

# Rotacaster Solution Spotlights



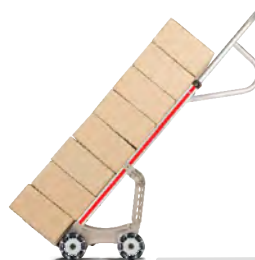
Easier, quicker, safer.  
**Rotacaster.**

## Rotacaster - The world's most versatile and robust multi-directional wheel.

- Rotacaster Wheel design and manufacture innovative, patented, multi-directional wheels.
- Rotacasters are a best-practices solution and provide substantial improvement on traditional swivel casters.
- Rotacaster wheels are sturdy, impact resistant and precision-engineered.
- Rotacasters are made from fully moulded polymers allowing the engineering of entirely new multi-directional movement solutions at a consumer, commercial and industrial level.
- Rotacasters deliver an improved multi-directional movement user experience.
- Rotacasters increase productivity through better functionality.
- Rotacasters enable ergonomically safer multi-directional manoeuvrability.



**RotacasterWheels**  
Commercial/industrial grade multi-directional capability in a rigid mount.



**Materials Handling**  
Award winning materials handling ergonomic safety and productivity.



**Conveyors**  
Transfer loads in any horizontal direction or cylindrical rotation.



**Robotics**  
Mobility and moveability on a simple, reliable, scalable platform.

# Rotacaster Solution Spotlights

## Australia Post Transfer

### The Challenge:

Australia Post used ball transfer tables for manual sorting of bulky international mailbags weighing up to 35 kg. This required substantial and repetitive manual effort by operators to push, pull and rotate the bags, exposing them to potential musculoskeletal injury. To address this issue Australia Post looked for alternative solutions that would substantially reduce operator input and exposure to risk of injury. With a targeted push/pull force of 50N (5kg) for a 35kg bag, it was acknowledged that this target would in all likelihood require a powered solution, adding to operating and maintenance costs.

### The Rotacaster Solution:

Rotacaster proposed a manual transfer solution utilizing their 48mm Rotacasters combined with polyacetal (POM) spacer rollers. The roller's smaller diameter was designed to provide support for the soft packaging, while minimizing friction and reducing the number of Rotacaster wheels required. Australia Post and Rotacaster collaborated on the design and construction of the transfer table. Trials were successfully undertaken at an Australia Post gateway.

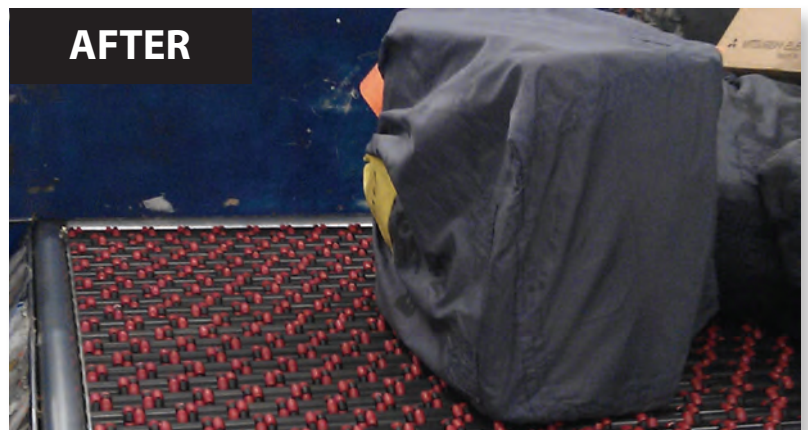
### Outcome:

The solution resulted in a significant reduction of push/pull forces to between 40 and 70N (4-7kg) in all directions on the table. Australia Post considered this a remarkable achievement in the absence of any powered assist.

### Additional Advantages:

In addition to reducing the push/pull forces required, without the cost noise and maintenance associated with a powered solution, the polymer surfaces of the Rotacasters and spacer rollers have demonstrated a lower affinity to adhesion of labels and stickers from packages, further reducing down time and maintenance costs.

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Product: 48mm Rotacaster

Capacity: 230kg (500lbs)

User: Australia Post

Country: Australia



# Rotacaster Solution Spotlights

## Pallet Repair Station

### The Challenge:

An Australian pallet manufacturer company was in need of a robust multi-directional transfer solution for its pallet inspection, maintenance and repair station. This is a hard and dirty business, with 250,000 pallets annually passing through and being inspected, cleaned and repaired on the transfer table.

### The Rotacaster Solution:

To objectively compare, they installed three solutions across three lines: ball-transfers, steel omni-wheels and 125mm Rotacasters.

Three years and 750,000 pallets later only one is left standing.

First to go were the ball-transfers. Every week required either maintenance or replacement as they were fast to wear under the heavy impact of the pallets and repair work.

Next to fail were the steel omni-wheels. Environmental and physical impact eventually started getting the better of these wheels. Last standing and fully operational remained the 125mm Rotacasters, which after three hard years showed virtually no wear and tear, required no maintenance, and delivered day in - day out.

### The result:

All maintenance stations were converted to use Rotacasters.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.

