

Discover the Benefits of “Goods to Person” Order Fulfillment

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Presented by:

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Discover the Benefits of “Goods to Person” Order Fulfillment

10 ways “Goods to Person” Can Improve Performance in your DC

The ***Goods to Person*** method of order fulfillment can deliver increased productivity for today’s distribution centers. It is an order fulfillment configuration that should be considered when the application has the appropriate activity profile and business drivers. The 10 warehouse logistics benefits of using this configuration will be presented along with the impact on ergonomics and worker comfort. In addition, the presentation will provide a description of applications where it could be implemented

Goods to Person

What is it?

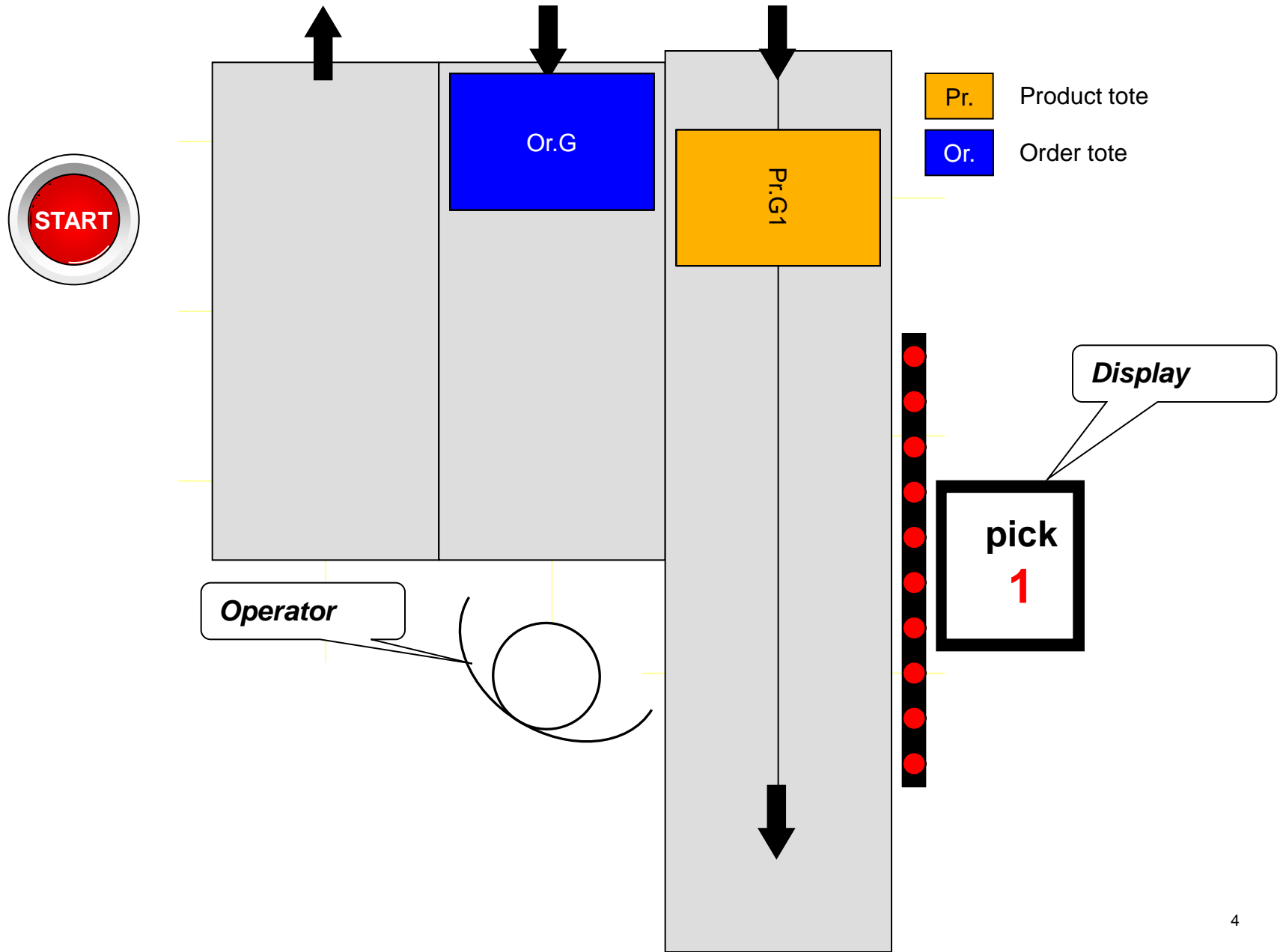
SKUs moved to operator:

Components:

- Staging buffer
- Conveyance
- Pick station
- Ergonomics
- Controls



Goods to Person: One to One layout



Goods to Person

One to multiple layout



Operator Interface Screen



Ground Chuck
SKU 123456
2lb package



Operator Interface Screen

Replenish Station



Goods to Person

Also works for pallet building



Product Pallet

Order Pallet

Goods to Person

16 Key Attributes

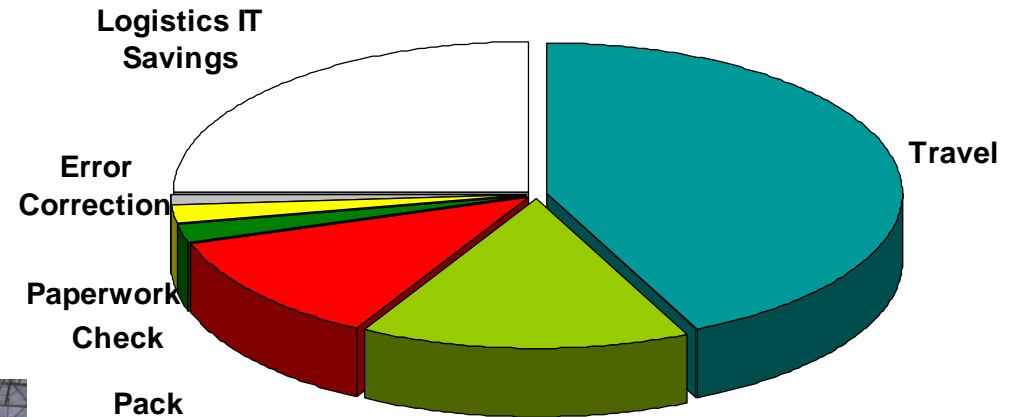
1. Travel time
2. Omit pick face
3. Omit re-slot
4. Not affected by order profile
5. Accurate
6. Less space
7. Security
8. Optimized replenishment
9. Ergonomic
10. Engineered work stations
11. Speed
12. Productivity
13. Less labor
14. Staff accordingly
15. De-coupled workstations
16. Sequencing



