



UNBOX
ROBOTICS

Solution Overview Deck

Examples

Solution Overview - Case 1

Application Type:
Parcel Sort



**SYSTEM THROUGHPUT : 600
PARCELS/HOUR**



SORTING ROBOTS: 7 (SR-450)
*(including Charging and Maintenance
buffer robots)*



ROBOT CONTROL SYSTEM: RCS7



TOTAL SORT CARRIERS: 26
Bin Type - Gaylord Boxes



SELF CHARGING SYSTEM: 2



MANPOWER REQUIRED: 2
At Induction Station: 1
For Parcel Retrieval: 1



**FEEDING SYSTEMS (MANUAL PUT
& SCAN): 1**



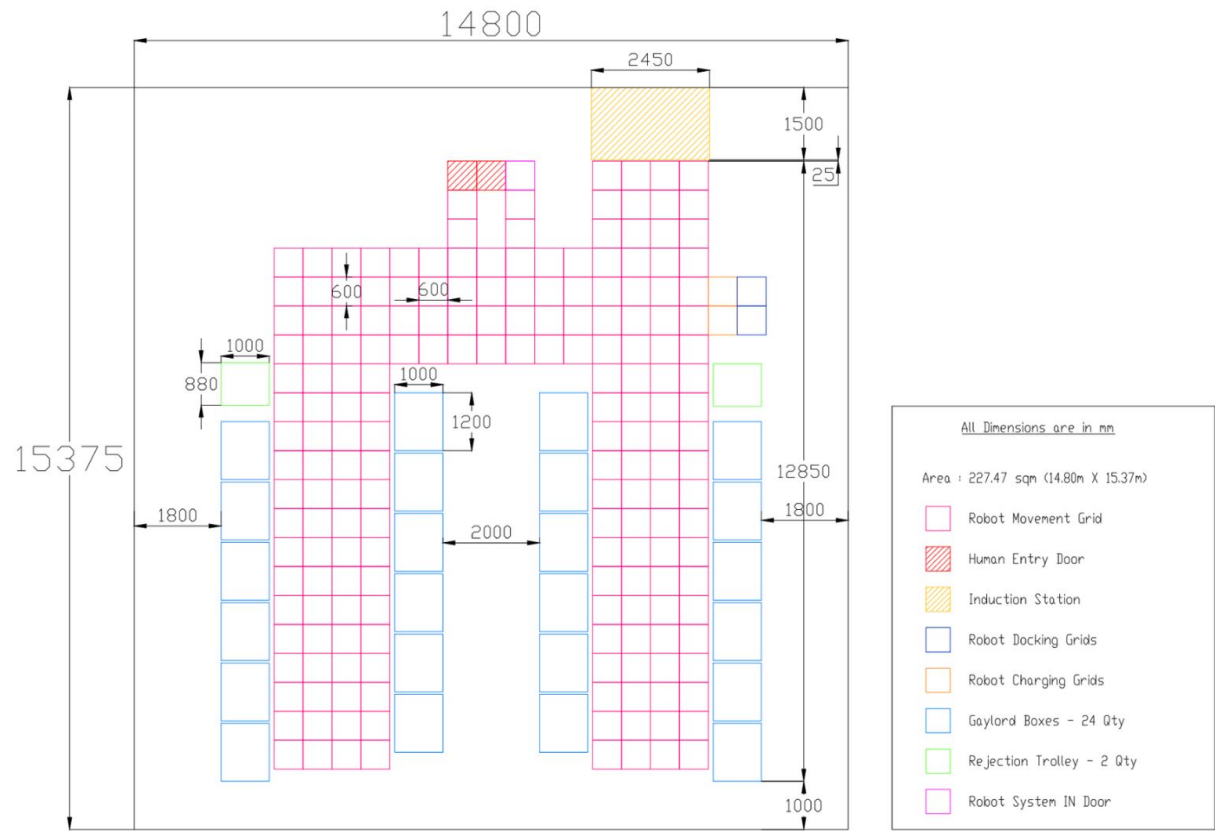
AREA REQUIRED: ~ 228 SQM
14.80m X 15.37m



BARRICADING UNITS : 1
Authorized Human & Robot Entry: 1 set

Solution Overview - Case 1 (Parcel Sortation)

Application Type:
Parcel Sort



Solution Overview - Case 2 (Scale up vs Case 1)

