9 Signs it's Time to Replace Your ASRS

Warehouse Insights

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Planning for decommissioning

Even with the proper maintenance, automated storage and retrieval systems (ASRS) need to be upgraded throughout their lifecycle and will eventually reach the point of retirement. If your operations rely on ASRS, it's important to recognize when your system needs to be upgraded - and when its time to plan for decommissioning. Planning for decommissioning should include scoping and budgeting a replacement solution to minimize the disruption to your operations.

Here are nine signs it's time to upgrade or start planning to decommission and replace your current ASRS solution:

#1 The equipment is 20+ years old
#2 It's becoming difficult and expensive to find spare parts
#3 The equipment has had little maintenance over its lifetime
#4 The equipment is used continuously (24/7)
#5 The equipment operates in a harsh environment
#6 You're experiencing frequent, unplanned downtime
#7 The system can't interface with the latest software
#8 The system is struggling to keep up with your operations
#9 You're spending significant budget maintaining/repairing the machine

If you are experiencing some of these signs in your current operations – your ASRS might benefit from an upgrade, add-on or software enhancement to boost your operational efficiencies. Although many operations put off upgrading or replacing their automated equipment as long as possible - if three or more of the above signs are present, it's time to start planning your decommissioning and replacement process.

You might be surprised to discover how the latest ASRS advancements could yield significant advantages over your current solution. This is because today's equipment is often more compact, stronger, faster and smarter - storing more weight at taller heights, transporting larger loads at higher speeds and completing tasks faster with more accuracy and easier programming.

#1 The equipment is 20+ years old

You can anticipate the highest quality automated solutions to last 15 - 20 years (when properly serviced and maintained). This is mainly due to the technicial support and availability of spare parts. If the equipment has been continually upgraded throughout its life you might expect the machine to last a bit longer before it will need to be replaced. But as OEMs evolve their product lines and your equipment ages, technicial support and spare parts will be harder and harder to come by.

OEMs often do not train and certify new technicians on 20+ year old technologies. Even if a piece of automated equipment appears pristine and works well after 20 years, it will still be difficult to find a technician—either on staff or from an authorized third-party service provider—with the skills and knowledge to maintain it after all that time. That's particularly true in today's workforce, as the baby boomer generation retires and fewer millennials and Gen Z enter trade and technical schools.

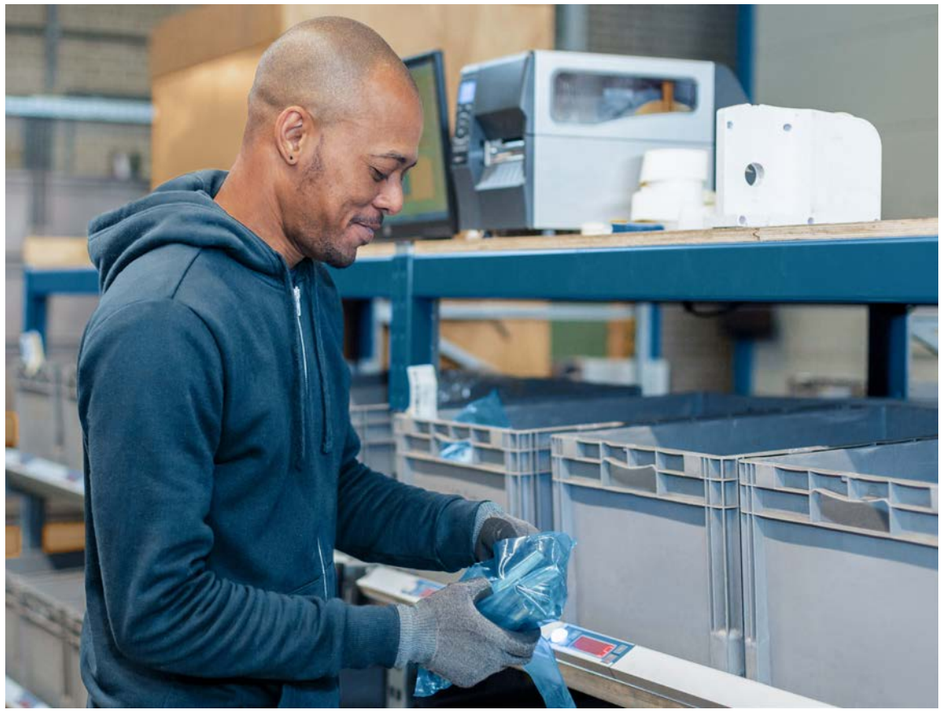
#2 It's becoming difficult (and expensive) to find spare parts

