

Complete Solution Client Case Study: Packaging Sustainability - R134a

The Challenge:

Customer was looking for a packaging sustainability solution in regards to receiving R134a cylinder shipments.

R134a containers were originally packaged in a one-time use cylinder that was difficult and expensive to dispose, creating excess waste of containers and packaging.

Our Approach:

Develop a packaging solution that would allow for refilling and reuse of the current cylinder.

The current 30lb. cylinder was heavy enough to reuse, but disposal of old product and labeling concerns needed to be addressed in order for the solution to succeed. A reusable valve was sourced and allowed for refilling of the cylinder. Although R134a is non-toxic, a system was developed to vacuum out all of the unused product as well as any impurities, then the container was refilled with clean product. The container was then wrapped with a removable jacket that included all of the label instructions. This self-contained packaging system allowed for ground shipment of the cylinder without any additional outer box or carton.

On-site filling of R134a can be done in either disposable or returnable/refillable cylinders.

The Result:

The reusable R134a cylinder, along with its removable label jacket, was a complete packaging sustainability solution versus the original packaging.

This system is still in place today and the average life cycle of the cylinder has exceeded our expectations. We are making a positive contribution toward the reduction of waste and embracing recycling. These factors are also related to the goals of our Environmental Management System (EMS).

