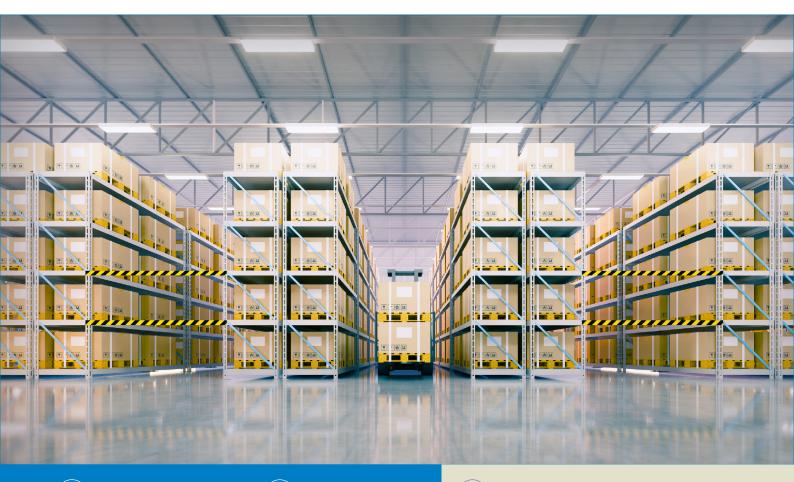


Automated material handling provides efficiency and safety benefits for NP Fulfilment



CHALLENGE

- Rapid increase in online shopping created a need to further speed up picking at the Sydney warehouse
- Need to assure employees that they are safe and can focus on the task at hand

- MiR200 industrial robot
- Unique latching modules
 developed by Konica Minolta

CUSTOMER BENEFITS

- Automation of internal transportation and logistics to increase productivity and reduce operational costs
- KPIs can be monitored at every level providing actionable insights
- Workers can focus on higher-value activities
- Flexibility of autonomous mobile robots (AMRs) requires no alterations to existing facilities prior to implementation
- Lower risk of work-related accidents due to automated trolley handling



Industry: Logistics and distribution service Location: Victoria

Established in 2002, NP Fulfilment provides order fulfilment for international businesses, with hundreds of online retailers, direct sellers, and e-commerce organisations using it to pick, pack, and ship their orders. It provides a range of direct and traditional channel product fulfilment solutions. Offering ISO 9001 quality accredited systems including inventory management, order processing, and reporting makes NP Fulfilment one of Australia's leading suppliers in the industry.



With a rapid increase in online shopping, there was a need to look for ways to further speed up picking at the Sydney warehouse while giving employees assurance that they are safe and can focus on the task at hand. NP Fulfilment guarantees that orders are picked, packed, and ready to ship within two hours of receipt.



Konica Minolta's solution effectively addresses those needs with the introduction of two MiR200 robots with unique latching modules. The MiR200 uses a laser-based technology, making it adept at automating various pushing and delivery tasks. Its flexibility as compared to automated guided vehicles (AGVs) or other track-based solutions requires no alteration to the facilities. As such, this solution offers a fast return on investment and increased cost savings.

With built-in sensors, cameras, and sophisticated navigation software, the MiR200 can identify its surroundings and take the most efficient route to its destination, safely avoiding obstacles and people. This helps to automate transports tasks and focus on higher-value activities.

In addition, the MiR200 can be mounted with customised top modules i.e., bins, racks, and lifts as the application demands. In this case, Konica Minolta developed the latching module for the MiR200, giving it the capability to latch onto trolleys. The mechanism lets the robot navigate easily through narrow aisles and support easy loading and unloading of items from the trolleys with minimum human intervention. This increases the productivity of NP Fulfilment as its workers are less reliant on manual labour, letting them focus on more valuable tasks.



Using the MiR200 robots from Konica Minolta, operational efficiency has been boosted, including the automation of internal transportation and logistics to increase productivity and reduce operational costs. It also means that key performance indicators (KPIs) can be monitored at every level to provide actionable insights.

Additionally, the MiR200 robot solution has produced a fast return on investment so NP Fulfilment employees can focus on higher-value activities. The flexibility of the robots also means there is no need for any alterations to existing facilities prior to implementation. It also improves safety for employees, due to its lower risk of work-related accidents from automated trolley handling.

The MiR200 robots can transport payloads up to 200 kilograms, are suitable for a clean room environment, are easily programmed with no prior experience needed, are safe and efficient, and include easily customisable top modules for different tasks.



"In addition to speeding up the process, the MiR200s enhance NP Fulfilment's ability to capture the movement of the product at each stage in the logistics lifecycle, including how long it's at each stage and how long it takes to get from one stage to another. Turning to technology was a no-brainer. It was also important for NP Fulfilment to work with organisations that have an innovation mindset."

> JEY KANAGARATNAM, CIO, NP FULFILMENT