B manufacturing facility in North Carolina	Investment	2026	Johnson and Johnson has announced a new \$2B biologics manufacturing facility located in Wilson, NC. The announcement follows an agreement with the Trump administration aiming to improve access and prices of medications for American patients. This investment is part of a \$55B US. operations expansion.
Johnson & Johnson	Johnson & Johnson expands US. Footprint with more than \$1B investment in next generation cell therapy manufacturing facility in Pennsylvania	Investment	2026	Johnson & Johnson announced a more than \$1B investment in a next generation cell therapy manufacturing facility in Montgomery County, PA. This investment is part of a \$55B US. operations expansion.
Kimberly Clark	Kimberly-Clark to build \$800M manufacturing facility in Warren, OH	Investment	2025	The Kimberly-Clark Corporation has announced its plans for a facility coming to Warren, OH. The company, which is one of the world's leading manufacturers of personal care and hygiene products, will establish an \$800M advanced manufacturing facility.
Kimberly Clark	Kimberly-Clark to invest over \$2B in US operations	Investment	2025	Kimberly-Clark announced plans to invest more than \$2B over the next five years in its North America segment, expanding its US. manufacturing capacity and modernizing its supply chain. The investment includes approximately \$800M to establish an advanced manufacturing facility in Warren, OH, and \$200M to add an automated distribution center at its factory in Beech Island, SC. The remaining funds will be put towards innovation and automation upgrades at Kimberly-Clark's facilities in North America.
Kimberly Clark	Kimberly-Clark plans \$130M expansion in Mobile AL, adds 29 jobs	Investment	2025	According to a news release from the Mobile Chamber, this investment is for the company's production line for a new generation of consumer-preferred hygiene products.

SECTOR OUTLOOK – FORECAST & TRENDS

Other end-user sectors

Overview

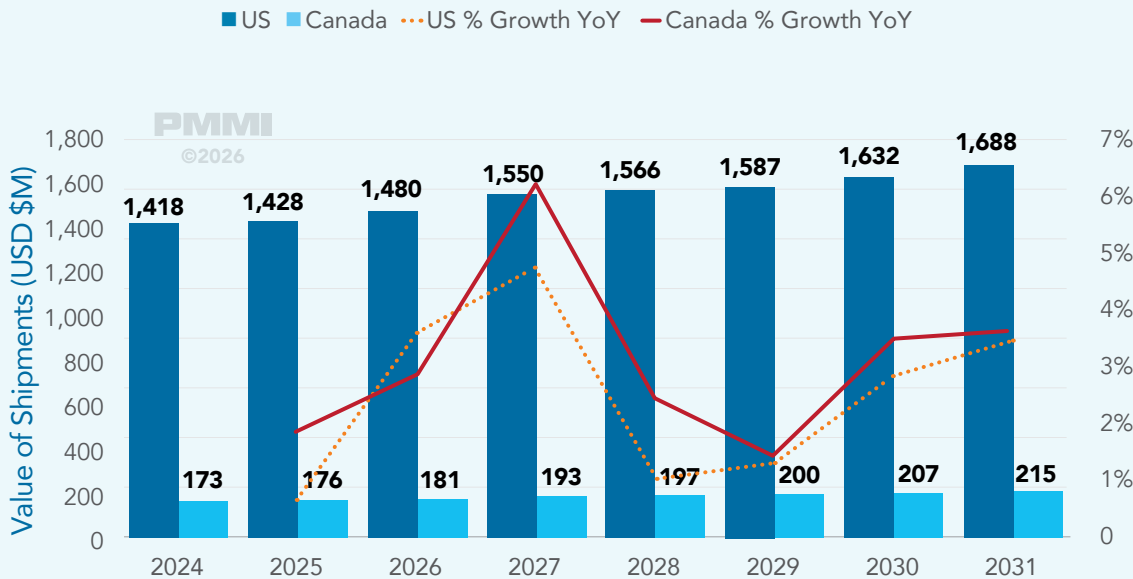
In 2025, the value of domestic shipments of packaging machinery within other end-user sectors in the US reached an estimated \$1.4 billion. This sector is projected to grow to \$1.7 billion by 2031, reflecting a CAGR of 2.8% for 2025-2031.

In Canada, other end-user sector machinery shipments were valued at an estimated \$176 million in 2025. This figure is expected to increase to \$215 million by 2031, with a CAGR of 3.3% for 2025-2031.

Trends

Activity across other industries reflects a more fragmented landscape compared to core packaging markets, with demand shaped by sector-specific pressures rather than broad trends. Automotive investment is tempered by ongoing uncertainty, cannabis activity has slowed as the market matures, and government-related work is contributing to growth in more specialized areas.

Fig. 48 Packaging Machinery Forecast - Other End-User Sectors



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

Automotive Facing Uncertainty and Slowing Investment

The automotive sector was described as particularly challenged in the current environment, with uncertainty emerging as a key factor shaping investment decisions. One interviewee highlighted a lack of clarity around the future direction of the industry, particularly as manufacturers navigate the transition between internal combustion and electric vehicles. This ambiguity has made it difficult for companies to commit to long-term capital investments, contributing to a more cautious approach to automation and expansion.

In addition to these structural uncertainties, broader economic conditions are further influencing activity. Tariffs and shifting policy dynamics have complicated planning, while high inventory levels across the market have reduced the urgency for new capacity. Together, these factors are contributing to a slowdown in demand relative to more stable sectors.

This combination of near-term economic pressure and longer-term technological transition positions automotive as a market in flux. While the sector remains significant, investment activity appears to be tempered as companies wait for greater clarity before committing to large-scale changes.

Government and Defense Activity Creating Niche Growth Opportunities

In addition to traditional commercial industries, one interviewee highlighted the growing importance of government-related work within their business. Activity tied to defense and ammunition production has become a more meaningful contributor than in previous years, ranging from smaller machine-tending applications to more specialized manufacturing processes.

However, participation in this segment introduces added complexity. The same interviewee noted that engaging with government projects requires navigating strict compliance requirements, extensive approval processes, and additional operational oversight. These factors can lengthen project timelines and increase the resources required to support each opportunity.

Despite these challenges, the sector represents a stable and potentially expanding area of demand. Rather than broad-based growth, activity in this space is shaped by the ability to meet highly specific requirements, reinforcing its role as a specialized but valuable segment within the broader market.

Cannabis Market Shifting from Expansion to Consolidation

The cannabis industry, once characterized by rapid expansion, is now entering a more constrained phase of development. One interviewee noted a slowdown in activity, attributing it in part to the absence of new state-level legalization, which had previously served as a key driver of investment and project pipelines.

At the same time, pricing dynamics are placing additional pressure on the market. Declining product prices have reduced margins for many producers, particularly smaller operators, limiting their ability to access capital for new equipment or expansion projects. This shift is contributing to a more cautious investment environment compared to earlier periods of growth.

As a result, the sector appears to be transitioning from a high-growth phase into one characterized by consolidation and selective investment. While opportunities remain, particularly among larger or more established players, the pace of new activity has slowed, reflecting a more mature and competitive market landscape.

Machine Statistics

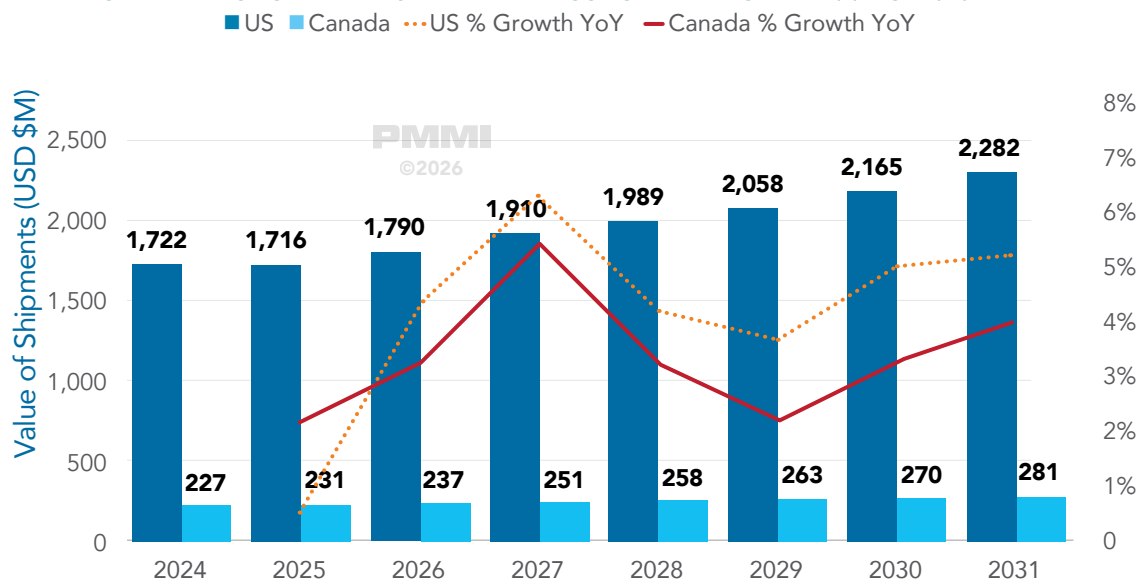
BAGGING, POUCHING & WRAPPING EQUIPMENT

In 2025, the total estimated value of shipments within the bagging, pouching, and wrapping equipment sector in the US was \$1.7 billion. The food sector dominated demand, accounting for 59% of US shipments in 2025, followed by pharmaceuticals (12%) and other end-user sectors (11%).

This machinery is forecast to grow by about 4.3% in 2026 in the US. By 2031, we expect the value of shipments to reach nearly \$2.3 billion, reflecting an overall CAGR of about 4.9% from 2025 to 2031.

In Canada, the bagging, pouching, and wrapping equipment market totaled \$231 million in 2025. Food again led the end-market mix at 58%, followed by other end-user sectors (12%) and personal care, toiletries, and cosmetics (11%). Shipments are forecast to grow by about 3% in 2026 and reach roughly \$281 million by 2031, an overall CAGR of about 3.4% from 2025 to 2031.