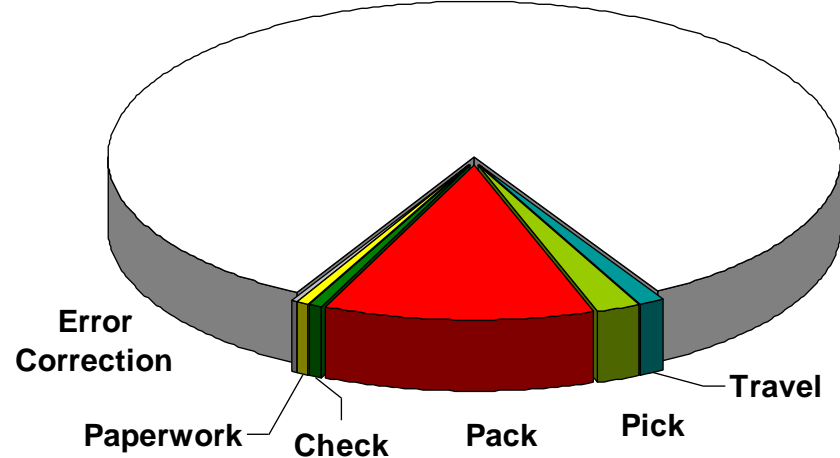
Goods to Person

#1 Eliminate travel time

- Long pick paths
- As SKUs grow, so do travel distances



Pick
↓
Time Saved



Goods to Person

#2 & #3 Omit Static Pick Face

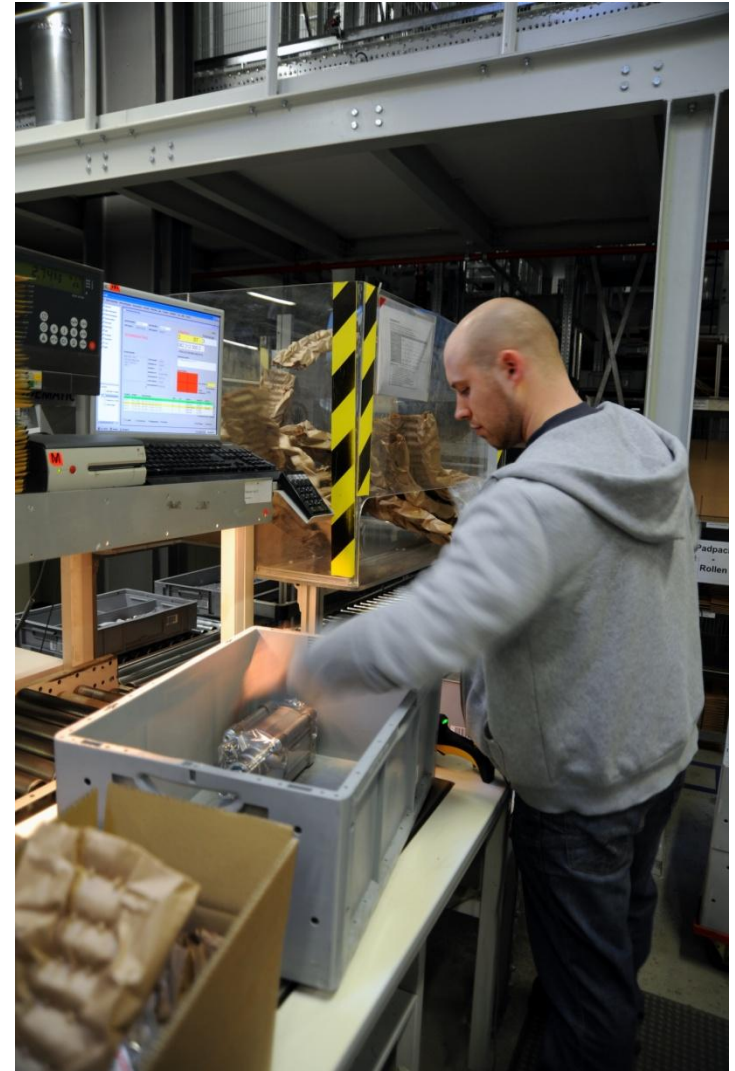
- No dedicated pick face
- No need to slot & re-slot



Goods to Person

#4 Not affected by Order Profile & SKU growth

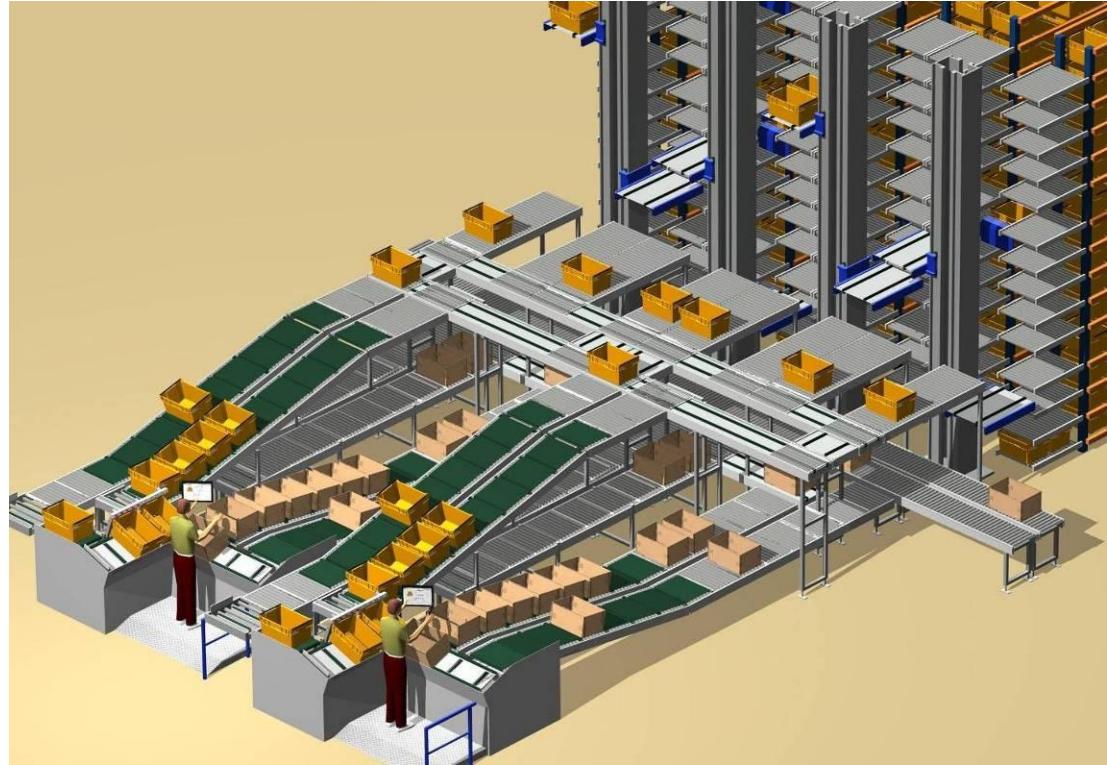
- Order Profile – not affected by changes
 - ✓ single item & multi item orders with equal efficiency
 - ✓ changing profiles do not compromise productivity
- Change sequence (weight, family group)
- Resilient to SKU proliferation
- Expand as business changes



