

# WAVING SOLUTIONS

Matthews NEXUS Warehouse Execution System provides highly-flexible waving capabilities based on organizational goals and performance



## Choosing the Best Method

In systems where DCs must constantly prioritize and re-prioritize orders, dynamic waving optimizes the flow of goods through a facility to distribute work efficiently and increase productivity. The design of a wave-building algorithm should meet the goals of a business. With Matthews NEXUS Warehouse Execution System (WES), waving can be dynamically configured to meet new operational requirements. Utilizing a WES often saves money and increases flexibility as compared to a traditional WMS.

The WES manages batch creation from a pool of orders; waving can be based on various performance objectives, such as:

- ▶ Determine the shortest pick path
- ▶ Ensure every zone finishes in concert
- ▶ Pick in the shortest amount of time
- ▶ Vary zone sizes to completely fill totes
- ▶ Wave by age – priority, order date, cutoff for shipping time

- ▶ Pick to dynamic cubic volume available, rather than number of orders
- ▶ Group orders in batches by attribute (VAS type, package type, service level, carrier, multi unit orders, oversize, etc.)
- ▶ Flash and expedited orders can be supported
- ▶ Minimize pick zones and pick aisles for a batch; select orders that maximize the number of picks per pick path
- ▶ Optional manual batch creation and managed release may also be used where appropriate
- ▶ Hospital waves

  
WAREHOUSE EXECUTION SYSTEM

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## Active Optimization

Matthews' waving is extremely flexible and can be tailored to meet your demands. Making modifications to waving processes is quick and highly customizable.

Waving may be designed to support a pull system to eliminate bottlenecks, balancing the flow of material across processes. For e-commerce, smaller sub-batches can be built and dynamically inserted into the correct pick wave as needed, instead of building one large pick wave. Continuous flow focuses on closing orders, rather than batches, adding orders based on projected workflow. This gives organizations the agility to adjust quickly to changes throughout the day.

## Wave Management

- ▶ Provides complete visibility of wave status (current, historical, and future) to simplify operations
- ▶ Downloads wave tasks (picks, puts, units to sort, etc.) to all sorters, ASRS, and other automation systems
- ▶ Provides wave planning function to create waves based upon pending work, equipment capability, available operators, and other user-controlled parameters to maximize wave efficiency
- ▶ Highly flexible based on labor, MHE (open cubbies), SLAs, VAS (gift wrap, hazmat), and workload



Let's talk about your application.

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