Fig. 49 Packaging Machinery Forecast - Bagging, Pouching & Wrapping Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

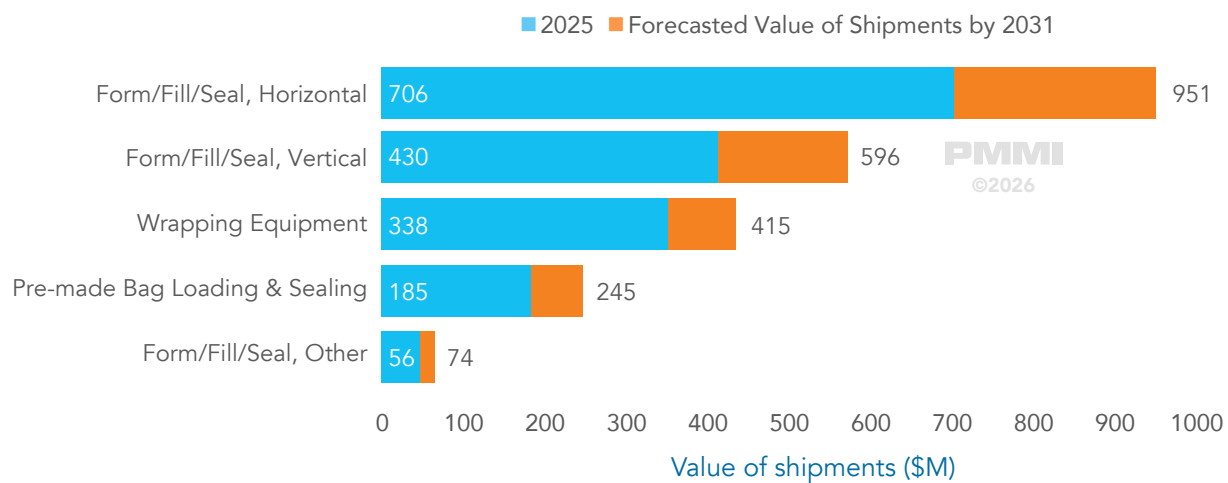
Table 17 - Bagging, Pouching & Wrapping Equipment

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$1015	59%	\$134	58%
Beverage	\$109	6%	\$13	6%
Household, Industrial, & Agricultural Chemicals	\$102	6%	\$18	8%
Pharmaceuticals	\$206	12%	\$11	5%
Personal Care, Toiletries, & Cosmetics	\$100	6%	\$26	11%
Other End-User Sectors	\$184	11%	\$28	12%
Total	\$1,716		\$231	

Source: Interact Analysis

BAGGING, POUCHING & WRAPPING EQUIPMENT SUB-MACHINES

Fig. 50 US Packaging Sub-Machinery Forecast - Bagging, Pouching & Wrapping Equipment



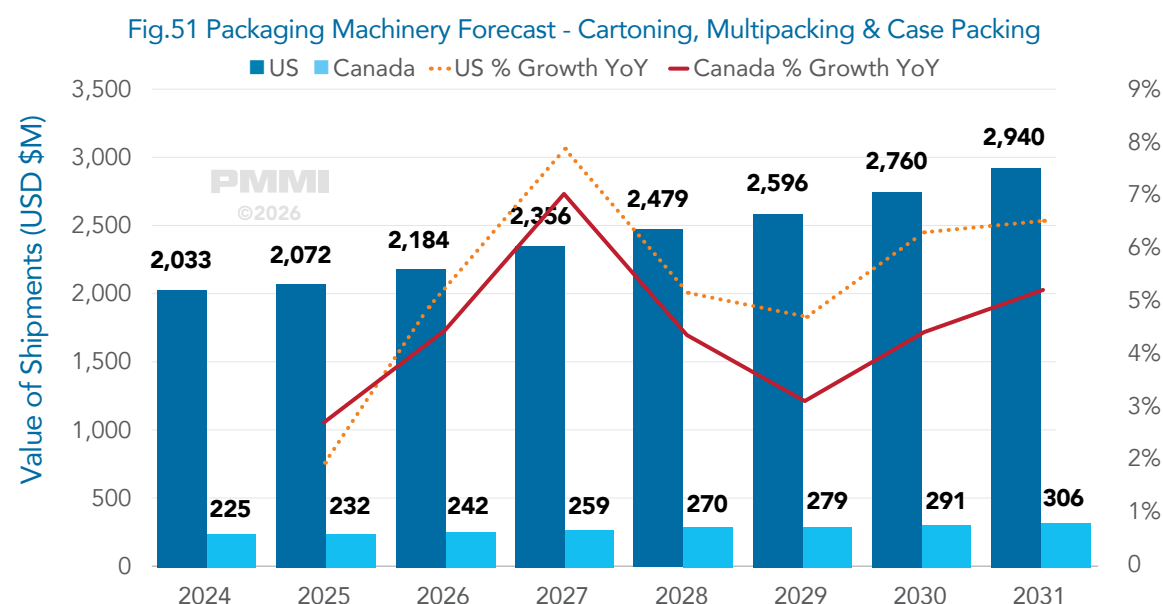
PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

CARTONING, MULTIPACKING & CASE PACKING

In 2025, the total estimated value of shipments within the cartoning, multipacking, and case packing equipment sector in the US was \$2.1 billion. The food sector remained the largest end market, accounting for roughly 45% of US shipments in 2025, followed by beverage (17%) and other end-user sectors (12%).

This machinery is forecast to grow by about 5.4% in 2026 in the US. By 2031, we expect the value of shipments to reach nearly \$2.9 billion, reflecting an overall CAGR of about 6.0% from 2025 to 2031.

In Canada, the cartoning, multipacking, and case packing equipment market totaled \$232 million in 2025. Food again led the end-market mix at 44%, followed by other end-user sectors (15%) and beverage (13%). Shipments are forecast to grow by about 4.5% in 2026 and reach roughly \$306 million by 2031, an overall CAGR of about 4.8% from 2025 to 2031.



PMMI members can visit <https://www.pmmi.org/content/soti-dash-board> to explore interactive forecast data by machine type, subcategory, industry, and more

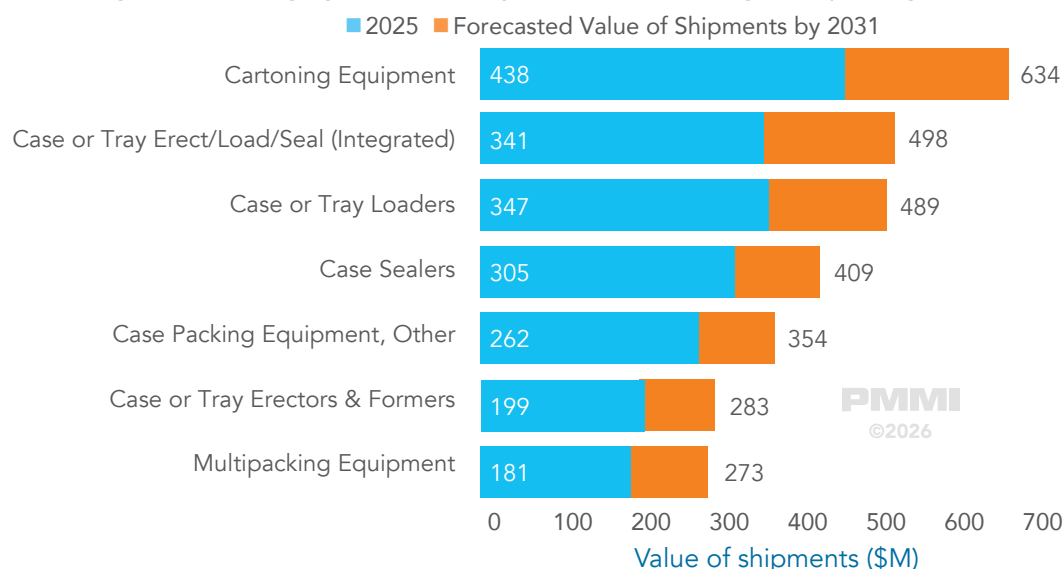
Table 52 - Cartoning, Multipacking & Case Packing

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$931	45%	\$102	44%
Beverage	\$347	17%	\$30	13%
Household, Industrial, & Agricultural Chemicals	\$193	9%	\$27	12%
Pharmaceuticals	\$230	11%	\$11	5%
Personal Care, Toiletries, & Cosmetics	\$115	6%	\$27	12%
Other End-User Sectors	\$256	12%	\$34	15%
Total	\$2,072		\$232	

Source: Interact Analysis

CARTONING, MULTIPACKING & CASE PACKING SUB-MACHINES

Fig. 52 US Packaging Sub-Machinery Forecast - Cartoning, Multipacking & Case Packing



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

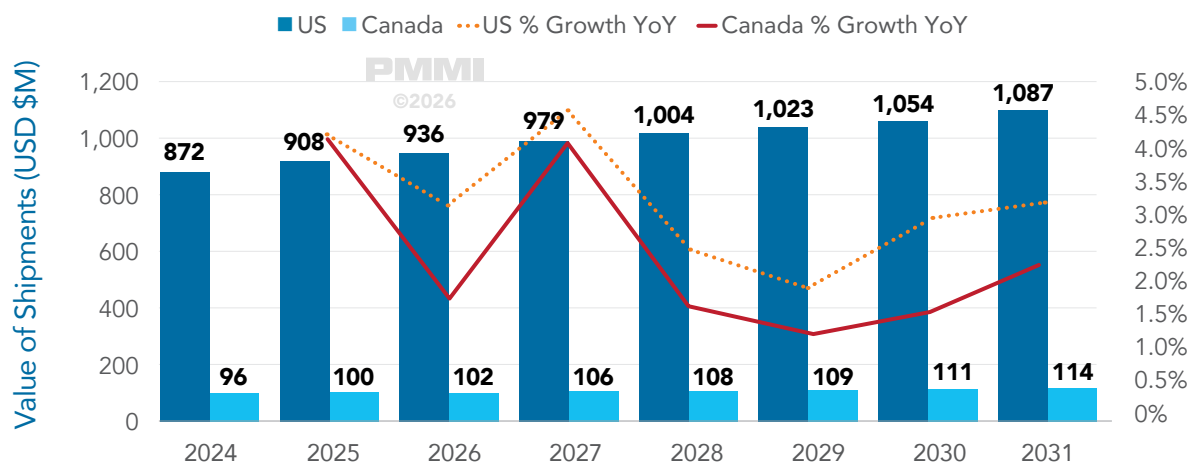
CODING, LABELING, PRINTING, & READING EQUIPMENT

In 2025, the total estimated value of shipments within the coding, labeling, printing, and reading equipment sector in the US was \$908 million. The food sector remained the largest end market, accounting for roughly 40% of US shipments in 2025, followed by beverage (17%) and household, industrial, and agricultural chemicals (14%).

This machinery is forecast to grow by about 3.1% in 2026 in the US. By 2031, we expect the value of shipments to reach near \$1.1 billion, reflecting an overall CAGR of about 3.1% from 2025 to 2031.

In Canada, the coding, labeling, printing, and reading equipment market totaled \$100 million in 2025. Food again led the end-market mix at 39%, followed by household, industrial, and agricultural chemicals (17%) and other end-user sectors (14%). Shipments are forecast to grow by about 1.8% in 2026 and reach roughly \$114 million by 2031, an overall CAGR of about 2.1% from 2025 to 2031.

Fig. 53 Packaging Machinery Forecast - Coding, Labeling, Printing, & Reading Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

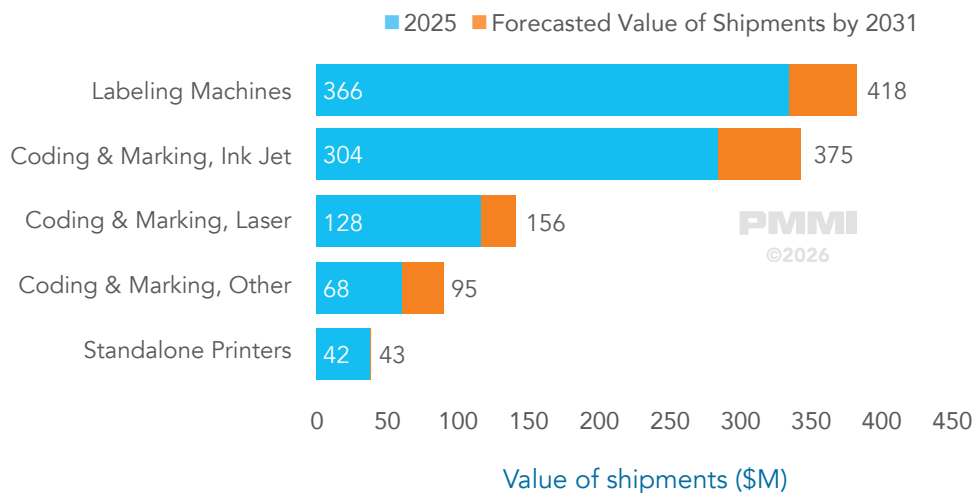
Table 19 - Coding, Labeling, Printing, & Reading Equipment