Goods to Person

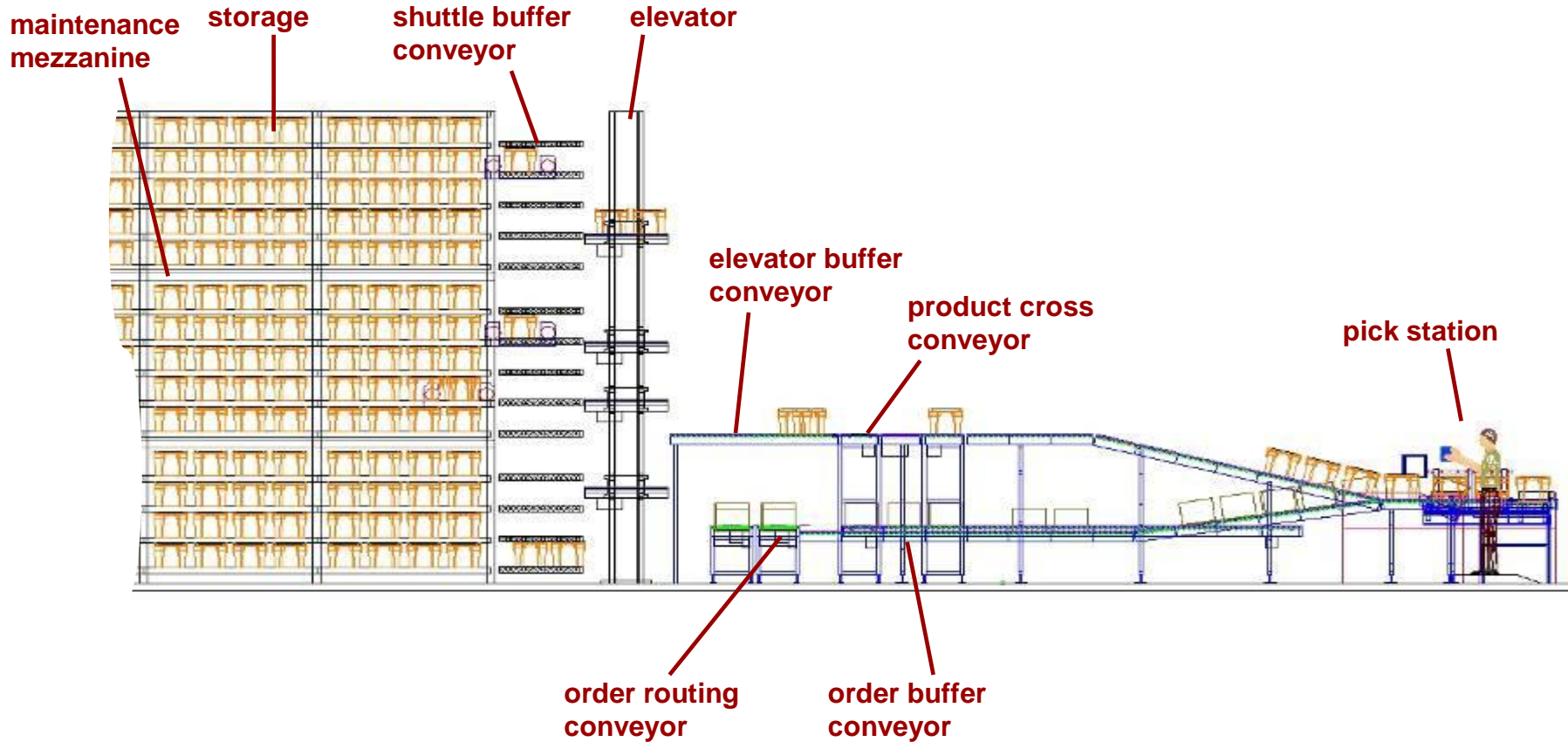
5 High Accuracy

- One to one picking typical
- Less chance of an error

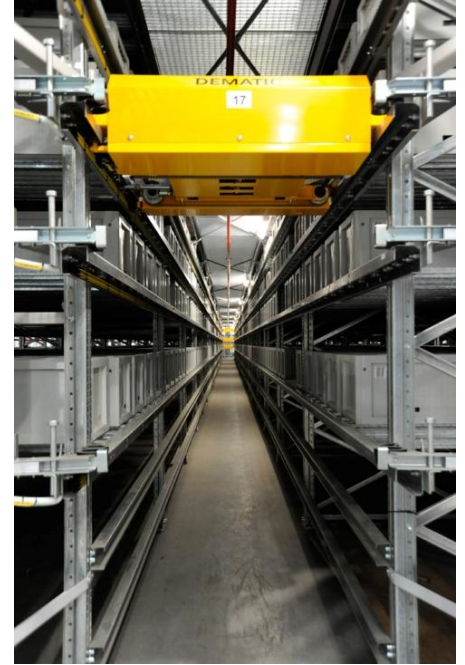


Goods to Person

#6 Requires Less Space



High Density Storage/Staging



Goods to Person

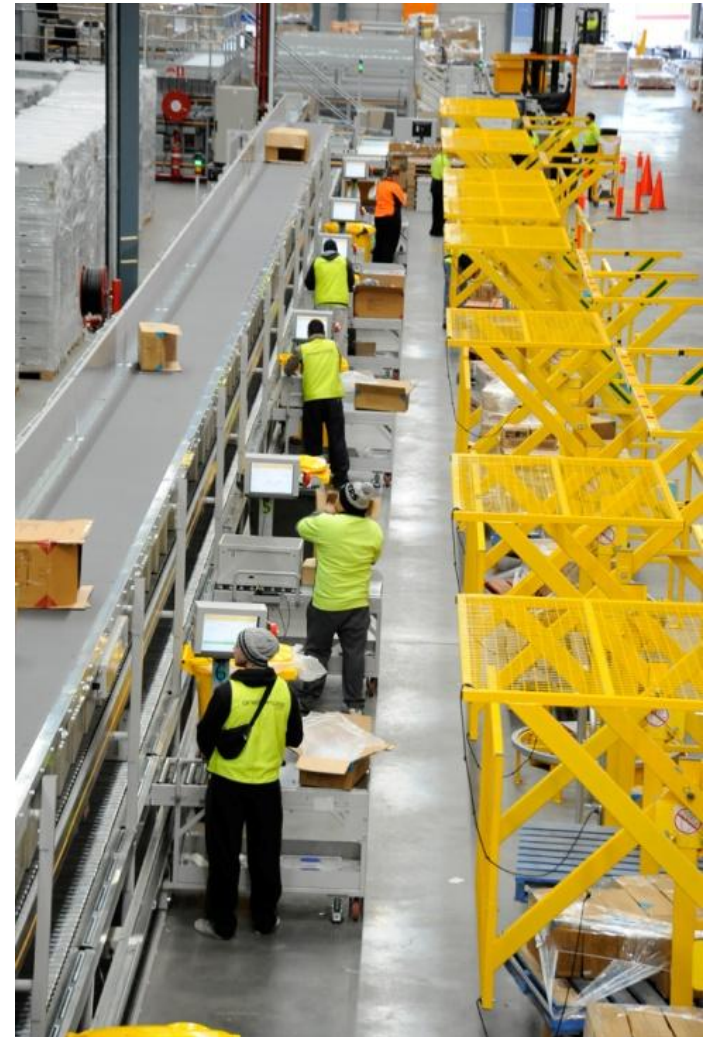
#7 Controlled Access, Product Security, Improved inventory



