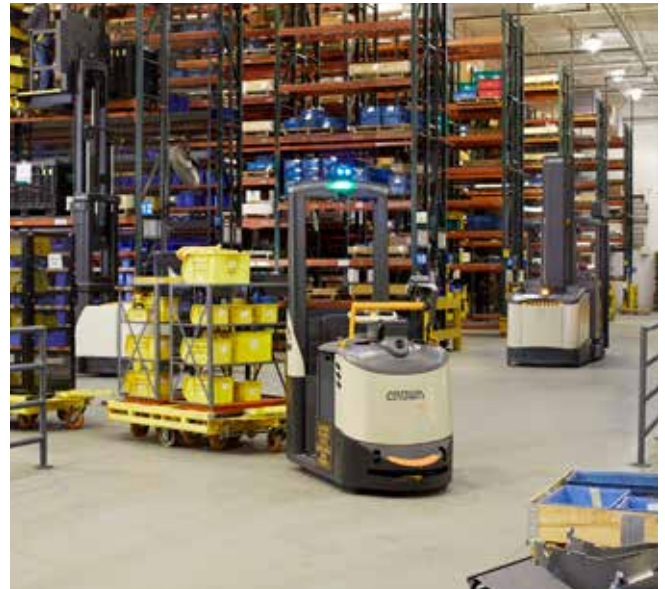


# APPLICATION OVERVIEW

*All Crown DualMode automated solutions are capable of operating in either autonomous or manual mode. Manual operation makes it easy to maneuver vehicles around obstructions, retrieve vehicles from the floor, move them into storage, deliver them for maintenance or use them in special situations. This flexibility empowers you to respond quickly and efficiently to almost any situation—without the intervention of a specialised support team.*



## Crown's DualMode Automated Lift Trucks Increase Utilisation with Full-Featured Operation in Manual Mode

### APPLICATION

Nearly any application that involves a predictable environment and repetitive tasks or functions can be a candidate for automation. However, a typical lift truck application in the warehouse consists of a wide variety of tasks, some consistent and some variable. Some functions may occur routinely and include repetitive travel paths. Others require a great deal of flexibility and adaptability that is best achieved with an operator. Additionally, identifying travel paths that are likely to remain clear of obstacles can be difficult. However, when repetitive travel along these types of paths can be identified, automated lift trucks may provide an effective solution.

### CHALLENGE

Identifying automation-friendly travel paths is only part of the story when implementing automation solutions. Portions of some functions may be automated, but it is rare that the entire function requiring a lift truck will not require human intervention. For instance, it may be possible to automate long-distance transport of goods across the warehouse, but goods must still be loaded and unloaded at each end of the transport path, where these activities can be completed more effectively by operators working in manual mode. Workers must also tell the lift truck when it is time to embark on its pre-determined path.

There may also be times when unexpected obstructions cause an automated vehicle to stop until the situation is evaluated or even resolved. Some automated vehicles offer limited manual-mode operation—mostly to allow operators or even dedicated automation support staff to return a truck to maintenance so they can be rebooted or serviced—but this takes a truck out of production until a service professional can work on it.



## SOLUTION

Crown's DualMode lift trucks can be operated in either automated or full manual mode, which can help accelerate the ROI you receive from vehicles operating in your facility. For example, if an obstruction is blocking the programmed path of a DualMode truck operating in automated mode, there are multiple options for enabling the truck to continue on its way. One option may be to move the obstacle itself, allowing the DualMode truck to resume travel on its programmed path. An operator can also quickly switch the vehicle into manual mode, maneuver around the obstruction, then return the truck to automated mode so it can resume its work. DualMode vehicles can also be temporarily switched from their automated duties for use in unique situations—without the need for specialised AGV training for any of your operators. This flexibility empowers you to get the most out of your DualMode vehicle in all situations.



## RESULTS

All Crown DualMode vehicles can be operated in both automated and manual modes, enabling lift truck operators to quickly switch to manual operation to accommodate dynamic changes in the production plan without the need for specialised operator training. Manual operation also facilitates movement of the vehicles to change or charge batteries or to perform specific functions before returning them to their automated duties.

- Flexibility to implement automation selectivity
- Faster restoration of automated activity
- No special operator training or support requirements
- Higher overall utilisation due to dual mode use
- Accelerated ROI

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## AUTOMATION WITH AN ACCELERATED ROI

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To learn more and contact your local  
Crown Branch visit [crown.com](https://www.crown.com).