Application Type:
Parcel Sort



**SYSTEM THROUGHPUT : 1400
PARCELS/HOUR**



SORTING ROBOTS: 21 (SR-450)
*(including Charging and Maintenance
buffer robots)*



ROBOT CONTROL SYSTEM: RCS21



TOTAL SORT CARRIERS: 26
Bin Type - Gaylord Boxes



SELF CHARGING SYSTEM: 5



MANPOWER REQUIRED: 4
At Induction Station: 2
For Parcel Retrieval: 2



**FEEDING SYSTEMS (MANUAL PUT
& SCAN): 2**



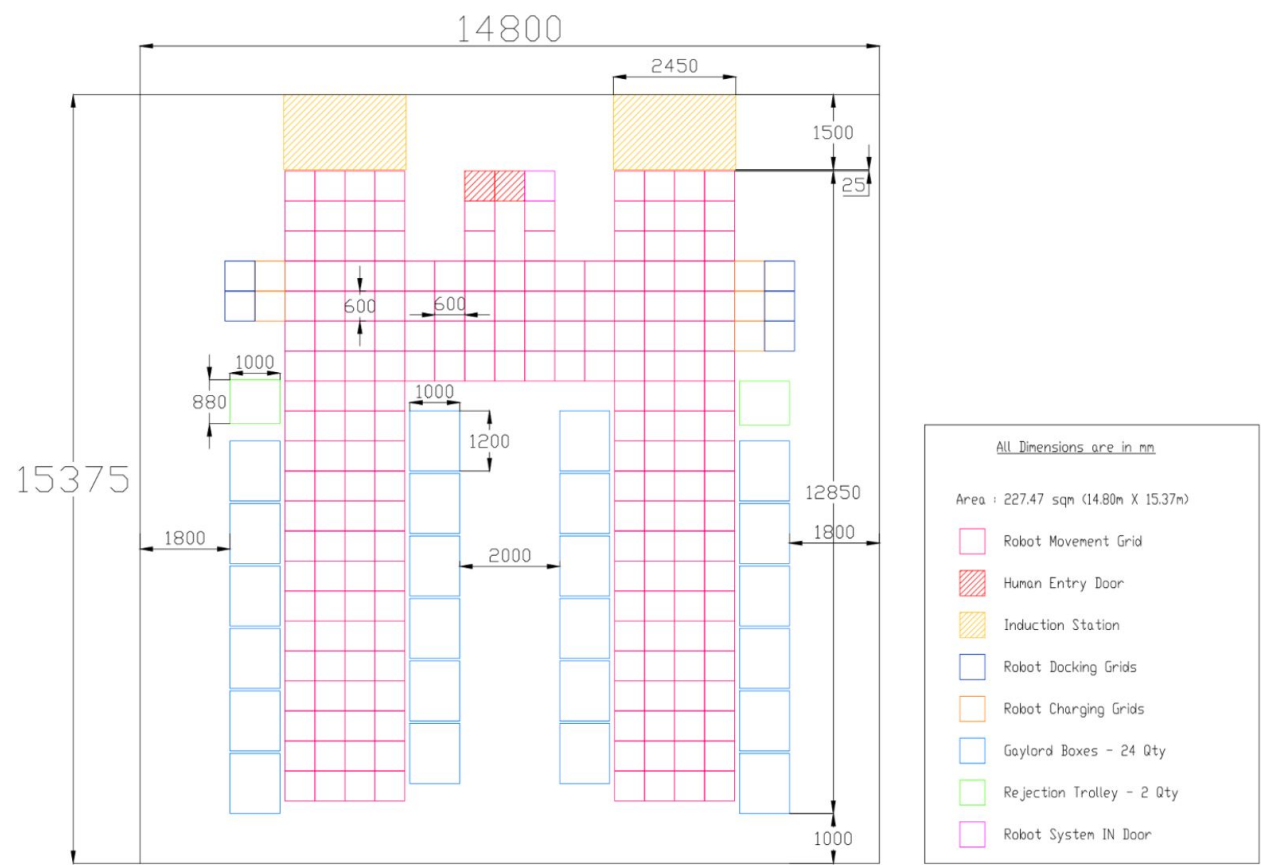
AREA REQUIRED: ~ 228 SQM
14.80m X 15.37m



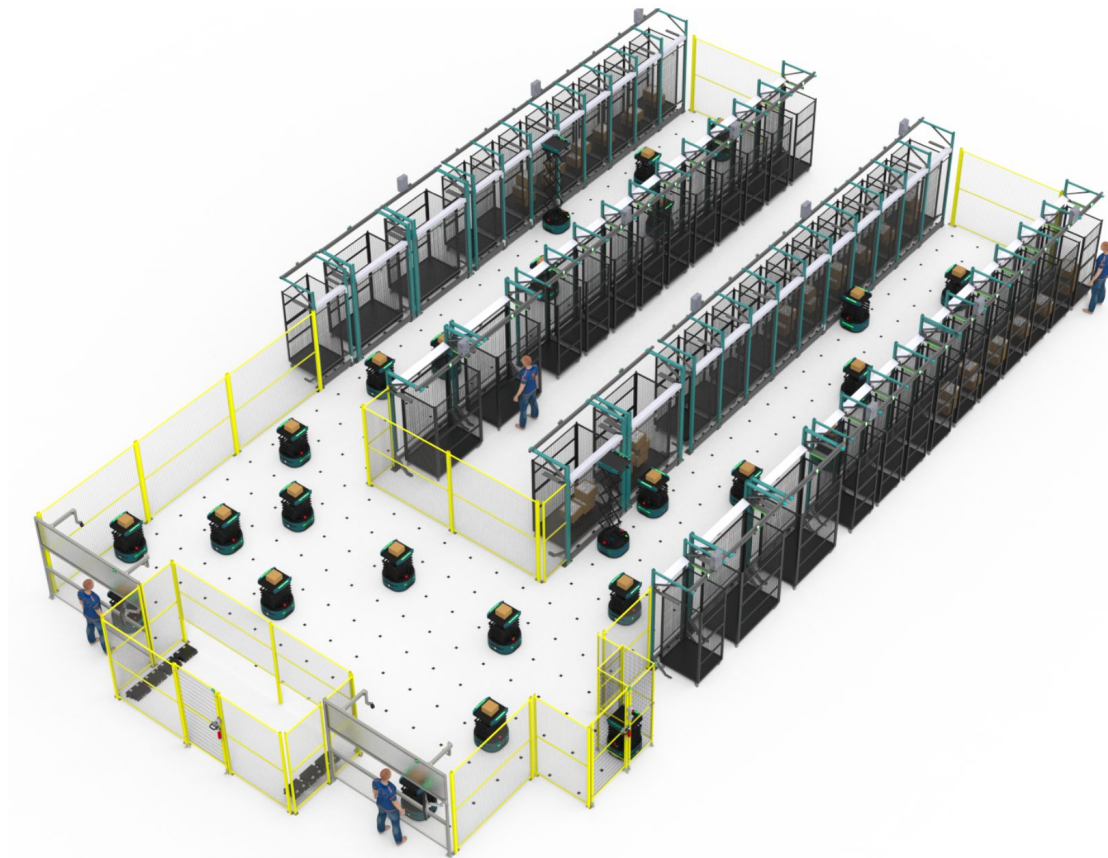
BARRICADING UNITS : 1
Authorized Human & Robot Entry: 1 set