Goods to Person

#8 Optimized Replenishment

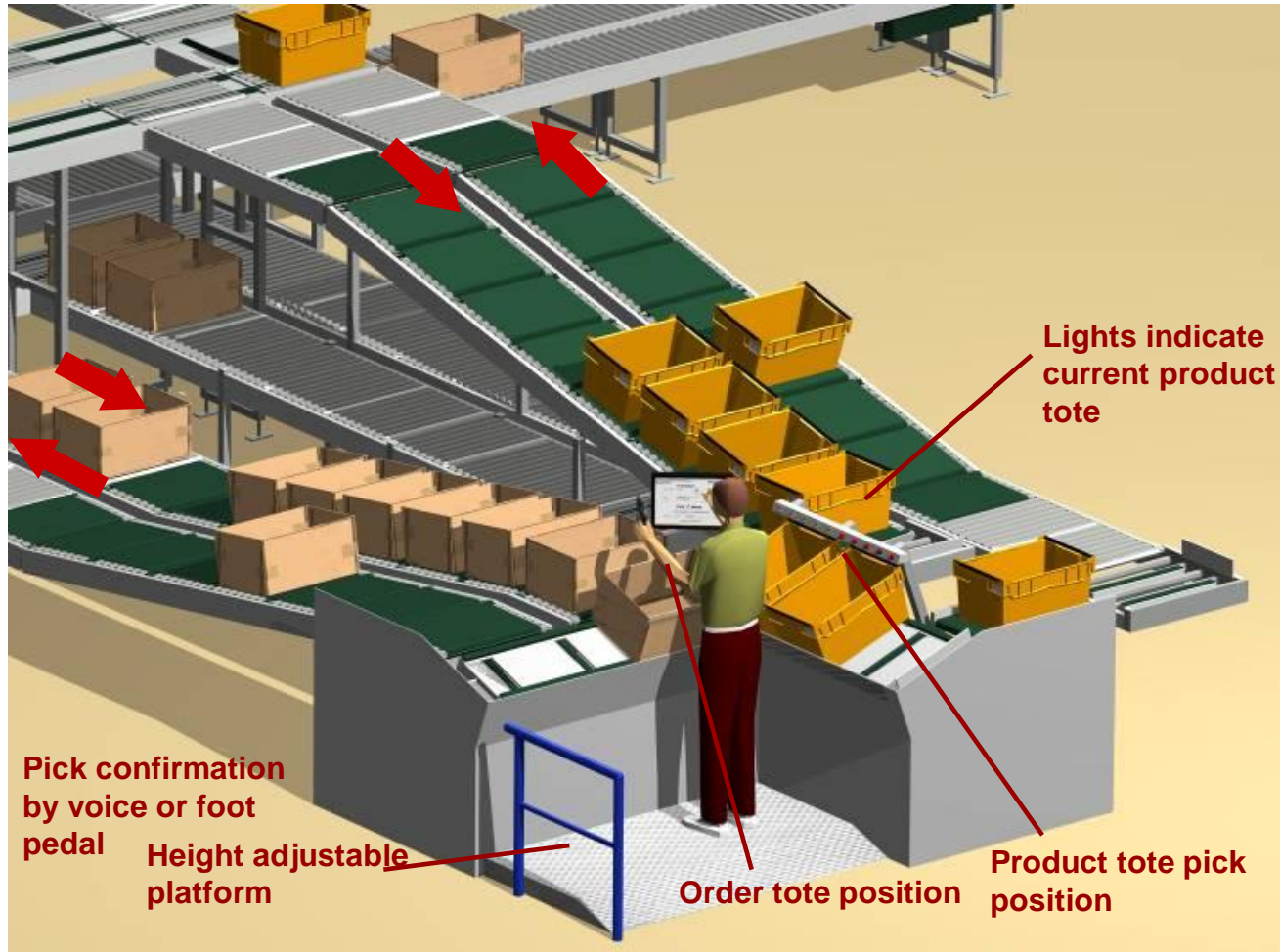
- Dedicated replenishment stations
- Automatic put away
- Less labor
- More accurate



Goods to Person

#9, #10 Ergonomic

- No tote, carton lifting
- Tilted
- Height adjustment



Goods to Person

#11, #12, & #13 High Rate & Labor Productivity

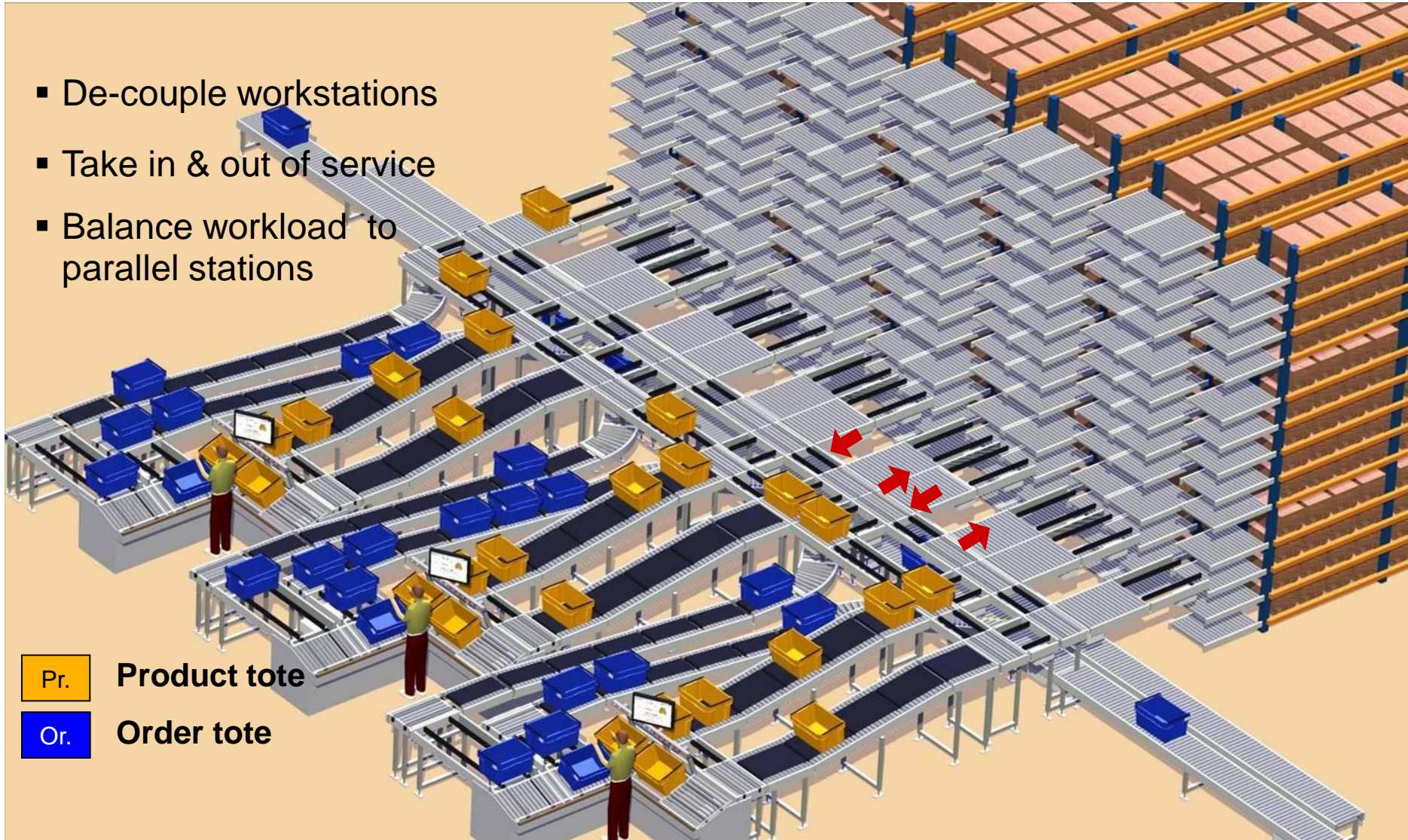
- Excellent productivity, speed
- High utilization
- 400 – 1,000 lines per operator/hr.
- Requires less labor to support (than person to goods)
- Flex up rates w/o adding significant labor