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Product: 125mm Rotacasters

Capacity: 230kg (500lbs)

User: Not available

Country: Australia

# Rotacaster Solution Spotlights

## DC Inline Transfer Table

### The Challenge:

A large US consumer goods manufacturer was looking to improve workplace ergonomics and productivity in its distribution centre. They needed to be able to manually rotate received boxes and move them to load onto a pallet. The boxes are gravity-fed to a workstation with a conventional conveyor roller bed. At this workstation, operators are required to sort, orientate and offload boxes onto a pallet for shipping.

The forces required to orientate and slide the boxes on conventional steel rollers were a target for improvement, especially considering the repetitive nature of the operation.

### The Rotacaster Solution:

Rotacaster US reseller Magnus Mobility proposed a manual transfer solution utilising their 48mm Rotacasters. Arranged as shown inside the standard conveyor frame and not needing any significant modifications the Rotacasters were spaced to optimally support the load and allow for easy rotation and movement.

### The Outcome:

After trials on the initial line, the manufacturer has moved to expand the solution across as 12 stations. Further expansion is planned for the future. The solution resulted in a significant reduction of push/pull forces originally required to rotate and transfer the boxes.

After the successful trial on one workstation, the distribution centre is now planning to upgrade all workstations. The solution requires no power to the Rotacasters and minimal maintenance, while delivering reliable productivity.



Product: 48mm Rotacaster

Capacity: 230kg (500lbs)

User: Not available

Country: United States

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# Rotacaster Solution Spotlights

## Precision Fitting Table

### The Challenge:

American Ceramic Technology Inc. (ACT) needed to increase productivity and improve workplace ergonomics in the fitting of grommets to their Silflex™ radiation shielding. The original workstation it was ergonomically challenging, requiring a two handed effort to position the up to 200lbs heavy Silflex™ blankets to precisely install the grommets.

### The Rotacaster Solution:

After investigating several options for an improved workstation, including an air table, ACT opted for the Rotacaster multi-directional wheel. Working with Integrator Prime Resource Inc, ACT developed a workstation using 48mm Rotacasters framed in modular T-slot aluminum extrusion from 80/20 Inc. The wheels were sourced from Rotacaster reseller Magnus Mobility Systems.

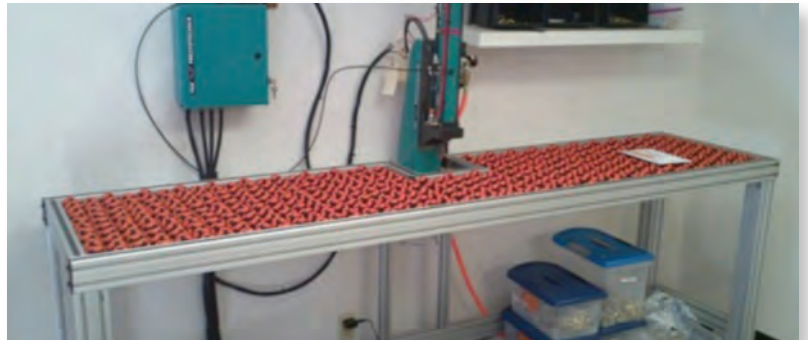
The chosen wheel density provides excellent load support, very easy movement and the ability to precisely positioning of these relatively heavy blankets.

The Silflex™ radiation shielding blankets are now manoeuvred and positioned easily with one hand eliminating the need to lean, twist and pull the item into place.

The new workstation exceeded all expectations for increased productivity and improved ergonomics while saving ACT over 75% in acquisition costs compared to the installation of an air-table.

The solution requires no power to the Rotacasters and minimal maintenance, while delivering reliable productivity and improved safety.

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Product: 48mm Rotacaster

Capacity: 230kg (500lbs)

User: American Ceramic Technology

Country: United States

# Rotacaster Solution Spotlights

## Pallet Transfer Table

### The Challenge:

To improve the movement of honeycomb paper pallets down to a packaging conveyor. One unusual aspect of the product movement is that some pallet packages require 90° rotation for proper orientation at final packaging.

The biggest problem encountered in moving product was that pallets would not track straight when traveling across the ball transfer turntable. Employees moving pallets that weigh up to 1,200 pounds would have a difficult time keeping the product moving in a straight line. Additionally, the force required to move product across the ball transfers was more than desired.

### The Rotacaster Solution:

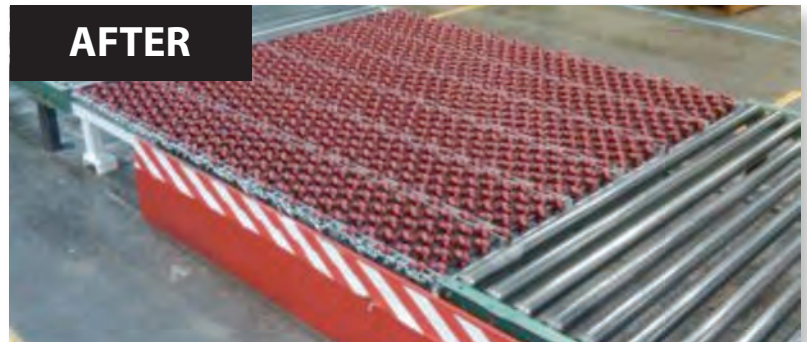
US Distributor Magnus Mobility joined the client in developing the very simple yet effective solution of deploying 630 48mm Rotacasters across 30 axles. The transfer table measures 61" x 66" (155cm x 168cm).