Solution Overview - Case 2 (Scale up vs Case 1)

Application Type:
Parcel Sort



Solution Overview - Case 2, Scale up vs Case 1 (Representative Render)



Solution Overview - Case 3

Application Type:
Order Consolidation



**SYSTEM THROUGHPUT : 800
PARCELS/HOUR**



SORTING ROBOTS: 11 (SR-450)

*(including Charging and Maintenance
buffer robots)*



ROBOT CONTROL SYSTEM: RCS11



**TOTAL SORT DESTINATIONS: 308
(INCLUDING REJECT BINS)**

Bin Type - Straight Slide 7 Level Rack - 44
Verticals



BATTERY SWAPPING SYSTEM: 2



MANPOWER REQUIRED: 3

At Induction Station: 1

At bin Closing: 2



**FEEDING SYSTEMS (MANUAL
SCAN & PUT): 1**



AREA REQUIRED: ~ 131 SQM

7.65m x 8.22m



BARRICADING UNITS : 1

Authorised Human & Robot Entry: 1 set

Solution Overview - Case 3

Application Type:
Order Consolidation



Solution Overview - Case 3 (Representative Render)

**Application Type:
Order Consolidation**



Solution Overview - Case 4

Application Type:
Parcel Sort



SYSTEM THROUGHPUT : 500 packages/hour



SORTING ROBOTICS: 9 (SR-450)
(including buffer robots)



Area Required: ~114 Sqm. (10.62m X 10.65 m)



FEEDING SYSTEM(MANUAL SCAN AND PUT) : 1



TOTAL SORT DESTINATIONS: 179
Bin Type - Tote Slide 3 Level Racks (49 Qty)
Bin Type - Tote Slide 2 Level Racks (16 Qty)



MANPOWER REQUIRED: < 2
At Induction Station: 1
For Parcel Retrieval: 1
Manpower saving: 3 FTEs
Est ROI: <36 months