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$364	40%	\$39	39%
Beverage	\$153	17%	\$14	13%
Household, Industrial, & Agricultural Chemicals	\$130	14%	\$17	17%
Pharmaceuticals	\$99	11%	\$5	5%
Personal Care, Toiletries, & Cosmetics	\$51	6%	\$11	11%
Other End-User Sectors	\$111	12%	\$14	14%
Total	\$908		\$100	

Source: Interact Analysis

CODING, LABELING, PRINTING, & READING EQUIPMENT SUB-MACHINES

Fig. 54 US Packaging Sub-Machinery Forecast - Coding, Labeling, Printing, & Reading Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

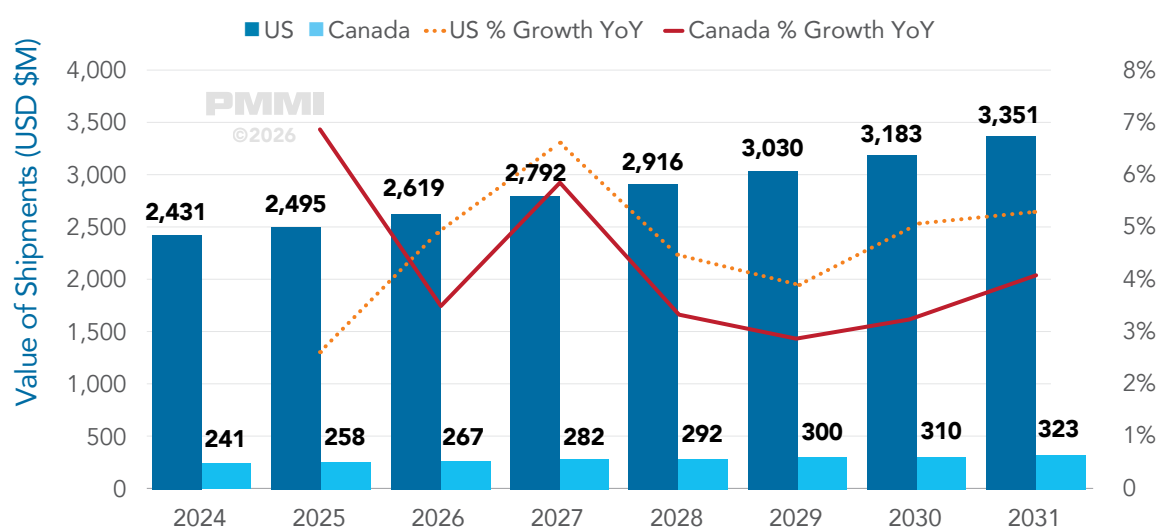
CONVEYING, FEEDING & HANDLING

In 2025, the total estimated value of shipments within the conveying, feeding, and handling equipment sector in the US was \$2.5 billion. The food sector remained the largest end market, accounting for roughly 41% of US shipments in 2025, followed by beverage (17%) and household, industrial, and agricultural chemicals (14%).

This machinery is forecast to grow by about 5% in 2026 in the US. By 2031, we expect the value of shipments to reach roughly \$3.4 billion, reflecting an overall CAGR of about 5% from 2025 to 2031.

In Canada, the conveying, feeding, and handling equipment market totaled \$258 million in 2025. Food again led the end-market mix at 41%, followed by household, industrial, and agricultural chemicals (16%) and beverage (14%). Shipments are forecast to grow by about 3.5% in 2026 and reach roughly \$323 million by 2031, an overall CAGR of about 3.8% from 2025 to 2031.

Fig. 55 Packaging Machinery Forecast - Conveying, Feeding & Handling



PMMI members can visit <https://www.pmmi.org/content/soti-dashboards> to explore interactive forecast data by machine type, subcategory, industry, and more

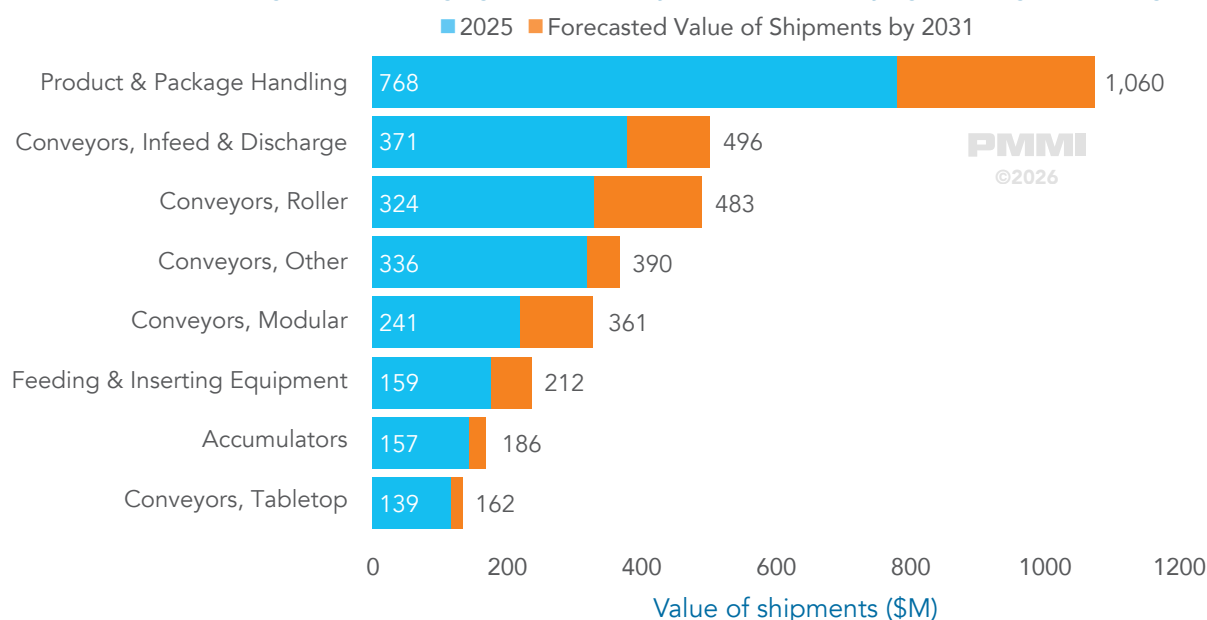
Table 20 - Conveying, Feeding & Handling

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$1026	41%	\$105	41%
Beverage	\$430	17%	\$35	14%
Household, Industrial, & Agricultural Chemicals	\$350	14%	\$42	16%
Pharmaceuticals	\$265	11%	\$12	5%
Personal Care, Toiletries, & Cosmetics	\$127	5%	\$27	11%
Other End-User Sectors	\$296	12%	\$36	14%
Total	\$2,495		\$258	

Source: Interact Analysis

CONVEYING, FEEDING & HANDLING SUB-MACHINES

Fig. 56 US Packaging Sub-Machinery Forecast - Conveying, Feeding & Handling



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

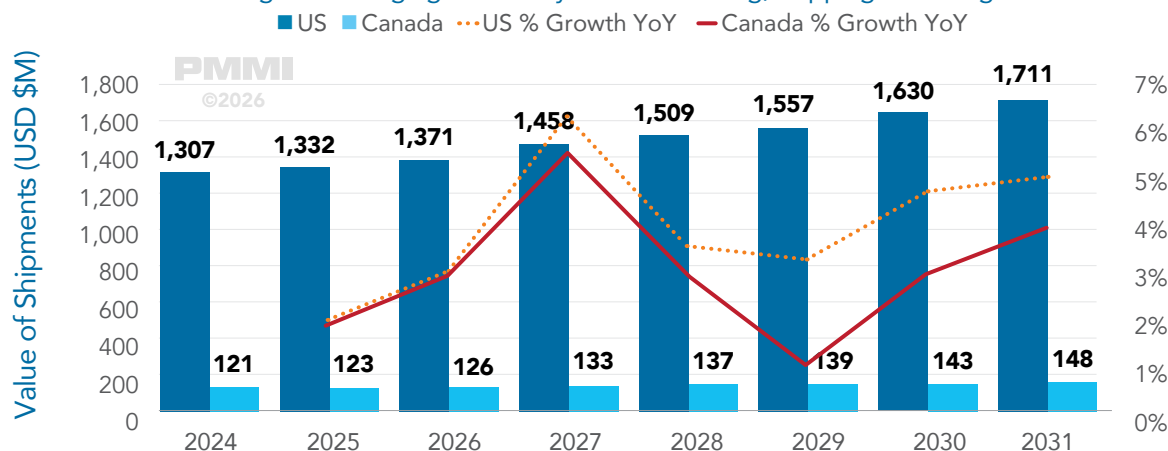
FILLING, CAPPING & CLOSING

In 2025, the total estimated value of shipments within the filling, capping, and closing equipment sector in the US was \$1.3 billion. The food sector remained the largest end market, accounting for roughly 32% of US shipments in 2025, followed by household, industrial, and agricultural chemicals (18%) and beverage (18%).

This machinery is forecast to grow by about 2.9% in 2026 in the US. By 2031, we expect the value of shipments to reach \$1.7 billion, reflecting an overall CAGR of roughly 4.3% from 2025 to 2031.

In Canada, the filling, capping, and closing equipment market totaled \$123 million in 2025. Food again led the end-market mix at 31%, followed by household, industrial, and agricultural chemicals (21%) and beverage (14%). Shipments are forecast to grow by about 2.9% in 2026 and reach roughly \$148 million by 2031, an overall CAGR of about 3.2% from 2025 to 2031.

Fig. 57 Packaging Machinery Forecast - Filling, Capping & Closing



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

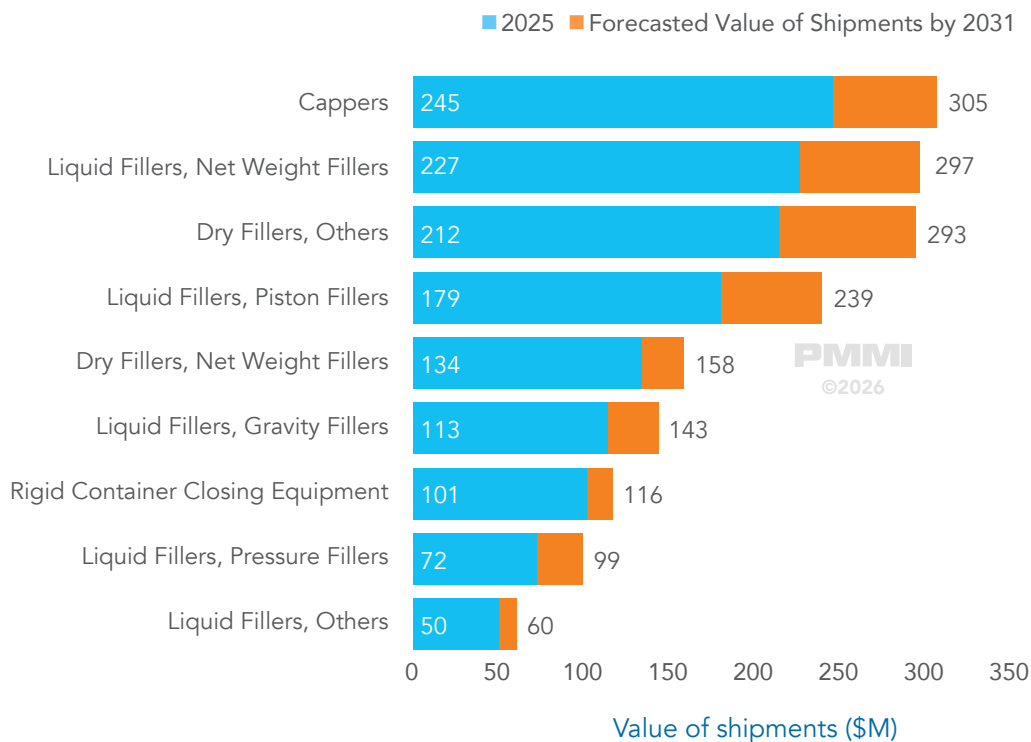
Table 21 - Filling, Capping & Closing

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$425	32%	\$38	31%
Beverage	\$236	18%	\$17	14%
Household, Industrial, & Agricultural Chemicals	\$243	18%	\$26	21%
Pharmaceuticals	\$181	14%	\$7	6%
Personal Care, Toiletries, & Cosmetics	\$74	6%	\$16	13%
Other End-User Sectors	\$173	13%	\$19	15%
Total	\$1,332		\$123	

