pitney bowes

SORT CENTER PROPOSAL
CHICAGO, IL
MAY 10, 2022

SAVOYE

Proposal No. Q21358
Revision 3.0

Savoye NA, a Delaware, USA Corporation (herein sometimes referred to as "Savoye") located at:

3950 Sussex Ave, Aurora, IL 60504

will contract to furnish, sell and deliver to Pitney Bowes Inc, (herein sometimes referred to as "Buyer"), equipment and services described in this proposal.

Proposal submitted to:
Stephanie Cannon
7171 Southwest Parkway, Building 300, Suite 400
Austin, TX 78735

Equipment to be installed at:
Lockport, IL

This proposal package includes or references the following documents:

1. Proposal Number: Q21358 dated **May 10, 2022**
2. Savoye Drawings: Q21358-CL20.1-220425-BB.dwg

In the event of conflict between any of the above, documents shall govern in the order listed.

The subsequent pages of this proposal contain information, including the whole or portion or phase of technical information, designs, processes, procedures, approaches, methods and techniques, technical specifications, concepts, characteristics, descriptions, rates, pricing, and other confidential information prepared and owned by Savoye ("Information").

This Information is proprietary to Savoye and is disclosed to the customer named on the title page hereof under terms of confidentiality and for the sole purpose of customer's evaluation of Savoye as a prospective contractor. Customer's use and disclosure of this proposal or parts thereof for any other purpose shall first require the prior written consent of an authorized officer of Savoye.

This proposal pricing will remain valid through June 6, 2022.

TABLE OF CONTENTS

1. PROJECT SCOPE

1.1. Proposal Overview

This proposal describes Savoye's offering for the Design, Manufacturing, Installation, and Commissioning of the Sort Center as requested by Pitney Bowes Inc and as indicated in this proposal.

1.2. Executive Summary

The proposed system for the Chicago sort facility includes the following equipment and functionality:

- Dual Receiving Areas with Multiple Style Induction Lanes
- Bulk Conveyance from Induction area to Mantissa Induction Platforms
- Equipment, Operator and Maintenance Support Platforms for Easy System Access
- Bulk conveyance from Mantissa sorter to Eurosort sorter platforms
- Inner Facility Induction Lines for Each Eurosort Induction Line
- Integration with Eurosort Sortation System and 480 Volt Power Distribution for Eurosort Equipment

1.3. Itemized Project Scope

The listing below serves to identify the party responsible for the project scope items.

Project Scope Item	Provided by Savoye	Provided by Buyer
1. Laydown space for equipment at site.		X
2. Technical data and required information before start of engineering.		X
3. Necessary drawings of the building. This is to include locations of floor drains, floor thickness, floor pitch, and any other details relative to the areas of equipment installation.		X
4. Project Management for the scope defined in this proposal.	X	
5. Mechanical engineering, layout and design for equipment as depicted on Savoye drawings and equipment listings.	X	
6. Controls engineering, layout, design and programming for equipment as depicted on Savoye drawings and equipment listings.	X	

Project Scope Item	Provided by Savoye	Provided by Buyer
7. Modifications to the building		X
8. Modifications to the existing WMS or software systems to accommodate new equipment and interface.		X
9. Procurement of Powered Extendable Conveyors.	X	
10. Installation and commissioning of Powered Extendable Conveyors.	X	
11. Modifications to existing facilities including modification to power, outlets, lighting and/or utilities lines. (Water, air, sprinklers, electric, etc.)		X
12. Conveyor hardware as depicted on Savoye drawings and equipment listings.	X	
13. Safety markings or signage not part of the MHE provided by Savoye		X
14. Bollards, fencing, work tables		X
15. Controls hardware for conveyor equipment as depicted on Savoye drawings and equipment listings.	X	
16. Fire Suppression system (sprinklers) for the following areas: Below the Mantissa Induction platoforms, (QTY 2), below the Eurosort Induction platforms (QTY 2), underneath Mantissa Sorter Structure, below Mantissa Center platform, and under any conveyor 48" or wider.	X	
17. Fire Suppression below the Eurosort sorter has NOT been accounted for in this proposal. This could be provided at additional cost if required by Pitney Bowes or local municipality.		X
18. Fire Suppression has not been included under the (4) jam platforms		X
19. Local motor disconnect switches.	X	
20. Dumpsters for removal of dunnage and trash.	X	
21. Temporary power, water, and toilets as required for installation.		X

Project Scope Item	Provided by Savoye	Provided by Buyer
22. Fork trucks and scissor lifts required for installation.	X	
23. Permit fees and inspection fees required for the project. (NOTE: Permit filing, documentation, and obtaining permits are the responsibility of Savoye and will be billed separately. Permitting delays outside of Savoye's control will result in a day-for-day schedule delay.)		X
24. Life Safety egress plan Development and associated architectural firm fees. (NOTE: Savoye will provide equipment layouts and assist architect in developing this plan)		X
25. Taxes, Duties, Freight.		X
26. Source of compressed air and piping to a header near (a shutoff valve within 15 ft) of all equipment locations requiring air.		X
27. Air piping from provided shutoff valve to the MHE provided by Savoye where required.	X	
28. Mechanical installation drawings issued for construction.	X	
29. Electrical device installation drawings issued for construction.	X	
30. Mechanical installation of Savoye-supplied conveyor equipment depicted on Savoye drawings. (Non-Union)	X	
31. Electrical installation for Savoye-supplied conveyor equipment depicted on Savoye drawings. (Non-Union).	X	
32. 480V power from Eurosort panel to Eurosort power supplies and drives.	X	
33. No Ignition SCADA system will be delivered by Savoye as part of this project. Parcel scan/weigh/dimensions will be collected within Mantissa's provided software.		X
34. Lighting below platforms.		X

Project Scope Item	Provided by Savoye	Provided by Buyer
35. Modifications to the existing building electrical power and data lines. This includes 480VAC power drops to control cabinets and powered extendable conveyors and dumpers. 120VAC power drops/outlets for scan tunnels, scales. Data drops to control panels, scales, scan tunnels.		X
36. Materials and labor for testing system including loading and unloading product to/from conveyor.		X
37. Mechanical checkout of equipment.	X	
38. Electrical checkout of equipment.	X	
39. Mechanical system commissioning.	X	
40. Electrical system commissioning.	X	
41. System mechanical documentation including manuals. The required spare parts list will also be provided 2 weeks before site installation/mobilization.	X	
42. System electrical documentation includes schematics, PLC programs and spare parts list.	X	
43. Spare parts ESTIMATE HAS BEEN PROVIDED but is not included in Pricing total. Pitney Bowes Inc will be required to procure required spare parts based on list provided by Savoye prior to site commissioning. Savoye will present the key spare parts as a change order request. Savoye will procure these spare parts if said change order is authorized by Pitney Bowes Inc.		X

1.4. Equipment Listing

Savoye will supply the Hytrol conveyor with either SEW, NORD, or Sumitomo motors, based solely on availability/lead times. Savoye will communicate this during the selection process to inform the customer to the various options and their associated schedule constraints.

Unit #	Conv. Type	Length	EW	Infeed	Outfeed	Speed	HP
D-1000	DUMPER	10'-0"					5
B-1001	BPC	13'-3"	43	54	54	45	3
B-1003	BPC	76'-6"	49	30	30	45	5
D-1004	DUMPER	10'-0"					5
B-1005	BPC	13'-3"	43	54	54	45	3
D-1006	DUMPER	10'-0"					5
B-1007	BPC	13'-3"	49	54	60	45	3
E-1008	EXTENDABLE	26'-0"				45	5
B-1009	BPC	37'-9"	39	39	54	45	5
E-1010	EXTENDABLE	26'-0"				45	5
B-1011	BPC	37'-9"	39	39	54	45	3
B-1013	BPC	47'-6"	49	24	153	90	5
B-1015	BPC	65'-0"	49	150	327	120	5
B-1017	BPC	26'-0"	49	303	303	120	3
B-1019	BPC	32'-0"	49	279	279	160	3
B-1021	ARB	85'-6"	48	276	276	160	15
B-1025	BPC	52'-0"	49	294	318	180	7.5
B-1027	BPC	65'-0"	49	312	312	180	7.5
B-1029	BPC	50'-0"	49	288	288	180	7.5
B-1031	ARB	85'-6"	48	276	276	160	15
B-1035	BPC	64'-0"	49	282	306	180	10
B-1037	BPC	51'-0"	49	303	303	180	5
D-1100	DUMPER	10'-0"					5
B-1101	BPC	19'-6"	39	54	96	45	3
B-1103	BPC	33'-0"	49	72	72	45	5
D-1104	DUMPER	10'-0"					5
B-1105	BPC	19'-6"	39	54	96	45	3
D-1106	DUMPER	10'-0"					5
B-1107	BPC	19'-6"	39	54	96	45	3
B-1109	BPC	31'-0"	39	66	114	90	3