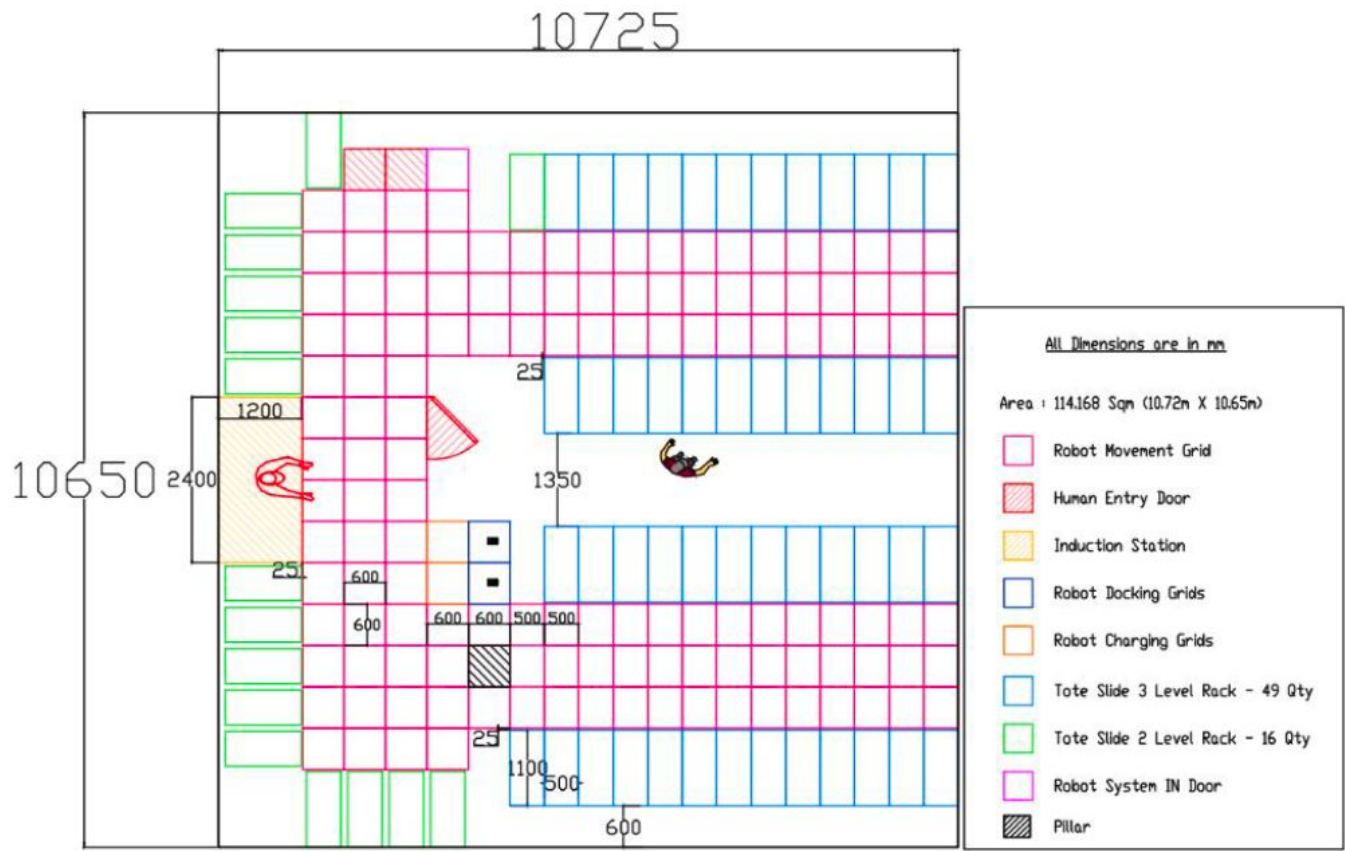
AUTO DOCKING STATIONS: 3



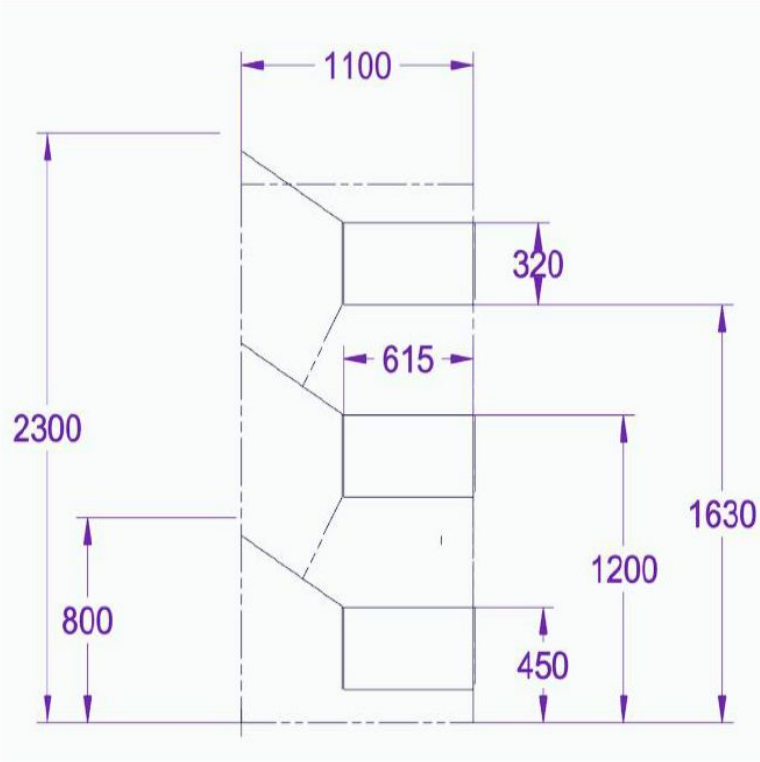
ROBOT CONTROL SYSTEM: RCS9

Solution Overview - Case 4

Application Type:
Parcel Sort

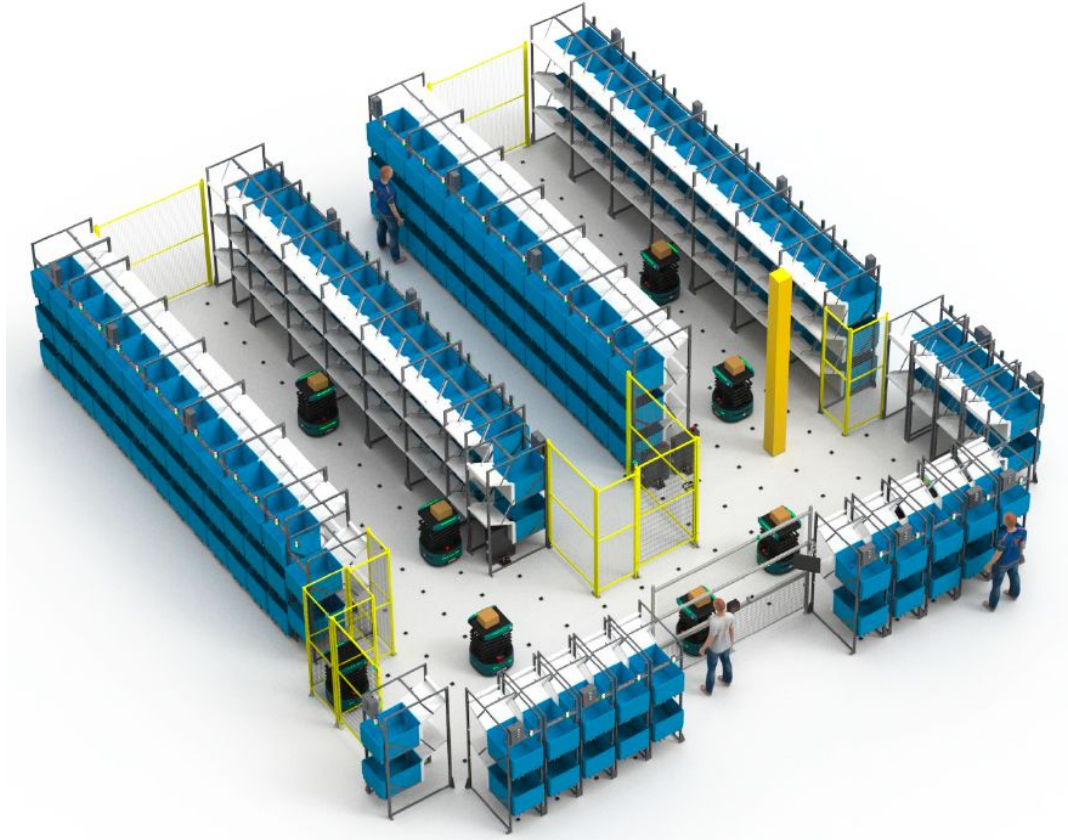


