

# Scalable Procurement Contract for Foldable Containers for Base Stations



## Overview

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Do foldable containers reduce repositioning costs?

In our ECR problem, the shipping company considers both transporting loaded containers and repositioning of empty containers over a planning horizon. Because empty repositioning incurs costs and consumes vessel capacity, foldable containers are used to reduce repositioning costs.

How to reduce the cost of repositioning empty containers?

There are many efforts to reduce the cost of repositioning empty containers, one of which is a foldable container. Foldable containers can be transported in a package such that a few folded containers occupy the same volume as one standard container.

What are the operating costs of a foldable container?

Let  $I_t$  be the inventory level of foldable containers at port at the end of period  $t$ . The total operating cost consists of transportation, repositioning, holding, penalty, folding, and unfolding costs. The transportation costs consist of expenses incurred during container flow.

Is repositioning empty containers a value added transportation?

On average, 20% of total container movements by ocean transportation are empty. Repositioning of empty containers is non-value added transportation with enormous transportation costs and non-profitable consumption of vessel capacity.

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A foldable cargo container looks like a traditional container, but it offers the opportunity of saving space when it's not being used. This type of container can be folded ...

Richard Danderline, Staxxon CFO commented "Increases in transportation costs for imported goods has been a key driver of global inflation since the shipping crises of 2022. ...

The foldable container concept originated from the logistics industry's demand for more efficient storage and transportation solutions. Extensive research and collaboration led

to the ...

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A shipping company can also reposition empty containers from surplus ports to deficit ports. These strategies must be completed while minimizing the total costs for ...

COLLAPSECON is the next evolution of shipping containers - a fully automated collapsible container that will improve operational efficiencies, deliver economic savings and reduce ...

The imbalance in global trade has led to an uneven distribution of empty containers worldwide, resulting in difficulties in cargo transportation. For instance, import ...

VersaCube provides portable shipping containers for government and military use, including storage, modifications, and transportation.

This study seeks to explore the effectiveness of employing foldable containers (FLDs) in liner shipping to reduce relocation and the empty containers and bunker costs (BCs) ...

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To address these issues, we have developed a mathematical model for repositioning both standard and foldable empty containers. We use the model to minimize total ...

Because of the extreme imbalance in intercontinental trade, the repositioning of empty containers creates a significant problem for shipping companies. There are many efforts ...

## Contact Us

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