Goods to Person

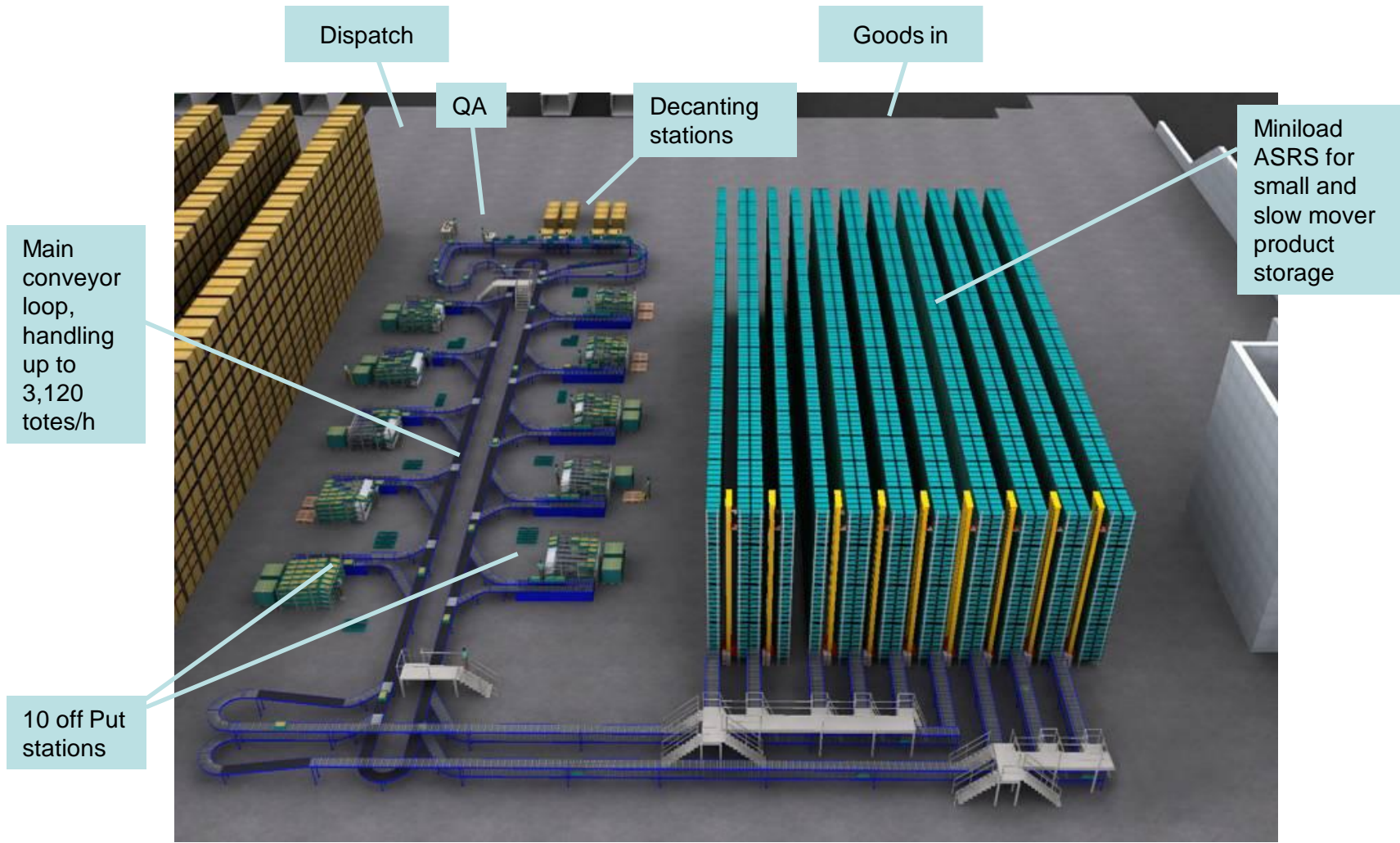
14, #15 Flexibility

- De-couple workstations
- Take in & out of service
- Balance workload to parallel stations



Goods to Person

#16 Accommodate Precise Sequencing of Orders

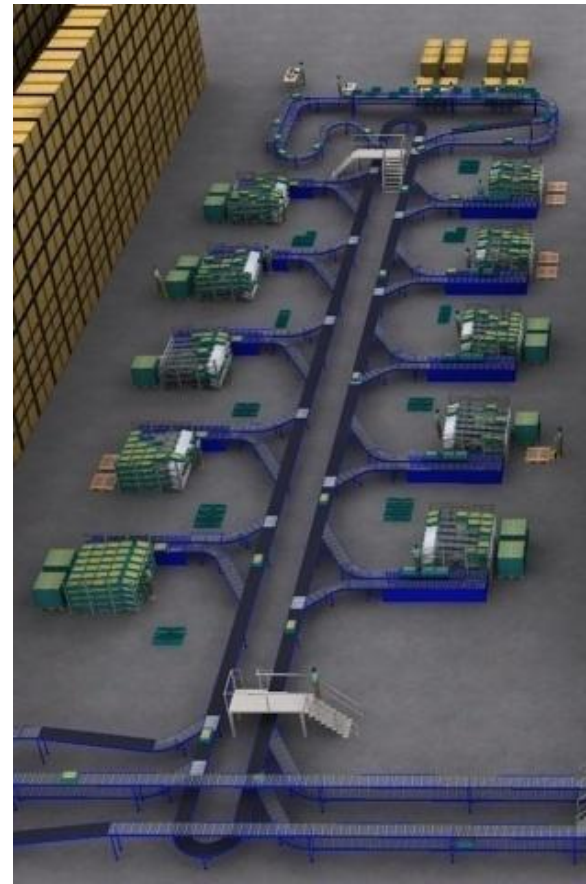
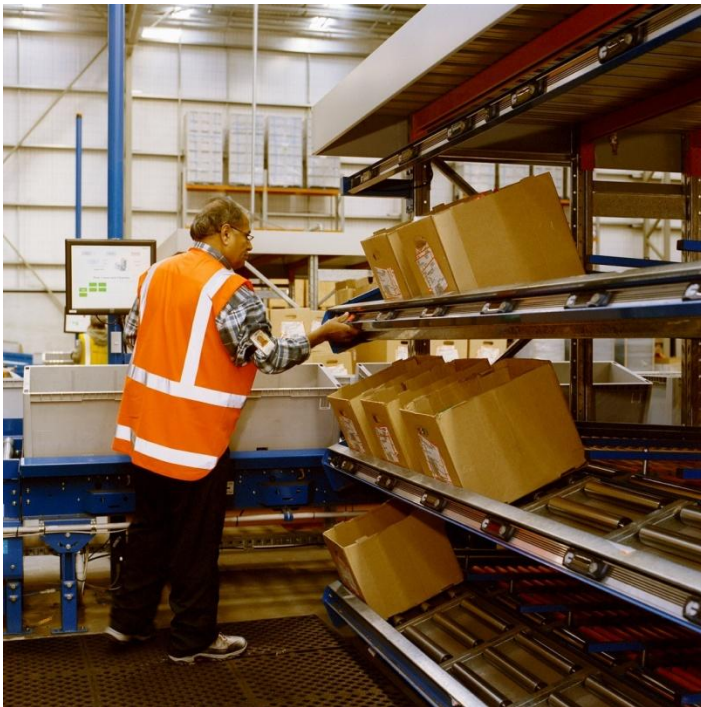
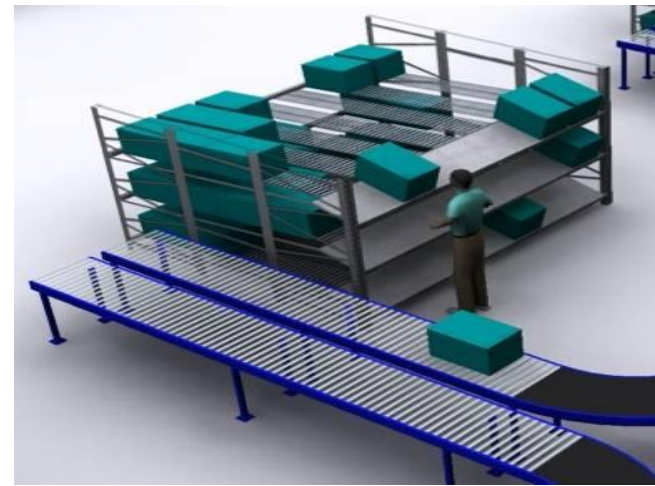