Source: Interact Analysis

FILLING, CAPPING & CLOSING SUB-MACHINES

Fig. 58 US Packaging Sub-Machinery Forecast - Filling, Capping & Closing



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

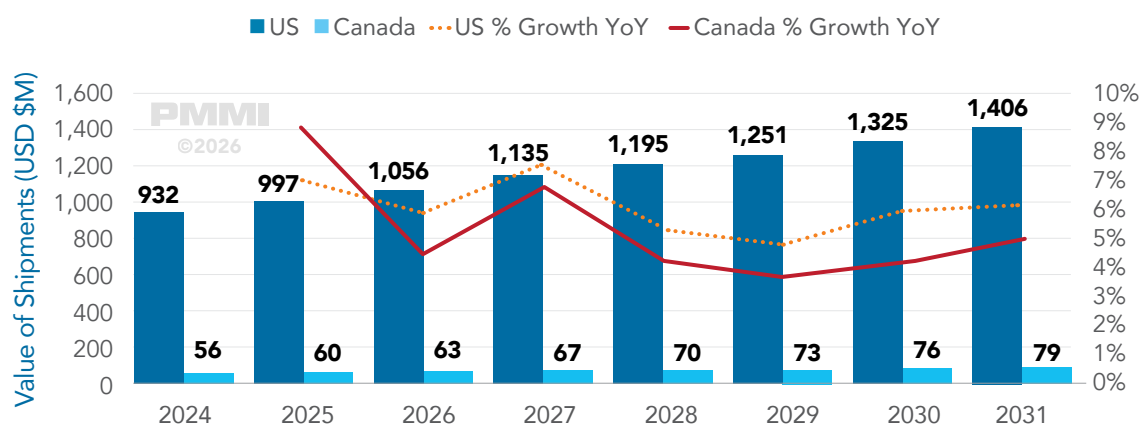
INSPECTION & TESTING EQUIPMENT

In 2025, the total estimated value of shipments within the inspection and testing equipment sector in the US was \$997 million. The food sector remained the largest end market, accounting for roughly 43% of US shipments in 2025, followed by beverage (14%) and household, industrial, and agricultural chemicals (14%).

This machinery is forecast to grow by about 5.9% in 2026 in the US. By 2031, we expect the value of shipments to reach \$1.4 billion, reflecting an overall CAGR of about 5.9% from 2025 to 2031.

In Canada, the inspection and testing equipment market totaled \$60 million in 2025. Food again led the end-market mix at 41%, followed by household, industrial, and agricultural chemicals (17%) and other end-user sectors (15%). Shipments are forecast to grow by about 4.3% in 2026 and reach roughly \$79 million by 2031, an overall CAGR of about 4.7% from 2025 to 2031.

Fig. 59 Packaging Machinery Forecast - Inspection & Testing Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

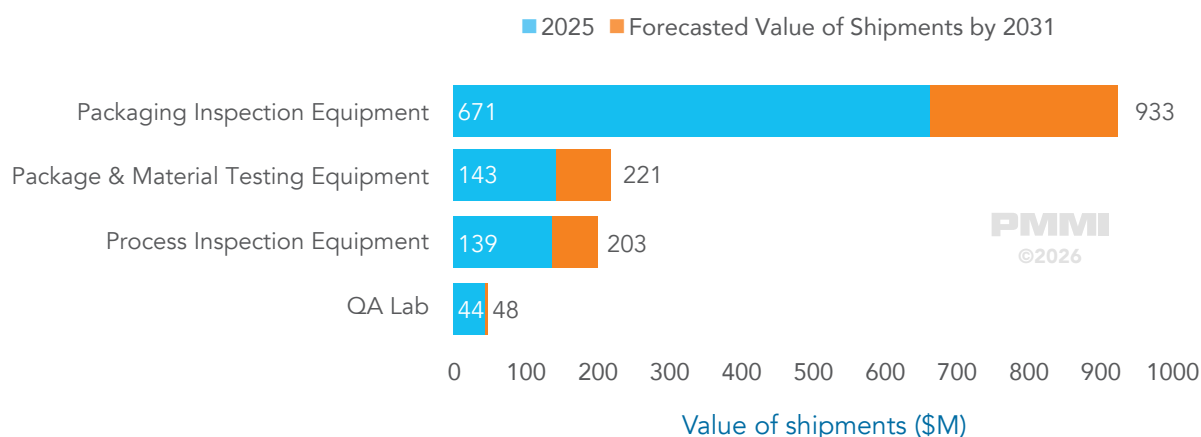
Table 22 - Inspection & Testing Equipment

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$429	43%	\$25	41%
Beverage	\$142	14%	\$7	12%
Household, Industrial, & Agricultural Chemicals	\$136	14%	\$10	17%
Pharmaceuticals	\$113	11%	\$3	5%
Personal Care, Toiletries, & Cosmetics	\$52	5%	\$6	11%
Other End-User Sectors	\$126	13%	\$9	15%
Total	\$997		\$60	

Source: Interact Analysis

INSPECTION & TESTING EQUIPMENT SUB-MACHINES

Fig. 60 US Packaging Sub-Machinery Forecast - Inspection & Testing Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

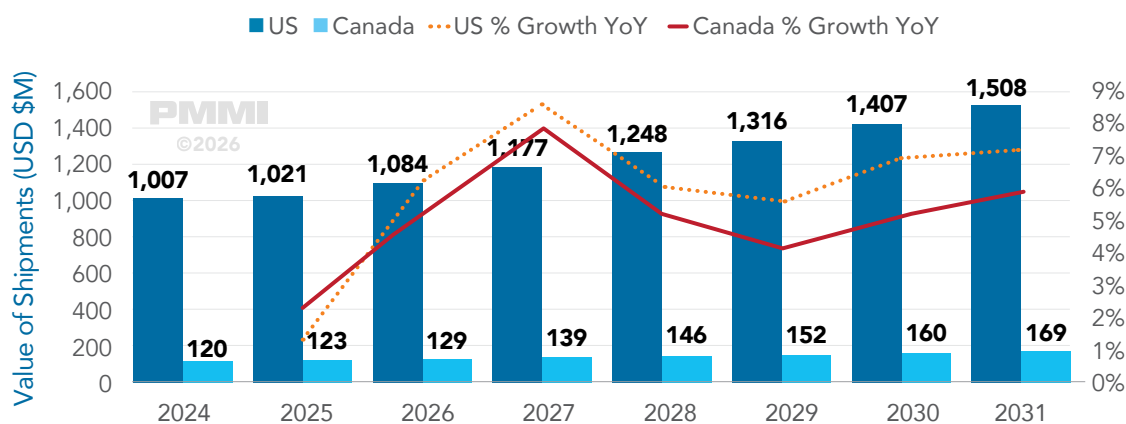
PALLETIZING & LOAD STABILIZATION

In 2025, the total estimated value of shipments within the palletizing and load stabilization equipment sector in the US was \$1.0 billion. The food sector remained the largest end market, accounting for roughly 39% of US shipments in 2025, followed by beverage (18%) and household, industrial, and agricultural chemicals (17%).

This machinery is forecast to grow by about 6.2% in 2026 in the US. By 2031, we expect the value of shipments to reach \$1.5 billion, reflecting an overall CAGR of about 6.7% from 2025 to 2031.

In Canada, the palletizing and load stabilization equipment market totaled \$123 million in 2025. Food again led the end-market mix at 38%, followed by household, industrial, and agricultural chemicals (19%) and beverage (14%). Shipments are forecast to grow by about 5.2% in 2026 and reach roughly \$169 million by 2031, an overall CAGR of about 5.5% from 2025 to 2031.

Fig. 61 Packaging Machinery Forecast - Palletizing & Load Stabilization



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

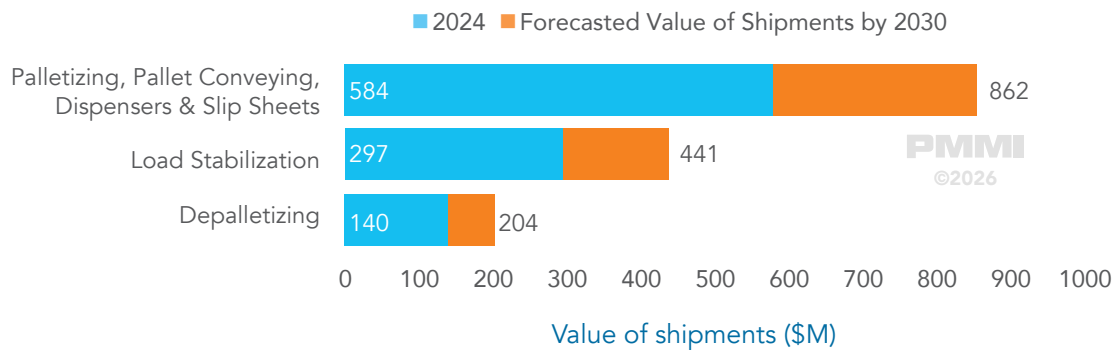
Table 23 - Palletizing & Load Stabilization

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$400	39%	\$47	38%
Beverage	\$187	18%	\$18	14%
Household, Industrial, & Agricultural Chemicals	\$172	17%	\$23	19%
Pharmaceuticals	\$89	9%	\$5	4%
Personal Care, Toiletries, & Cosmetics	\$49	5%	\$12	10%
Other End-User Sectors	\$124	12%	\$18	14%
Total	\$1,021		\$123	

Source: Interact Analysis

PALLETIZING & LOAD STABILIZATION SUB-MACHINES

Fig. 62 US Packaging Sub-Machinery Forecast - Palletizing & Load Stabilization



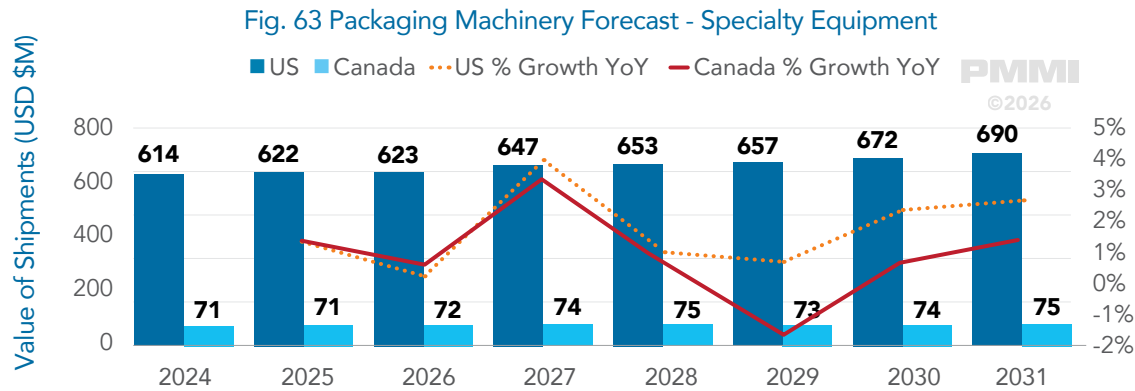
PMMI members can visit <https://www.pmmi.org/content/soti-dashboards> to explore interactive forecast data by machine type, subcategory, industry, and more

SPECIALTY EQUIPMENT

In 2025, the total estimated value of shipments within the specialty equipment sector in the US was \$622 million. The food sector remained the largest end market, accounting for roughly 38% of US shipments in 2025, followed by household, industrial, and agricultural chemicals (17%) and beverage (15%).

