

Australia's export-driven meat, wine and fresh produce industries are facing increasing pressure to optimise loading efficiency, reduce operational costs and maintain strict product integrity across complex global supply chains.

Automated loading systems, particularly one-shot technologies offered by the Joloda Hydraroll Group, present a game-changing opportunity.

This paper explores the benefits of Joloda Hydraroll and Actiw Intralogistics' container loading technologies for Australian manufacturers and exporters.

With both **modified and unmodified** truck, trailer and container solutions available, businesses can select the right system for their logistics model and product profile. From faster container and trailer turnaround and improved cold chain compliance to reduced labour costs and enhanced product care, these systems represent a strategic investment in future-ready logistics.

Australia is globally renowned for its high-quality, high-value agricultural exports. These products depend on reliable cold chain systems and containerised shipping to maintain freshness, quality and regulatory compliance.

Key export categories include:



Meat

Chilled and frozen beef and lamb, shipped internationally.



Wine

60% of total production exported, with strong demand from China, the US and the UK.



Fresh Produce

Citrus, table grapes, berries and stone fruit, exported mainly to Asia-Pacific markets



Modelling shows the average dock can lose **up to 3%** of total pallet volume during peak periods simply because systems are at capacity.

For a business shipping 300,000 pallets per year, that's **9,000 pallets** and potentially **millions of dollars in lost revenue**.

FOODMACH

Automation | Robotics | Integration | Turnkey Projects



Common Challenges in Container Loading

Despite upstream automation in processing and packaging, the loading process remains largely manual or semiautomated across the industry, creating key pain points:



Cold Chain Vulnerability

Slow loading exposes perishables to temperature fluctuations.



Labour Intensive

Forklift and manual loading requires significant staff and incurs safety risk.



Slow Turnaround

Loading one container can take up to 60 minutes.



Inefficient Space Usage

Suboptimal packing increases freight costs.



Risk of Damage

Rough handling of fragile goods like wine bottles and produce crates.

These issues can lead to shipment delays, rejected loads, customer complaints,





The Solution: Automated One-Shot Container Loading



The Joloda Hydraroll Group offers a comprehensive portfolio of automated loading systems tailored to different applications:



Unmodified Trailer Systems (Actiw)

LoadMatic: Fully automated loading system for palletised, palletless or slip sheet loads for non-modified trailers and containers, able to handle complex loads for on-dock or stand-alone installations.

LoadMatic Lite: A compact, costeffective alternative designed for integration onto existing docks particularly for use with forklift or AGV infeed. Suitable for less complex loading tasks.

Benefits

- Works with all standard shipping containers and trailers
- No trailer modifications required
- Ideal for third-party logistics and international exports
- Scalable solutions—adaptable for growing operations or seasonal use



Modified Trailer Systems (Joloda Hydraroll)

Slipchain and **Trailerskate**: Perfect for dedicated shuttle runs between known facilities

Moving Floor: Best for bulk or irregular loads

Benefits

- · Highest throughput loading speeds
- Optimised for controlled fleet environments
- Suitable for high-volume factory-towarehouse routes



Sector-Specific Benefits



Meat Exporters

Cold Chain Integrity: Reduces door-open time from 30–60 mins to under 5 mins and minimises temperature fluctuations, preserving meat quality and shelf life.

Hygiene & Safety: Less human contact reduces contamination risk and enhances worker safety by removing manual handling of heavy loads.

Faster Dispatch: Higher throughput during peak export windows.



Wine Exporters

Glass Protection: Gentle, controlled loading minimises shock and vibration, minimises insurance claims and product loss.

Load Optimisation: Supports mixed SKU loading with precision placement and maximised use of container space lowers freight cost.

Brand Protection: Pristine delivery helps protect reputation in high-end markets.



Fresh Produce Exporters

Speed = Freshness: Fast loading protects shelf life and reduces spoilage

Reduced Handling: Fewer touches mean fewer bruises and rejections

Scalable for Harvest Peaks: Maintains throughput with existing workforce



Measurable Economic Benefits



Time Savings

Up to 80% reduction in container loading time



Labour Efficiency

Fewer operators required per shift



Freight Optimisation

More pallets per container = lower cost per unit



Energy Reduction

Less time with container doors open reduces cooling load



Data Integration

Load verification and ERP/WMS compatibility

Environmental & ESG Impact

Sustainability is a priority for global buyers and retailers.

One-shot loading contributes by:



Reducing Emissions

Fewer forklifts and idling trucks



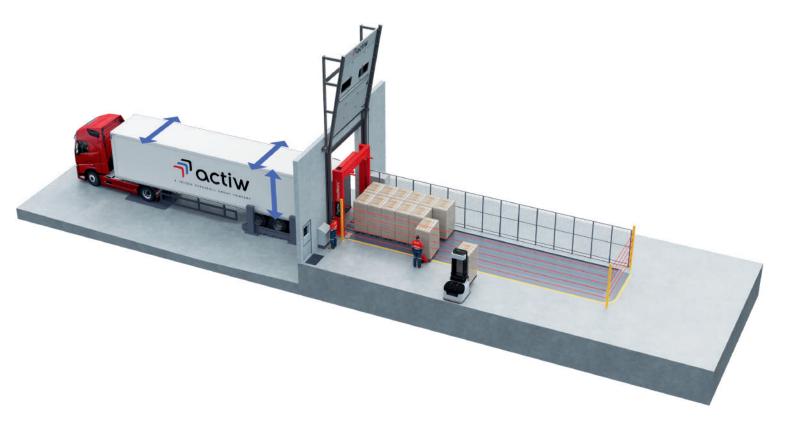
Lowering Energy Use

Faster closure of the cold chain



Improving Worker Conditions

Reduces injury risk and repetitive strain



Implementation and ROI

- Compatible with standard container formats
- Easily integrated into new or existing warehouse layouts
- Interfaces with major WMS and ERP platforms



Return on Investment

- Typical payback period:12–24 months
- Driven by savings in labour, freight, and product losses
- Scales easily with export growth

User CasePotential

A recent analysis of a typical packing operation shows the potential to:



- Increase loading capacity up to 50% per day without increasing the number of docks or yard space.
- Reduce the need for container handling. Containers loaded on trailer chassis.
- Reduce current loading labour and equipment by 50% after two years with higher capacity
- Significantly reduce cold chain breach incidents
- Potentially improve retailer satisfaction scores



Strategic Advantage in Global Markets

With global demand for premium Australian exports increasing, logistics is no longer a back-end function—it's a strategic differentiator. Joloda and Actiw one-shot loading systems empower exporters to:



- Respond faster to market demand
- Reduce variability and risk
- Preserve product quality and brand integrity

Conclusion

Automated one-shot loading solutions from the Joloda Hydraroll Group, including Actiw's LoadMatic and LoadMatic Lite, offer a smarter. safer, and more scalable way for Australian manufacturers and exporters to compete on the world stage.

Whether you're shipping meat, wine, fresh produce (or any product at all), automating your loading process could be the final step in achieving end-to-end export excellence.

To learn more, contact Foodmach, an official ANZ partner for Joloda **Hydraroll Group.**



FOR MORE INFORMATION:

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