A lay-out of Rotacaster48mm wheels was designed by Magnus Mobility using Rotacaster's prefabricated aluminum mount channels to provide the lowest rolling resistance for the pallets along the packaging lines. The design provided the proper load support for the pallets' 6" square pads.

The expected improvements were achieved. The honeycomb pallets were easier to move across the Rotacaster transfer table, rotation of pallets was easily accomplished manually and the directional control was improved greatly. Now loads of card and paper products arrive and are easily rotated and precisely positioned.

The solution requires no power to the Rotacasters and minimal maintenance, while delivering reliable productivity.

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Product: 48mm Rotacaster

Capacity: 550Kg (1200lbs)

User: Not disclosed

Country: United States



# Rotacaster Solution Spotlights

## Transfer Table

### The Challenge:

A car manufacturer needed to move heavy steel parts bins between parallel in and out conveyor lines in one of their parts distribution centers. The use of a ball transfer table was not proving to be an effective solution. The bins with a narrow steel frame base were difficult to control and the ball transfers failed more frequently than was acceptable.

The manufacturer challenged their conveyor supplier to come up with a more effective product for transferring the parts bins through the workstation from one line to the other.

### The Rotacaster Solution:

The conveyor company used Magnus Mobility's Max Performance Conveyor Rollers to solve this problem. Max Performance Conveyor Rollers use the Rotacaster multi-directional wheel to provide easy and controllable movement in all directions. The Max Performance Rollers were installed in an existing conveyor section, replacing 1.9" steel rollers as a retrofit.

### The Results:

The parts bins are now easy to control and move, requiring less force by employees than the ball transfer table.

The product selected was a 32" Max Performance Roller with the Rotacaster R2-0484-99 wheel on 2" centers. Rollers were installed on 3" centers. The solution requires no power to the Rotacasters and minimal maintenance, while delivering reliable productivity.



Product:	48mm Rotacasters
Capacity:	450Kg (1000lbs)
User:	Not disclosed
Country:	United States

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# Rotacaster Solution Spotlights

## Pallet Transfer Station

### The Challenge:

A South African company needed a solution for a transfer table to redirect pallets at the end of a conveyor line. They needed a robust, reliable and cost effective solution with minimal maintenance needs.

### The Rotacaster Solution:

Instead of the more traditional infrastructure and maintenance-heavy air- or ball bearing tables, the company opted for Rotacasters effectively configured around the periphery, as seen in these images.

Thanks to the multi-directional capabilities of the Rotacasters the solution is simplicity itself.

The complete solution requires only 64 paired R2-125mm Rotacasters and supports weights of up to 800Kg per pallet.

It can be operated by a single person. The received pallet can comfortably be moved to and from the receiving table.

The solution requires no power and minimal maintenance, while delivering reliable productivity.



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Product: 125mm Rotacaster

Capacity: 800Kg (1760lbs)

User: Not disclosed

Country: South Africa



# Rotacaster Solution Spotlights

## Pallet Transfer Station

### The Challenge:

A US professional/consumer gardening goods company needed a solution for a transfer table to redirect pallets at the end of a conveyor line. They needed a robust, reliable and cost effective solution with minimal maintenance needs.

### The Rotacaster Solution:

Instead of the more traditional infrastructure and maintenance heavy air- or ball bearing tables, the company chose Rotacasters uniquely configured around the periphery, as seen here.

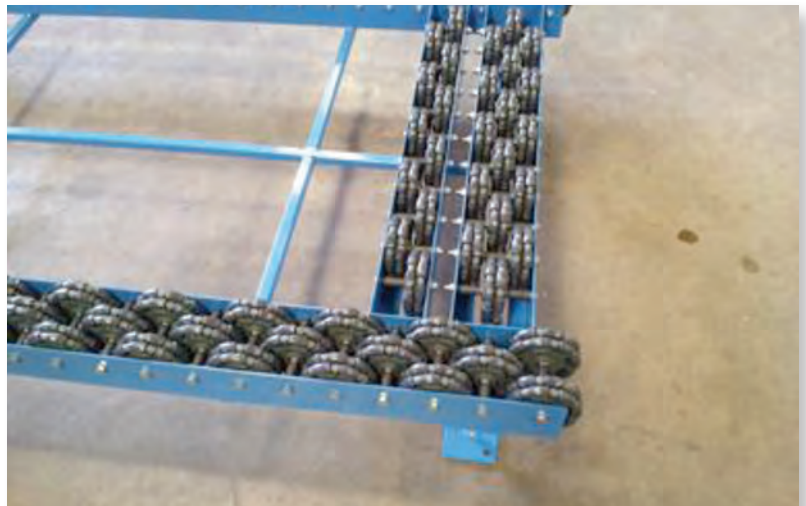
The multi-directional Rotacasters deliver a simple and productive solution. The complete solution requires 101 paired R2-125mm Rotacasters and supports weights of up to 800lbs per pallet.

It can be operated by a single person.

The received pallet can comfortably be moved to and from the receiving table.

