



The Alpal™ Revolutionizes Efficiencies in the Frozen Food Industry MCCAIN FOODS CASE STUDY



In the early 1900's Andrew McCain ran a small farming operation focused on selling potatoes to the local market. After many years of providing great service, Mr. McCain was anxious for something new.

In 1957 he decided to pursue an opportunity with his sons to move on from farming and enter into the frozen food industry. With the demand for frozen foods increasing, McCain quickly grew from a small Canadian factory to a global 20,000-employee company and a leader in frozen food production.

In the past decade the South African branch of McCain Foods has become a leading supplier of frozen chips, vegetables, and meals, helping to make it one of the most recognizable brands in the world. McCain has acheived gold status by the American Institute of Baking (AIB) for their continued excellence in manufacturing and food safety practices.

Collapsibility Lowers Return Shipping Costs

The Alpal™ was first introduced to McCain Foods - South Africa in 2001. With as many as 26,000 steel containers filled with frozen vegetables being shipped every month between their three facilities, McCain found that they were wasting money when returning empty steel containers from one facility to another. With an average freight cost of \$1,600 per truckload each way, McCain needed a solution that would help improve their efficiency and reduce their return shipping costs. McCain quickly saw the benefits of replacing their heavy steel containers with the lightweight and collapsible Alpal. They could return 240 fully-collapsed Alpals per truckload compared to 26 empty steel containers.

CONTAINERS	# PER OUTBOUND TRUCK SHIPMENT	# PER RETURN TRUCK SHIPMENT
Steel	26	26
ProBin Alpal	52	240

Before switching to the Alpal, McCain would have needed 10 trucks to return 240 steel containers for a total cost of \$16,000. Now, with the Alpal, they can ship all 240 containers back in just one truckload. The savings achieved is \$14,400 or a 90% savings per return shipment.



ALPALS WAITING TO BE FILLED



240 ALPALS RETURNED PER TRUCKLOAD



240 Steel

CONTAINERS RETURNED

10 trucks x \$1,600/truck = \$16,000



240 ProBin AlpalsRETURNED

1 truck x 1,600/truck = 1,600

Savings per return trip: \$14,400 or a 90% savings per return trip.





ALPALS STACKED 8 HIGH IN STORAGE

Increased Storage Efficiencies and Greater Durability

McCain also had issues when stacking the steel containers in their cold storage facility. They found that it was difficult to line up the steel posts, which is critical to prevent stacks from falling over. Use of the Alpal instantly alleviated this problem with the unique interlocking feature that allows each Alpal to rest squarely on the Alpal below it. Alpals can safely be stacked up to 8 units high in storage.

After nine years of repeatedly filling, stacking, and transporting the Alpal containers, fewer than 2% of these sturdy collapsible bins have been replaced within the McCain processing network. Built with a rotationally-molded frame and steel bars for extreme durability, most of the original Alpal containers are still being used today, and only new Alpals are being added when expanding their fleet.



PROTECTED VEGETABLES IN COLD STORAGE

Macro Plastics has been driven by a spirit of innovation since the early '90s, when MacroBins® were first introduced to the wine and stone fruit markets of California. With a continuing vision to diversify through innovative products and services, Macro Plastics has expanded globally into the agriculture, food processing, retail, and industrial packaging markets.

Macro Plastics' ProBin family of products was created to meet the specific requirements of the food processing industry. Featuring the lightweight and collapsible Alpal and injection-molded plastic solid-wall containers, all ProBins are durable, easy to clean, and made with FDA-approved materials that are certified safe for food products.