E-1110	EXTENDABLE	26'-0"				45	5
B-1111	BPC	30'-6"	39	39	120	45	5
E-1112	EXTENDABLE	26'-0"				45	5
B-1113	BPC	27'-6"	39	39	114	45	3
B-1115	BPC	66'-0"	49	90	198	120	7.5
B-1117	BPC	62'-0"	49	195	318	160	7.5
B-1119	BPC	18'-6"	49	312	312	160	3
B-1201	HSS	46'-0"	31	36	36	60	3
S-1203	SPIRAL	25'-0"	36	36	198	100	3
B-1301	HSS	17'-0"	31	150	195	300	3
B-1303	HSS	22'-0"	31	168	204	120	3
B-1401	HSS	27'-3"	39	150	222	300	3
B-1403	HSS	44'-9"	39	198	282	120	5
B-1501	HSS	15'-0"	39	150	168	300	3
B-1503	HSS	33'-6"	39	144	204	150	5
B-1505	HSS	60'-0"	39	198	198	150	7.5
B-1507	HSS	63'-0"	39	195	198	150	7.5
B-1509	HSS	20'-0"	39	168	228	150	5
B-1511	HSS	30'-0"	39	228	228	150	5
B-1512	HSS	23'-0"	39	150	216	150	5
B-1513	HSS	55'-0"	39	204	204	150	5
B-1515	HSS	56'-0"	39	201	270	150	5
B-1517	HSS	60'-0"	39	264	264	150	7.5
B-1519	HSS	55'-0"	39	240	240	150	5
B-1521	HSS	18'-0"	43	237	237	150	3
B-1523	ARB	71'-0"	48	237	237	160	15
B-1525	HSS	11'-0"	43	213	213	150	3
B-1527	HSS	54'-0"	43	189	291	150	7.5
B-1529	HSS	37'-0"	43	288	288	150	5
B-1531	HSS	10'-6"	31	120	138	120	3
B-1533	HSS	18'-0"	31	114	144	120	3
B-1541	HSS	15'-0"	31	120	132	120	3
B-1543	HSS	18'-0"	31	114	144	120	3

D-1544	DUMPER	10'-0"					5
B-1545	Cleated Incline	35'-0"	34	54	249	45	7.5
B-1601	HSS	15'-0"	39	150	168	300	3
B-1603	HSS	33'-6"	39	144	204	150	5
B-1605	HSS	60'-0"	39	198	198	150	7.5
B-1607	HSS	63'-0"	39	195	198	150	7.5
B-1609	HSS	20'-0"	39	168	228	150	5
B-1611	HSS	29'-6"	39	225	228	150	5
B-1612	HSS	23'-0"	39	150	216	150	5
B-1613	HSS	60'-0"	39	180	180	150	7.5
B-1615	HSS	60'-0"	39	177	228	150	7.5
B-1617	HSS	60'-0"	39	225	228	150	7.5
B-1619	HSS	60'-0"	39	225	228	150	7.5
B-1621	HSS	60'-0"	39	225	228	150	7.5
B-1623	HSS	60'-0"	39	225	228	150	7.5
B-1625	HSS	35'-0"	43	201	240	150	5
B-1627	ARB	71'-0"	48	237	237	160	15
B-1629	HSS	11'-0"	43	213	213	150	3
B-1631	HSS	54'-0"	43	189	252	150	7.5
B-1633	HSS	37'-0"	43	249	249	150	5
B-1635	HSS	14'-0"	43	225	225	150	3
B-1641	HSS	7'-0"	31	120	132	120	3
B-1643	HSS	20'-0"	31	108	144	120	3
B-1651	HSS	15'-6"	31	114	144	120	3
D-1652	DUMPER	10'-0"					5
B-1653	Cleated Incline	35'-0"	34	54	249	45	7.5

1.5. Safety Features

At Savoye, safety is very important, and our equipment and systems are designed to reduce or eliminate safety issues consistent with United States industry standards on safety, including the following:

- Safety Standards for Conveyors & Related Equipment .....ANSI B20.1
- National Electric Code ..... NFPA 70
- Safety Standards for Mechanical Power Transmission .....ANSI B15.1

Moving equipment and products are necessary aspects of automated material handling. Savoye will incorporate all machine safety protections where appropriate but it is essential that the customers safe use and operation of the equipment and systems is required to avoid injury to the customer's employees or damage to the customer's property and equipment. The commitment of the customer to the safe use and operation of the equipment and systems is required to avoid injury to the customer's employees or damage to the customer's property and equipment.

The particular circumstances of the customer's operation of the equipment should be analyzed by the customer to specifically address safety in the customer's operation of the equipment and systems.

1.6. OSHA Compliance

OCCUPATIONAL SAFETY and HEALTH ACT of 1970 (OSHA)

"Compliance with the Occupational Safety and Health Act of 1970 (OSHA) is the responsibility of the employer and is dependent on many factors beyond the equipment supplied by Contractor. Contractor will take reasonable steps to design its products so that Owner can meet the OSHA requirements. However, the ultimate responsibility for the safe operation of equipment remains with owner. Contractor will follow the industry safety practices listed in our proposal in furnishing equipment. If revisions to the equipment are required and requested, Contractor will make them, as far as technically possible, and will make adjustments in the price charged to reflect such revisions. Labor performed by Contractor's employees at Owner's facility during installation and start up will be accomplished in compliance with applicable OSHA requirements."

1.7. Buyer's Safety Responsibilities

During installation, the Buyer is to provide area guarding necessary to protect personnel and equipment from hazards associated with installation; i.e. warning signs, hand rails, barriers, netting, floor marking, fork truck guarding, etc.

1.8. Savoye Drug/Alcohol-Free Workplace Policy

Savoye maintains a Drug/Alcohol-Free Workplace Policy and complies with the Drug Free Workplace Act of 1988. As such, Savoye has adopted a drug and alcohol testing program. Copies of the Savoye Drug/Alcohol-Free Workplace Policy are available upon request. This proposal assumes no additional drug testing or background checks will be required by the customer.

2. SYSTEM DESIGN CRITERIA

2.1. System and Operational Environment

2.1.1. Climate

The system described herein has been designed for the following temperature and humidity conditions:

- Temperature: +50 ºF to +100 ºF
- Humidity – 50%; non-condensing
- General Conditions – dry

2.2. Materials to Be Handled & System Rates

2.2.1. Parcels to Be Handled

The proposed equipment will properly convey materials having the characteristics and dimensions as represented in the following charts and will have the capability to convey such materials at the rates specified herein. The actual rates achieved are dependent upon the operating personnel, and the customer therefore accepts final responsibility for the attainment of the specified rates after system acceptance.

The data referenced herein is the basis for the proposed system design and must be verified in the Buyer's review of this proposal. Deviation from the information provided as part of the system requirements could adversely affect the system design and operation, which could result in adjustments to the project price and schedule.

The dimensions to be handled are identified below:

Mantissa Tilt Tray Sorter

Type	Length (in)	Width (in)	Height (in)	Weight (Lbs.)
Parcel Min Dimension	6	3	0.25	>1
Max Dimension for 36" Parcel	36	20	20	50
Parcel Average Dimension	14	10	5	6
Five-Sided Scan on Tilt Tray sorter (Qty 1 after each induction bank)	Yes			
Presentation scanner at each Tilt Tray Sorter Induction	Yes			
Parcel Label Orientation Required	Yes			

Savoye takes exception to any parcels that fall outside of the specified MTBH range in the above tables.

Additionally, all parcels must have a conveyable surface, and must be able to remain stationary on a moving sorter and associated conveyors. Items in bags and cartons cannot tumble or roll while traveling on the conveyor system.

The system as proposed includes areas considered to be "bulk handling" and as such, parcel and label orientation cannot be guaranteed in such areas.

2.2.2. System Rates

The following rates are based on 85% utilization and an average parcel of 14" L x 10" W x 5" H when narrow edge leading. The rates are belt conveyor spacing capacity. As a manually loaded system the actual area rate is determined by the operators and the average length of the product.

Area (Each)	Equipment Operating Rate	Operator Expected Rate
Extendable Inbound Unload Line (per line)	2,300 PPH	1,800 PPH
Gaylord Receiving Inbound Unload Line (per line)	4,500 PPH	2,700 PPH
Mantissa Induction Conveyor (per line)	1,800 PPH	1,500 PPH
Mantissa Sorter	17,544	17,544
EuroSort Gaylord Dump (Inner Facility, per bank)	4,500	2,700 PPH
EuroSort Sorter (By Others) (with pre-sort)	13,000 PPH **	950 PPH

The system design rate assumes an average carton size not to exceed 14" L x 10" W x 5" H to achieve stated mechanical performance.

To maximize the throughput of the overall facility, Pitney Bowes will need to utilize the direct feed gaylord dumpers which feed the Eurosort induction areas.