The solution requires no power and minimal maintenance, while delivering reliable productivity.

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Product: 125mm Rotacaster

Capacity: 360Kg (800lbs)

User: Not disclosed

Country: United States

# Rotacaster Solution Spotlights

## Concrete Wall Transfer

### The Challenge:

A concrete pre-fab company in Canada needed a solution to transfer concrete walls from one assembly line to the next in their curing facility. The solution needed to be durable, cost effective and require minimal maintenance.

### The Rotacaster Solution:

Instead of the more traditional infrastructure, the company opted for Rotacasters arranged along the line of- and perpendicular to the primary direction of movement.

The solution required only 72 paired R2-125mm Rotacasters per transfer table. 12 tables were installed in total.

Transferring the substantial wall slabs was handled by a simple chain drive requiring minimal maintenance, while delivering reliable productivity.

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Product: 125mm Rotacaster

Capacity: 1000kg (2200lbs)

User: Not disclosed

Country: Canada



# Rotacaster Solution Spotlights

## HD Steel Dollies

### The Challenge:

Incheon Air, a South Korean cargo airline, faced the challenge of transferring a very heavy load into the body of their Boeing 737-400 freighters. While the aircraft interior floor is equipped with ball-transfers, they are not suitable to carry the heavy point loads of the cargo.

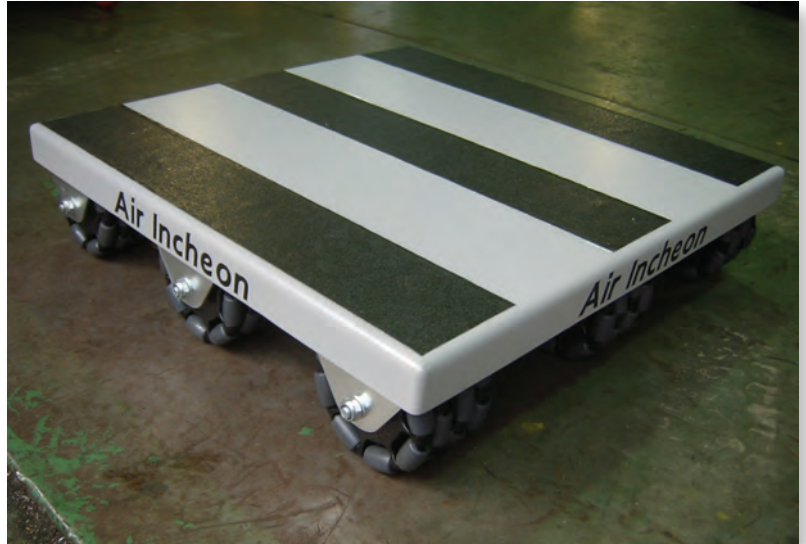
### The Rotacaster Solution:

Air Incheon turned to Korean Rotacaster partner BNP in search for a robust multi-directional solution. In collaboration they designed and built a heavy-duty steel dolly equipped with nine Rotacaster quads.

The solution enables Air Incheon to place the cargo onto four of these dollies and bring the shipment into the aircraft, negotiate a 90 degree turn and place it into the correct location to balance the load.

The solution requires no power to the wheels and minimal maintenance, while delivering reliable and improved productivity.

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Product: 125mm Rotacasters

Capacity: 1000Kg (2200lbs)

User: Air Incheon

Country: South Korea

# Rotacaster Solution Spotlights

## Pallet Transfer

### The Challenge:

A leading Australian distributor of electronic office imaging equipment required a solution to receive product for warranty remanufacture and refurbishing and be able to move from work-station to work-station in a confined environment.

### The Rotacaster Solution:

Rotacaster adopted its steel channels each fitted with 4 125mm Rotacaster quads and connected with steel-rods. This configuration allows the placement of a standard pallet on which the product is received directly between the channels. The low centre of gravity provides a stable platform, which can be manoeuvred precisely by one person, from station to station.

The solutions reduce the effort required to transfer the product, while improving safety and productivity.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.



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Product: 125mm Rotacasters

Capacity: 500Kg (1100lbs)

User: Not disclosed

Country: Australia



# Rotacaster Solution Spotlights

## White-Goods

### The Challenge:

A large Mexican white goods distributor needed to improve the handling of the large and tall loads such as washers and dryers. Using traditional 2-wheel hand trucks, the user had to negotiate their way without being able to see well as they had to balance the heavy load which put considerable ergonomic stress on the body.

### The Rotacaster Solution:

By adopting the self-supporting Rotatruck, the company was able to focus it's staff on safely guiding the load down the aisles, rather than having to primarily support them. The self supporting feature enables the user to walk offset from the load and see where they are going. This significantly improved the ergonomic handling qualities for the user, including reduced fatigue.

Importantly, the use of Rotacasters allows the easy change of direction without destabilising the tall load, as unlike traditional swivel casters, Rotacasters are in a fixed mount.



