

# Challenge Solution

## Client

Newark Electronics  
Gaffney, South Carolina

Newark Electronics is the market-leading catalog distribution company of electronic parts and components in North America, and the largest sector of the worldwide catalog distribution division of Premier Farnell, PLC.

## Challenge

Newark Electronics opened a distribution center in Gaffney, South Carolina. Since they were starting the new operation with a brand new building, it was determined that it would be an opportune time to further automate order handling. There was a need to initiate batch picking for orders, rather than individual preparation of each order.

## Solution

Through batch picking, Newark Electronics could reduce required manpower, improve efficiency, and decrease overhead, lowering the cost per pick. Mantissa recommended a tilt-tray sorter, which was designed to sort 120 items/minute to approximately 200 packing chutes, using manual induction.

An integral part of the design included Order Chek™, a combination software/hardware package that tracks a particular order as it is assembled in a given chute. This allows better utilization of both chute and packer, providing a more constant workflow and more consistent use of the packer's time.

Once the order is packed, it is placed on a "take-away" conveyor and passed through an in-line taper before arriving again at the induction platform. After re-induction, the packed order then travels to one of twenty-one shipping chutes for fluid loading into a truck, or placement into a shipping container for presorted merchandise. Using the same sorter for two distinct purposes provides excellent machine utilization initially. As volume grows, the sorter can then become a dedicated unit assigned to only one function, with a second sorter handling the other.

Through Mantissa's unique design, Newark Electronics was able to increase efficiency, while preserving the flexibility necessary in a start-up facility.



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