**Disclaimer: For Pitney Bowes to realize maximum throughputs of the overall system, they must duplicate bin destinations across the virtual sorters on the Mantissa Tilt Tray Sorter. **

3. System Description

The system solution offered in this proposal will allow received goods entering the facility in different formats and different containers, for both returns and deliveries processing, to be received and sorted to the required out bound container with a minimum of manual labor and processing time. The system is comprised of (5) different areas:

1. Inbound Receiving
2. Mantissa Tilt Tray Induction
3. Mantissa Tilt Tray Sortation
4. Eurosort Induction
5. Eurosort Sortation (by Others)

Layout

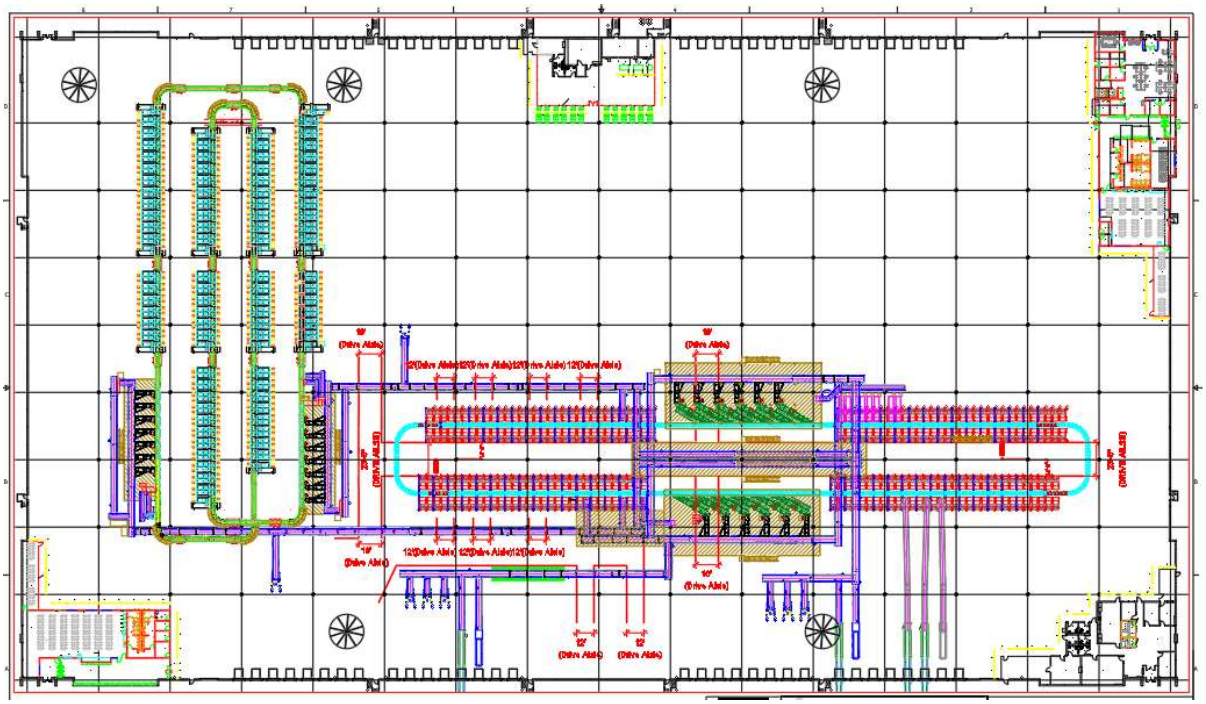


Figure 1 – Overall System Layout

3.1. Inbound Receiving

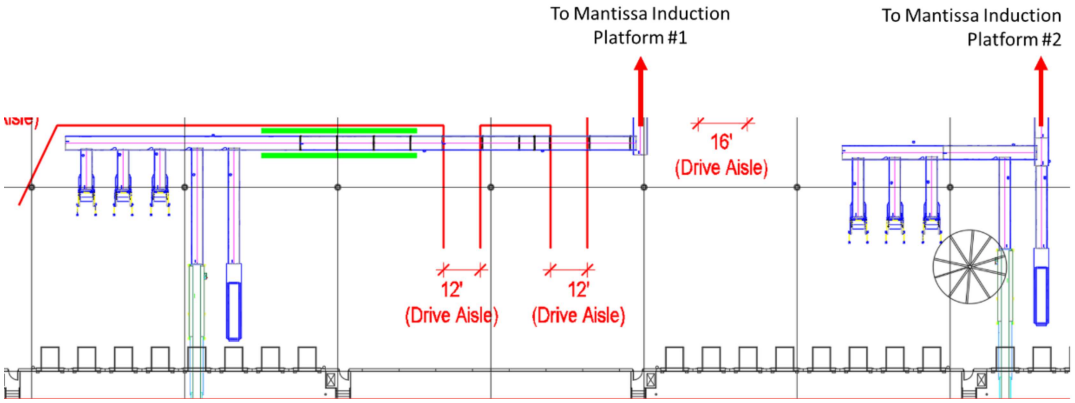


Figure 2 – Inbound Receiving Area

The inbound receiving area consists of the following:

1. Four (4) floor loaded trailers using an extendable reach conveyor (1 provided by Savoye, 3 provided by Pitney Bowes)
    a. It's assumed the three (3) extendable units provided by Pitney Bowes are in working condition, are not in need of repair, and are excluded from any warranty offered by Savoye.
2. Six (6) gaylord dumpers (1 dump and return every 4 minutes, with a 2-minute exchange time for operators).
3. Zero Manual Induct lines
4. Approximately 16,000 sqft of pallet staging between the inbound lane groups.

The parcels loaded onto the conveyor via the gaylord dumpers or the extendable reach conveyors are brought together onto bulk conveyance and transported to the Mantissa Induction platforms. The inbound lines are amassed into two groups, each consisting of 3 gaylord dumpers and 2 extendable reach conveyors. Each group of inbound lines directly feeds one of the two Mantissa induction platforms. Additional conveyance is provided to allow parcels from any inbound lane to be delivered to either one of the Mantissa induction platforms.

3.2. Mantissa Tilt Tray Induction

There are two induction banks on the tilt tray sorter and each induction bank on the Tilt Tray sorter consists of 6 operator inductions stations. Therefore, there are a total of 12 operator induction stations on the sorter. The operator stations are fed using an ARB sorter. The ARB sorter diverts the bulk stream of parcels into each induction station chute. From the chute the operator can pick up the parcel and place it directly onto the Mantissa induction conveyor. Savoye will provide PB with the ability to enable/disable individual operator stations so stations without an operator do not receive any parcels.

To ensure each operator has parcels to process, the ARB sorter will utilize a round robin allocation approach to diverting parcels. For instance, if there are three operator stations enabled on a given

platform, the ARB will start by diverting parcels to stations #1, it will continue diverting parcels to station #1 until it is full and cannot accept any additional parcels. Once the first station is full, the ARB sorter will stop diverting to the first station and begin diverting parcels to station #2. It will continue diverting parcels to station #2 until the second station is full. Once full, the ARB will stop diverting to the second station and begin diverting parcels to station #3. Once the final station is full, the ARB will stop diverting to the third station and go back to station #1 and fill it back up again. This process will continue until all stations are completely full.
If all stations are full at the same time, the sorter will not divert parcels to any of the operator stations and allow the parcels to run off the end of the ARB sorter onto the recirculation conveyor. If the recirculation conveyor becomes, or is full, Savoye will shut off the conveyors coming from inbound receiving. The ARBs and the recirculation conveyors will continue to run, but no new parcels will be delivered from inbound receiving until operator stations become empty again.

Each induction platform has provisions for future addition of robots at 5 locations per side. In these locations a 3 ½′ x 3 ½′ area has been protected to allow the installation of robot stations that would mount from the floor.

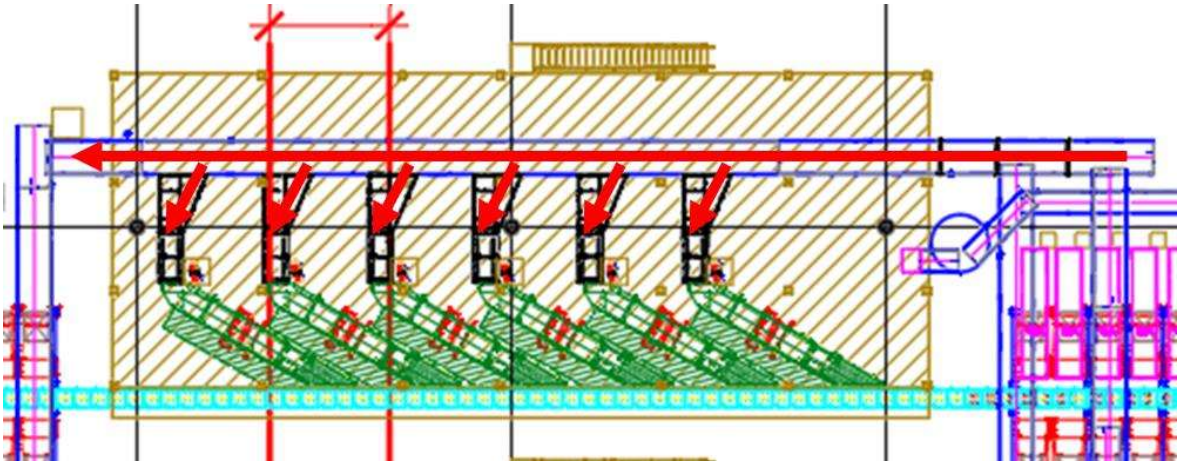


Figure 3 – Mantissa Tilt Tray Induction

3.2.1. Load Balancing for Mantissa Tilt Tray Induction Platforms

It's vitally important to provide adequate product to all 'enabled' operator stations no matter what platform they are on. To accomplish this, bulk conveyance is provided to connect the two ARB sorters on each Mantissa induction platform.

This recirculation conveyor between the two mezzanine platforms provide the ARB sorters a destination for parcels IF all the induction operator stations are full. This allows parcels to continue moving to the next induction platform. Savoye will monitor the fullness of the recirculation conveyors between the platforms.

If, at any point in time ALL operator inductions stations become full, Savoye will turn off the conveyors coming from the Inbound Receiving area. Shutting off the conveyors coming from Inbound Receiving will ensure the recirculation conveyors do not get into a gridlock state.

