Pallets

US Industry Study with Forecasts for 2019 & 2024

Study #3314 | August 2015 | $5300 | 317 pages

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Growth in US pallet demand will be supported by gains in domestic manufacturing and warehousing activity, and by the replacement of worn pallets with newer units.

US demand to rise 1.7% annually through 2019

The total number of pallets in use in the US is forecast to increase 1.9 percent annually through 2019 to 2.6 billion units, supported by gains in US manufacturing and warehousing activity. This will lead to an increase in pallet demand of 1.7 percent per year to 1.4 billion units. When manufacturing activity fell during the 2007-2009 economic recession, a significant number of pallets sat idle. Pallet users satisfied product handling requirements with existing stock and purchased new pallets only when absolutely necessary. This lowered the overall condition of the pallet stock, as pallets were not repaired or replaced at normal intervals. When the economy recovered, users began to replace these older pallets with new units, resulting in pallet demand gains of nearly nine percent per year between 2009 and 2014. In addition, the replacement of poor quality pallets with newer units resulted in a marginal increase in aggregate stock levels during this time.

Plastic, metal pallets to outpace wood types

Wood is by far the most widely used material, with wood pallets comprising 84 percent of the total stock in 2019 and 93 percent of sales in unit terms. Wood strikes a balance between low cost and high durability and is suitable for use in most applications. However, because wood already accounts for such a large share of the total pallet market, opportunities for additional growth will be limited and wood pallet demand will be outpaced by that of plastic and metal. Plastic is becoming particularly important in the food and beverage and pharmaceutical industries because of its resistance to insects, fungi, and other types of biological infestation. In addition, plastic has a significantly longer lifespan than wood and can be completely recycled. Metal pallets, which make up the smallest share of pallet unit sales, will continue to be used in settings where there is a need to carry extremely heavy items or to transport products such as chemicals, which can damage other pallet materials. Demand for new and refurbished pallets will grow at similar rates through 2019. Further growth in the wood pallet stock will provide more sales opportunities for refurbished pallets.

Warehousing, construction markets to grow fastest

Manufacturing will remain the largest market for pallets in 2019. However, the warehousing and construction markets will post faster growth. The warehousing market will register the largest gains in unit terms because of both higher industrial activity and increased use of pallet management service firms. Sales advances in the construction market will be supported by a rebound from a decade-long drop in construction spending in real terms.

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MARKETS

Transportation Equipment

The total pallet stock among transportation equipment manufacturers stood at 289 million units in 2014, while these producers purchased 142 million pallets in that year. The transportation equipment segment is the second largest manufacturing market for pallets, accounting for 15 percent of total 2014 market demand. Pallets utilized in this market industry not only transport vehicle components between plants but are also used to transport replacement parts to distributors and parts retailers. Additionally, pallets are utilized to store components in factory warehouses. In addition to motor vehicles, the types of transportation equipment included in this market are aircraft, bicycles, marine equipment, railroad equipment, and recreational vehicles.

Industry Outlook -- Transportation equipment shipments by US plants are forecast to rise less than one percent per year in real (inflation-adjusted) terms through 2019, slowing noticeably from the 2009-2014 pace. This will reflect a dramatic deceleration in motor vehicle production growth following a period of double-digit annual gains, as well as a moderation in aerospace equipment industry output. Shipments of other types of transportation equipment, on the other hand, will accelerate through 2019, supported by a pickup in economic growth domestically and overseas.

Motor vehicle and parts shipments are projected to climb less than one percent annually through 2019 in inflation-adjusted terms. This will be restrained by slow production growth for automobiles, trucks, sport utility vehicles, and vans. This will be due to several factors, such as a normal slowing of growth following a period of double-digit gains, the improvements in quality and durability that domestic producers have instituted in recent years, and an expected reduction in the average number of miles driven annually. On the other hand, the

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**TABLE IV-3**

<table>
<thead>
<tr>
<th>Item</th>
<th>2004</th>
<th>2009</th>
<th>2014</th>
<th>2019</th>
<th>2024</th>
</tr>
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<tbody>
<tr>
<td>Manufacturers’ Shipments (bil 2009$) pallets/mil $ mfg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pallet Stock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By Material:</td>
<td></td>
<td></td>
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<tr>
<td>Wood</td>
<td>2105</td>
<td>2075</td>
<td>2051</td>
<td>2208</td>
<td>2362</td>
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<tr>
<td>Plastic</td>
<td>103</td>
<td>154</td>
<td>209</td>
<td>267</td>
<td>333</td>
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<tr>
<td>Metal</td>
<td>117</td>
<td>119</td>
<td>119</td>
<td>132</td>
<td>144</td>
</tr>
<tr>
<td>Corrugated Paper</td>
<td>25</td>
<td>26</td>
<td>29</td>
<td>33</td>
<td>36</td>
</tr>
<tr>
<td>By Market:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1913</td>
<td>1852</td>
<td>1789</td>
<td>1890</td>
<td>1985</td>
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<tr>
<td>Warehousing</td>
<td>372</td>
<td>462</td>
<td>561</td>
<td>680</td>
<td>810</td>
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<td>Construction</td>
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<td>39</td>
<td>35</td>
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<td>52</td>
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<td>Other</td>
<td>19</td>
<td>21</td>
<td>23</td>
<td>25</td>
<td>28</td>
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<tr>
<td>demand/stock</td>
<td>0.51</td>
<td>0.35</td>
<td>0.53</td>
<td>0.53</td>
<td>0.53</td>
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<td>Pallet Demand</td>
<td>1202</td>
<td>842</td>
<td>1287</td>
<td>1400</td>
<td>1515</td>
</tr>
</tbody>
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**CHART II-1**

PALLET PRICING, 2004-2024

(annual % change)

Source: The Freedonia Group, Inc.
Rehrig Pacific Company
4010 East 26th Street
Los Angeles, CA 90058
323-262-5145
http://www.rehrigpacific.com
Annual Sales: $335 million (estimated)
Employment: 850 (estimated)
Key Products/Services: plastic rackable, nestable, fire retardant, delivery and distribution, and dairy pallets; and pallet management, recycling, repair, and logistics services.