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Product: Rotatruck, steel

Capacity: 375Kg (800lbs)

User: Not disclosed

Country: Mexico

# Rotacaster Solution Spotlights

## Beer, Wine, Spirits

### The Challenge:

Leading beer, wine and spirits retailer and Woolworths Group member BWS needed to improve the handling of the heavy loads involved in moving cartons of it's product. Using traditional 2-wheel hand trucks, the user had to negotiate their way through narrow aisles while balancing the heavy load which put considerable ergonomic stress on the body. Likewise, the manual loading and unloading of the trolley required a lot of bending and flexing.

### The Rotacaster Solution:

By adopting the self-supporting Rotatruck, the company was able to focus it's staff on safely guiding the load down the aisles, rather than having to primarily support them. This significantly improved the ergonomic handling qualities for the user, including reduced fatigue.

Loading and unloading was also improved by the 2 phase self-supporting position. Fewer pull-backs also considerably reduced strain on the operator.

Importantly, the use of Rotacasters allows the easy change of direction without destabilizing the tall load, as unlike traditional swivel casters, Rotacasters are in a fixed mount.

The solution requires no power to the wheels and minimal maintenance, while delivering reliable productivity.



Product: Rotatruck, steel

Capacity: 375Kg (800lbs)

User: BWS

Country: Australia

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# Rotacaster Solution Spotlights

## Bread-Crate

### The Challenge:

A large commercial baker was looking for an ergonomically safe way to move stacks of 12 and 15 bread crates. These stacks are 1.80m and 2.25m tall respectively. Fully loaded they weigh as much as 185Kg with a challenging very high centre of gravity. Traditional hand trucks required the operator to support the load, making it difficult to see past the load when moving forward.

### The Rotacaster Solution:

By adopting the self-supporting Rotatruck, the company was able to focus it's staff on safely guiding the crate stacks while transferring them, rather than having to primarily support them. This significantly improved the ergonomic handling qualities for the user, including reduced fatigue.

To secure the crates to the truck, Rotacaster developed a patented self-engaging latching system that is easily disengaged after placing the crate stack.

Productivity is further improved by the use of the multi-directional Rotacasters fitted to the front of the wheelbase and enabling precise multi-directional manoeuvrability.

Importantly, the use of Rotacasters allows the easy change of direction without destabilising the tall load, as unlike traditional swivel casters, Rotacasters are in a fixed mount.

The solution requires no power to the wheels and minimal maintenance, while delivering reliable productivity.



Product: Rotatruck, alu

Capacity: 230Kg (500lbs)

User: Not disclosed

Country: New Zealand

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# Rotacaster Solution Spotlights

## Milk-Crate Rotatruck

### The Challenge:

Leading Australian grocery retailer Woolworths needed to improve its back of store operations resupplying milk into the rear-loading display fridges. The objective was to reduce injuries, increase productivity and improve the user experience.

### The Rotacaster Solution:

Rotacaster developed a specialised Rotatruck to pick-up the milk-crate stacks from the delivery pallets and deliver them to the fridges, from where individual bottles could be transferred into the display. The solution significantly reduced the amount of bending required as well as the effort required to transfer the milk from the crates to the display.

In addition to a 12 month multi-site trial, movement specialist dorsaVi electronically analysed flexion and forces with and without the Rotacaster solution and found significant reduction in both, as well as improved productivity. This data was confirmed in the final data generated by the trial across a substantial number of sites.

The milk-crate Rotatruck is fitted with Rotacaster's patent-pending adaptable latching system, designed to securely auto-engage the milk-crates.

Woolworths has decided to roll-out the Rotacaster solution across most of its stores. While considered a significant capital investment, ROI is expected in 90 days.

Since then the Milk-Crate Rotatruck has been adopted more widely across a range of organisations including several dairies. We estimate that in 2014 more than half of Australia's packaged milk will be transferred on Rotatrucks.



Product: Rotatruck, alu

Capacity: 230Kg (500lbs)

User: Woolworths

Country: Australia

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# Rotacaster Solution Spotlights

## Narrow-Track Rotatruck

### The Challenge:

A leading Australian manufacturer and distributor of beverages and milk products needed to improve its milk distribution and reduce manual handling risks. Replacing its current hand-trucks, the solution needed to suit not only their specific distribution centre needs, it also needed to integrate into the supply chain.

### The Rotacaster Solution:

Rotacaster developed a specialised Rotatruck to not only pick-up the milk-crate stacks from the floor and delivery pallets, but to be able to retrieve crates from between crate stacks. To complicate matters, the client needed to be able to handle two different crate styles. To meet the client's needs, Rotacaster developed a new narrow-isle wheelbase and adapted Rotacaster's patent-pending adaptable latching system, designed to securely auto-engage the milk-crates, to work inside the narrow body as well as adjust to different crate heights.

A second solution was developed to pick-up two crate stacks at a time to further improve productivity, especially when interfacing with the supply chain, specifically the loading and loading of large trailers.

The solutions reduce the effort required to transfer crate stacks, improves safety and productivity, especially critical to the supply chain, specifically.

The Milk-Crate Rotatruck has adopted widely across a range of organisations including dairies. We estimate that in 2014 more than half of Australia's packaged milk will be transferred on Rotatrucks.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.