As your equipment ages you'll find OEMs discontinue stocking spare parts as they become outdated. Often this isn't the choice of the OEM, as technology evolves, parts suppliers upgrade components available on the market and OEMs are forced to discontinue older spare parts due to component sourcing issues.

Although it may be possible to source spare parts from authorized third-party service providers or online marketplaces, it will likely be a time-intensive and increasingly expensive process. Further, if the equipment breaks down and a spare part is not quickly available, your productivity may be impeded for a longer period of time.

#3 The equipment has had little maintenance over its lifetime

Equipment that does not have regular preventive maintenance performed will most likely need to be replaced sooner than equipment that has been regularly maintained over its lifecycle. Keeping up with regular maintenance past the warranty period keeps your machine in better physical condition overall and allows the OEM to recommend upgrades, add-ons and enhancements that aid in extending the lifetime of the equipment.



#4 The equipment is used continuously (24/7)

Equipment that runs more frequently (24/7/365) or with heavy load cycles not only needs more frequent service, but is also be expected to wear out faster and likely need replacement sooner. Automation equipment used infrequently or with lower duty cycles typically has a longer life span.

#5 The equipment operates in a harsh environment

In some cases, the surrounding environment can also impact a system's longevity. Automated systems operating in ambient temperatures and a relatively clean facility are more likely to last longer than those in dusty, dirty or extreme temperature facilities.

#6 You’re experiencing frequent, unplanned downtime

If operations are being constantly interrupted by unplanned downtime it’s time to take a closer look. You can quantify actual downtime by reviewing past service and maintenance records. This will give you an idea of the maintenance performed on the equipment over time. If you see trends that tell you that the equipment is breaking down more often or has needed a lot more maintenance recently, it may be time to start planning for decommissioning.

#7 The equipment can’t interface with the latest software

If your experiencing internal interface issues with the latest version of your ERP or WMS software it’s time for an upgrade. These issues are often fixed with a solution software upgrade. If an upgrade is not available for your equipment that’s a sign you should start to consider a decommissioning and replacement plan.

Further, the latest automated material handling solutions are enabled with communication capabilities via secure internet connection, allowing operations better insight into equipment performance. Such information can be used internally for more accurate scheduling of on-site maintenance activities while also providing remote monitoring to prevent certain failures from occurring in the first place. If your system can’t take advantage of remote monitoring an upgrade should be considered.

#8 The equipment is struggling to keep up with your operations

While your equipment may have been performing as expected during the first few years of its life, things change. When internal operational processes and goals change, but the automated material handling solution isn’t updated in alignment, chances are high the solution can no longer keep pace with or meet the new requirements.

For example, an operation may expand product lines. A merger or acquisition might mean consolidation of multiple inventories into a single facility. Fulfillment lead times may have been compressed to meet customer delivery expectations. Regardless of the change in process, chances are the solution is no longer optimized for the new operational approach.

