

Challenge Solution

Client

CDW
Vernon Hills, Illinois

CDW is the nation's leading direct computer technology solutions provider for business, government agencies and educational institutions. CDW is also a leading source of technology products and services for Cisco, Compaq, Hewlett-Packard, IBM, Intel, Microsoft, Sony and other top name brands. Their mantra for success: "Everything we do revolves around the customer."

Challenge

CDW requested a sortation system engineered to handle all shipping processes of computer components of different size and weights arriving from separate warehouses. The system implemented needed to be flexible enough to grow and expand as their business requirements evolved. In addition to the above, CDW required a sole software source for the entire distribution center, which included tilt-tray sorter and conveyors, for ease of maintenance and upgrades.

Solution

Mantissa custom designed a 664' tilt-tray sortation system with a speed of 120 trays per minute fed by over two miles of conveyor. The trays were engineered to handle product from memory chips to monitors, weighing up to 75 pounds.

By using multiple induction schemes, Mantissa incorporated three automatic inductors to handle all full case product arriving from pick modules, as well as split case product from a separate warehouse. Two manual induction stations were used to handle cross-docking and special items for billing.

Mantissa provided a common software interface, MerlinPLUS, to seamlessly integrate the tilt-tray sorter with CDW's Warehouse Control System.

In response to the customer's concerns regarding energy conservation, Mantissa provided a new, unique and efficient means of powering the sorter utilizing the Green Drive™, a high efficiency low energy drive mechanism (Patent Pending).

Target Tilt™ trays, in conjunction with the use of 450-degree spiral chutes, were chosen to safely convey product from 18' elevation to dock level for loading into trucks.

By designing a system with future expansion in mind, Mantissa integrated both hardware and software for the tilt-tray sorter and conveyor system to streamline the entire shipping operation. All to make sure customers remain at the center of all that CDW does.



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