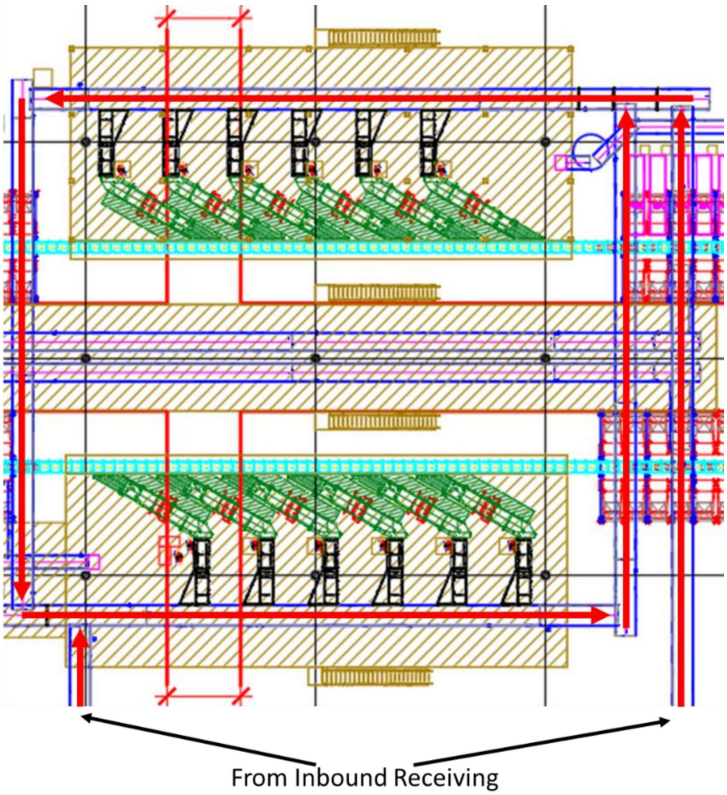


Figure 4 – Mantissa Platform Load Balancing

3.3. Max Recirc, No Read, and QA Handling for Mantissa Tilt Tray Sorter

Savoye has provided the following methods to handle exception parcels on the Mantissa tilt tray sorter. One (1) max recirculation return conveyor line is provided to remove parcels after a pre-defined number of revolutions on the sorter. Savoye has also provided one (1) no-read return conveyor line to bring parcels which didn't get a good scan directly back to the induction platform. Savoye has designated eight (8) chutes off the tilt tray sorter for various QA types. A workstation will be positioned at the base of EACH QA chute for processing. These workstations will be provided by Pitney Bowes. the operator will then place the processed parcel onto a conveyor which will transport the parcel to a powered incline spiral and onto the induction platform. The parcels will fall into a cart and then will manually be placed into the nearest operator chute for re-induction onto the tilt tray sorter. Locations of the various exception handling chutes and conveyors are shown on Figure 5.

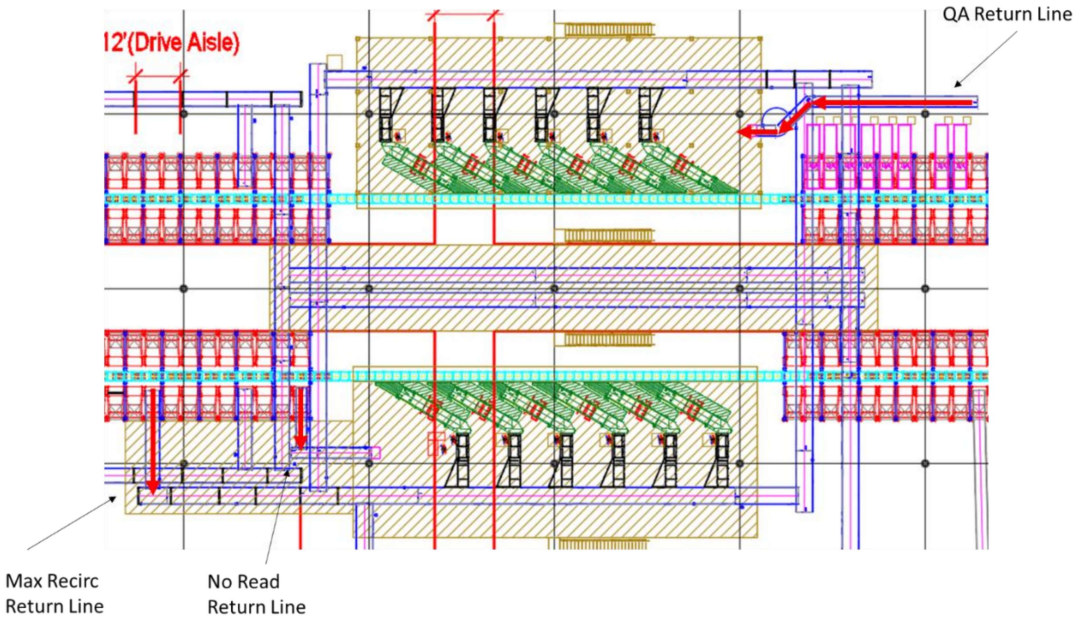


Figure 5 – Mantissa Tilt Tray Max Recirc, No Read, and QA Handling

3.4. Mantissa Tilt Tray Sorter

The Tilt Tray Sortation System is capable of handling both corrugate and polybag items. The Tilt Tray loop is approximately 1038' long with 28" pitch trays running at 402 feet per minute. With twelve inductors and 256 divert locations, this system will satisfy the throughput needs for Pitney Bowes both now and in the years to come.

3.4.1. Mantissa Semi-Auto Induction Conveyor

A conveyor system (by others) transports bulk packages with pre-applied shipping labels to the Induction Platform (by others) where (12) Mantissa Zebra® Semi-Automatic Inductors (SAI) feed the sorter. Mantissa will design and install the Zebra® Semi-Automatic Inductors to handle the product as described in the Product Specifications and Rates section below. The design will include (6) total bed sections: (1) induct section, (3) sync belts, (1) scale belt and (1) 30-degree spur section.

Each SAI station is staffed by an associate working at an induct station between the bulk conveyor and the SAI induct belt. For single tray items (see specification below), the associate places the parcel in the induct notch in the proper orientation. Once the inductor takes the item away another item can be placed in the notch. These items will be inducted onto the tray in a cross load (long edges are front and back on tray). Larger items designated as double tray loads will require the associate to align the case with the longest edge parallel to the direction of travel of the inductor. Each station is equipped with a presentation scanner, CPU and display that connects to Mantissa's induct HMI application. Power for these stations is provided by others.

Each Inductor has a scale belt section to capture the item weight and dimensioning system over the belt to gather volume data. The shipping label barcode can be read by either the presentation scanner at the SAI station or the over tray scanning system after induction. A manager will select the mode of scanning. Mantissa will track the package weight and dimension data through induction onto the sorter where an over the sorter scanning system will read the shipping label. The Mantissa

control system will marry the weight, dimension and barcode data together and request a divert destination from the client's control system.

Images captured by the scan tunnel will be FTP'd to Pitney Bowes.

3.4.2. Mantissa Sorter Tray Configuration

Mantissa's trays are on 28" pitch and the sorter is running at 402 feet per minute.

Ribbed trays will be utilized to minimize surface contact for better transition on and off the trays

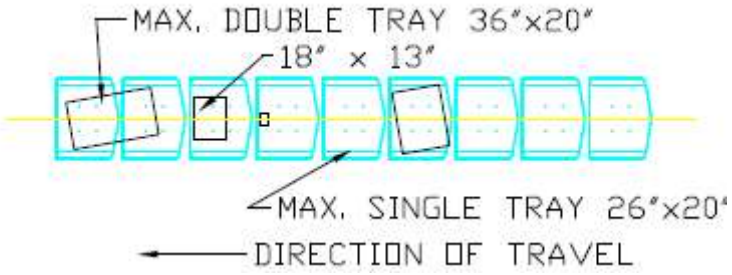


Figure 6 – Mantissa Tray Configuration

3.4.3. Mantissa Sorter Chute Design

Gaylord chutes are chimney style guides that feed a Gaylord container (provided by others). For each Gaylord there is an operator push button station housing an Enable/Disable selector switch and chute status indicator light. Each Gaylord also has a Gaylord full photo-eye and Gaylord present photo-eye. During production the sorter will divert packages to the Gaylord chutes when enabled by the control system. Diverting will stop once the chute is detected as full, if the gaylord is not present or if the operator disables the chute with the selector switch.

The QA chutes are chimney style guides that feed packages to a work table (to be defined). Each QA chute is equipped with Conveyor Full photo-eye and Enable/Disable selector switch and chute status indicator light. QA chutes will handle exceptions (no read, item not needed, etc.).

The Direct-to-Conveyor (DTC) locations are intended for the conveyor to receive parcels directly from the transition. An interlock (Produced-Consumed or hard wired by others into one of the Mantissa I/O panels) will be used to indicate an "okay to divert" signal for each DTC divert.