This machinery is forecast to grow by about 0.2% in 2026 in the US. By 2031, we expect the value of shipments to reach roughly \$690 million, reflecting an overall CAGR of about 1.7% from 2025 to 2031.

In Canada, the specialty equipment market totaled \$71 million in 2025. Food again led the end-market mix at 38%, followed by household, industrial, and agricultural chemicals (20%) and other end-user sectors (14%). Shipments are forecast to grow by about 0.5% in 2026 and reach roughly \$75 million by 2031, an overall CAGR of about 0.8% from 2025 to 2031.



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

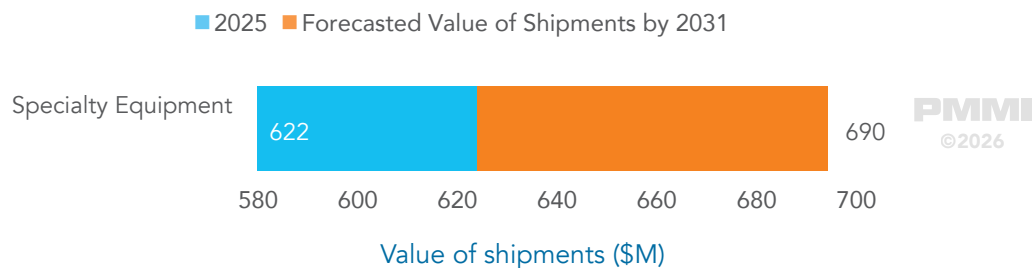
Table 24 - Specialty Equipment

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$238	38%	\$27	38%
Beverage	\$96	15%	\$9	12%
Household, Industrial, & Agricultural Chemicals	\$104	17%	\$14	20%
Pharmaceuticals	\$79	13%	\$4	6%
Personal Care, Toiletries, & Cosmetics	\$31	5%	\$7	10%
Other End-User Sectors	\$74	12%	\$10	14%
Total	\$622		\$71	

Source: Interact Analysis

SPECIALTY EQUIPMENT SUB-MACHINES

Fig. 64 US Packaging Sub-Machinery Forecast - Specialty Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

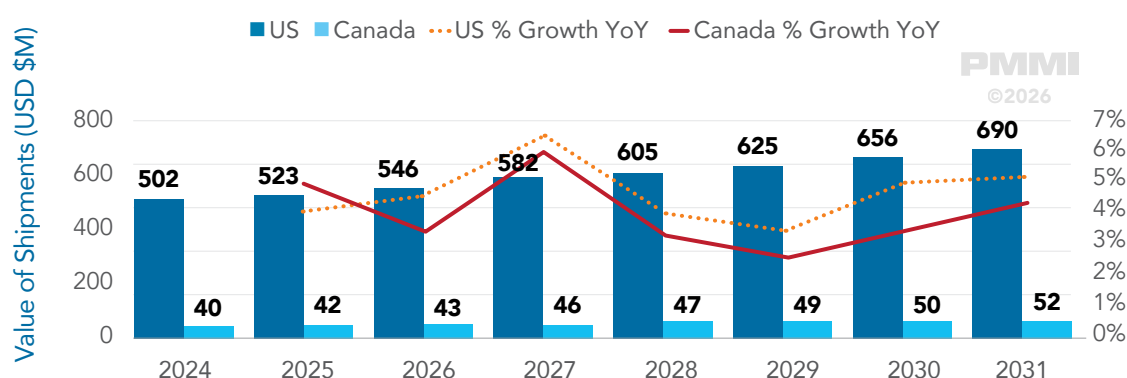
TRAY, CLAMSHELL & BLISTER PACKAGING EQUIPMENT

In 2025, the total estimated value of shipments within the tray, clamshell, and blister packaging equipment sector in the US was \$523 million. The food sector remained the largest end market, accounting for roughly 55% of US shipments in 2025, followed by pharmaceuticals (17%) and other end-user sectors (16%).

This machinery is forecast to grow by about 4.5% in 2026 in the US. By 2031, we expect the value of shipments to reach roughly \$690 million, reflecting an overall CAGR of about 4.7% from 2025 to 2031.

In Canada, the tray, clamshell, and blister packaging equipment market totaled \$42 million in 2025. Food again led the end-market mix at 58%, followed by other end-user sectors (19%) and personal care, toiletries, and cosmetics (12%). Shipments are forecast to grow by about 3.4% in 2026 and reach roughly \$52 million by 2031, an overall CAGR of about 3.8% from 2025 to 2031.

Fig. 65 Packaging Machinery Forecast - Tray, Clamshell & Blister Packaging Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, industry, and more

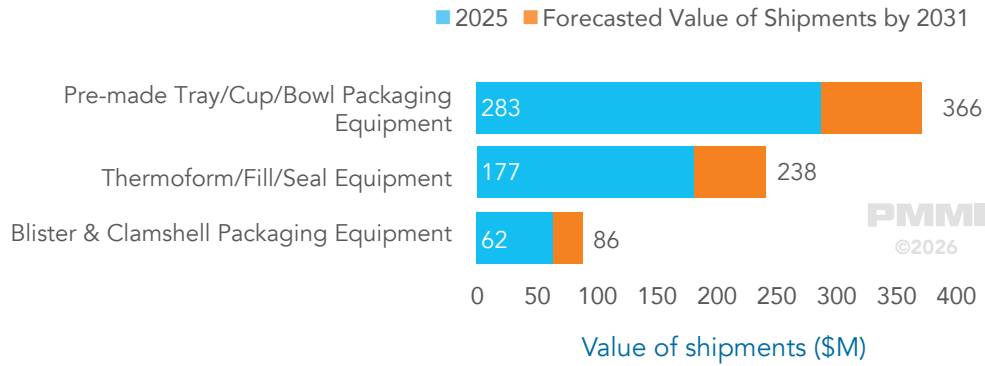
Table 25 - Tray, Clamshell & Blister Packaging Equipment

Industry	USA		Canada	
	2025 Value of Shipments (\$M)	Share %	2025 Value of Shipments (\$M)	Share %
Food	\$287	55%	\$24	58%
Beverage	\$10	2%	\$0.4	1%
Household, Industrial, & Agricultural Chemicals	\$22	4%	\$1	3%
Pharmaceuticals	\$91	17%	\$3	7%
Personal Care, Toiletries, & Cosmetics	\$29	6%	\$5	12%
Other End-User Sectors	\$85	16%	\$8	19%
Total	\$523		\$42	

Source: Interact Analysis

TRAY, CLAMSHELL & BLISTER PACKAGING EQUIPMENT SUB-MACHINES

Fig. 66 US Packaging Sub-Machinery Forecast - Tray, Clamshell & Blister Packaging Equipment



PMMI members can visit <https://www.pmmi.org/content/soti-dashboard> to explore interactive forecast data by machine type, subcategory, industry, and more

7

Appendix

RISKS ASSOCIATED WITH FORECAST

While the underlying fundamentals of the packaging market remain relatively stable, the outlook is increasingly shaped by external factors, particularly around policy direction and the broader macroeconomic environment. Over the past two years, industry participants have repeatedly highlighted that it is not just economic conditions themselves that influence investment decisions, but the speed and unpredictability with which they can change.

One of the most frequently cited risks is the evolving US policy landscape. Trade policy has become a key source of disruption. Interviewees described an environment where tariffs and regulatory decisions can be introduced or adjusted rapidly, often with little advance notice. This has made it difficult for companies to plan long-term investments, especially those with global supply chains. In several cases, businesses noted that policy changes were implemented quickly enough to force immediate reassessment of cost structures and sourcing strategies, creating a “pause and reassess” dynamic across the market.

This unpredictability is especially important for capital equipment demand. Even when underlying demand remains intact, sudden policy shifts can delay project timelines as companies wait for clarity. As a result, the risk is less about a permanent reduction in demand and more about timing disruptions, where orders are pushed out rather than cancelled entirely. However, if uncertainty persists, these delays can accumulate and weigh on short-term growth.

In parallel, monetary policy presents an additional layer of risk. While expectations had previously pointed toward easing financial conditions, uncertainty around the future direction of interest rates has increased. Changes in Federal Reserve leadership and evolving inflation dynamics have introduced new questions about whether rates could remain elevated or begin rising again. For equipment buyers, borrowing costs are a critical factor in investment decisions. Higher or more volatile interest rates can reduce the attractiveness of large capital expenditures, particularly for small and mid-sized firms.

Taken together, these factors create an environment where confidence becomes as important as fundamentals. The past several years have demonstrated that even in relatively stable demand conditions, uncertainty alone can slow decision-making. As a result, the primary risk to the forecast is not necessarily a sharp downturn, but rather a more cautious investment environment where projects are delayed, scaled back, or staged over longer timelines.

RESEARCH METHODOLOGY

Sources utilized in state of the industry report

Our research relies heavily on primary sources of information. For this report, these sources were as follows:



PMMI Membership
Supplier Survey



20+ Interviews With Packaging
Machinery Suppliers



Attending Industry
Tradeshows

These sources were used to achieve the following:

- 1 Determine market size for 2025 through a bottom up counting of revenues
- 2 Uncover sentiment relating to growth during 2025/2026
- 3 Understand challenges and opportunities facing packaging machinery suppliers
- 4 Determine relative share of machine types by industry
- 5 Understand long term drivers of growth

Secondary Data Sets Used in Modelling Process:

US Census

The US Census provides robust data on the performance of manufacturing by various industry sectors. This data was relied upon heavily to determine the relative size of end-verticals. It was also used to provide historic perspective for how packaging machinery production has performed, and its relationship with machinery production.

Federal Reserve Economic Database (FRED)

Our macroeconomic commentary relies heavily on information provided by the federal reserve. The FRED provides information relating to inflation, interest rates, supply chain pressures, amongst much more. We've utilized these historic datasets to help determine the impact macroeconomic movement has on the sale of packaging machinery.

US Bureau of Labor Statistics

We relied on the US Bureau of Labor Statistics for information relating to employment of service

technicians and utilized it to provide context for the workforce shortage discussion.

Processing Machinery Supplier Websites

Websites from public packaging machine suppliers are utilized to gain historic perspective of growth and to better understand the drivers of growth. Investor relation reports are utilized heavily for this purpose.

The Manufacturing Industry Output Tracker

An internal dataset managed by Interact Analysis, the manufacturing industry output tracker looks at growth of manufacturing and machinery production to aid in forecasting the market by industry and machine type.