Product: Rotatruck, alu

Capacity: 230Kg (500lbs)

User: Not applicable

Country: Australia

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# Rotacaster Solution Spotlights

## Bottled-Water Rotatruck

### The Challenge:

An Australian bottled water and related products distributor needed to improve its delivery productivity while reducing manual handling risks. The solution needed to be flexible allowing the transport of more than water bottles, plus it needed to carry enough water for multiple or large deliveries.

### The Rotacaster Solution:

Rotacaster developed a specialised Rotatruck based around hand-truck supplier Magliner's water delivery solution. The Rotatruck is equipped with trays that fold-up and out of the way, allowing the transport of mixed packages, even in combination with water bottles.

The solutions reduce the effort required to transport water bottles, improves safety and productivity. The Bottled-Water Rotatruck carries up to six 20l bottles.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.

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Product: Rotatruck, alu

Capacity: 230Kg (500lbs)

User: Not applicable

Country: Australia



# Rotacaster Solution Spotlights

## Bottled / Compressed Gas

### The Challenge:

An leading Australian bottled gas supplier required an improved solution to deliver increasingly heavy gas cylinders. The brief called for the safe retrieval, the transfer and delivery of gas cylinders weighing up to 100Kg.

### The Rotacaster Solution:

Rotacaster developed a specialised Rotatruck using its curved back hand-truck to safely nestle during transport. The gas bottle is secured to the Rotatruck with Rotacasters own safety restraint system enabling the safe handling during transfer and when parking to unload.

The solution reduces the effort required to transport gas bottles, improves safety and productivity.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.



**Easier, quicker, safer. Rotacaster.**

Product: Rotatruck, alu

Capacity: 230Kg (500lbs)

User: Not applicable

Country: Australia

# Rotacaster Solution Spotlights

## Crate/Tote Latch System

### The Challenge:

A leading Australian food distributor needs to deliver a wide range of goods including cartons, 20l drums and bags easily, quickly and safely to thousands of locations every day. At each stop the driver stacks the goods from the truck onto the hand-truck to deliver to one or more stores and restaurants. With parking and time at a premium, maximum flexibility and productivity without sacrificing safety is key.

### The Rotacaster Solution:

Rotacaster proposed a modified version of its popular heavy duty Rotatruck. To confidently transport unstable cans of oil and other fluids, Rotacaster proposed a special riveted buffer on the frame and two framing buffers on the toe. Here two 20l cans can safely nestle and support cartons, bags and cases of drink on top.

Alternatively, cartons and cases of drinks can be stacked directly onto the toe to carry up to a total of 230kg worth of goods. A central strap to the top cross-bar supports smaller bags and boxes or alternatively two stacks of boxes or drink crates.

The self-supporting 4-wheel wheelbase, equipped with large 250mm never-flat wheels enables the navigation across most types of terrain.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.

**Easier, quicker, safer. Rotacaster.**



Product: Rotatruck, alu

Capacity: 230Kg (500lbs)

User: Not applicable

Country: Australia



# Rotacaster Solution Spotlights

## Crate/Tote Latch System

### The Challenge:

To transfer a wide range of crates or totes easily, quickly and safely.

### The Rotacaster Solution:

Aside from the traditionally crated items such as milk, bread, beverages and vegetables, a globally growing trend to delivering in crates/totes drove Rotacaster's decision to develop an entirely new latching system enabling the secure and safe transport of crate/tote stacks by Rotatruck or other hand-trucks.

Rotacaster paid special attention to the easy and safe engagement of the crates/totes. The securing and disengagement is managed by Rotacaster's patented latching system. It can be adapted to a wide range of crate/tote sizes and configurations thanks to clever on-the-go height adjustability.

Already used for milk-crate and bread-crate systems, the Rotacaster latching system is being evaluated for a wide range of crate/tote delivery systems, including complex and high frequency supply chain solutions needing to deliver a wide range of destination specific mixed pre-packed goods.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.



Product: Latching system

Capacity: 230Kg (500lbs)

User: Not applicable

Country: Australia

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# Rotacaster Solution Spotlights

## Custom Assembly Table

### The Challenge:

To create a multi-directional assembly platform on which to assemble a state of the art digital receiver being assembled onto a circular platform. The platform needs to carry the assembly as it moves from one work-station to the next. It needs to rotate to allow access from every side in a very space constrained facility. Moving the total 250Kg assembly needs to be effortless and safe in every direction.

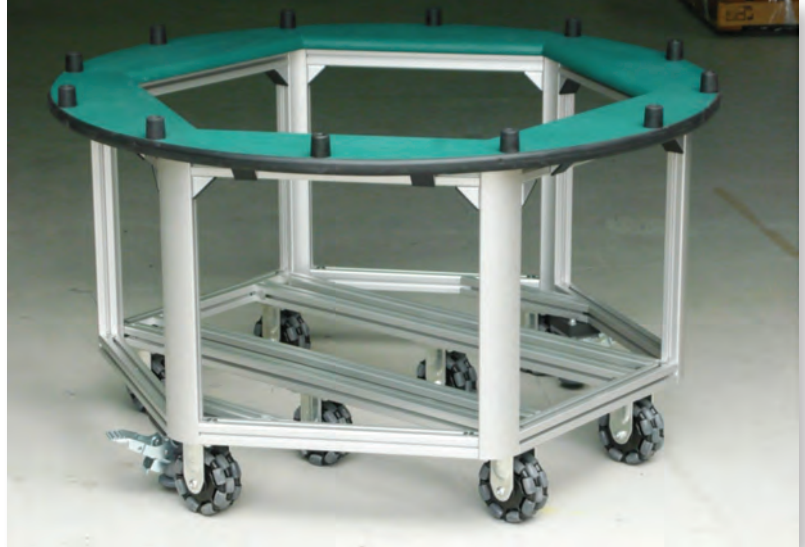
### The Rotacaster Solution:

Rotacaster created a table-top platform to safely contain the overall assembly platform. Easily accessible from all sides it also spares out a large area under the platform centre to allow cable harness access.

