



## ANHEUSER-BUSCH

Bringing People Together for a Better World

# Comprehensive Maintenance, Reusable Pallet, and Logistics Redesign Cuts Waste, Increases Reusable Packaging Lifespan, and Reduces CO<sub>2</sub> Impact

Anheuser-Busch is the world's largest brewer, with the vision of bringing people together for a better world by building a company to last, brewing beer, and building brands that will continue to bring people together for the next 100 years and beyond. This includes global sustainability commitments focused on smart agriculture, water stewardship, circular packaging and climate action. Faced with a combination of operational and supply chain challenges in the production and transportation of two leading beer brands, AB InBev (ABI) invested in a comprehensive program of preventative maintenance, pallet redesign, and logistics redesign that not only improved environmental and business performance, but also extended the lifespan of reusable packaging components.

### MEASURABLE IMPROVEMENTS:

- 8% increase in brewery efficiency
- 3.8k hecta-liter reduction in product waste
- 33% Increase in load capacity
- 54% reduction in transportation cost
- 25% reduction in packaging material supply loads
- 30% reduction in CO<sub>2</sub> Emissions (nearly 42 tons/year)
- Extended keg lifespan



## The Challenge

Throughout 2017, ABI experienced considerable operational challenges due to keg leakage. One particular pain-point was supporting the production of the Estrella and Montejo brands in 1/2 BBL kegs due to the complex nature of the supply process for these brands. This issue resulted in lost sales, increased transportation expense, and decreased operational efficiency. The brewery was experiencing significant failure rates of kegs that were introduced into the production line, and ABI was also paying for three separate legs of transportation.

## The Goal

Identify an operational solution that would reduce keg leakage and transportation costs, comply with international shipment and customs regulations, and support ABI sustainability goals.

## The Solution

Critical to the initiative was implementation of a keg preventative maintenance program. This required dedicated CapEx funds to replace old or compromised keg components with new, higher-quality parts in order to prevent keg leakage and maintain production efficiency with minimal waste. From there, an optimized network supply and demand strategy was developed to significantly reduce transportation cost. Combining these two initiatives not only resulted in reduced waste, cost, and operational downtime, but also resulted in a large reduction of Anheuser-Busch's CO<sub>2</sub> footprint.

To implement the optimized reusable packaging transport model, ABI designed a process based around delivering serviced/repared kegs directly to the Tuxtepec brewery. To carry out this vision, several sub-components needed to be fully vetted:

## The Solution (continued)

- Inflow of kegs requiring maintenance/repair to ensure production support
- Pallet heat-treatment to comply with international shipment regulations
- Keg palletization and trailer loading
- Transport and Customs clearance

In the optimized network, pallets are heat-treated at the same facility that the kegs are serviced/ repaired, thus allowing a consolidated process of palletizing kegs directly onto heat-treated pallets before loading them onto a trailer. The pallet itself was re-designed, increasing the capacity of each load from 480 units to 640 units. Once the packaging materials are loaded, they are shipped directly to Tuxtepec, eliminating the need for additional materials and shipping to/from a third location.

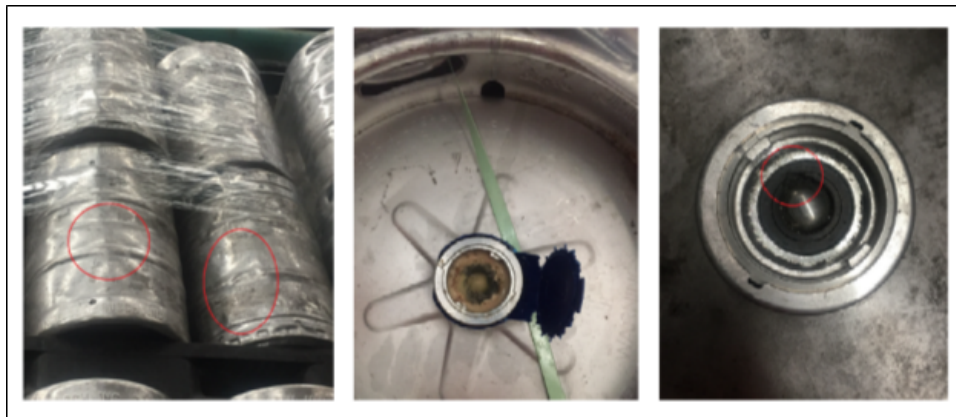
## The Impact

The comprehensive reusable packaging strategy deployed at AB InBev cut waste, cost, and their CO<sub>2</sub> footprint. Investment in the preventative maintenance program for reusable kegs coupled with pallet redesign allowed AB InBev to consolidate heat-treatment and palletization of ready-to-use kegs at a single location (vs. two previously) and increase pallets per load by 33%. Brewery efficiency increased 8%, transportation of rejected/returned kegs was eliminated, finished goods transportation costs were reduced by 54% and CO<sub>2</sub> impact decreased by 30%. This approach not only improved environmental and business performance, it also extended the lifespan of the reusable packaging components used by Anheuser-Busch.