Sources utilized in state of the industry report

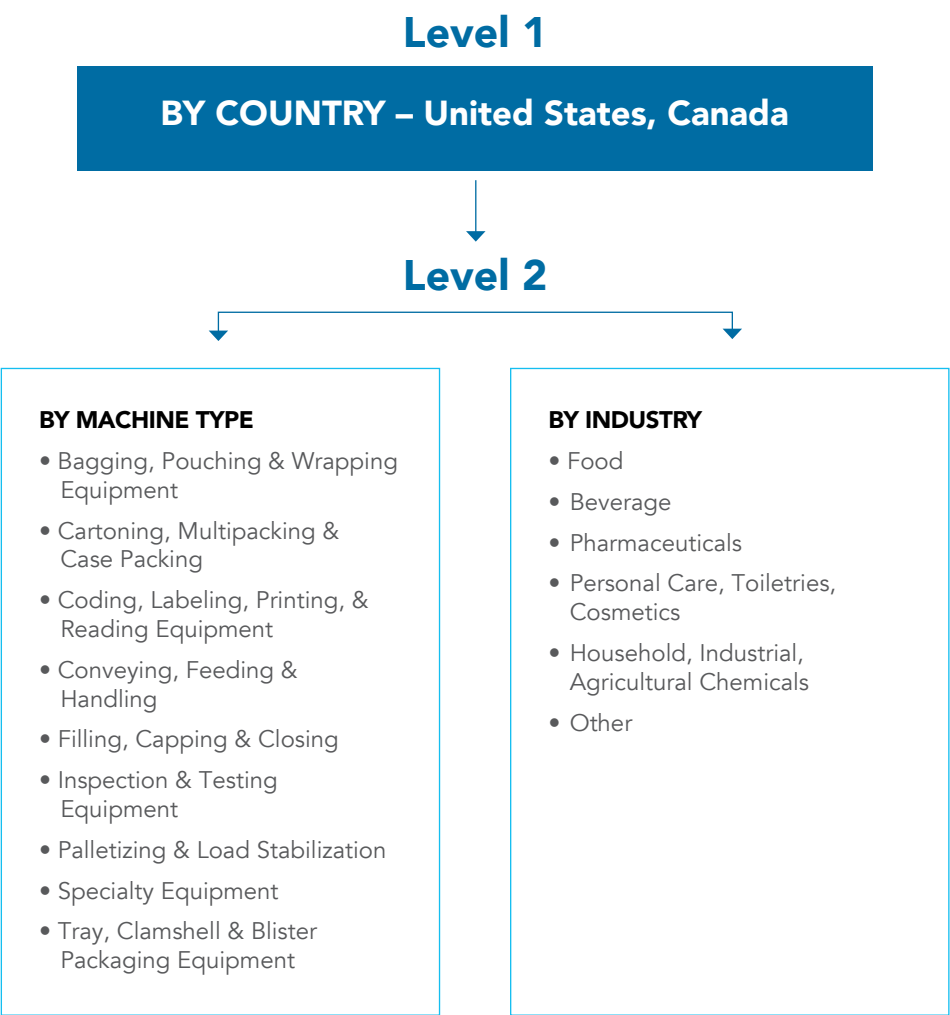
Our methodology follows a multi-phase approach, with a strong emphasis on bottom-up market sizing. The foundation of this approach is the use of reported data rather than purely modeled estimates, with the goal of grounding market sizing in actual supplier inputs wherever possible. As the research evolves, we continue to expand and refine the data collected to strengthen this approach.

Market size estimates at the total market and industry levels are supported by consistent reporting across the supplier base. At the individual machine-type level, survey results have remained stable over recent editions and cover each major machine category. These results are further validated through supplier interviews to confirm alignment and support targeted refinements where needed.

We expect the level of detail and accuracy at the machine-type level to continue improving as additional historical data is collected and reporting consistency increases across the supplier base. Feedback remains an important component of this process, and insights gathered through each edition are incorporated to refine subsequent analyses.



Segmentation for Processing Market Size and Forecasts



Data was collected and presented in terms of total shipments for the calendar year 2025, represented in terms of US dollars. A forecast for the years 2026 through 2031 is also presented.

All data is presented in terms of US Dollars

Segmentation for Processing Market Size and Forecasts



Level 3

Bagging, Pouching & Wrapping Equipment

- Form/Fill/Seal, Horizontal
- Form/Fill/Seal, Vertical
- Form/Fill/Seal, Other
- Pre-made Bag Loading & Sealing
- Wrapping Equipment

Cartoning, Multipacking & Case Packing

- Cartoning Equipment
- Multipacking Equipment
- Case or Tray Erect/Load/Seal (Integrated)
- Case or Tray Erectors & Formers
- Case or Tray Loaders
- Case Sealers
- Case Packing Equipment, Other

Coding, Labeling, Printing, & Reading Equipment

- Coding & Marking, Ink Jet
- Coding & Marking, Laser
- Coding & Marking, Other
- Labeling Machines
- Standalone Printers

Conveying, Feeding & Handling

- Accumulators
- Conveyors, Infeed & Discharge
- Conveyors, Modular
- Conveyors, Roller
- Conveyors, Tabletop
- Conveyors, Other
- Product & Package Handling
- Feeding & Inserting Equipment

Filling, Capping & Closing

- Liquid Fillers, Piston Fillers
- Liquid Fillers, Gravity Fillers
- Liquid Fillers, Pressure Fillers
- Liquid Fillers, Net Weight Fillers
- Liquid Fillers, Others
- Dry Fillers, Net Weight Fillers
- Dry Fillers, Others
- Cappers
- Rigid container closing equipment

Inspection & Testing Equipment

- Package & Material Testing Equipment
- Packaging Inspection Equipment
- Process Inspection Equipment
- QA Lab

Palletizing & Load Stabilization

- Palletizing, Pallet Conveying, Dispensers & Slip Sheets
- Load Stabilization
- Depalletizing

Specialty Equipment

- Specialty Equipment

Tray, Clamshell & Blister Packaging Equipment

- Thermoform/Fill/Seal Equipment
- Pre-made Tray/Cup/Bowl Packaging Equipment
- Blister & Clamshell Packaging Equipment

Market figures and forecasts are presented by industry in the full dataset. An interactive **dashboard** of the full dataset is included separately from the written report to provide PMMI members the ability to interrogate the data based on their specific needs.

DEFINITIONS OF MACHINERY CATEGORIES

Machine Types Included in Scope

Bagging, Pouching & Wrapping Equipment:

Liquid and dry fillers that deposit product into flexible bags and pouches, including form/fill/seal machines and equipment for filling premade bags. Also includes wrapping equipment for individual products, such as shrink wrappers and flow wrappers.

Wrapping Equipment: Machinery that envelops a product and sometimes a primary package with a thin plastic or paper layer.

Flow Wrappers

Flow wrappers are a specialized type of horizontal form/fill/seal (hf/f/s) machine that features a film reel mounted above the operating level, whereby the product is loaded horizontally and a longitudinal seal is formed below the pack. Typical applications include wrapping individual candy or granola bars.

Overwrappers

Machinery that applies a layer of paper or plastic wrapping over a primary package or another form of packaging, often for cylindrical or cubical products, such as an overwrap for a sealed carton of perfume.

Shrink Wrappers & Heat Tunnels – Single Item

Equipment that shrinks thermoplastic film tightly around the surface of an individual product or group of products, where the shrink is activated by heat.

Twist Wrappers

Also known as bunch wrappers, twist wrappers cut and wrap pieces of film via a twisting mechanism, usually around small, individual products such as candies.

Cartoning, Multipacking & Case Packing:

Machines that erect, form, load and close paperboard cartons as well as those who make case erectors, packers and sealers, as well as equipment that packs primary containers into corrugated trays. Also in this category is a wide range of multipacking equipment from shrink bundlers and carrier equipment, sleeveers and banders and related machines that package individual items together.

Cartoning Equipment: Cartoning equipment is defined as machinery that forms cartons as primary packages from flat blanks, including several related functions including erecting, folding, closing, side seaming and sealing of cartons.

Carton Erectors/Formers

Equipment that forms cartons by erecting and forming flat blanks into a primary package.

Carton Sealers

Equipment that closes and seals carton flaps into a finished primary package after the carton has been loaded with product.

Carton Erect/Load/Seal (Integrated)

Machines that perform the cartoning functions of erecting, closing, folding, side seaming, and sealing, on a single machine.

Gabletop Cartoning Equipment

Any cartoning machine that performs a variety of functions specific to gabletop cartons, including forming, folding, and sealing.

Carton Loaders

Equipment that places product into cartons.

Sleevers

A wide variety of machines that apply a sleeve, typically made of paperboard or corrugated or other materials, around a single item or package.

Cartoning, Multipacking & Case Packing

Multipacking Equipment: A wide range of equipment that consolidates multiple items for single sale (such as cans of soup on a shrink-wrapped tray) or groups separate packages sold together as a single stock keeping unit (two water bottles shrink bundled together.)

Sleevers – Multiple Items

A wide variety of machines that apply a sleeve, typically made of paperboard or corrugated or other materials, around multiple products or packages.

Tray Formers

Equipment that forms (but does not load products onto) durable, corrugated trays used to ship multiple items from a packaging operation, such as machines that form trays used to ship 20 cans of soup.

Handle/Carrier Applicators

Machinery that erects any type of packaging carrier apparatus, such as equipment that applies plastic carriers onto six-packs of beer cans or machines that erect paperboard flats into six-pack carrying cases for glass bottles of soda.

Banders, Strapping and Tying Equipment

Equipment that applies a plastic or paper-based strip around a product.

Shrink Wrappers & Heat Tunnels – Multiple Items

Equipment, also known shrink bundlers, that wraps two or more single packages in film that is then passed through a shrink tunnel to form a tightly bound single unit for sale.

Custom Engineered Multipacking Equipment

Any custom engineered equipment, built per specification for specialized applications and not part of a supplier's standard product line, that is designed to consolidate multiple items or group separate packages together for single sale.

Cartoning, Multipacking & Case Packing

Case or Tray Erect/Load/Seal (Integrated): Machines that form, fill or load, and seal a case or tray on a single machine in a continuous operation.

Case or Tray Erectors & Formers: Equipment that assembles and readies paper-based cases and trays on a packaging line for later product filling or loading processes.

Case or Tray Loaders: Equipment that places primary packages into shipping trays.

Case Sealers: Machinery that closes flaps of a case before sealing it using tape or other adhesives.

Case Packing Equipment, Other: This does not include cartoning equipment, multipacking equipment, case or tray erectors & formers, case or tray loaders, and case sealers. This would include polybag case liner equipment and pad/partition inserters/dispensers.

Coding, Labeling, Printing, & Reading

Equipment: Equipment for printing, stamping, and marking packages with graphics and codes and for applying labels, from ink jet coders and tabletop printers to pressure-sensitive labelers.

Coding & Marking, Ink Jet: Coders that use liquid ink and spray it onto a package or product in a controlled pattern to create/add text and/or graphics.

Coding & Marking, Laser: Machines that emit laser beams to produce codes text, and/or graphics in a controlled pattern directly onto a container.

Coding & Marking, Other: This does not include ink jet and laser coding & marking types. This includes thermal transfer coders and stamping machines (hot or cold).

Labeling Machines: Labeling machines apply preprinted or blank labels, stickers to packages, as well as perform shrink sleeve labeling. Also includes specialty labeling equipment like RFID applicators or electronic article surveillance (EAS) technology applicators, as candies.

Printer/Applicators

Printer/applicators, also known as print-and-apply labeling systems, combine the functions of label printing and dispensing into a single machine and can be used in a wide variety of applications, from barcode label printing to stickers and warning labels.

Pressure-Sensitive Label Applicators

Labeling machines that apply light pressure to labels coated with an adhesive backing on one side to separate the label from the face stock before adhering it to the package.

Roll-fed Labelers

Machines that remove a continuous roll of labels and separates and applies labels onto a container or package that is rotated while going through the label application head.

Pre-Cut Label Applicators

Also known as cut-and-stack labelers, these machines run stacks of labels that have been die cut with incisions,

separate the labels from the stack and apply them to containers or packages.

Standalone Printers

Dedicated printers for a wide variety of applications, such as machines that print peel-off barcode or shipping labels or direct coding of shipping cases in an offline application, as opposed to printing codes on containers on the packaging line.

Filling, Capping & Closing: Equipment that fills liquid and dry product into containers such as bottles, cans, and other rigid plastic containers, as well as flexible packaging. The category also covers a range of equipment that seals or closes the package.