The frame was built on an universal MAYTEC extruded aluminium components. This allows not only the integration of the top platform, multi-directional Rotacasters and brakes adaptable with standard components, it enables the reconfiguration for yet unknown future purposes.

The whole assembly is supported by eight Triple Rotacaster assemblies in welded mounts. The assembly platform can be locked into place with two foot operated floor brakes.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.



Product: 125mm Rotacasters

Capacity: 450Kg (1000lbs)

User: Not applicable

Country: Australia

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# Rotacaster Solution Spotlights

## Picking Cart

### The Challenge:

A customer was using a six caster picking cart; four swivel casters on the corners with two rigid casters in the center. The rigid caster improved tracking and control when moving long distances and turning, however, it limited manoeuvrability in tight spaces. Additionally, the rigid wheel was damaged when the cart was pushed sideways. Floors were also damaged.

### Solution:

The multi-directional Rotacaster was fit up in a compatible caster rig and installed on one picking cart. The result was just what the customer was looking for. The R3-1258 triple Rotacaster rolling as a 125mm wheel provided the same tracking control as the rigid caster for long runs and the cart manoeuvrability was enhanced. Most importantly, the picking cart could very easily be moved directly sideways.

The specific problem of wheel and floor damage was eliminated and overall handling of the picking cart was improved with the R3-1258 Rotacaster installed over a fixed wheel. The customer installed Rotacasters on sixty-five picking carts used in their distribution center.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.

**Easier, quicker, safer. Rotacaster.**



Product: 125mm Rotacasters

Capacity: 200Kg (450lbs)

User: Not applicable

Country: United States

# Rotacaster Solution Spotlights

## Umbrella Cart

### The Challenge:

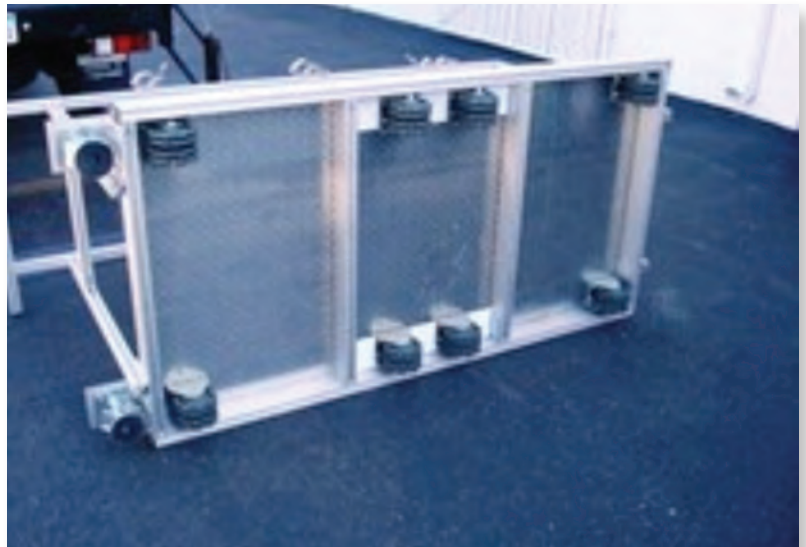
An amusement park was having problems deploying umbrellas within the park where needed. The dollie used to transport the six umbrellas and stand used two rigid and two swivel casters. The swivel casters would get stuck in railroad tracks and other irregular surfaces within the park as the load was not balanced. With a load weighing close to 500 pounds, it was difficult for one person to move the umbrellas where needed. Building a dollie with more swivel casters was explored, but the dollie was very difficult to move as all the swivel casters were not going in the same direction.

### The Rotacaster Solution:

The amusement park designed and had built a dollie employing the Rotacaster multi-directional wheel. The design used eight Rotacasters so that the dollie would not tilt and get stuck on railroad tracks or driveways. Fabricated from aluminium extrusion and assembled with Fath hardware, the dollie has four Rotacasters in the center of the platform mounted slightly lower, less than 1/16", than the Rotacasters in the corners. This design provides great manoeuvrability as the dollie rotates on center.

The dollie is easily manoeuvred around the park without getting stuck on the obstacles the swivel caster dollie did.

**Easier, quicker, safer. Rotacaster.**



Product: 125mm Rotacasters

Capacity: 450Kg (1000lbs)

User: Not applicable

Country: United States



# Rotacaster Solution Spotlights

## Mobile Enclosure

### The Challenge:

Medialift manufactures a beautifully-crafted, weatherproof enclosure for the outdoor use and enjoyment of a flat screen TV and media gear. The challenge they faced was providing a mobile enclosure easily moved and positioned on crowded patios or in limited office or conference room spaces.