Goods to Person Station

Accommodate Precise Sequencing of Orders

Example: 18 put locations, light directed

- Scan SKU tote
- Activates lights
- Put to order carton
- Carton flow rack
- Build pallets at back end



Reference Systems

Goods to Person

Example System: apparel

Issues

- Person to goods
- Long distances between picks
- Static pick locations
- Temporary labor for seasonal peaks

Solution

- Goods to person configuration
- High rate “Put to store” stations
- 24 order totes per module
- Light directed, ASRS feed



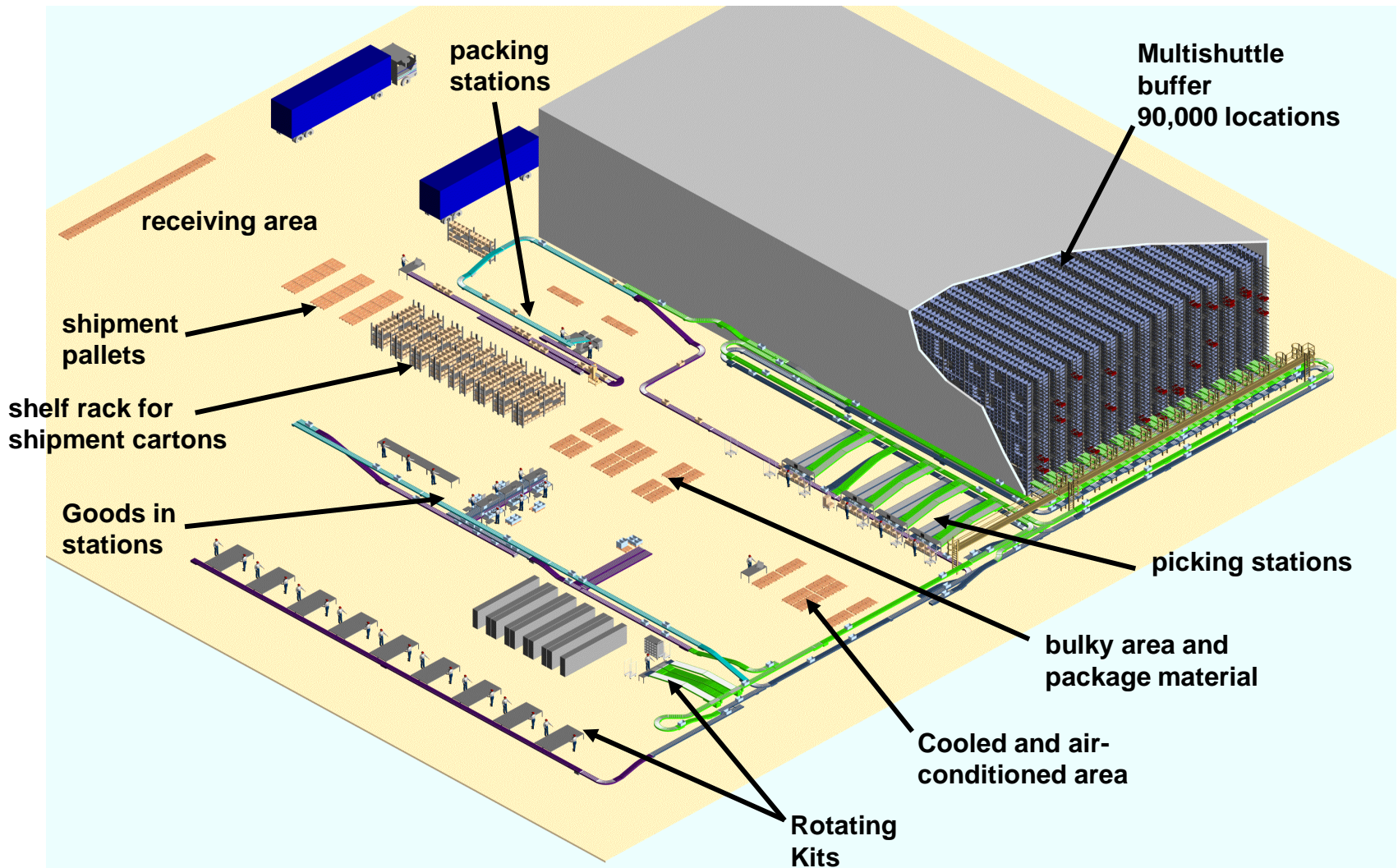
The Results

- Three fold increase in picking rates
- Capacity to meet peak volumes
- Rates up to 750 – 1,000 items per hour/operator
- 300 – 350 lines per hour/operator
- Reduction in picking errors
- Real time monitoring of staff
- 35% reduction in cost per case handled



Goods to Person

Example System, medical supplies



Inbound Repacking

- Incoming goods
- Repacked from pallet to totes
- Dividers in totes
- Depending on batch size tote volume assigned
- Filled totes conveyed to storage buffer



High Density Storage/Staging



Goods to Person

Pick Stations



The Picking Process



Pick from

- Optical Identification
- Complete tote or compartment highlighted with light beam
- Light curtain checks pick from position

