

Collapsible containers

Design could change container backhaul

By Deborah Aarts

Researchers in India have developed a new container design that could solve a problem that has dogged shippers since start of the new global economy: what to do about empty TEUs on backhaul routes.

According to some research, at least one in four containers currently moving through major US container points is empty, with no cargo revenue to offset the cost of the move. This imbalance occurs in many countries, including Canada, and adds tremendous waste and cost to supply chains.

With this in mind, Anoop Chawla and Sudipto Mukherjee—two researchers at the Indian Institute of Technology—have designed a collapsible 20-foot container. Built to ISO standards, the container folds hydraulically into one-quarter of its original size when empty.

To put it in Canadian perspective, this means four full inbound containers could be unloaded from a ship in Vancouver, shipped by rail to Toronto, unloaded at the cross-dock or deconsolidation centre, compressed into a ‘folded’ state, and sent back to the dock in Vancouver on a single railcar.

A self-locking mechanism keeps the collapsed containers together, and no special equipment would be needed to handle them at the dock.

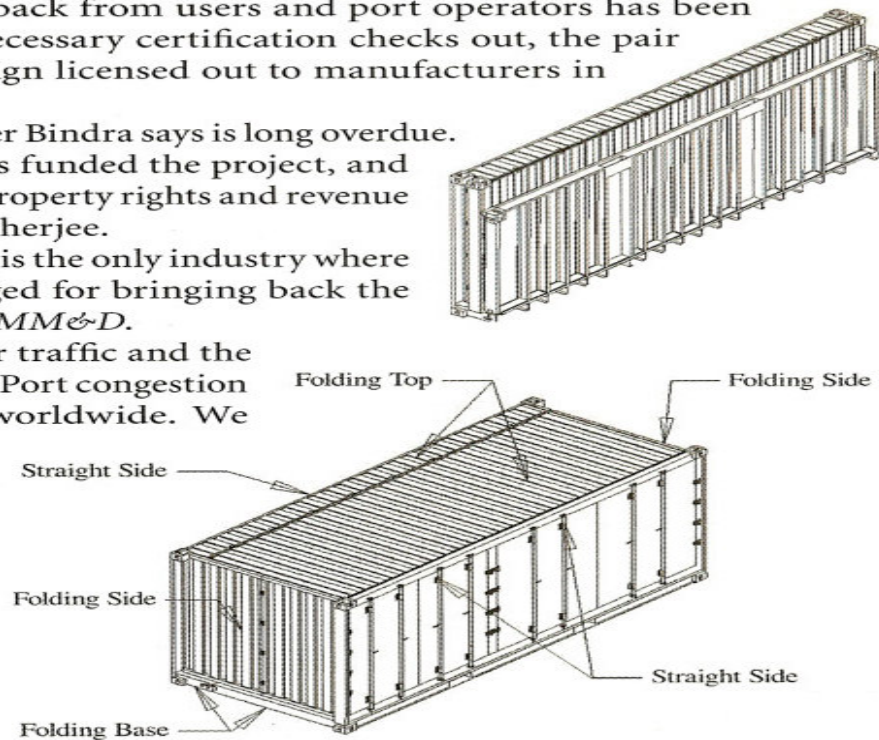
The project has been three and a half years in the making. Currently, Chawla and Mukherjee have finished a proof of concept project with an old box, and the feedback from users and port operators has been very positive. If the necessary certification checks out, the pair hopes to have the design licensed out to manufacturers in the next year.

It’s a concept Avinder Bindra says is long overdue. The former banker has funded the project, and will share intellectual property rights and revenue with Chawla and Mukherjee.

“[Marine] shipping is the only industry where the shippers get charged for bringing back the empties,” Bindra told *MM&D*.

“Think of the lesser traffic and the reduction of pollution. Port congestion is a major problem worldwide. We think this will help reduce it.”

Diagrams of a new collapsible container in the folded and erect states. (Diagrams copyright Simpri Investments Ltd and The Indian Institute of Technology-Delhi).





Taking Stock

Innovations we like

Our lead news story this issue looks at a newly designed collapsible shipping container. The new box breaks down a traditional twenty-foot box into a package only a quarter of the size.

In the current environment of imbalanced global shipping trade, the economic practicality of this design is immediately evident. Reducing the amount of space consumed by empty backhaul containers could net huge savings for shippers and carriers alike.

We hope that this technology will catch on; it's environmentally friendly, smart and cost-effective—all things that *MM&D* readers are looking for!

Along those same lines, we are proud to introduce an innovation of our own: with this issue we begin a major initiative to put more of our content online, starting with the annual Logistics Review. Check it out at www.mmdonline.com.

The shift to more online editorial coverage means we can provide greater in-depth editorial content and a broader range of topics with the instant, any-time access that only the Web can provide. We are also proud to be a part of the Rogers family of industrial publications which will be rolling out a new, integrated Web offering starting this fall. This will give our readers a comprehensive range of news and product information that's unique in Canada.

I invite you to go online and read our Logistics Review editorial feature. There's lots there, including stories on cargo security, the changing role of third-party logistics providers and the evolution of intermodal services in Canada. It's the same great content that you expect from *MM&D* (penned by features editor Deborah Aarts) with all the convenience of the Web!

Emily Atkins