### The Rotacaster Solution:

Jim Carr, medialifTV® CEO and inventor, chose the Rotacaster multi-directional wheel for use on the media-ROVER and media-SPYDER trolleys. The Rotacaster wheel provides medialifTV® customers with great maneuverability of their enclosures. The media enclosure, when mounted on one of the trolleys, can be positioned in any direction, even directly sideways. This maneuverability makes it easy to position the medialifTV® enclosure exactly where the customer wants the unit.

In addition to the functionality of the Rotacaster, there were also other design and esthetic advantages. The wheel required a minimum of mounting space and was easily incorporated into the trolleys. And Mr. Carr found the Rotacaster to be cool and edgy, as are the medialifTV® products.



**Easier, quicker, safer. Rotacaster.**

Product: 125mm Rotacasters

Capacity: 90Kg (200lbs)

User: MedialifTV

Country: United States

# Rotacaster Solution Spotlights

## Multi-Directional Creeper

### The Challenge:

A pipe inspection specialist needed greater manoeuvrability especially when working inside tight pipes.

### The Rotacaster Solution:

The user was able to adapt Rotacaster's dual R2 clusters with welded mounts onto a standard shop creeper and custom tender.

This wheel configuration was ideally suited to work in pipes of varying diameters, enabling easy movement both in the primary direction of travel as well as left and right rotation along the curvature of the pipe.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.

**Easier, quicker, safer. Rotacaster.**



Product: 125mm Rotacasters

Capacity: 200Kg (440lbs)

User: Not applicable

Country: United States



# Rotacaster Solution Spotlights



## Multi-Directional Creeper

### The Challenge:

An Australian rail operator needed a solution to access, inspect and facilitate repairs in pipes as small as 600mm in diameter. Traditionally the operator has been crawling on hands and knees or commando style, hauling needed tools behind them, making the task hard and ergonomically unpleasant and risky.

### The Rotacaster Solution:

Rotacaster developed an adjustable mount for its Rotacasters allowing the user to match the angle to the pipe diameter, thereby optimising stability and manoeuvrability in the pipe, both in the primary direction of travel as well as left and right rotation along the curvature of the pipe.

The same system was adapted for a tool tender enabling safer, easier access, even in smaller pipes.

The solution requires no power and minimal maintenance, while delivering reliable and improved productivity.

**Easier, quicker, safer. Rotacaster.**

Product: 125mm Rotacasters

Capacity: 200Kg (440lbs)

User: Not available

Country: Australia

# Rotacaster Solution Spotlights

## Hand Truck - for Liquide Nitrogen

### The Challenge:

Air Liquide Health Care Australia needed a compact solution that would transport two liquid nitrogen dewars and two medical oxygen cylinders with minimal load tilt.

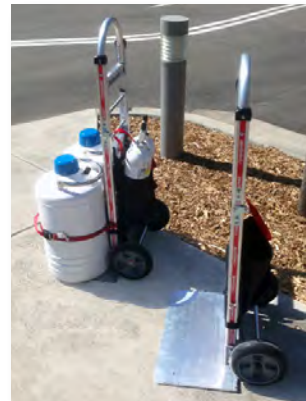
### Solution:

Rotacaster developed a specific two wheel hand truck to meet these requirements and the strict rules associated with handling liquid nitrogen.

It consists of a light but robust folding aluminium frame and an extra large folding toe to accommodate the two liquid nitrogen dewars and provide a compact solution. An additional frame mounted rubber extrusion significantly reduces the risk of damage to the dewars while attached straps stabilise and secure the load. A sturdy bag fixed between the frame enables the transportation of up to two additional oxygen bottles.

Other features include a release strap that enables the toe to be folded without bending, and the reduced handle height allows the operator to minimise the load tilt.

**Easier, quicker, safer. Rotacaster.**



Product: 2-Wheel Hand Truck

Capacity: 230kg

User: Air Liquide Healthcare

Country: Australia



# Rotacaster Solution Spotlights

## Rotatruck and WorkCover Rebate for Newcastle Battery

### The Challenge:

Newcastle Batterie needed a solution to easily handle heavy batteries, weighing up to 40kg, for refilling shelves and servicing customers.

Furthermore Newcastle Batterie wanted to benefit from the NSW WorkCover, which prospects a rebate of up to \$500 for small enterprises improving safety in their businesses.

### Solution:

Rotacaster designed a Rotatruck tailored to Newcastle Batteries needs. An extra wide noses can easily carry even heavy and big truck batteries. The 2nd folding nose requires less bending when moving batteries around the store or the warehouse and enables positioning close to the shelf when unloading. The waist high handle makes pushing the Rotatruck easy though loaded and gives free sight.

### NSW Work Cover:

Newcastle Batteries signed up for the WorkCover rebate program and joined a webinar about improved safety. After purchasing the Rotatruck the company lodged an application for the \$500 rebate from WorkCover which was approved to the full extent at the end.

**Easier, quicker, safer. Rotacaster.**

For more information about the NSW WorkCover please visit: <http://www.workcover.nsw.gov.au/>