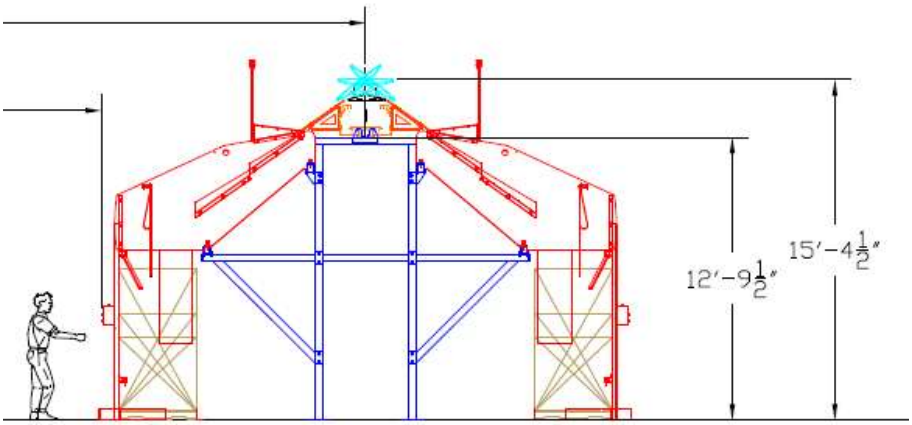


Figure 7 – Mantissa Tilt Tray Sorter Chute Design

3.5. Conveyance from Mantissa to Eurosort Induction Platforms

To maximize the throughput of the tilt tray sorter, Savoye has designed a conveyor system to allow parcels destined for Eurosort to be discharged from the tilt tray sorter PRIOR to passing by the other induction bank of the tilt tray sorter. Each tilt tray induction bank has two (2) discharge chutes for parcels destined for Eurosort. One chute is for Eurosort Platform #1, and the other chute is for Eurosort Platform #2.

This design both maximizes the number of empty carriers presented at each induction bank, along with delivers parcels to a specific induction bank on the Eurosort Sorter to maximize the number of empty trays presented at each Eurosort induction bank.

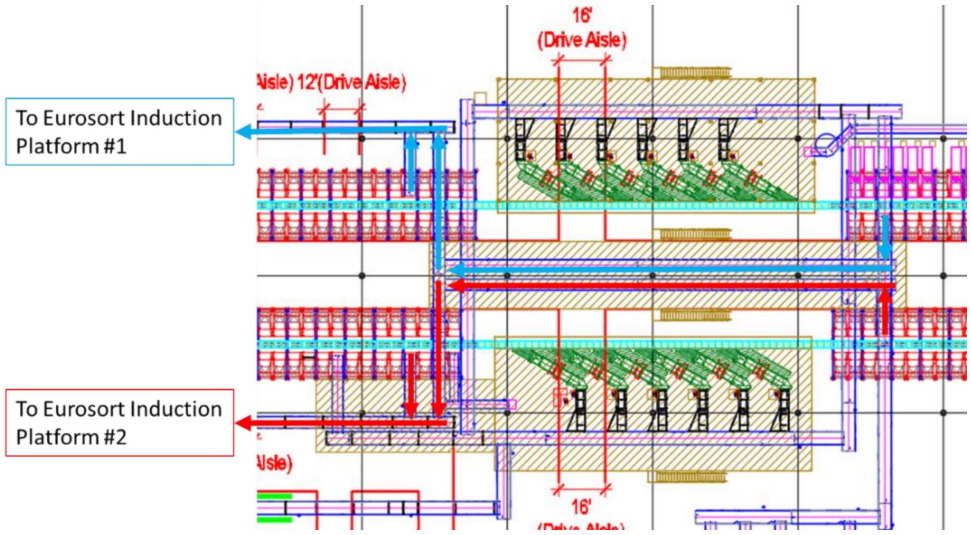


Figure 8 – Conveyance Paths to Eurosort Induction Platforms

3.6. Eurosort Induction

There are two induction banks provided by Savoye on the Eurosort sorter and each induction bank consists of 7 operator inductions stations. Therefore, there are a total of 14 operator induction stations on the Eurosort sorter. The operator stations are fed using an ARB sorter. The ARB sorter diverts the bulk stream of parcels into each induction station chute. From the chute the operator is able to pick up the package and place it directly onto the Eurosort sorter. Savoye will provide PB with the ability to enable/disable individual operator stations so stations without an operator do not receive any parcels.

To ensure each operator has parcels to process, the ARB sorter will utilize a round robin allocation approach to diverting parcels. For instance, if there are three operator stations enabled on a given platform, the ARB will start by diverting parcels to stations #1, it will continue diverting parcels to station #1 until it is full and cannot accept any additional parcels. Once the first station is full, the ARB sorter will stop diverting to the first station and begin diverting parcels to station #2. It will continue diverting parcels to station #2 until the second station is full. Once full, the ARB will stop diverting to the second station and begin diverting parcels to station #3. Once the final station is full, the ARB will stop diverting to the third station and go back to station #1 and fill it back up again. This process will continue until all stations are completely full.

If all stations are full at the same time, the sorter will not divert parcels to any of the operator stations and allow the parcels to run off the end of the ARB sorter onto the recirculation conveyor. If the recirculation conveyor becomes, or is full, Savoye will shut off the conveyors coming from inbound receiving. The ARBs and the recirculation conveyors will continue to run, but no new parcels will be delivered from inbound receiving until operator stations become empty again.

Each induction platform has provisions for future addition of robots at 3 locations per side. In these locations a 3 ½′ x 3 ½′ area has been protected to allow the installation of robot stations that would mount from the floor.

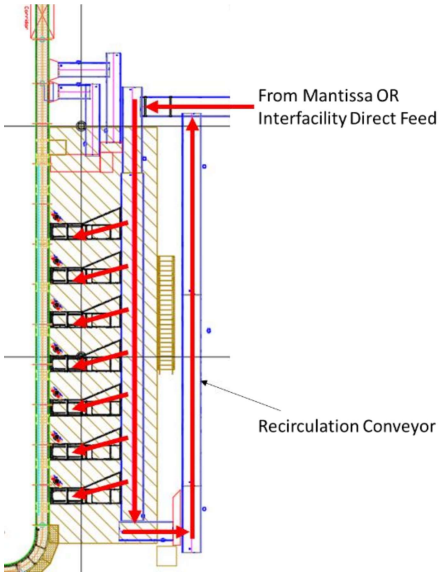


Figure 9 – Eurosort Induction Stations

3.7. Eurosort NO Read/QA Handling

Savoye will provide 2 return conveyors for each Eurosort induction platform. Pitney Bowes anticipates using these return conveyors for No read parcels and for QA parcels. Operator stations will be placed on the mezzanine platform (provided by others) to process the parcels that are returned via these conveyors. Once these parcels are processed, they will be placed back onto the Eurosort Sorter.

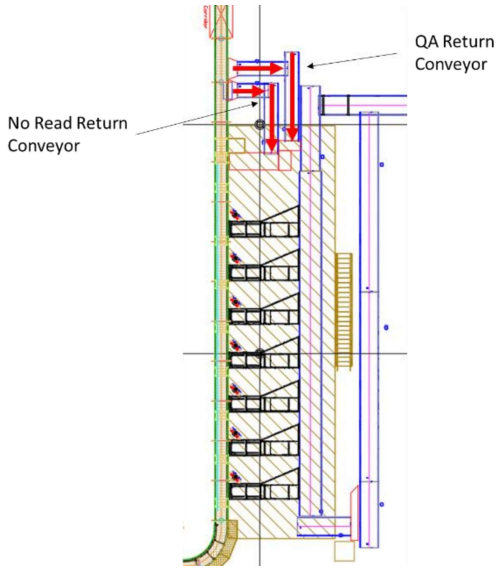


Figure 10 – Eurosort No Read and QA Chutes

3.8. Label Scan, and Parcel Dimensioning and Parcel Weighing

Label scanning can occur at 2 separate locations on the Mantissa sorter.

- Presentation scanners located on the induction conveyors (1 per induction line)
- Over Tray scanning system onboard the sorter. (1 per induction bank)

A PB manager will have the ability to select between the presentation scan mode and the Over Tray scan mode.

Presentation Mode:
While operating in the presentation scan mode, the operator must scan the parcel prior to setting it onto the induction conveyor. If the parcel receives a good scan, the parcel will be allowed to go onto the sorter. If the parcel does not receive a good scan, the parcel will be held on the conveyor and the operator will be alerted. If parcel is scanned properly, it's then weighed and sent out to the sorter.

Over Tray Scan Mode:
If the system is run in Over Tray Scan mode, the operator will simply place parcels on the induction conveyor and they will be dimensioned, weighed, and inducted onto the sorter. Once on the sorter, the parcel will go through a scan tunnel and be scanned. If no scan is acquired, the parcel will be diverted to the no-read chute where it will be brought back to the induction mezz deck for processing and reinduction.

3.9. Inner Facility Induction Lanes

Each Eurosort induction line also has the ability to induct Inner Facility parcels. The Inner facility induction consists of 2 infeed lines. Each infeed line consists of a gaylord dumper along with an incline belt conveyor which will dump parcels on the main conveyor that feeds the Eurosort induction platforms. Figure 11 shows the two interfacility lines which directly feed the eurosort platforms, bypassing the Mantissa tilt tray sorter entirely.

