

Specialist wine distributor 14 degrees has opened a national wine distribution centre (DC) in Port Melbourne, creating Australia's first high density Pallet Runner storage facility for the long-term cellaring of premium quality wines.

Incorporating bottling and case packing lines, the new 14,500 pallet capacity DC enables 14 degrees to offer significant supply chain benefits and savings to the Australian wine industry. Customers include award-winning wineries such as Yering Station, Mt Langi Ghiran, Parker Coonawarra Estate and Xanadu.



The Challenge

As 14 degrees' business grew, managing the supply chain became much more complex. The wine distributor had stock scattered all across the country at multiple locations. This required a lot of effort to keep track of, and move around when it was needed elsewhere.

14 degrees' first task was to find a central location that would enable them to cost-effectively fulfil orders to just about anywhere in Australia, as well as streamline export procedures.

Port Melbourne, with its great port, road and rail connections fit the bill perfectly. 14 degrees then worked closely with storage partner Colby to optimise the DC layout and workflow procedures.

Our Solution

Colby did a lot of work up front analysing 14 degrees' current and future business needs, and presented a range of options, with its recommendation being an innovative Pallet Runner satellite storage system. "After a premium quality wine has been bottled, the less it is handled the better. Colby's Pallet Runner system is an ideal solution for storing premium quality wine."

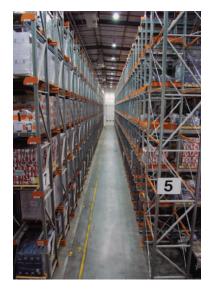
Darren Rathbone, Director, 14 degrees

With the Pallet Runner, 14 degrees could space-efficiently store pallets more than 30 deep in a single lane. This enables 14 degrees to park a whole vintage of a wine in just one or two lanes within the system, and forget about it until it is due for release.

Faster, safer, more efficient pallet handling

Taking full advantage of the building's 14 metre height, Colby's high density Pallet Runner satellite storage system provides capacity for more than 13,000 pallets. Self-propelled 'intelligent' carts operate automatically and independently on rails within the storage system. This lets forklift operators focus on bringing product to and from the racking, enhancing productivity and safety, and reducing the potential for product damage.







Colby Storage Solutions' Joe Carmody with Darren Rathbone, 14 degrees

"When we have large orders to ship, we can pick all of the pallets ahead of time and stage them within a couple of lanes in the Pallet Runner system. When it comes time to ship, we can simply pull the pallets out and load them straight onto the transport."

Darren Rathbone, Director, 14 degrees

When pallets are to be put away, the forklift operator first loads the motorised Pallet Runner into the relevant put-away lane, then loads the pallet into the lane.

Upon receipt of the put-away instruction, the motorised cart drives under the pallet. An electromechanical lifting platform then raises the pallet, and transports it to the required put-away location within the lane.

By the time the forklift operator has placed the next pallet to be put away in the storage system, the motorised cart is ready to begin its next cycle. Pallets are scanned as they are fed into the storage system, and scanned again when they are retrieved, providing real-time location ID and full traceability.

All product movements are RFdirected, with stock, location and order data managed by wine industry IT system, Vinpoint. The Pallet Runner not only gives 14 degrees the best possible use of space, it is also a valuable resource for staging orders.

Colby's flexible storage design for 14 degrees also provides efficient storage solutions for wines cellared in smaller pallet quantities including Selective, Double Deep and Drive-In ColbyRACK.

Supply chain integration

Another supply chain initiative was the decision to include 14 degrees bottling – a wine bottling and packaging facility – in the DC.

14 degrees can now tanker premium wine in bulk to the DC, bottle and put it straight into storage. This provides supply chain, quality and cost benefits compared to bottling at the source and transporting finished goods.

With the new DC, 14 degrees has integrated its supply chain to the point that it can receive wine, bottle it, and take it across the road to the Port of Melbourne for export orders in the shortest possible time, which is a big boost for its customers' export businesses.

Whether it's bottling, short to longterm storage, pick, pack, delivery or export, the flexibility provided by the new DC gives 14 degrees the ability to cost effectively process orders from full container loads down to a single bottle.

"Consolidating the bulk of our stock in a purpose-designed, climate controlled environment not only optimises the long-term quality of our wines, it has enabled us to significantly improve supply chain and transport efficiency."

Darren Rathbone, Director, 14 degrees

Customer benefits

- → Space efficient storage
- → Increased productivity
- → Enhanced safety of forklift drivers
- → Reduced product damage
- → Enhanced staging of orders
- → Improved customer service