REPRESENTATIVE TOTE SLIDE RACK WITH DIMENSIONS



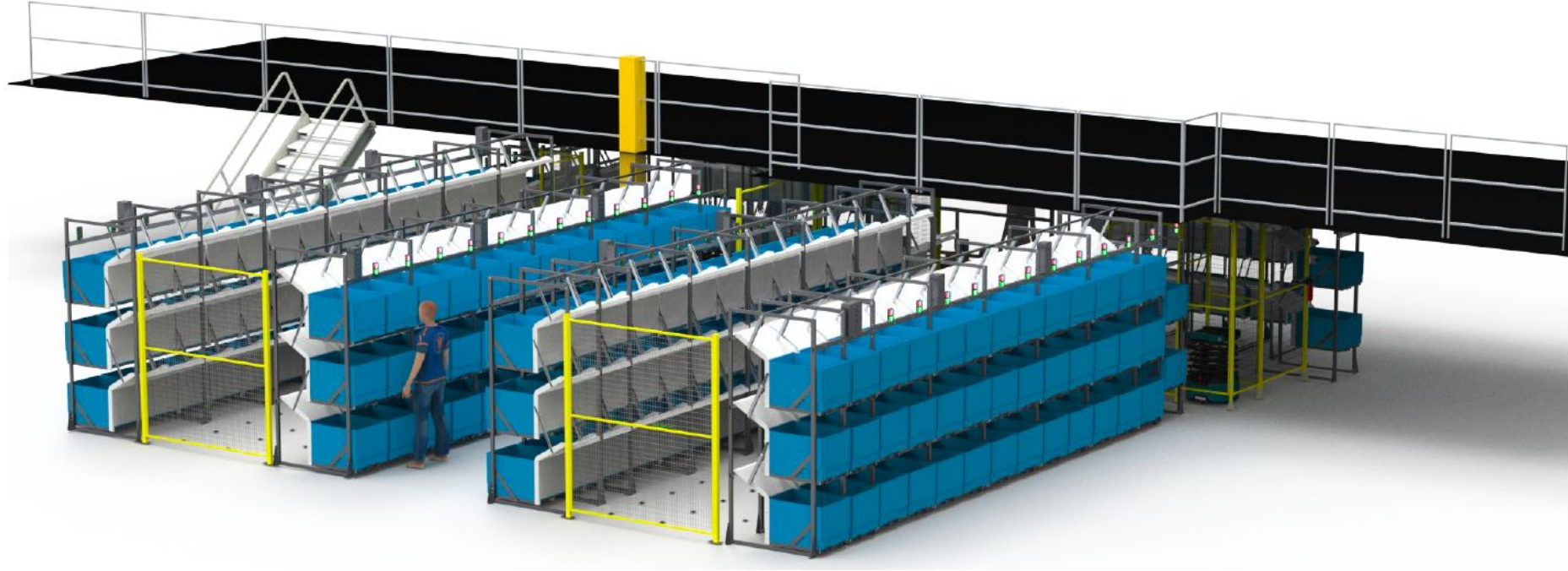
Solution Overview - Case 4

Application Type:
Parcel Sort



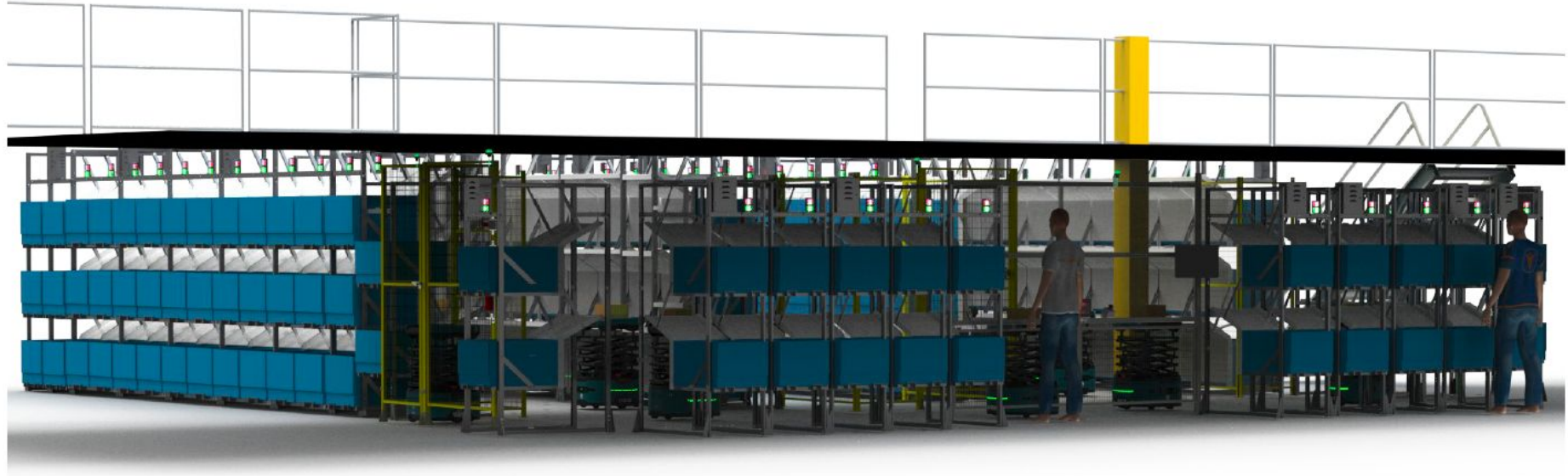
Solution Overview - Case 4

Application Type:
Parcel Sort



Solution Overview - Case 4

Application Type:
Parcel Sort



Solution Overview - Case 5 (4 modules)

Application Type: Order Consolidation



**SYSTEM THROUGHPUT : 11,400
UNITS/HOUR**

Per Module : 2850 UPH



SORTING ROBOTS: 260 (SR-550)