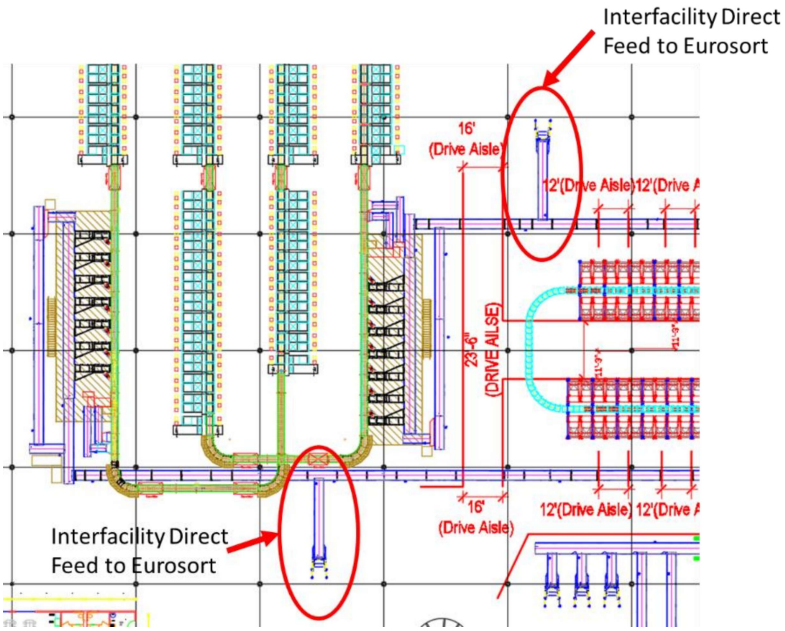


Figure 11 – Interfacility Direct Feed Gaylord Dumpers to Eurosort

3.10. System Mezzanines and Platforms

The overall system contains the following mezzanines and platforms:

- (2) Mantissa (6) Person Induction Platforms
- (1) Bulk Transfer Maintenance Platform (located inside tilt tray sorter loop)
- (2) Eurosort (7) Person Induction Platforms
- (3) 4′ x 4′ Conveyor Maintenance Platforms
- (1) L-Shaped 11′ x 12′ Conveyor Maintenance Platform

System mezzanines and platforms have the following construction

- Structural Steel Framing Members
- 20 Gauge Roof Decking
- ¾″ Engineered Composite Light Duty Tongue and Grove Decking
- IBC Rated Stairways with Diamond Checkered Treads
- Bulk Transfer Maintenance Platforms are Accessed Using Caged Rung Ladders

Savoye has NOT included any crossovers within the Inbound Receiving area.

3.11. Eurosort Push Tray Parcel Sortation (By Others)

The Eurosort push tray parcel sorter is depicted on Savoye's drawings for illustration purposes only. This sorter is not part of Savoye scope of work and will be provided by others.

3.12. Interface with Pitney Bowes Inc Host System

There is one interface point between the material handling equipment provided by Savoye and the customer's Host system. This interface point is between MANTISSA and the customer's host and performs the system induction scan and the tilt tray induction scan at the same time.

3.12.1. System Induction Scan/Tilt Tray Induction Scan Message:

- Message sent from Mantissa PLC to PB Host with barcodes, weight, and dimension information, along with ParcelID (PLC-generated) and lane identifiers.
- PB Host responds to Mantissa PLC with Destination (Bin Location) along with Alternate Destination (exception/backup) and including the ParceID.
- Message sent from Mantissa PLC to PB Host with ParcelID and confirmed destination, along with disposition (good divert, failed, lost, no host response, etc.).
- A keep alive message in each direction.

*Note: we will mimic the message protocol being used at the PB sites in Monroe, Bloomington, Atlanta, Boston, Stockton, Dallas, and Columbus.

Pitney Bowes Inc Host Responsibilities:

- Under 500 millisecond response time for all messages between the host and PLC systems
- Manage bin destination allocations including the opening, closing, and allocation of each bin on the Tilt Tray Sorter

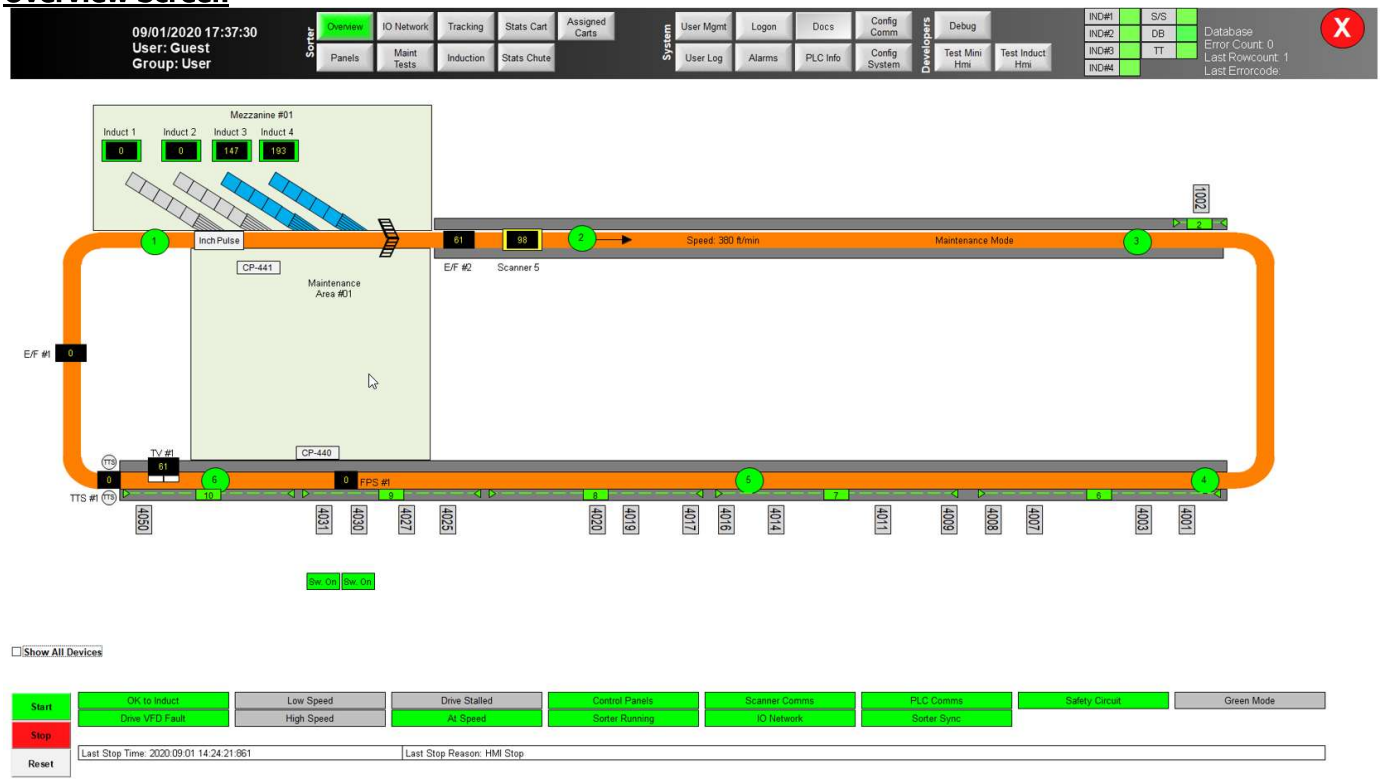
3.13. Reporting and System Statistics

Savoye will **NOT** provide and industrial PC to run a SCADA system for system level reporting and statics as it has at the other Pitney Bowes facilities. This is because Savoye does not have any induction conveyor lanes, nor is Savoye performing any presort prior to the Mantissa tilt tray and Eurosort push tray sorters.

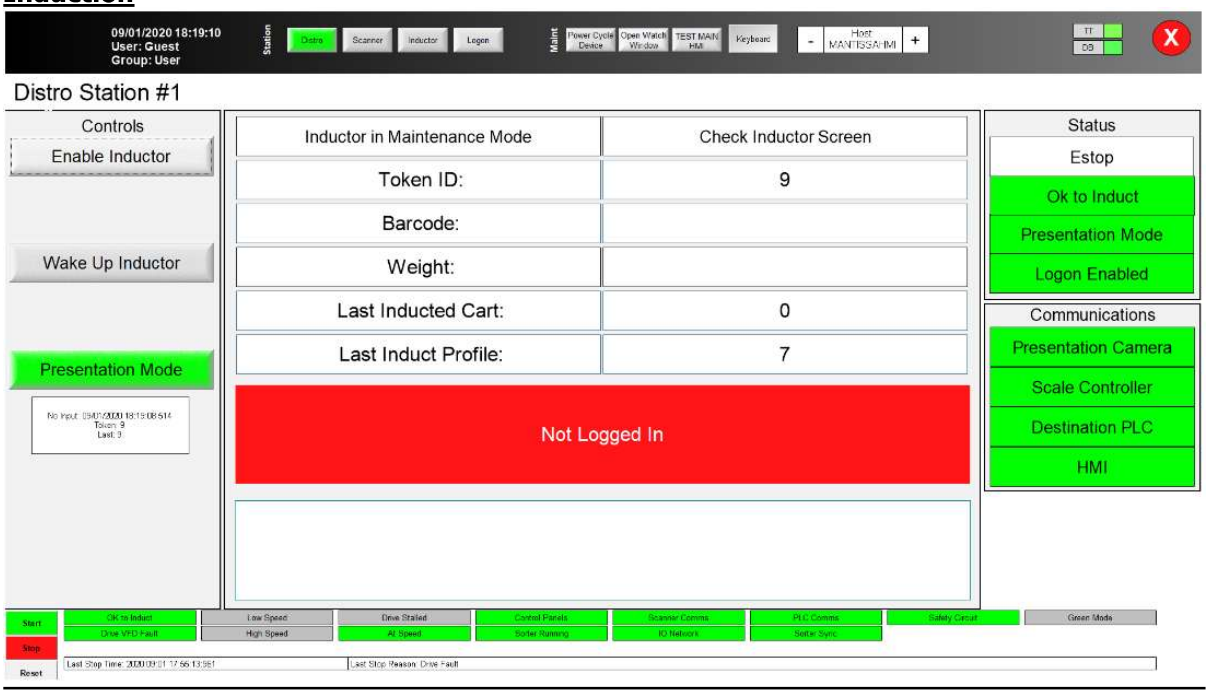
The Mantissa sorter will have its own integrated system level statistics which will capture and display the sorter induction scan read rates and throughput, individual bin destination statistics, recirculation counts, mis-divert counts, and bin full counts.

