



"We appreciated the fact that Schoeller Arca Systems really studied the needs of our business. They examined the handling of different solutions in the fast food restaurant distributions chain, from filling at the supplier to depots, then on to the restaurants and back."

Case study Coca-Cola

Schoeller Arca Systems' "Mega-Box" efficiently carries Coca-Cola concentrate to McDonalds restaurants all over the world. Based on a 250 litre plastic foldable bag-in-box, this system was specifically developed for soft drinks products and the Coca-Cola Company's distribution needs. Fibre-free containers make product handling easier, safer and more hygienic, while reducing both costs and waste.

BACKGROUND

Coca-Cola has long been the sole supplier of soft drinks to the McDonalds global chain of fast food restaurants. Instead of delivering ready-to-drink Coke, the company delivers a thick concentrate of Coke minus the water and carbonate. For many years, this concentrate was delivered in a five gallon bag-in-box package. The box was made of cardboard with a liner bag inside. This solution proved satisfactory until consumption of Coke at McDonalds eventually outgrew it and a larger, more efficient package was needed. In early 2000, Coca-Cola set out to find the packaging solution that would usher in a new era of efficiency in the distribution of concentrate.

REQUIREMENT

The new package should be easy to handle by anyone working in a restaurant, and it should not contain any fibers, which ruled our materials like cardboard and wood. Hygiene and safety were also priorities, both in terms of the package's use and of the protection of the product inside it. Waste should be reduced - a criterion which favoured a returnable and recyclable system - and finally, the new solution should help reduce costs.

SOLUTION

Coca-Cola and Schoeller Arca Systems had a first project meeting in April 2001.

In the early phases of the project Coca-Cola had ana-

lyse the distribution flows logistics and consumption of concentrate in different countries, which led them to the conclusion that the container should ideally be 250 liters in volume. Based on this input, Schoeller Arca Systems studied the handling of various packaging solutions in the fast food restaurant distributions chain, from filling at the supplier to depots, then on to the restaurants and back. Special attention was given to handling equipment and storage systems, both at depots and in restaurants. Together, we concluded that the best solution would be the Combo Life 65, a plastic, foldable mini-IBC, with pallet dimensions aligned to half the Euro-pallet standard (600 x 800 mm).

IMPLEMENTATION

The first conceptual design of a plastic foldable mini-IBC was ready in May 2001. Three prototypes were then built and used in a six month trial, so that all steps in the handling could be studied and measured. Testing continued for several months and the system efficiency closely monitored and results discussed. The data indicated that the solution was working well, so work on a new IBC design was initiated in parallel to save time.

When tests were completed, the agreement between Coca-Cola and Schoeller Arca Systems was signed, and the tools for the new IBC (called "Megabox" within Coca-Cola) were ordered.

Production of the final IBC started in June 2002, and the first "Mega-boxes" were delivered to Coca-Cola in The Netherlands.

RESULTS

The customer's switch from 20 liter bag-in-boxes to the Mega-box that began back in 2002, will soon be completed in Europe. Meanwhile, Coca-Cola is exploring the possibility of employing this system in other parts of the world.