

New System to load trucks and containers in minutes - automatically!

The revolutionary Seafreight Loading Chassis (SLC) was first adopted by Rondo Building Services Pty Ltd (Rondo) for interstate and international container loads more than four years ago. Now Rondo has turned to the SLC to revolutionize its local distribution.

Rondo was created approximately 30 years ago as a joint venture between CSR and Boral. It is the leading domestic manufacturer of steel frames for suspended ceilings and steel frame wall studs and the largest user of light gauge steel in Australia.

Rondo has recently completed building a new state-of-the-art distribution centre and head office at Erskine Park NSW. It seized this green field opportunity to review all aspects of its supply chain and again turned to the SLC as the cornerstone of an entirely new system of loading containers and local tray trucks.

What is an SLC?

The SLC is a patented steel chassis fitted with rollers to provide quick and easy roll in, roll out loading and unloading of shipping containers. SLCs are built in 10 ft, 20 ft, or 40 ft configurations with chequer plate floors. The 20 ft. version can carry up to 24 tonnes of freight.

SLCs are exclusively supplied by Container Loading Solutions Australasia Pty. Ltd..



The Concept

Rondo products are often six or seven metres long and can be difficult to handle.

Rondo required a system that eliminated the dangers of working-at-heights. It was critical to bring loading to ground level for greater speed and safety than is possible using traditional methods.

It also wanted to drastically reduce the standing time of its trucks and to decrease the demands for expensive materials handling equipment.

Local deliveries have taken in excess of two hours to load and secure, with the drivers needing to be on top of the loads to complete the task of securing.

Having used SLCs to reduce product damage and freight costs while increasing loading productivity for international and domestic shipping container loads, Rondo was keen to gain similar benefits for the loading of its local tray truck fleet.

A new SLC was developed to roll directly onto tray trucks so this could be achieved.

SLCs enable pre-loading without the presence of shipping containers. Loading can be done at night, or at other times that suit production, rather than having to wait for containers and vehicles to arrive on site.

The concept also involves eliminating the double handling of products from production to despatch which previously risked damage and increased costs.

The new SLC offers a solution to these problems and hence increases productivity.

The System

The challenge for Container Loading Systems was to develop a total system that could meet all Rondo's criteria.



The system had to be flexible enough to work with trucks of various tray heights and lengths as well as with shipping containers of up to 40 feet length.

Traditional systems using forklifts or side loaders were dismissed as they failed to meet key objectives of cost, safety and flexibility.

Designing and building a large hydraulic lift table to lift the loaded freight chassis and push them onto trucks and into shipping containers was the key step that enabled all criteria to be met.

The lift table was complemented by specially designed tracks bolted to the tray of the trucks. These tracks enable the loaded SLCs to be pushed along the length of the trays. They also secure the loaded chassis to the trucks.

The SLC Lift Table

The SLC lift table is 9.5 metres long, weighs approximately 16 tonnes and will easily lift, push and pull 25 tonnes.

The lift table was selected because it can simply and quickly adjust its height to meet the varying requirements of trucks from four tonne tray trucks to 40 ft container skels.

The lift table sits inside a 1.5 metre deep and 20 metre long pit in Rondo's warehouse floor. On one side of the pit is the warehouse for finished product and on the other side is the 20 metre warehouse doors where the trucks back into the warehouse.

It has hydraulic rams in the centre of the table that push or pull the chassis along its length and onto the trucks. The entire table can be operated by a single person with a wireless remote and it can position a fully loaded SLC into a container in a matter of minutes.

The Operation

During the night Rondo loads SLCs with product on the warehouse side of the pit. The loaded chasses are then pushed to the lift table by a standard forklift.

Once on the lift table, the loads are moved along rail tracks and lifted to the required height for each truck.

The loaded chasses are then easily pushed by the hydraulic ram into the containers or



The whole operation takes a matter of minutes.

When a truck returns after delivering freight the empty chassis is simply lifted off the truck with a standard forklift and nested awaiting future use.

The Benefits

By using the SLC in conjunction with the lift table Rondo has dramatically reduced double handling and loading at heights.

These benefits have improved the safety of the environment for sub contractors and warehouse personnel.

Rondo has gained a 30% reduction in the per tonne cost of their local Sydney metro distribution.

The payback period is less than two years.

Reduced handling ensures less damage and has given significantly increased confidence in the quality of the delivered product.

Turnaround times have improved immensely. When an empty truck returns to the warehouse the next load is already packed and fully secured waiting for loading which takes only minutes.



This is a key component of improving warehouse productivity by allowing an increase in tonnage shipped through the warehouse per unit of personnel and facilities.

Rondo estimates that it will save at least 1.5 hours of standing time for each truck movement and therefore can often complete two truck movements per tray each day instead of one.

Furthermore, now that shipping containers can be presented at Rondo on skel trucks rather than on sideloaders, local container transport costs are reduced as the product loading capacity is increased bringing further freight cost reductions.

Summary

The SLC lift table and the Container Loading Services freight chassis are helping Rondo to improve its logistics productivity, improve safety, raise product quality and reduce investment levels.

Find out more about the revolutionary SLC and/or the lift table by contacting David Beach at Container Loading Solutions at david@cls-int.com.au or 03 8687 9827.