Optimized Put Wall Solution

Superior Solution
Maximizes Performance and ROI
Softeon provides the industry’s most powerful, flexible and optimized Put Wall solution, reducing picking costs, optimizing throughput, and maximizing flexibility.

There is an increased interest in Put Wall Systems – and for good reason.

In the face of efulfillment and other pressures, companies are increasingly turning to Put Wall systems to reduce order picking costs and increase throughput. What is a Put Wall? A Put Wall is a fulfillment system that uses a physical structure to create a series of “cubbie holes” or slots into which products for customer orders are placed, or put, after picking. Each slot holds products for all, or part, of an individual customer order.

Each order may contain one or multiple items. When all the items for an order have been placed into slot by associates, other operators on the back side of the wall place those items into their proper shipping containers, such as cartons or polybags.

Within this basic construct, there are many options. For example, putting and packing operations are often driven by light systems that instruct front-side associates what picked items in what quantities should go in each slot based on scanning a SKU bar code. Each put is then confirmed by pressing a button on the light display below each slot.

Similarly, when all the items for an order have been placed into a slot, a light on the back of the slot can indicate to associates that this order is ready for packing - but there are several options in terms of the technologies used.

While Put Walls are most commonly seen in piece picking operations, they can also support scenarios when an item is, in effect, the size of a case (e.g., an electric drill), which may require a larger slot size than normal.
Put Walls have many other advantages, including modularity and scalability. It is possible to start small, with even just one wall module, and easily add additional modules over time.

Put Walls – if supported with the right software – can deliver superior results in terms of cost and throughput versus common alternatives, such as use of pick carts alone.

Pick carts often involve discrete picking, meaning orders for each order are placed into shipping cartons or totes on the cart, though “cluster picking” techniques can be used to improve productivity. The pick cart is then generally moved by human or mobile robot to a packing station.

By using a Put Wall, order picking efficiencies are gained through the use of batch picking, where picks are grouped, so that all items needed for orders to be processed in a given wall module or modules are picked in one stop at each location. This is generally much more efficient than discrete order picking.

Those batch picks are delivered by a cart or conveyor to associates for placement into the wall slots, so this becomes a form of “goods to picker” order processing, meaning that workers have little travel distance associated with their activities.

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Experience has shown that putting and packing operations using lights delivers high levels of order accuracy, and can be performed in a paperless environment - with all the benefits associated with that.

Because Put Wall slots can be sized to the needs of each operation, and because each slot in well-run operations can be turned over many times throughout the day, put walls are also very space efficient.
Management Software is KEY

Achieving the full potential and efficiencies of Put Walls can only be achieved with the right software to direct and optimize the full Put Wall pick, put and pack processes.

Despite the many benefits of Put Walls, there are also a number of operational challenges (see right).

Softeon Put Wall, a subset of our full Warehouse Execution System (WES), eliminates all those challenges and more with a powerful, highly configurable and optimized solution to maximize full Put Wall system productivity, throughput, and customer service.

It does this through a number of powerful capabilities to manage and optimize Put Wall operations, starting with what orders should be considered for Put Walls processing.

The system uses other efficiency techniques, such as calculating what combinations of a relatively few number of SKUs can complete the highest number of orders, driving picking productivity and clearing the order pool quickly.

The system also supports waveless or wave-based order release, meaning it easily handles hot orders as carrier cut-off times are near.

If using pick carts to feed the wall, Softeon Put Wall groups orders on each cart based on total efficiency, minimizing travel time. For conveyor-based “pick module” systems, Softeon supports zone picking, dynamic zoning, pick-and-pass and more.

Softeon provides out of the box support for all pick technologies, including RF and bar code scanning, our own Voice system that works on any Android device, lights on carts or in pick zones, mobile robots, etc., with configurable, rules-based prompts and dialogs.

Without the right software, fulfillment sites can experience the following issues:

- Sub-optimal order batching
- The right orders not directed to the wall for processing at the right time
- Excessive dwell times – put wall slots are held up for an hour or more awaiting items needed to complete orders
- Challenges managing overall Put Wall operations
- Challenges hitting carrier cut-off times
Softeon really shines in terms of Put Wall execution with a variety of tools. Work coming to the Put Walls is metered, ensuring a steady, consistent flow of work that minimizes congestion and down time.

To determine what cartons/totes should be released, the system can consider the work at a given wall module, how much work is in the queue, orders on the conveyor, and even orders awaiting picking. Dwell time – the time it takes a given slot to be “turned” – is minimized, as the system automatically prioritizes picks to minimize turn times. Softeon Put Wall also calculates the expected time it will take for products to reach the Put Walls – say 40% longer for mezzanine picks versus carton flow rack. Picks are released in a way that uses those time calculations to ensure all the products for an order will arrive at the same time. In fact, the system automatically releases orders based on customer service commitments, carrier cut-off times, and time it will take to do the work to ensure SLAs are met.

Softeon offers a number of tools to optimize Put Wall execution.

Other features of the Softeon Put Wall system include:

- Robust exception handling, such as if an item has to be short picked due to a late replenishment, with several options for handling these scenarios
- Support for continuous slot assignment, rather than requiring a “wall wave” to be complete in a module before the next one is processed
- Use of “virtual walls” that group two or more physical walls together for order release to gain picking efficiencies and reduce the number of cartons/totes on the conveyor system
- Support for multiple putters working a given wall module at the same time
- Support for one associate working two wall modules
- A complete order packing capability, either traditional or with use of technology such as an autobagger
- A robust cartonization function that optimally determines what items should go in each carton type, with sophisticated rules for which products can be packed with other items
Softeon provides the market's most powerful, flexible and configurable Put Wall solution to power efulfillment and other picking requirements.

Benefits of the Softeon solution, beyond those associated with Put Walls generally, include the following:

- Full support for other picking areas/types beyond Put Walls - in one integrated system
- Rapid deployment and time to value
- Use of commodity hardware that reduces costs significantly
- Ability to rapidly add additional wall modules over time
- Optimizing techniques to significantly improve picking and Put Wall operations
- Automated, waveless order release considering service-commitments, processing times, picking efficiency, and the flow of work into the wall modules
- Optimization of what work goes through Walls and what goes straight to packing, based on efficiency calculations and the status of Put Wall throughput
- Significant reduction in the gap between theoretical Put Wall throughput and actual results
- Robust support for conveyor-based and cart-based picking simultaneously
- Integrated packing functionality

Softeon is the clear Put Wall solution leader — let's talk about your needs today.
Softeon brings an advanced Warehouse Management System (WMS) and Warehouse Execution System (WES) to the market, available together or stand-alone.

This game-changing solution set delivers new levels of productivity, throughput and customer satisfaction, in the industry’s first Warehouse Management and Execution System – backed by our track record of 100% deployment success.

Uniquely, the WES delivers value for DCs of all types: highly automated, manual and operations with medium levels of automation. It also provides direct management and optimization of Voice, smart carts, put walls, pick-to-light, mobile robots and more, with multiple customer benefits.

In addition to WMS and WES, Softeon offers the broadest suite of flexible, functionally rich solutions in the industry, including Labor and Resource Management, Assembly and Kitting, Yard Management, TMS, Parcel, 3PL Billing, Order Management, Direct Store Delivery, and Reverse Logistics.

All available in the Cloud or on-premise.

For more information, please visit www.softeon.com.