

# More production efficiency. Less waste.

# Case Study Tenneco Automotive: Benefits through partnership

## **Summary**

Tenneco Inc. is an \$ 8.2 billion global automotive tier one supplier, pioneering global ideas for cleaner air, and smoother, quieter and safer transportation. Having experienced the effectiveness of CHEP packaging solutions in Europe, Tenneco's U.S. operations decided to take a closer look at how CHEP could reduce the considerable waste and inefficiency the company was experiencing due to poor packaging across several operations in the U.S. China and elsewhere in Europe. The outcome is a successful partnership that is now reaping considerable efficiency benefits and eliminating hidden waste.

## **Facts about Tenneco**

TENNECO TENNECO Narshall Plant 1

- Founded 1940
- Headquartered in Lake Forest, Illinois
- Number of employees: 29,000
- Four divisions Clean Air, Ride Performance, Elastomers and Aftermarket
- 89 manufacturing facilities worldwide
- 14 engineering centers in 24 countries
- Produces exhaust and ride performance systems and components



# Challenge

In analyzing waste across its supply chain, Tenneco identified that the biggest area of hidden waste was one-way packaging. Prior to working with CHEP, the customer had been using a fleet of owned containers, supported frequently with additional cardboard boxes and wooden pallets when container shortages occurred, which were a source of multiple problems in production and logistics. These included environmental issues related to disposal and health & safety, extra labor to handle OWP, a lack of containers during production peaks, additional supply costs associated with emergency cardboard spend and a degree of product damage. In addition to process inefficiencies, these and other issues also resulted in non-value-added capex and under-utilized transportation. Remaining mindful that introducing change on the shop floor can be difficult, Tenneco wanted to ensure its people were bought into the new solution.

# **Solution**

Tenneco worked closely with the CHEP team to analyze the Total Cost of Ownership (TCO) of the existing solution and trial the new packaging concept lane-by-lane. The analysis included lease versus purchase of returnable containers, with CHEP's business case for container lease options proving extremely competitive. Since August 2015, Tenneco has been rolling out use of CHEP Folding Large Containers (FLCs). The shop-floor personnel have fully embraced the new, more reliable system.

#### **Benefits**

Aside from improved production efficiency, the main benefits in transportation are cube utilization and pack density, which greatly increased optimization of trucks and sea-freight containers as well as warehousing. The overall system now has far greater transparency, with CHEP providing the customer with full control over its packaging planning and provision. This removal of uncertainty has resulted in greater stability not only within the plants, but also in the supply chain.

# Facts

- Working with both the Clean Air and Ride Performance divisions
- Over 26,000 containers per month
- Exhaust and ride system components
- Active since August 2015
- Improved supply chain efficiency
- Greater system transparency
- Non-value-added processes eliminated in China, Europe & U.S.
- Reduction in space utilization
- Shorter cycle times due to elimination of repacking
- Improved workplace safety
- Reduced CO<sub>2</sub> footprint contributes to customer's sustainability principles

"Our plant materials management through-put has vastly improved since implementing CHEP's returnable container process and costs of dealing with cardboard have been reduced. In addition, with this new process we no longer have the need for additional indirect labor for cardboard disposal. By eliminating the need for cardboard disposal, Tenneco plants have also made a positive impact on their local community's environment."

Gary Southerland, Sr. Packaging Systems Analyst, Tenneco Automotive

CHEP North America 37564 Amrhein Road, Suite 100 Livonia, MI 48150, USA Mail: chep.automotive1@chep.com Phone: +1 888-873-2277 www.chep.com

