Speaker assembly

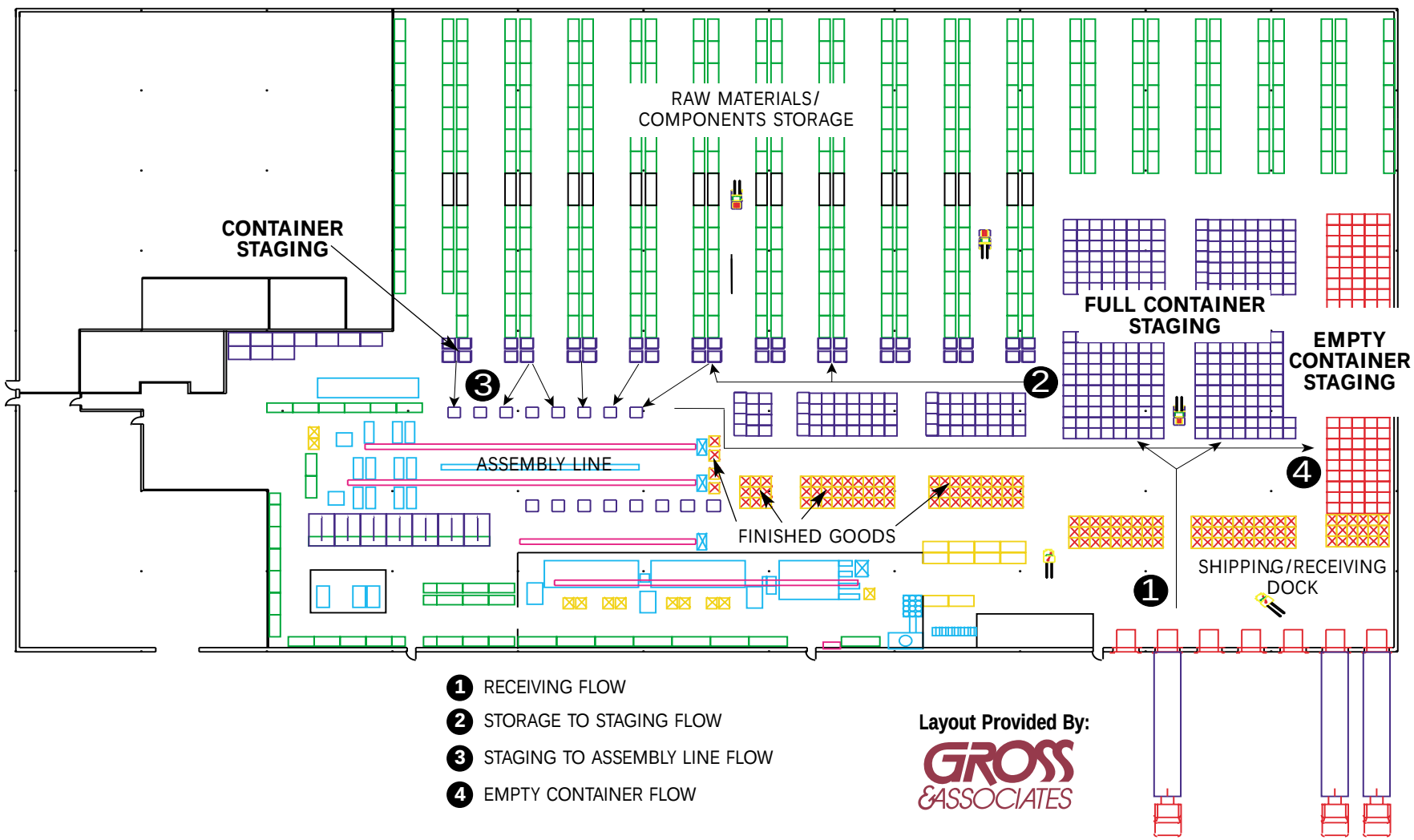
Returnable containers facilitate JIT parts handling and delivery, streamline order flow in speaker assembly operation

Time is of the essence at this manufacturing facility, which ships speakers B2B. Parts and components are delivered to the speaker assembly lines on a JIT basis, keeping inventory to a minimum and reducing congestion on the line. Returnable containers, all with a standard 40 by 48 inch dimension, contain lot-size quantities of parts and components. Full containers are staged in a bulk stacking area directly adjacent to the receiving dock. The fastest-moving items are staged at the ends of aisles in the raw materials storage area, directly adjacent to the assembly lines. Replenishment on the assembly line takes place (via pallet jack) when inventory falls below a certain predetermined quantity. Empty containers, which fold flat for storage and shipping, are staged near the shipping dock so that they can be returned to vendors on the next pickup of full containers.

FACILITIES OVERVIEW

Total Warehouse space: 78,000 sq ft
Clear height: 16 ft
Number of SKUs: 75
Throughput: Medium volume
Number of employees: 75
Equipment budget: $2.2 million

- Combined shipping/receiving docks facilitate U-shaped flow of parts and orders, streamlining handling and reducing travel distances
- Standardizing on one container size keeps container inventory to an absolute minimum
- Containers fold flat when empty, reducing the amount of storage space required
- Space is built in to and around the shipping/receiving dock for staging of both full and empty containers
- Locating the fastest-moving SKUs near the assembly line reduces travel distance and eliminates the potential for a line shutdown while awaiting a parts delivery
- Inventory turns quickly and the number of trading partners is few, helping the facility maximize the benefits of returnable containers
- Returnable containers present a neat appearance on the assembly line and eliminate packaging waste



1. RECEIVING FLOW
2. STORAGE TO STAGING FLOW
3. STAGING TO ASSEMBLY LINE FLOW
4. EMPTY CONTAINER FLOW

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