Pick to

- Put to light display
- Indicates carton & qty

Weigh scale

- Checks quantity picked
- 5 scales per station

The Picking Process

Tote Dividers



Goods to Person

Example System, 3PL, pharma

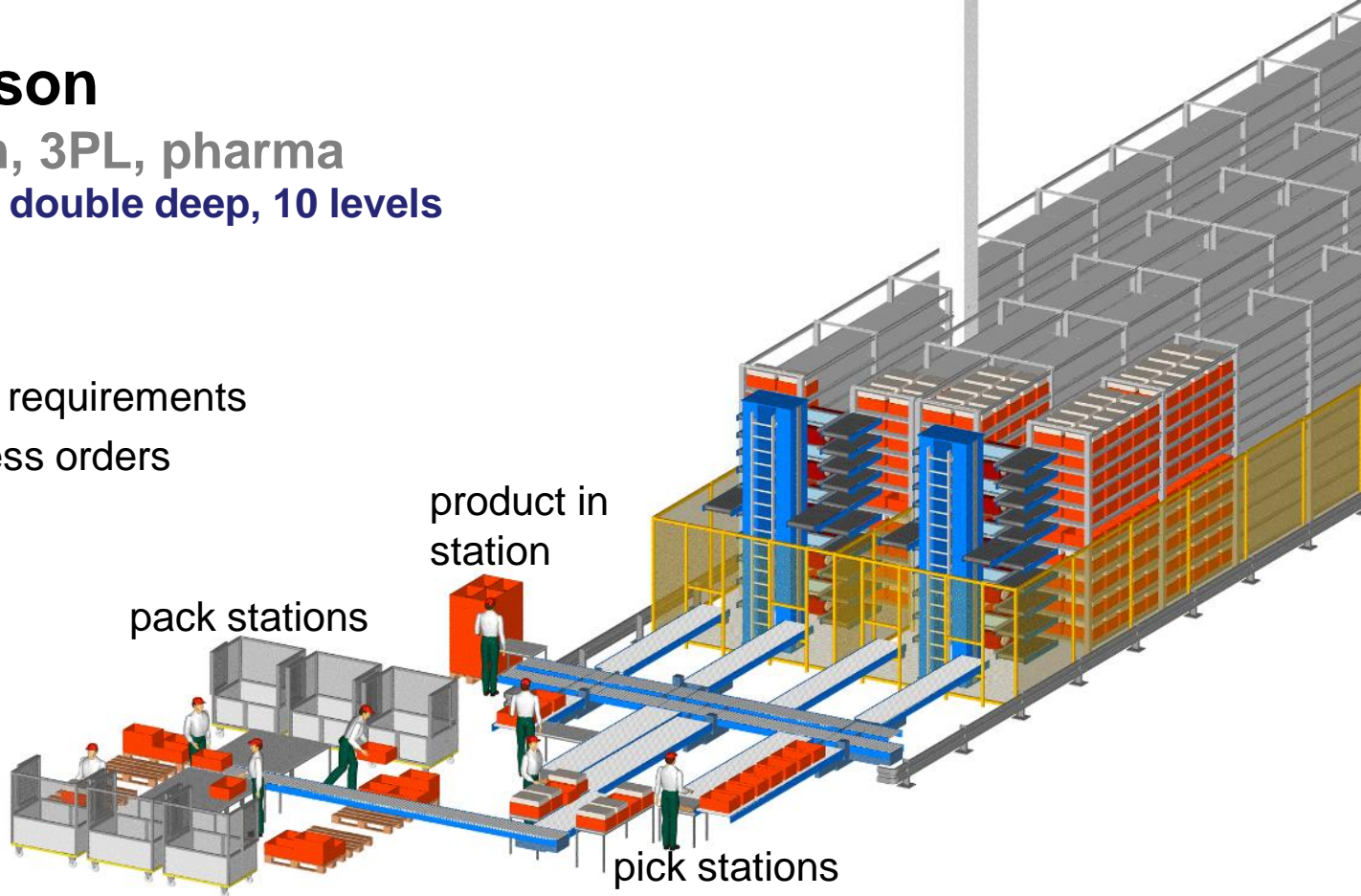
8,000 totes, 2 aisles, double deep, 10 levels

The Issues:

- Space utilization
- Need to reduce labor requirements
- Reduce time to process orders

The Solution:

- Goods to person
- High density ASRS
- Pick & pack stations



The Results:

- Reduce picking errors (1% to less than .01%)
- No dedicated pick face (no re-slotting)
- Reduced staff to operate (400 lines per operator per station), ergonomic pick/pack stations
- Reduced space utilization
- Improved product security (control access to narcotics)
- Product sequencing (heavy, light, liquid, etc.)

Goods to Person

Example system: food distributor

The Issues:

- Space utilization
- Reduce labor
- Reduce time to process orders

The Solution:

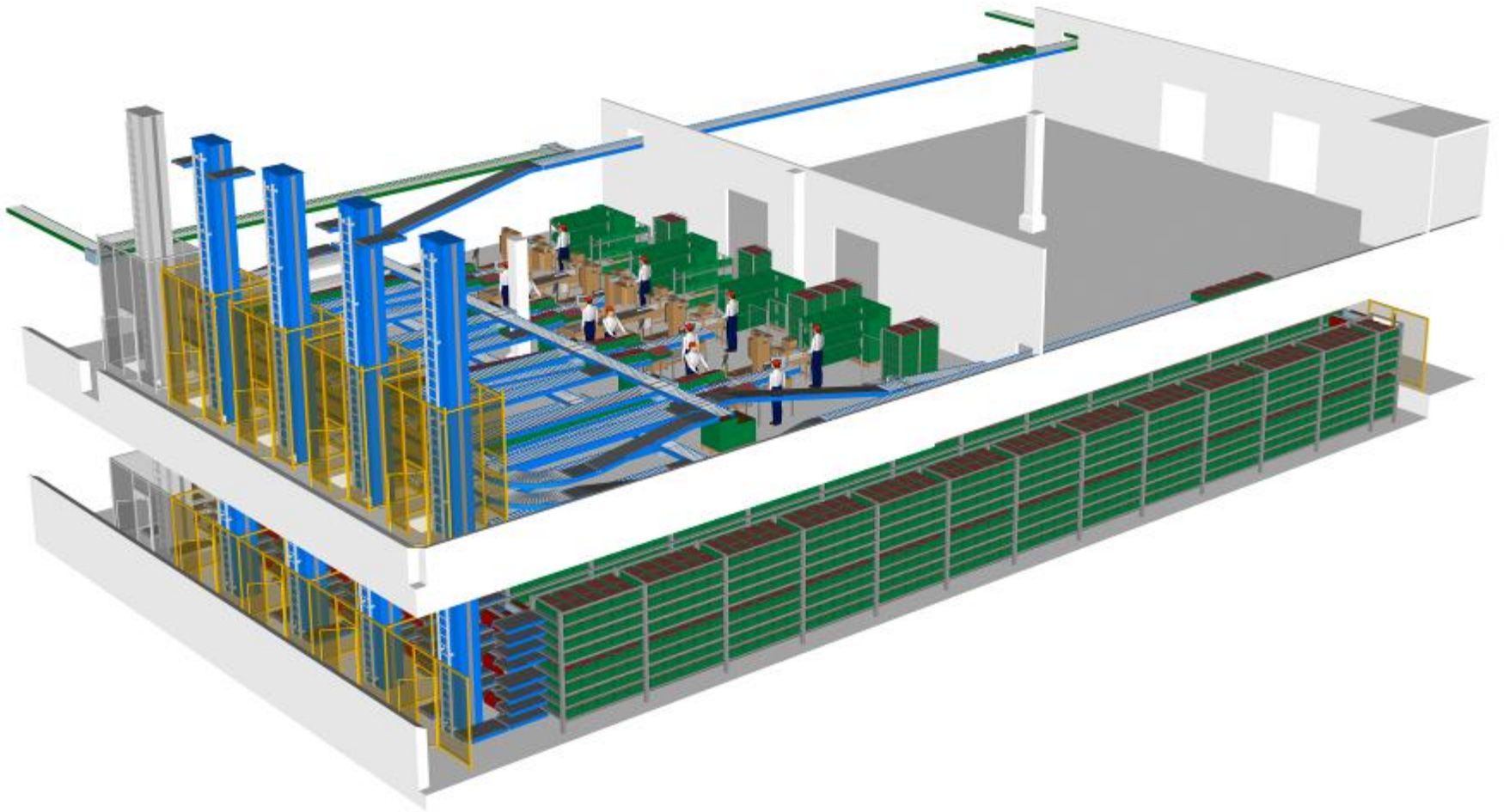
- Goods to person order fulfillment
- High density ASRS
- Pick & pack stations