*(including Charging and Maintenance
buffer robots) - Per module : 65 Robots*



PACK TABLES : ~36 QTY

~9 pack tables per module



**TOTAL ORDER DESTINATIONS:
1,660 FOR 30 MINS**

Bin Type - Straight Slide 5 Level Racks - 83
qty per Module



SELF CHARGING SYSTEM: 52

13 Self Charging Systems per Module



MANPOWER REQUIRED: ~48

At Induction Station : 12
For Parcel Retrieval and Packing : ~36



**FEEDING SYSTEMS (MANUAL PUT
& SCAN): 12**

3 Manual Put & Scan System per Module



**AREA REQUIRED: ~ 461 SQM PER
MODULE**

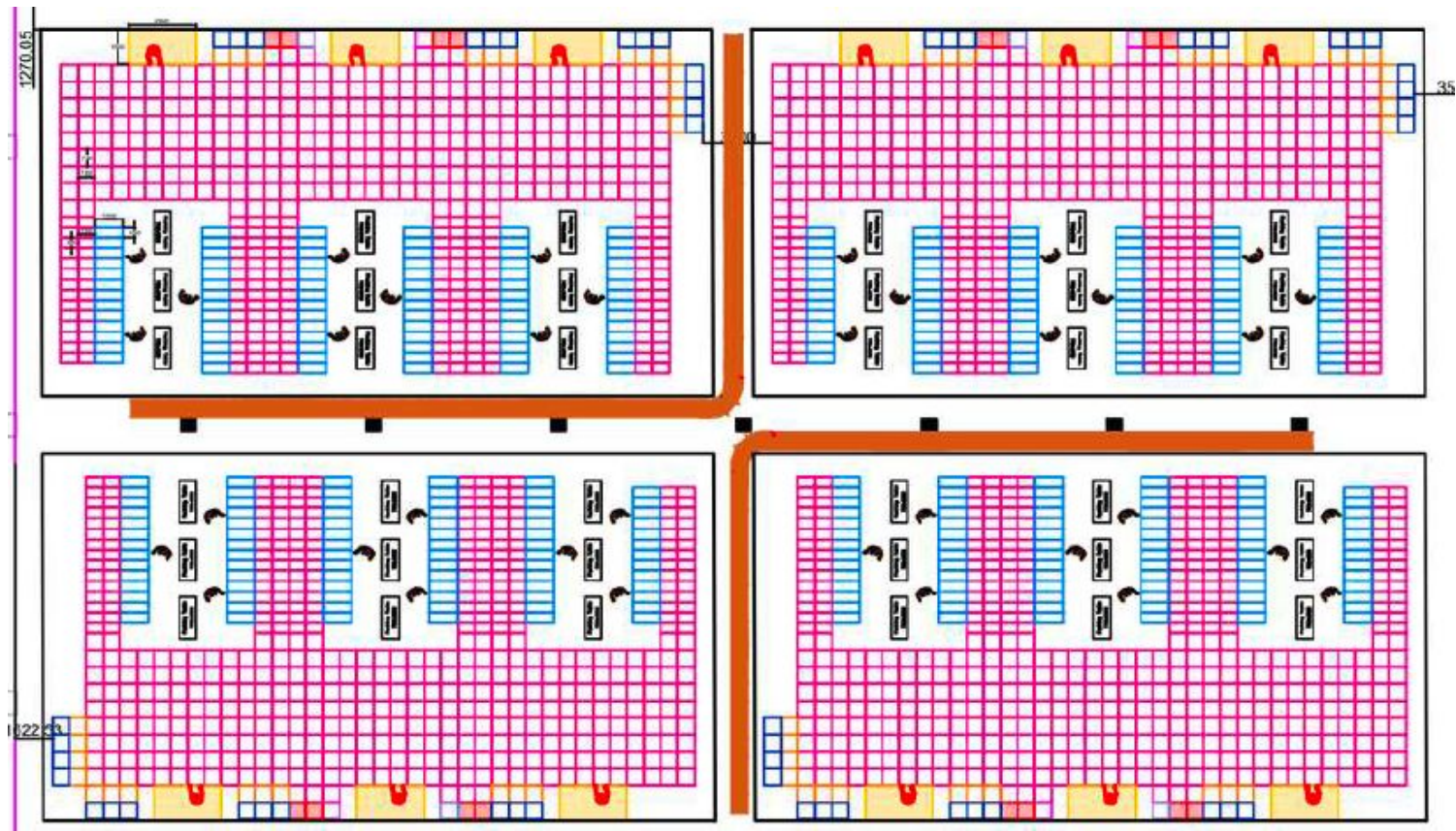


BARRICADING UNITS : 8