Rehrig Pacific is a leading manufacturer of injection molded reusable shipping containers for the food and beverage industries. Other products include plastic pallets, curbside waste and recycling containers, dairy and soft drink cases, bulk milk containers, hazardous waste containers, and cooler display products. The privately held company operates via two product and service groups: Supply Chain, and Waste and Recycling.

The Company competes in the US pallets industry via the Supply Chain product and service group, which includes the manufacture of plastic rackable, nestable, fire retardant, delivery and distribution, and dairy pallets, in addition to the provision of pallet management, recycling, repair, and logistics services. The Company’s rackable pallets, which incorporate Rehrig Pacific’s proprietary SNAP-LOCK two-piece design, mainly consist of a bottom deck with an extra-large surface area, in addition to a roughened top deck intended reduce slipping and enable higher stacking. These pallets are available in standard and HUSKYLITE varieties designed to work with most automated pallet handling equipment. The Company makes nestable pallets in 24-inch-by-40-inch and 48-inch-by-40-inch sizes, which features BOX BEAM

Sample Profile & Table, & Study Coverage

TABLE VI-7

<table>
<thead>
<tr>
<th>MIDWEST PALLET DEMAND</th>
<th>2004</th>
<th>2009</th>
<th>2014</th>
<th>2019</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwest Mfg Value Added (bil 2009$)</td>
<td>523.1</td>
<td>452.4</td>
<td>548.3</td>
<td>648.0</td>
<td>746.0</td>
</tr>
<tr>
<td>Midwest Warehouse Value Added (bil 2009$)</td>
<td>9.8</td>
<td>11.5</td>
<td>14.7</td>
<td>18.1</td>
<td>21.8</td>
</tr>
<tr>
<td>pallets/mil $ mfg value added</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pallets/000$ warehousing value added</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Midwest Pallet Demand
East North Central
West North Central

% midwest
Pallet Demand

Source: The Freedonia Group, Inc.

This Freedonia study, Pallets, presents historical demand data (2004, 2009, 2014) and forecasts (2019, 2024) by material, market, product and region of the US. The study also considers market environment factors, examines the industry structure, evaluates company market share and profiles 43 US industry competitors.
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Page 7
Related Studies

World Corrugated Boxes
This study analyzes the world corrugated box industry. It presents historical demand data (2004, 2009 and 2014) and forecasts (2019 and 2024) by raw material (e.g., containerboard, adhesives, inks, waxes), market (e.g., food and beverage, nonfood nondurables), world region and major country. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.
#3339 .......... November 2015 ............... $6400

Stretch & Shrink Film
US demand for stretch and shrink film will rise 3.5 percent yearly to $3.1 billion in 2019. Shrink film will outpace the larger stretch film segment based on the former’s improvements in strength and customizability. Stretch hoods used in storage and distribution will pace the stretch films segment based on their edge in pallet wrapping. This study analyzes the $2.6 billion US stretch and shrink film industry, with forecasts for 2019 and 2024 by type, market, application, and resin. The study also evaluates company market share, and profiles industry players.
#3262 .......... April 2015 ............... $5100

World Bulk Packaging
World demand for bulk packaging is projected to increase 5.0 percent annually to $39.2 billion in 2018. The Asia/Pacific region will surpass North America as the largest market, and along with the Africa/Mideast region, will be the fastest growing market. Flexible bulk packaging products will outpace rigid types. This study analyzes the $46 billion world bulk packaging industry, with forecasts for 2018 and 2023 by product, material, market, world region, and for 18 countries. The study also evaluates company market share and profiles industry players.
#3233 .......... January 2015 ............... $6300

Corrugated & Paperboard Boxes
US corrugated and paperboard box demand will rise 2.8 percent per year to $39.4 billion in 2018. Corrugated and solid fiber boxes will remain the largest and fastest growing product segment. The food and beverage market will remain dominant, based in part on more value-added boxes such as display ready and moisture-resistant types. This study analyzes the $34.7 billion US corrugated and paperboard box industry, with forecasts for 2018 and 2023 by material, product and market. The study also evaluates company market shares and profiles industry players.
#3235 .......... December 2014 ............... $5300

Rigid Bulk Packaging
US demand for rigid bulk packaging will rise 4.0 percent per year to $7.3 billion in 2018. Rigid intermediate bulk containers (RIBCs) and material handling containers will see the fastest growth. Rigid bulk containers will see the fastest growth, while pails will overtake drums as the largest product segment. Plastic will outpace steel and paperboard to be the fastest growing rigid bulk packaging material. This study analyzes the $6 billion US rigid bulk packaging industry, with forecasts for 2018 and 2023 by material, product and market. The study also evaluates company market share and profiles industry players.
#3213 .......... October 2014 ............... $5300

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