CONCEPT TO COMPLETION



NEED THAT BESTSELLER TOMORROW? OR GROCERIES IN AN HOUR? NO PROBLEM.

Today, on-demand delivery is a given, but just a few years ago, it was impossible. In most cases, a major difference between then and now is the advancement of automated storage and retrieval systems (ASRS) and the software that drives them.

By connecting the customer directly to the product in the warehouse, an ASRS reduces wait times and human error. As soon as a shopper clicks "Buy Now," fulfillment processes are set in motion automatically. Within hours, or even minutes, your package is on its way.

It's no surprise, then, that many distribution centers, manufacturing facilities and e-commerce businesses are eager to install a custom ASRS. Though successful implementation is complex, its overwhelming nature can be tempered by breaking down the process into the following five steps.

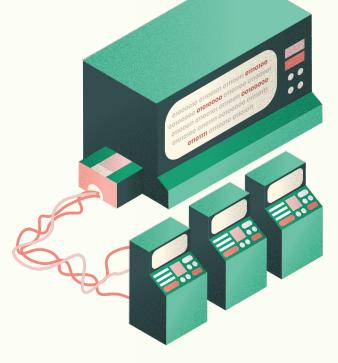
Step 1: Data Gathering

8

Each ASRS application is unique. To engineer the most effective solution, a business should collect detailed data about products, orders and inventory levels. Validating this data is the most critical step in sizing the system, according to Alfredo Valadez, a project manager who designs integrated automation solutions at Burns & McDonnell.

Step 2: Assessment

Once data validation is complete, an automation solution provider should develop a detailed understanding of the business, including how products and services are distributed from the fulfillment center. A team should be assigned to measure, analyze and document current operational processes, as well as evaluate physical constraints, product specifications, packaging requirements and operator safety. Verified data models should then be used to establish parameters for the system design.



Step 3: Design

Designing a custom ASRS solution requires careful product selection and a thorough understanding of the entire fulfillment process. ASRS vendors offer a wide variety of equipment, and a customized ASRS should include whatever combination of products is most appropriate, regardless of manufacturer.

"A full-service automation provider will consider how the new ASRS will impact upstream manufacturing processes and downstream shipping operations," says Brian Chatham, a project manager at Burns & McDonnell. "Then it will develop a vendor-agnostic solution that streamlines operations within and beyond the warehouse."

Step 4: Construction

Whether an ASRS requires a new building or a building modification, it's important to understand all relevant regulations. A qualified automation solution provider will not only evaluate your design options and engineer the system to meet relevant codes but also act as the contractor. By bringing design, bidding and scheduling under one roof, the solution provider verifies that potential challenges are identified and resolved as early as possible. This eliminates the need to manage many suppliers and avoids finger-pointing if something goes wrong.

Step 5: Commissioning and Training

For a project to be completed on time and on budget, close coordination between vendors, construction subcontractors, plant management and operations is essential. A full-service automation solution provider can manage this entire process and even train warehouse staff on the new ASRS.

TURNKEY IMPLEMENTATION

An ASRS provides the agility a business needs to meet the high expectations of modern consumers. A full-service automation provider offers the wide-ranging experience necessary to design and implement a custom solution that meets specific needs.



Want to know more? Learn how to get started with ASRS at burnsmcd.com/CountOnASRS