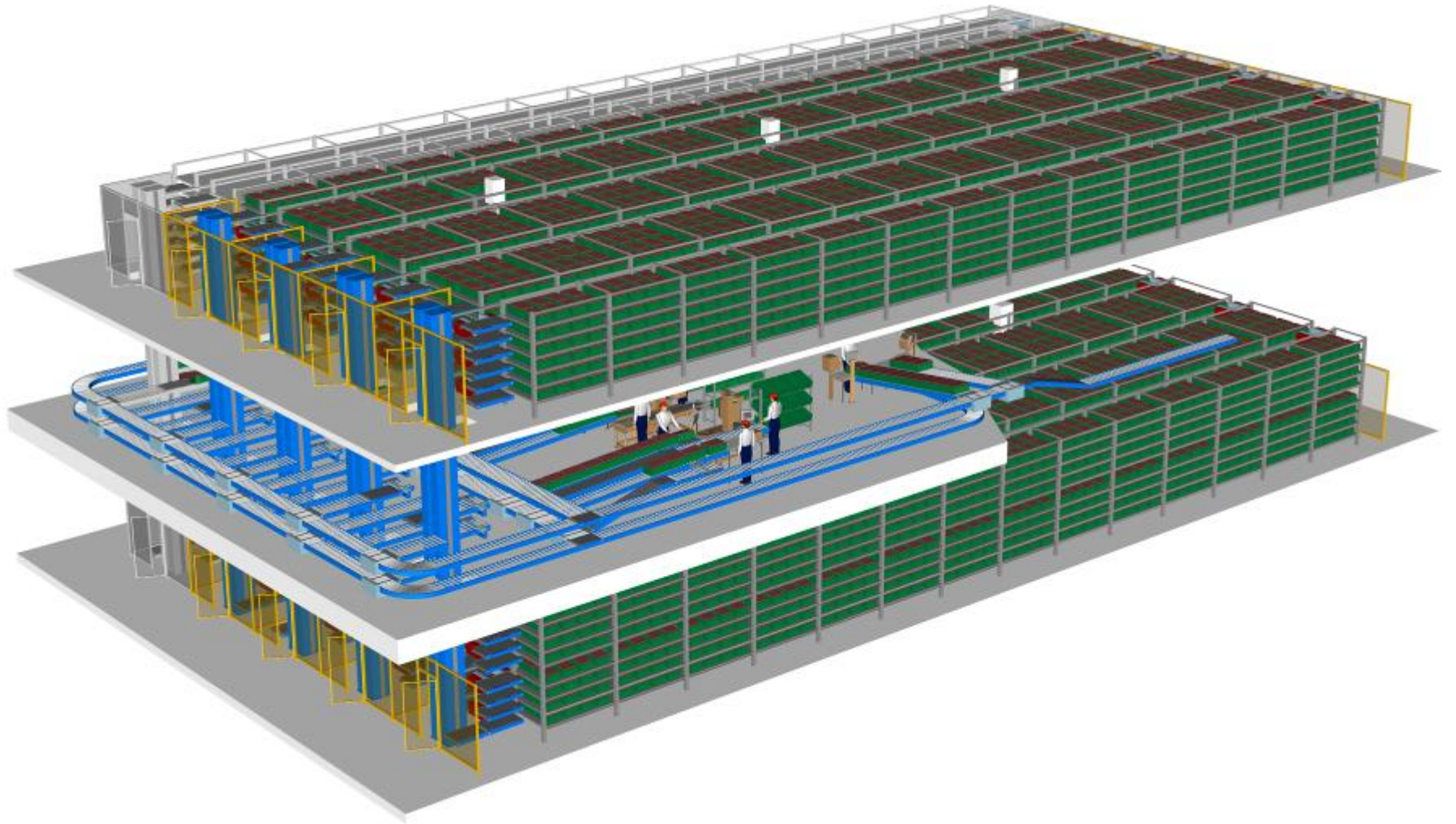


The Results:

- No dedicated pick face (no re-slotting)
- Reduced staff to operate
- Ergonomic pick/pack stations
- Reduced space utilization
- Reduced energy, small temp. controlled



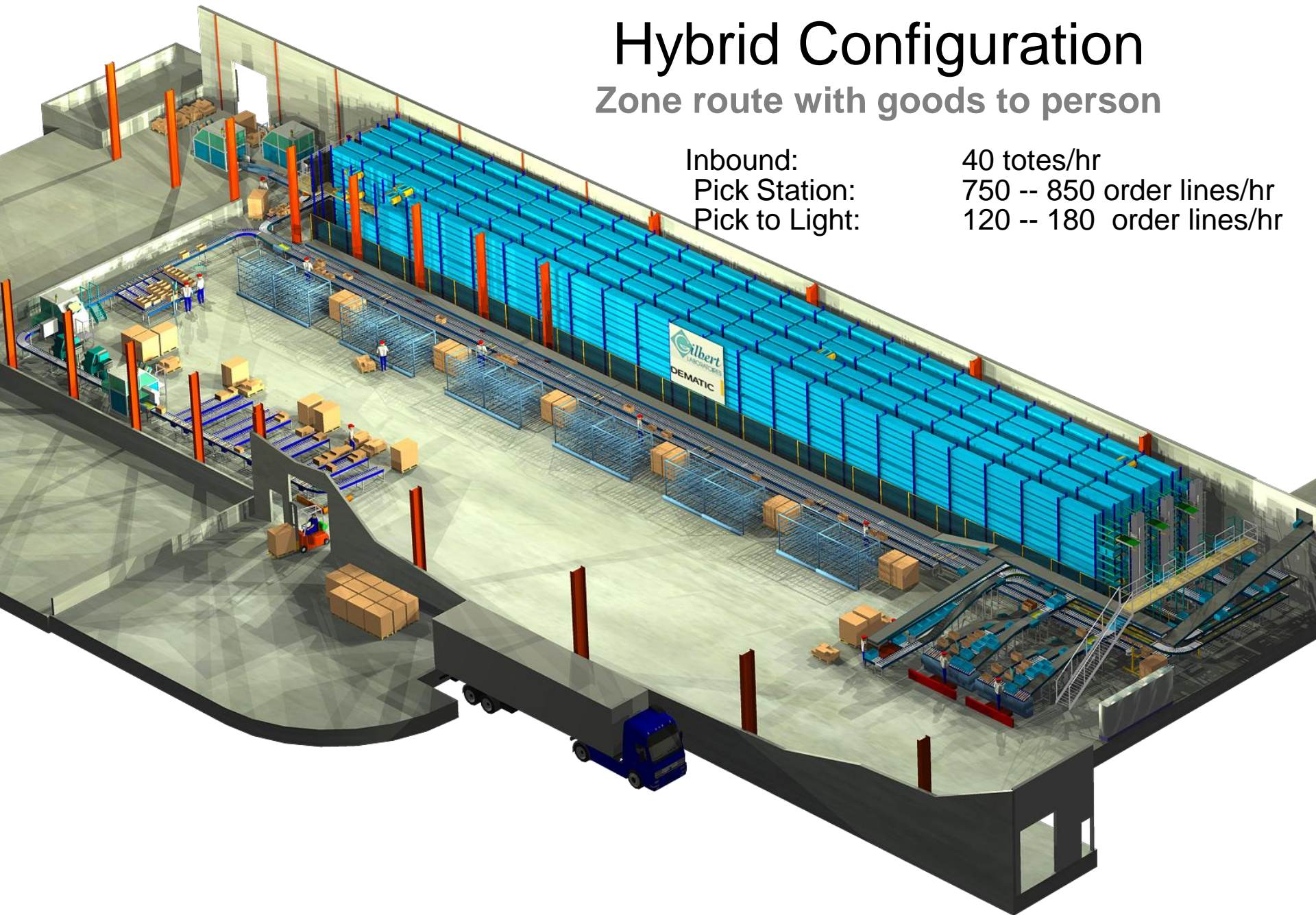




Hybrid Configuration

Zone route with goods to person

Inbound:	40 totes/hr
Pick Station:	750 -- 850 order lines/hr
Pick to Light:	120 -- 180 order lines/hr



Goods to Person

Example system, production



Production

Fits into overhead spaces: delivers loads to floor level



Goods to Person

An effective method of order fulfillment

1. Travel time
2. Omit pick face
3. Omit re-slot
4. Not affected by order profile
5. Accurate
6. Less space
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