

# Pilkington Packaging Overhaul

## Pilkington North America



### ABSTRACT

Pilkington Auto Glass was founded in 1826 as an Auto Glass Manufacturer located in Saint Helens, England. The company operates as a single global organization serving the Original Equipment and Local Automotive Glass Replacement Aftermarket sectors. The company's sales are made up of auto glass (70%) and architectural products (30%). Throughout the North America segment of the company, there are 7 sites that produce glass related materials. The country also holds 2 distribution centers and 86 service centers. With the wide array of locations within the Pilkington's inventory, the packaging of auto glass is an essential part of their business. To have quality glass for their customers, the windshields need to be bound tightly during transit to avoid any fractures or scratches. Therefore, the way that Pilkington packages their product is their number one priority.

### INTRODUCTION

Pilkington, as a whole, utilizes all three types of pallets to transport their products to their 86 service centers and direct customers. The three types of pallets that are most commonly used are wooden crates, plastic bins, and steel racking. The service centers then stock the material to sell to local aftermarket installers to produce most of the companies sales. In the other segment, is sales to direct customers, such as Safelite. Currently, Pilkington is facing a problem with treated wood pallets because they do not stand up to the constant demand of the job and they easily break after roughly 4 uses (3 Months). They have been searching for more opportunities to make their packaging more sustainable and have less annual costs than their current packaging system. If Pilkington North America would switch to a steel pallet system rather than a wooden system, they could have the opportunity to save on labor costs, refuse costs, and overall packaging costs that are associated with their wooden pallets currently.

### METHOD

Even though the wood pallet system, is much cheaper to operate in the short term, the costs will begin to add up rather quickly. Since the 86 service centers need to be fed constantly with product, there needs to be enough pallets to fulfill their orders. There needs to be:

- 50 Pallets being transported to the service center
- 50 Pallets being transferred from the service center
- 50 Pallets being filled and staged for the next shipment

To fulfill the constant need for orders from the service centers, there needs to be an estimated 15,000 pallets in inventory. This also includes 2,000 pallets set aside for increased demand.



<b>Cost of a Wood Crate</b>	\$85
<b>Cost of a Metal Crate</b>	\$380
<b>Yearly Est. Cost (Wood)</b>	\$4,335,000
<b>Yearly Est. Cost (Metal)</b>	\$500,000

	Investment	# of Crates Purchased	Amount Lost	# on Hand
<b>Year 1</b>	\$ 1,000,000	2631	0	<b>2631</b>
<b>Year 2</b>	\$ 1,000,000	2631	263	<b>4999</b>
<b>Year 3</b>	\$ 1,000,000	2631	500	<b>7130</b>
<b>Year 4</b>	\$ 1,000,000	2631	713	<b>9048</b>
<b>Year 5</b>	\$ 1,000,000	2631	905	<b>10774</b>
<b>Year 6</b>	\$ 1,000,000	2631	1077	<b>12328</b>
<b>Year 7</b>	\$ 1,000,000	2631	1233	<b>13726</b>
<b>Year 8</b>	\$ 1,000,000	2631	1373	<b>14984</b>



### RESULTS

With a short transition period from wood crates to metal racking, the company will start to see a major improvement in the yearly cost for packaging. The cost of the metal racking has a payback period of roughly 1.2 years over the wooden system that they currently utilize. Even with a 10% loss annually on their adjusted inventory of their new metal racks, they are still saving millions every year. After the transition period, Pilkington will be saving roughly \$3,835,000 annually.

### IMPLICATIONS

When we toured Pilkington's Columbus Distribution Center, we noticed that the company, as a whole, is very environmentally efficient. We were blown away that they are still utilizing wood crates when they could be using metal products. This change is not only going to affect the company's bottom line, but it will also increase their green initiatives by reducing the amount of material that they are sending to the landfills. This in turn will decrease their carbon footprint in their respective market.

### REFERENCES

Ann Harrod – Facility Coordinator  
Chris Yates – Operations Manager  
Columbus Distribution Center  
Jeff Humphreys – Operation Manager  
Charleston Service Center

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