Authorised Human & Robot Entry: 2 sets
per Module

Solution Overview - Case 5

Application Type:
Order Consolidation



Application Type:
Order Consolidation

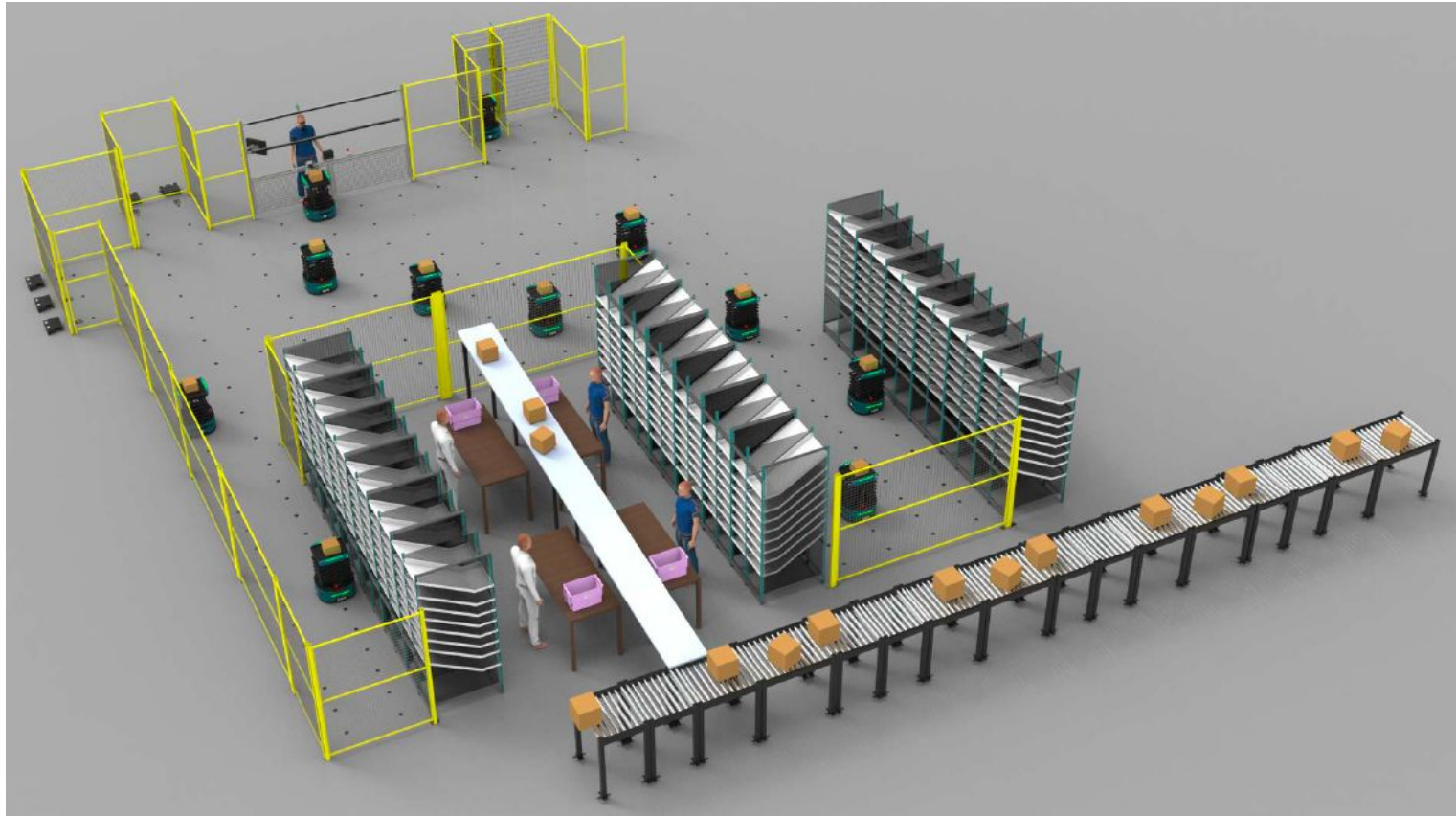


Area : 460.28 sqm (29.04 X 15.85)

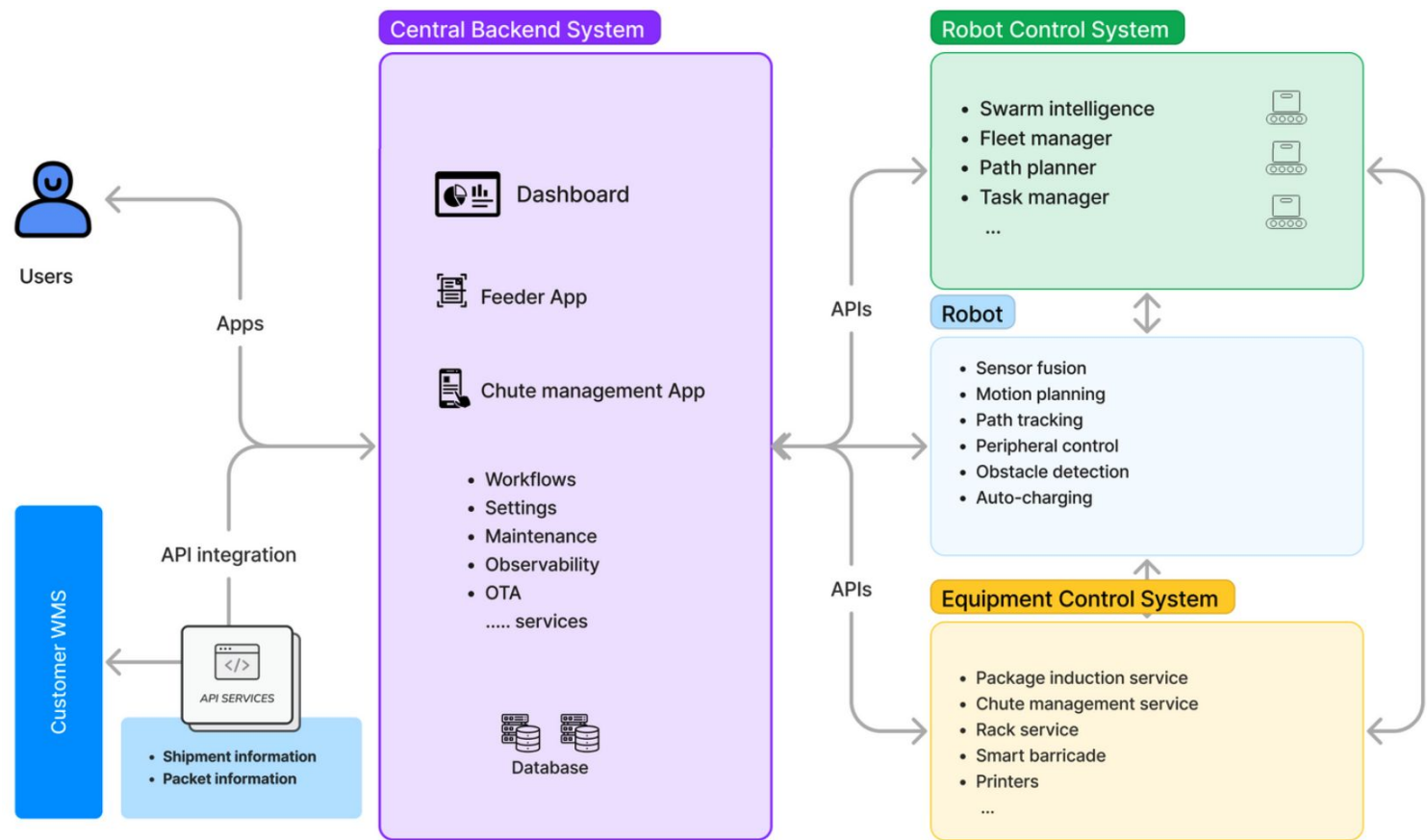
-  Robot Movement Grid
-  Human Entry Door
-  Induction Station
-  Robot Docking Grids
-  Robot Charging Grids
-  Straight Slide 5 Level Racks - 83 Qty
-  Robot System IN Door
-  Robot System OUT Door

Solution Overview - Case 5 (4 modules)

Application Type:
Order Consolidation



System Architecture





Thank you