Liquid Fillers, Piston Fillers: Volumetric fillers that dispense products of various viscosities with a piston that draws liquid from a hopper and pushes it through a nozzle to fill a container.

Liquid Fillers, Gravity Fillers: Also called gravimetric fillers, these liquid filling machines dispense typically water-thin or low viscosity liquids from an upper chamber by dropping the product into a container, such as a bottle.

Liquid Fillers, Pressure Fillers: These liquid filling machines, also known as pressure gravity fillers, dispense higher viscosity liquids by placing pressure on the liquid through displacement pumps.

Liquid Fillers, Net Weight Fillers: Also called net weighers, these fillers use load cells beneath each filling station to dispense liquid products by exact tare weight in liquid filling operations.

Liquid Fillers, Others: This would not include piston fillers, gravity fillers, pressure fillers, or net weight fillers. For example, vacuum fillers, flow meter fillers, and aerosol & dispensing filling systems.

Vacuum Fillers

Used in applications for filling highly viscous and pasty products such as cream cheese or yogurt, these liquid filling machines use a rotary valve pump that creates a vacuum to suck product down into a chamber above the container.

Flow Meter Fillers

Flow meter filling machines dispense liquid products at rates determined by the product's flow characteristics through a valve above a container.

Aerosol & Dispensing Filling System

Machines that fill liquid substances into a container so that the substance can be released as a spray using an actuator that is mechanically primed or uses compressed gas as the propellant. Heat seal pre-made, rigid blister packs for retail, such as equipment that seals blister packs of batteries with a hang hole.

Dry Fillers, Net Weight Fillers: This dry filling equipment, also called net weighers, loads cells beneath each filling station to dispense dry products by exact tare weight.

Dry Fillers, Others: This would not include net weight fillers. For example, auger fillers, piece counters, tablet counters, combination scales, vibratory fillers, pocket fillers, and loss-in-weight fillers.

Auger Fillers – Auger fillers employ a rotating screw to dispense product through a tube for even, volumetric distribution, such as powdered milk or granulated sugar.

Piece Counters – Machinery that dispenses parts or pieces to precise specifications, such as a 50-count screw bag or box.

Tablet Counters – Often used in pharmaceutical and nutraceutical packaging operations, these counters dispense a set quantity of tablets into a container. Slat counters are part of this family of products.

Combination Scales – Also known as combination weighers and weigh scalers, this equipment uses multiple weighing heads that, during simultaneous filling, combine the total product weight in each head to determine that a specified weight has been reached before discharging to a container, such as on a potato chip bag line.

Vibratory Fillers – Equipment that vibrates to dispense small, dry or granular items whereby multiple lanes distribute products from a bulk hopper to a container to reach a specific weight or count, such as in peanut packaging applications.

Pocket Fillers – Volumetric fillers that are also known as cup fillers. This packaging machine dispenses dryproducts such as cat treats or nuts by moving products from a hopper to a defined-size chamber that drops products during filling.

Loss-In-Weight Fillers – Systems that measure how much product has been dispensed by detecting the reduction in weight of a scale-mounted hopper as product exits the hopper.

Cappers: Packaging equipment that feeds and applies caps or other closures to plastic or glass bottles on liquid filling lines.

Crown Cappers – Machines that crimp and apply metal crown seals (also known as crown corks) over the tops of bottles, such as in beer bottle capping.

Roll-on Cappers – Machinery that applies aluminum roll-on pilfer proof (ROPP) caps, such as aluminum caps for non-alcoholic sparkling grape juice, as a tamper-evident sealing feature.

Press-on Cappers – Specialized cappers that apply caps or closures that snap onto the mouth of a container, such as child-proof aspirin bottles. Also called push-on or snap-on capping machines.

Screw Cappers – Used to apply threaded plastic caps that are twisted down over the mouth of a container to a set torque, such as plastic capping for most soda bottles.

Overcappers – Packaging machinery that applies an outside cap over a container with a plug, pump, or other type of seal, such as a protective cap applied to a pump hairspray product.

Retorquers – Machines that tighten lug or screw cap closures into the body of a product after the closure has been placed over the open mouth, such as applications

tightening a nozzle closure into the bottle of a plastic bottle of household cleaner.

Rigid container closing equipment: Equipment used to seal, lid, or otherwise close highly rigid containers for solids or liquids including processes such as crimping aerosol cans, applying pumps to plastic bottles, and sealing pails of paint.

Can Seaming Equipment – Machines that close a filled aluminum or other metal can by folding and pressing another metal piece over the opening thereby forming a leak-proof seal, such as seaming beer or cat food cans.

Corking Machines – Closing equipment used to seal glass bottles by inserting a cork into the top of the bottle in applications such as wine bottles.

Crimper – Used for applications such as perfume spray bottles, crimping machines apply caps or buttons that are joined to the main metal seal to add the functionality of releasing liquid products from the package when depressed.

Plug & Fitment Applicators – Packaging machinery that applies plugs and fitments to a container, such as vial plug in a liquid pharmaceutical operation.

Pump Applicators – Also known as pump placers, these closing machines place a dispensing pump or spout onto the mouth of a rigid container, such as in window cleaner bottles. Pump sorters are also included here.

Induction Sealers – Using an electromagnetic field, these rigid container sealers heat to apply inner foil seals, often as a tamper-evident feature for glass or plastic bottles before they are overcapped.

Inspection & Testing Equipment

Package integrity testing equipment used for quality and safety applications (metal detectors, fill level inspectors) as well as other equipment to analyze materials, test product attributes and log data.

Package & Material Testing Equipment: Any equipment or device that tests the quality, integrity and performance of a packaging container or material.

Analyzers – Devices and equipment that measure attributes of packaging materials to optimize shelf life performance, such as the permeability of oxygen and carbon dioxide gasses and moisture. Includes modified atmosphere packaging (MAP) headspace gas analyzers, permeation analyzers, hydrocarbon analyzers, moisture analyzers and related products.

Packaging Material Testing – A broad range of equipment that focuses on analyzing packaging material substrates, especially paper and film, for attributes such as color, opacity, material strength, heat-seal quality and performance.

Coatings and Thickness Testing – Any specialized testing and analytical equipment or device used to measure micro-level material thickness and coatings on packaging or substrates.

Packaging Inspection Equipment: A wide range of equipment to measure packages, detect anomalies in package integrity as part of a quality control or safety process, or otherwise test machinery on a packaging line.

Checkweighers – Machines that weigh the amount of a package to verify its weight is within designated limits, such as a checkweigher for cases.

Metal Detectors – Machines that inspect packaging for metallic foreign matter.

X-Ray Systems – Machines that emit x-rays in a variety of applications to detect the presence of a foreign substance or object.

Vision Inspection Systems – Also known as machine vision (MV), vision inspection systems use cameras and other imaging technologies to detect defects.

Thermal Scanners – Infrared and other thermal scanners that measure heat emitted from an area of a package, often used to detect seal integrity of heat-sealed packages and containers.

Package Integrity Testing – A wide range of equipment and systems used to test packaging integrity properties including test compression, seal integrity, and leaks.

Fill Level Inspection – Quality control systems that use cameras and other devices to detect uniform fill level.

Cap Torque Testing – Inspection equipment used on bottling lines to test the torque of a screw cap to define machine tolerances so the capping equipment can be properly calibrated to avoid destruction of bottles during the operation.

Process Inspection Equipment: Testing and analytical equipment used specifically for food, beverage and other processing operations for product (as opposed to package) quality and safety.

Process Analyzers – Devices and equipment that measure and analyze product attributes or the chemical composition of products, such as the presence of fat, sugar, and proteins in a food, beverage or other processed product. Includes inline and lab devices such as densitometers, viscometers, colorimeters, product moisture analyzers, spectrometers, sulfur analyzers, pH analyzers, sodium detection systems, water treatment analyzers, chloride detectors, chlorine analyzers, and related flow, density and level instruments.

Data Loggers – Devices that store data on a processing line, tracking process data, environmental factors such as humidity or other data on processing operation.

QA Lab: Companies that sell equipment or consumables related to quality assurance (QA) and packaging integrity testing.

Lab Infrastructure – Labs that offer services related to establishing, managing or maintaining controls, predictive analysis practices, processes and procedures that help ensure product quality and safety.

Lab Equipment – Highly specialized nonindustrial lab

equipment used by quality assurance (QA) labs for testing of seal integrity, coatings, air and gas presence, temperature, permeation, and other packaging or product attributes.

Lab Services – Third-party labs that offer testing and quality assurance to consumer-packaged goods companies and other packagers.

Lab Consumables – Any lab accessory or consumable product used by quality assurance (QA) and other labs for testing of products and packages, such as, test tubes or chemicals used during testing.

Palletizing & Load Stabilization

Mechanical or robotic systems that loads and unloads pallets or stabilizes them from stretch wrappers and palletizers to pallet conveyors and depalletizing systems. Also included here are related supplies, such as pallets and slip sheets.

Pallet Conveying, Dispensers & Slip Sheets: Tools, accessories and systems for augmenting pallets with extra stability or for moving pallets around a facility after the pallet has been loaded and stabilized.

Pallets & Slip Sheets

Pallets are flat structures that support bulk products, shipping cases, and other bulk goods that come in plastic, wood, stainless steel, aluminum, and other varieties. Slip sheets are flexible thin sheets made of fiber, plastic or corrugated material that support finished products such as shipping cases or multipacks that are collected by forklifts with push/pull mechanisms, as an alternative to pallets.

Pallet Conveyors & Turntables

Pallet conveyors are specialized conveyors designed to transfer empty or finished pallets from a palletizing station to another station within a facility, such as a dock station or warehouse rack. Included here are related items for moving pallets such as skid carousel turntables that orient pallets into the desired direction on a conveyor.

Slip Sheet/ Top Sheet Handling

Equipment that helps load or otherwise handle slip sheets and top sheets such as push/pull mechanisms for slip sheets that are configured onto forklifts.

Pallet Inverters/Pallet Load Transfer Systems

Pallet inverters are designed to turn an entire pallet load in various directions (upside down, sideways, etc.), enabling a damaged case at the bottom or side of the pallet to be easily removed without having to unstack a pallet manually. Pallet elevators are used to lift or lower pallets, often within a warehouse of a facility.

Pallet Dispensers & Elevators

Machines that raise or lower pallets from a stack to ready them for a manual or automatic palletizing operation.

Load Stabilization: Any machinery, systems, or accessories used to secure and stabilize a pallet while it is being loaded, or in later distribution or storage.

Stretch Wrappers

Semi-automatic and automatic machines that wrap highly elastic plastic film around finished pallet loads to protect

and contain them during shipping and warehousing; includes rotary towers, turntable systems, orbital wrappers and other types of stretch wrapping systems.

Stretch Hooders

Machinery that vertically covers a pallet load from top to bottom with a hood of stretch film.

Load Stabilization Adhesive Systems

Systems that apply non-destructive adhesives to individual cases or bags as they are loaded onto a pallet so that they grip the next layer above or below. Can be used as an alternative to stretch wrapping.

Strapping – Transport Packaging

Any machine or manual tool that wraps and seals one or more plastic or metal straps around a load pallet to secure and stabilize it, ranging from manual strapping tensioners to automatic machines.

Corner Post & Edge Applicators

Corner posts, corner boards, edge protectors and related protective material and systems that provide corner protection and load stabilization to pallet loads during shipment and storage.

Depalletizing: Equipment that unloads empty containers such as glass or plastic bottles to be filled from a pallet onto a packaging line.

Depalletizers (Mechanical) – Mechanical or conventional depalletizing systems unload containers from a pallet onto a conveyor that feeds a packaging line without the use of robotics.