Example HMI screens or Mantissa Tilt Tray Sorter:

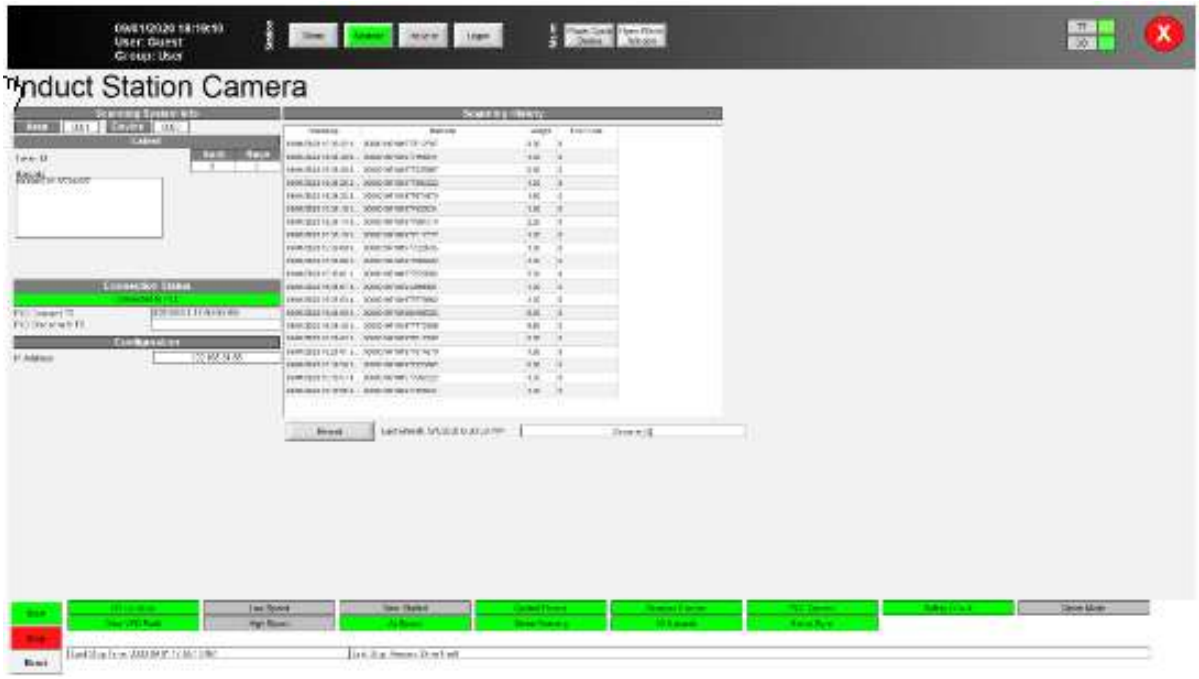
Overview Screen



Induction



Induct Station Camera



Other screens provided: Scanner View, Scanner statistics, Dimensioner Statistics, System Alarms, and Scale Statistics.

The Eurosort sorter will have its own integrated system level statistics which will capture and display the sorter induction scan read rates and throughput, individual bin destination statistics, recirculation counts, mis-divert counts, and bin full counts.

3.14. Optional Work Scope

3.14.1. Optional: Additional Direct Feed Dumper Lines

Savoye is offing the addition of two (2) Dumper units with cleated belt inclines for Interfacility direct feed to the Eurosort Sorter. Included in this optional scope is:

- Two (2) Advanced Lift Gaylord Dumper Units
- Two (2) Hytrol Cleated Belt Incline units.

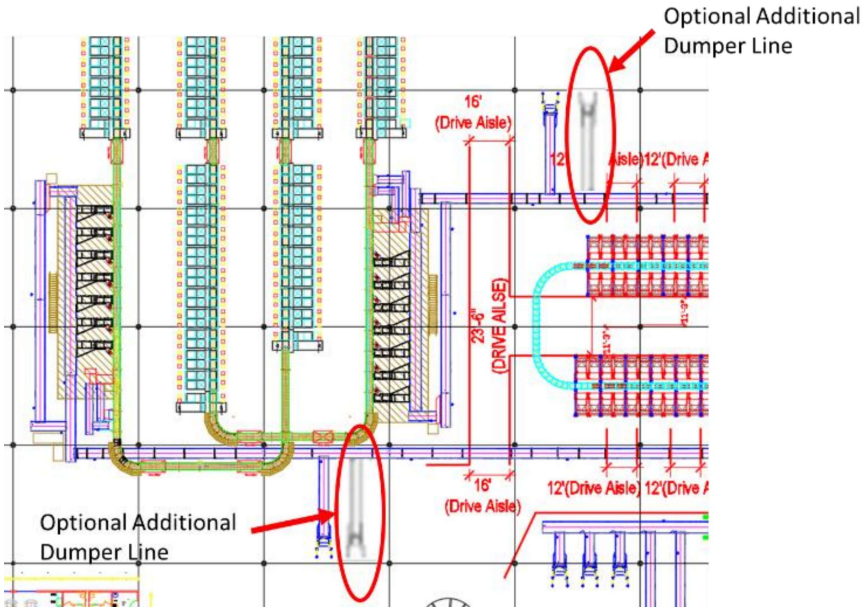


Figure 12 – Optional Dumpers for Direct Eurosort Feed

3.14.2. Optional: Fluid Outbound Lines

Savoye is offing the addition of three (3) fluid outbound lines on the Mantissa Tilt Tray Sorter. Included in this optional scope is:

- Three (3) Stewart Glapat Extendable Conveyor units
- Three (3) custom chutes to connect the sorter to the takeaway conveyor
- Three (3) takeaway Conveyor Lines that transport parcels from the tilt tray sorter to the extendable conveyor units located at the dock area.

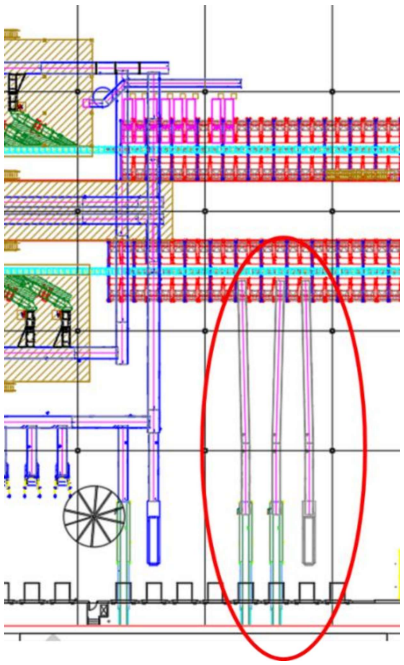


Figure 13 – Optional Scope: Fluid Outbound Lines

4. PROJECT IMPLEMENTATION

4.1. Project Schedule for Sort System

Schedule is dependent on OEM equipment being able to delivered by 10/17/2022. Any delay on building availability or receipt of Purchase Order will impact overall project milestone dates. Schedule below are estimated dates. A detailed project schedule will be submitted following receipt of order.

Milestone	Complete Date
Proposal Submission	05/06/2022
Receipt of Order	05/16/2022
Detailed Engineering	05/23/2022 – 07/22/2022
Approval Drawings Submitted	06/15/2022
Approval Drawings Approved	06/20/2022
Manufacturing	08/05/2022 – 01/15/2022
Installation	10/18/2022 – 02/20/2023
Commissioning	01/30/2023 – 04/05/2023
Full System Testing/Soft Go-Live/Beneficial Use	04/07/2023 – 04/15/2023
Acceptance Testing	04/14/2023 – 04/15/2023
Go-Live	04/16/2023
Stand-By Support	04/16/2023 – 04/30/2023

4.3. Project Team

Upon receipt of the order, the Savoye Project Team will be assigned. The project team will consist of a Project Manager and a number of Project Engineers from varying disciplines. Pitney Bowes Inc retains the option of requesting any team member be replaced at Pitney Bowes' discretion without cause. Savoye to provide Project Team member credentials and organizations chart with contact details and escalation contacts.

The Project Manager is responsible for the execution of the project through final acceptance of the system. The Project Manager acts as the single point of communication between the customer and Savoye.

The Project Manager monitors engineering activities from a design and planning standpoint, charting engineering progress and reviewing the system design to ensure that the system complies with the customer requirements and specifications. The Project Manager shall visit the installation as needed to coordinate the site activities in conjunction with the Savoye Site Manager from the start of installation through final testing and acceptance. The purpose of these on-site visits will be to inspect the completed work and coordinate installation details with the customer.

Administrative duties of the Project Manager include the acknowledgment of the formal purchase order and subsequent change orders, the supervision of invoicing, and the follow-up on payments. He also provides formal progress reports to Savoye management personnel. The Project Manager insures adequate documentation of inter-departmental decisions and actions, as well as records agreements and decisions between the Customer and Savoye.

The Project Manager furnishes the Customer with a detailed project schedule, for the work to be performed. This schedule identifies the major milestone events associated with the work. The schedule identifies the scheduled start and completion dates of each major installation task or event to be performed. This project schedule is updated as necessary throughout the life of the project.