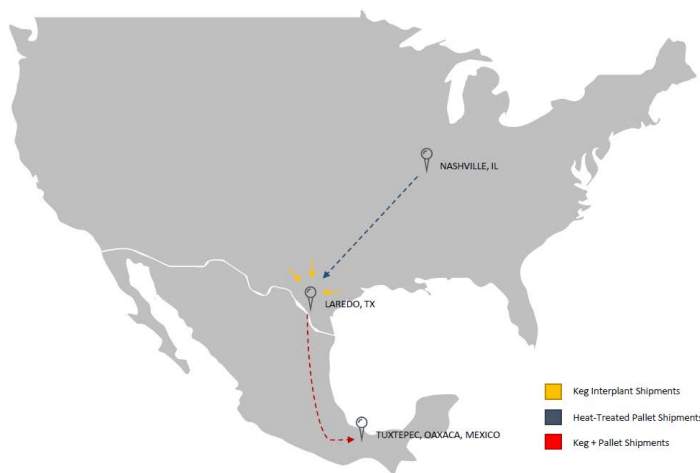


“As the world’s largest brewer, Anheuser-Busch InBev is constantly working toward the highest level of quality and service to our customers, while doing so in the most efficient and cost-conscious manner possible. This process change allowed us to more effectively manage a specific flow for our keg float and has impacted other areas of our supply chain as well. Innovative process implementations such as this will be key as we continue striving toward our 2025 Sustainability Goals. We are honored to be recognized by the Reusable Packaging Association for this initiative.”

-- Andrae Kirkland, Sr. Analyst - Reverse Logistics, Anheuser-Busch InBev



Defective Kegs Before Preventative Maintenance Program



Logistics Prior to Program Implementation



Logistics After Program Implementation



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## About Anheuser-Busch InBev

Anheuser-Busch InBev is a publicly traded company (Euronext: ABI) based in Leuven, Belgium, with secondary listings on the Mexico (MEXBOL: ANB) and South Africa (JSE: ANH) stock exchanges and with American Depositary Receipts on the New York Stock Exchange (NYSE: BUD). Our Dream is to bring people together for a better world. Beer, the original social network, has been bringing people together for thousands of years. We are committed to building great brands that stand the test of time and to brewing the best beers using the finest natural ingredients. Our diverse portfolio of well over 500 beer brands includes global brands Budweiser®, Corona® and Stella Artois®; multi-country brands Beck's®, Castle®, Castle Lite®, Hoegaarden® and Leffe®; and local champions such as Aguila®, Antarctica®, Bud Light®, Brahma®, Cass®, Chernigivske®, Cristal®, Harbin®, Jupiler®, Klinskoye®, Michelob Ultra®, Modelo Especial®, Quilmes®, Victoria®, Sedrin®, Sibirskaia Korona® and Skol®. Our brewing heritage dates back more than 600 years, spanning continents and generations. From our European roots at the Den Hoorn brewery in Leuven, Belgium. To the pioneering spirit of the Anheuser & Co brewery in St. Louis, US. To the creation of the Castle Brewery in South Africa during the Johannesburg gold rush. To Bohemia, the first brewery in Brazil. Geographically diversified with a balanced exposure to developed and developing markets, we leverage the collective strengths of nearly 200,000 employees based in more than 50 countries worldwide. For 2017, AB InBev's reported revenue was 56.4 billion USD (excluding JVs and associates).



## About the Excellence in Reusable Packaging Award

The Reusable Packaging Association (RPA) Excellence in Reusable Packaging award recognizes companies and organizations that have developed and implemented innovative and measurable reusable packaging solutions in a business-to-business supply chain. 2018 marks the seventh year for this annual award program. Submissions are reviewed by an independent panel of judges who are not members of the RPA. RPA is a non-profit trade organization representing and promoting the common business interests of member suppliers and users of reusable packaging products and services. RPA promotes the use and value of reusable transport packaging systems, which offer product quality, economic, and environmental benefits to supply chains.