Depalletizers (Robotic) – Robotic depalletizers unload containers from a pallet onto a conveyor using robotic arms.

Depalletizers (Magnetic) – Depalletizing systems designed for unloading metal cans from a pallet onto a conveyor using a magnetic lift and release system.

Tray, Clamshell & Blister Packaging Equipment

Equipment that thermoforms, fills and seals rigid and semi-rigid blisters, premade bowls and trays, as well as machines that load and seal packages like trays, cups and clamshells.

Thermoform/Fill/Seal Equipment: Thermoform/fill/seal (TF/F/S) machines use heat and vacuum or pressure applied to continuous rolls of film to form rigid or semi-rigid containers of various shapes and sizes prior to filling, hermetically sealing and cutting them into individual units.

TF/F/S for Flexible and Semi-Rigid Film – Machines that heat and apply vacuum or pressure to continuous rolls of thermoformable film to form packages such as trays, cups, portion packs, and often their lids prior to filling, hermetically sealing and cutting the package.

TF/F/S for Tablet/Capsule Blister Packs – Machines that heat and apply vacuum or pressure to continuous rolls of nonrigid thermoformable film prior to filling

and hermetically sealing small blister packs, such as in pharmaceutical or nutraceutical capsule applications.

Pre-made Tray/Cup/Bowl Packaging Equipment:

Machines that handle, load, fill, and seal containers such as trays, blister packs, cups and bowls that have been manufactured offline on a separate operation.

Product Loading into Trays, Cups & Bowls – Machines dedicated to depositing products, often dry foods such as cookies, into individual, pre-made trays that have been formed in a separate operation.

Tray, Cup & Bowl Sealing – Equipment that takes a pre-made rigid container including a tray, cup, or bowl and seals the container using paper, plastic lid stock, foil, or other material, such as sealing of cups of ramen.

Denest/Fill/Seal (Integrated) – A monobloc machine that performs three main functions for rigid trays, cups, and bowls in a single, continuous operation: denesting or separating pre-made containers and dropping them as individual units onto a conveying device, filling the containers, and then sealing the containers.

Blister & Clamshell Packaging Equipment: Machines that load products into pre-made, highly rigid containers as individual packages and then seal the container.

Clamshell Closing & Welding Equipment – Machines that seal or close pre-made clamshell packages by pressing the lid down onto the bottom of the clamshell or using heat sealing technology to seal the lid onto the bottom of the clamshell, such as closing an individual portion pack of salad.

Blister Sealing Equipment (Retail Packs) – Machines that heat seal pre-made, rigid blister packs for retail, such as equipment that seals blister packs of batteries with a hang hole.

Clamshell & Blister Loading Equipment – Machinery dedicated solely to depositing or placing of wet or dry products into a pre-made clamshell or blister package.

Skin Packaging Equipment – Skin Packaging Equipment: A specialized type of vacuum packaging machine for non-food applications that draws air out of a plastic sheet to form a tight mold around the product, often with a retail card backing such as skin packaging for a hand tool for retail.

Custom Engineered Blister & Clamshell Packaging Equipment

– Any custom engineered equipment, built per specification for specialized applications and not part of a supplier's standard product line, that is designed to load and seal pre-made blister and clamshell packages.

Conveying, Feeding & Handling

Machinery and accessories for moving products and packages through a line, from conveyors, accumulators and lane dividers to vibratory feeders, unscrambling equipment and pick-and-place equipment.

Accumulators: Devices that are used to buffer, accumulate and offload containers, package components and packages between machines or stages in a production operation.

Accumulation Tables – Devices that accumulate and offload containers and packages on a single, often horizontal level, such as a bi-directional accumulation table for aluminum cans.

Rotary Accumulators – Also known as turntable accumulators, these buffering machines store containers or packages on a flat rotating disk, for example, filled pharmaceutical vials.

Spiral/Helical Accumulators – Buffering system that accumulates and conveys containers or packages by elevating them in a spiral or helical formation above the line, as an example, buffering containers on high-volume bottle filling line.

Vertical Accumulators – A buffering system that aligns horizontal rows of containers or packages through indexing and then elevates the indexed rows in a vertical fashion as a stack, often used for high-volume lines.

Conveyors, Infeed & Discharge: Infeed and discharge conveyors move containers and packages into or out of a packaging machine. Often specific timing or back-pressure considerations apply to these conveyors.

Conveyors, Modular: Modular conveyors, also known as modular belt conveyors, consist of attachable modules, often of plastic, that can be quickly linked together via joint rods and pins for quick reconfiguration on a conveying line as needed.

Conveyors, Roller: Lineshaft or roller conveyors feature cylindrical rollers that move primary cartons or secondary packaging such as cases, through a production line.

Conveyors, Tabletop: Any flat conveyor system in a variety of formats and sizes that runs products horizontally, usually on a belt or belted system.

Conveyors, Other: This does not include accumulators, infeed & discharge, modular, roller, and tabletop conveyors. This includes, bucket, incline, cable, flighted, magnetic, screw, vibratory, and air/vacuum tabletop style conveyors, conveyor components and accessories, and guides, rails & adjustment systems.

Product & Package Handling: Systems related to handling products as well as empty or filled primary containers; often combined with conveyors or feeding equipment for specific handling functions.

Lane Dividers, Merge & Transfers – Also known as lane combiners and laners, these systems that sort, separate, merge or relocate outfed packages or containers, such as finished cases, often integrated into conveying operations.

Diverters & Rejects – Devices integrated with conveyors to remove, divert and stage for collection packages or containers considered rejects, such as unlabeled or otherwise defective items, or to otherwise separate products from a packaging line, such as in quality checks.

Elevators & Lowerators – Product and package handling equipment that raises or lowers containers or product from one elevation to another before feeding them into the next operation, such as elevators used for palletizing and depalletizing bottles.

Puck/Carrier Systems – Any equipment or packages or containers associated with the molded plastic or food grade stainless steel components that hold containers such as bottles, cans, and tube during conveyance through a line, including puckers, depuckers and the pucks themselves.

Timing Screws – Screws that help regulate the infeed of packages so they align with a later process, such as timing the infeed of a package into a packaging machine.

Denesters – Machines that unhinge and separate a stack of – containers, such as tray, clamshell and blister denesters, before placing them onto a conveyor, one by one, for a separate operation such as filling.

Stacking Machines – Machines that collect and stack products such as flat products and place them onto a pallet.

Tray/Crate Handling Machines – Any machinery associated with moving trays or crates, such as tray stackers.

Case Unloaders – Also known as decasers, this machinery is specifically dedicated to automatically unloading containers such as glass or plastic bottles from a reshipping case so that they are single file and upright for a later process.

Air/Vacuum Transport – Systems that use air or vacuum pressure to move and control empty containers that are suspended by their necks toward the neck of the container or bottle.

Dumpers & Bulk Unloading – Dumpers, tilts and other bulk unloaders used to discharge the contents of a material handling operation into another.

Tilters & Shakers – Also includes product settling conveyors, this equipment is used to vibrate the container so that the product inside settles or is more evenly distributed, such as shaking sticky ingredient powder in a bag.

Custom Engineered Product & Package Handling – Any custom engineered equipment, built per specification for specialized applications and not part of a supplier's standard product line, that is designed to handle empty or filled primary containers in conjunction with conveying and feeding equipment.

Feeding & Inserting Equipment: Packaging systems that sort, organize and insert packages or containers, usually associated with a filling operation.

Pick-and-Place – Automated systems that use robots that pick objects or products as part of a product or package handling operation.

Orienting/Unscrambling Machines – Machines that take containers and sometimes products and correctly orient or organize them prior to packaging, such as unscrambling and orienting empty plastic bottles into a single-file, mouth-up position before filling.

Placement/Feeder Systems – Placement or inserter machines and friction feeders that deposit items, such as product literature or desiccant sacks, into a package.

Hanger/Display Tab Applicators – Any machinery that applies a type of hanger to assist consumers in carrying a package, such as machines that attach a carry case plastic hanger for a two-gallon multipack of joined water jugs. Also, machines that apply hanger or display tab systems onto a package for retail display.

Protective Packaging Feeders – Systems for inserting protective packaging such as paper cushioning, rolls of corrugated wrap, or cellulose wadding into a package such as a shipping case.

Vibratory Feeders (Circular) – A feeding system usually for small or lightweight products such as screws that gently shakes and rotates materials or products inside a bowl to move them onto a narrow track to be counted and fed into a package, single-file.

Specialty Equipment

Suppliers of equipment and accessories for a highly specialized set of products, from air drying equipment, static eliminators and adhesive applicators to suppliers of machine replacement parts.

Adhesive Applicators – Equipment designed specifically to apply an adhesive during packaging formation and sealing of cartons, cases and related material, or adheres paper labels to cans, and related applications.

Static Eliminators – Ionizers that remove buildup of static electricity from webs and roll film during winding and related operations so that contaminants do not adhere to the film during the operation.

Corona Treaters – Machines that apply an electrical charge, typically to plastic film and cast extrusion lines during converting, to raise surface tension of the plastic substrate to prepare it for later processes such as printing and adhesive coating.

Air Drying Systems – Also known as air knives, these air-drying systems use high pressure to wick or remove moisture from containers, labels or other packaging components, such as after a container is rinsed, cleaned, or filled.

Container Cleaning & Sanitizing Machines – Machinery that removes or aids in removing foreign objects and contaminants from rigid and semi-rigid containers, usually immediately before or after a filling operation.

Assembly Machines – Machines that are engineered to assemble different packaging components together, such as fitment assembly machines for containers.

Third-Party Replacement Parts – Seal jaws, auger replacements, forming collars, knives for cutting film, capping chucks, web and rollstock cores, finwheels, change parts and more.

Product/Package Recovery Machines – Machines and systems that can extract defective, mispackaged or otherwise unsellable finished product prior to end-of-line operations.

Industrial Recycling Equipment – Covers a range of machines that prepare industrial waste within a plant for later use, such as balers, or machines that take spent materials and generate them into fuel within the plant, such as incinerators that use spent coffee grounds for energy.

Tape Dispensers – Devices or machines that dispense adhesive tape.

LICENSE TERMS

PMMI, The Association for Packaging and Processing Technologies 2025. All rights reserved. The information contained herein shall not be distributed or shared by the recipient. No part of this document may be reproduced without the express written permission of PMMI.

This report has been published by PMMI and Interact Analysis and provided to companies for their internal use only. By using this document (and its related attachments/files) you accept that you are a lawfully licensed user and you will adhere to the following terms and conditions.

(i) You will not distribute, in any form or fashion, the information contained within to persons who are not licensed users. This report may not be copied or given, lent or resold to third parties without the express permission of the publishers.

(ii) You accept the terms of our disclaimer as outlined below.

(iii) All rights (including copyright) are reserved to the publisher.

If you wish to re-use any part of this report within a document (e.g. press release, earnings report/presentation, customer presentation) then you must contact PMMI Business Intelligence at businessintelligence@pmmi.org for prior written approval.



PMMI HEADQUARTERS
12930 Worldgate Dr., Suite 200
Herndon, Virginia 20170
T: (571) 612-3200
www.pmmi.org

PMMI LATIN AMERICA
Homero 418 Piso 7
Col. Miguel Chapultepec
Miguel Hidalgo, D.F. 11570 Mexico
T: + (52 55) 5545 4254

Visit PMMI's Business Intelligence Library for More!

Our most recent reports



2025-2027
Economic Outlook



2026 Processing State of
the Industry Report



Managing
Obsolescence

For more information, contact:

Contact Rebecca Marquez, Director, Custom Research
Phone: 571-612-3205 Email: rmarquez@pmmi.org

Visit pmmi.org