#9 You’re spending significant budget maintaining/repairing the machine

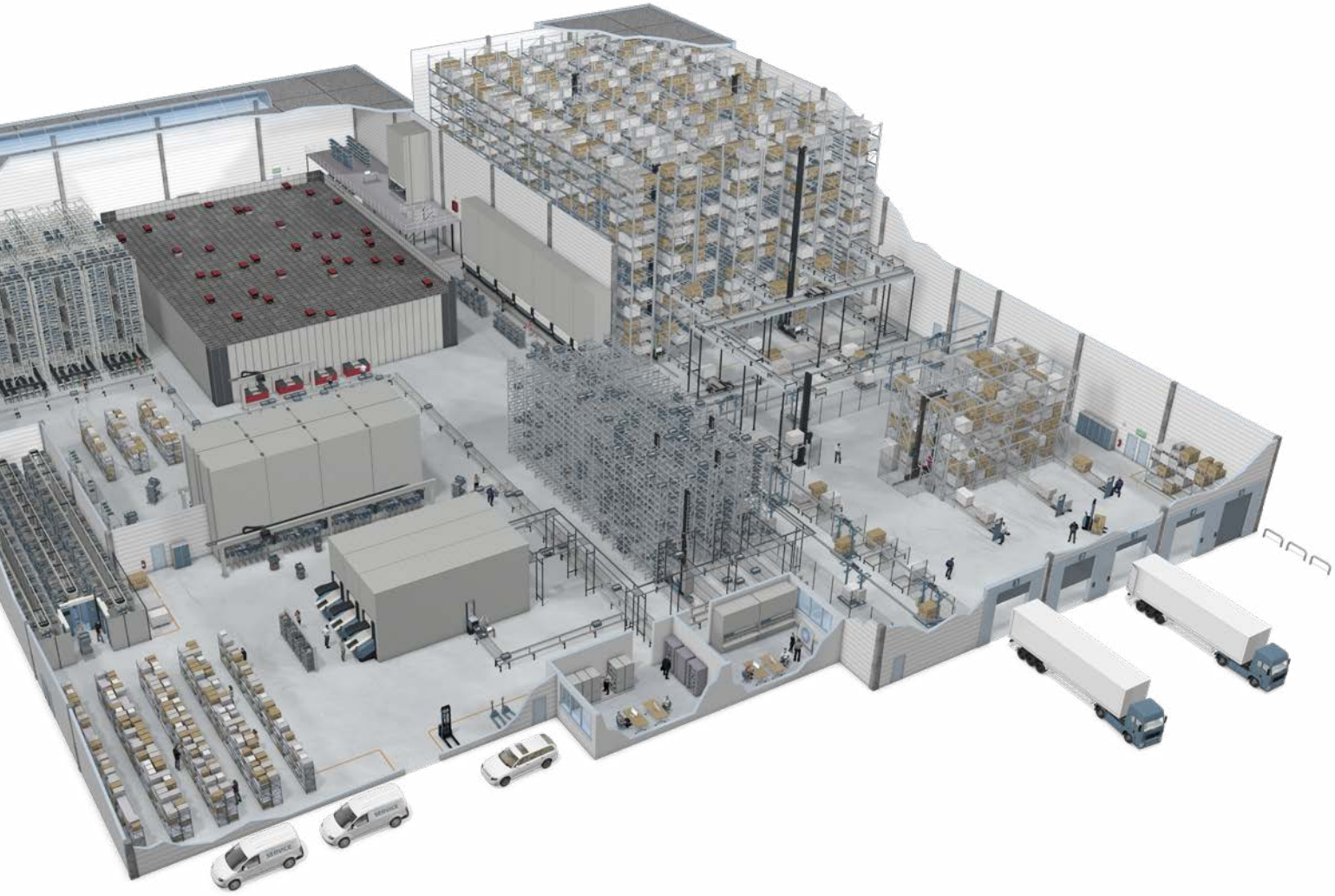
When the bulk of your operational warehouse budget is being spent nursing along problem-prone (but still necessary) equipment, it’s time for an upgrade. Often, the budget used for maintenance and repair can be better spent as part of an investment in new or upgraded equipment.

About Kardex

Kardex is a global industry partner for intralogistics solutions and a leading supplier of automated storage solutions and material handling systems. The Group consists of two entrepreneurially managed divisions, Kardex Remstar and Kardex Mlog.

Kardex Remstar develops, produces and maintains dynamic storage and retrieval systems and Kardex Mlog offers integrated materials handling systems and automated high-bay warehouses.

The two divisions are partners for their customers over the entire life cycle of a product or solution. This begins with the assessment of customer requirements and continues through planning, realization and maintenance of customer-specific systems. It ensures a high level of availability combined with low total cost of ownership and operation.



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