Project Engineer from varying disciplines relating to the equipment or service being provided will also be a part of the project team. The Project Engineers will have the responsibility of insuring that the design meets the requirements of the project scope.

Savoye will provide a Site Manager to be present at the job site for the duration of equipment deliveries, installation, pre-commissioning, commissioning, and final acceptance. This professional will serve as on-site liaison between Savoye and the customer. In addition, the Site Manager will direct installation crews under contract with Savoye.

4.4. Installation

4.4.1. Installation Laydown Areas Required

Savoye has outlined in Figure 14 the required laydown area. Savoye also anticipates a portion of the building to be used by operations. This space is shown in Figure 14 as well.

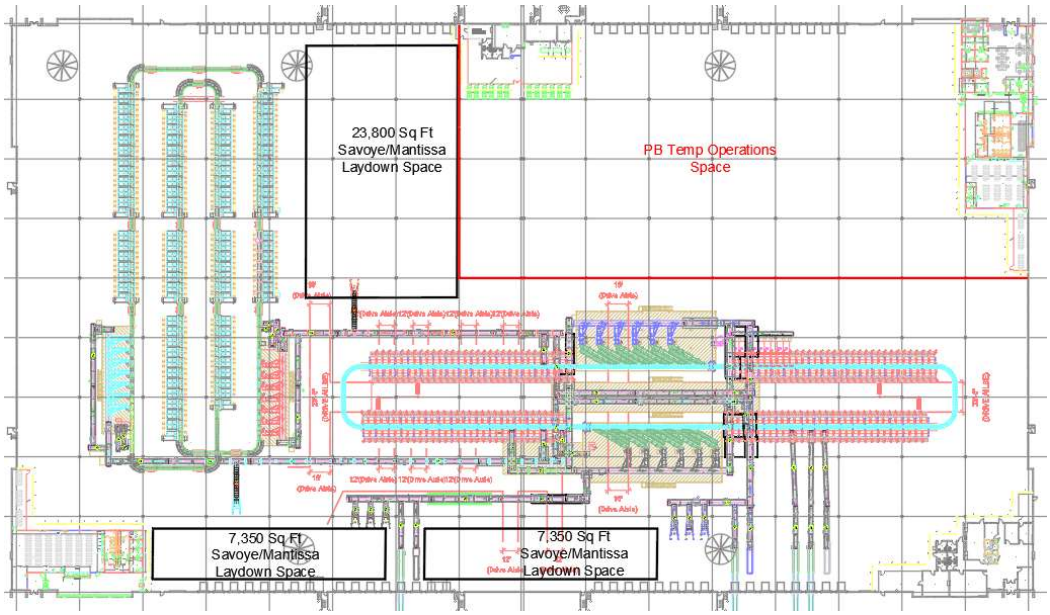


Figure 14 – Required laydown area

4.4.2. Scope of Mechanical Installation

The following defines the mechanical installation scope of work that is to be performed as part of the system proposed herein. All tasks described below are to be performed and / or directed by Savoye using ***NON-UNION labor***.

- Unloading and inventory of all new equipment deliveries pertaining to the scope as described in this proposal upon arrival at the job site.
- Savoye and any hired affiliates are to work in unison with other contractors on property regarding neatness, space, access, etc. No trade is to block or utilize space that would impede the progress of other trades.
- Installation of all scan tunnel equipment.
- Field cut conveyor sections, as required, to fit overall conveyor lengths into actual system layout.
- Checkout and run-in of all system mechanical components. This work includes tracking of belts, equipment alignment, etc.
- Mechanical checkout of the system as a whole. This includes verification of equipment installation, speeds, adjustment of mechanical equipment to ensure proper operation, etc.

4.4.3. Scope of Electrical Installation

The following defines the electrical installation scope of work that is to be performed as part of the system proposed herein. This proposal is based on using ***NON-UNION labor*** on a continuous basis.

- Unloading and inventory of all new electrical equipment deliveries pertaining to the scope as described in this proposal upon arrival at the job site.
- Installation of all external devices required in order to provide system operation as described in this proposal. All devices will be wired to the control panel.
- All power and control conductors will be routed in EMT conduit or tray.
- Conduit normally attached to the conveyor frames or supports. In some instances, conductors will be routed in locations not adjacent to the equipment to be installed.
- Buyer to supply and install required communication cabling (Ethernet, etc.) to the supplied Savoye panels.
- Communication cabling required from the supplied Savoye panel is included as part of the electrical installation.
- The supply of cable/conduit and labor for installation of power feeders from the customer's existing distribution panels to the Savoye supplied control panels is NOT part of Savoye's Scope of Work.
- All power distribution from the Savoye panels to control devices and motor drives will be included as part of the electrical installation.
- 120V AC electrical outlets (2 quad boxes for each scanner, 1 quad box for each scale) are required for the scan tunnel, scale. These outlets are NOT part of Savoye's Scope of work and must be provided by Pitney Bowes Inc.
- Check out and run-in of all system electrical components. This includes verification of device wiring to I/O points, adjustment of photocell positions, checkout of device operation, etc.
- Check out of the system including verification of equipment speeds, adjustment of electrical equipment to ensure proper operation, etc.
- Provide personnel for support during the commissioning of the system.

4.5. Commissioning

Commissioning is included in the scope of this project.

The purpose of commissioning is to verify the system functions as intended and defined in the Description of Operations. All I/O checks, motor rotation checks, etc. are considered part of "pre-commissioning" and must be complete before commissioning is to take place on that part of the system.

Checklists will be used to document the commissioning process. After commissioning is complete acceptance testing process will begin to validate conveyor speeds and system functionality per the Acceptance Test Plan. Acceptance test plan has been provided. Please see Appendix 2.

4.6. On site Hands-On Training

Savoye offers and encourages customer participation in on site basic mechanical, electrical and operational training sessions. Training includes troubleshooting techniques, review of functionality, basic maintenance and repair service and system exception recovery procedures. Savoye will provide one training session for operators and maintenance personnel during the commissioning phase of the project. The session will be 2 hours in duration. We recommend keeping the

audience dedicated to those responsible for the operation, and training of the operators of the system, so the sessions are effective.

Additional hands-on training is available during commissioning phase of the project. Savoye encourages participation during this phase as this provides time for customer personnel to gain familiarity and comfort with operating and maintaining the system.

4.7. Buyer Responsibility

- Building Modifications
- Modifications to the existing production software systems
- Power, water and restrooms as required for installation
- Permit fees and inspections required for project. (Savoye is responsible for all permitting applications, documentation, and obtaining permits. If permitting is delayed for reasons outside of Savoye's control, it will result in a day-for-day schedule slippage.)
- Compressed Air drops
- 480V power drops to Main Control Cabinets
- 120V power outlets for scan tunnels, scales.
- 3 powered extendable conveyor units for inbound receiving.
- Taxes and Duties
- Freight
- Materials and labor for testing system including loading and unloading product to/from conveyor

4.8. Manuals & Documentation

Savoye will supply three (3) copies of a complete drawing package, installation drawings, operation and service manuals including illustrated parts lists and recommended spares which become the property of Pitney Bowes Inc upon award. One (1) copy of the manual will be printed and two (2) will be supplied on flash drive.

5. SUPPORT

5.1. Optional 24x7 Technical Support

Savoye offers 24/7 technical support. Customers will be connected with our engineering team members to troubleshoot, identify and assist your team with recovery of your system.

24x7 contract customers have access to call center support via 1-800 number 24x7 & 365 days a year. Customers will speak to a live person and a call back from our service engineer is guaranteed within 60 minutes. Our team of experts will work with your maintenance or operations personnel to troubleshoot and correct the problem to get your system operational.

If the system is not operational within 1 hour, the call is escalated to Support Management to determine next steps with the customer. If it is determined on-site support is required, an expert field service engineer will be sent to site to rectify the problem. Field service will be billed per 0

At Savoye we understand the critical importance of minimizing interruptions to your operations. Savoye field service engineers can respond to site for emergency service within 24 hours.

Savoye will provide Pitney Bowes ninety (90) days of 24x7 remote support after go-live. A purchase order for continued 24x7 remote support beyond the ninety (90) days would be needed to ensure no lapse in support.

Pricing for 24x7 technical support will be provided during the installation phase of the project.

5.2 Parts & Labor Warranty

Contractor warrants for a period of twelve (12) months that the materials and equipment provided hereunder (i) shall be free of defects in materials and workmanship, (ii) are in compliance with the requirements set forth in this SOW and the Agreement and all descriptions made in submitted proposals; and (iii) are provided in a manner consistent with general industry standards reasonably applicable to the provision thereof. Limitations on these warranties contained within quotes or proposals shall be null and void. Contractor shall promptly repair or replace, at its expense, the materials and equipment provided hereunder that does not meet the foregoing warranties. Pitney Bowes Inc must provide Savoye immediate written notice of the claimed defect, including a description of the goods, the defect, and the date of its discovery. Savoye reserves the right to inspect the part or goods at Pitney Bowe's location. Pitney Bowe's shall bear responsibility for the cost of labor and other charges for removal of defective part or goods and installation of the replacement part or goods.

Savoye's obligation does not extend to failure or damage due to abuse, neglect, accident, improper repair, maintenance, adjustment, exposure to corrosive or abrasive material, operation under any degree of dampness, or alteration or modification by persons other than Savoye. Nothing contained in this SOW shall be deemed a waiver of any representations, warranties, or guarantees implied by Law. In addition, Pitney Bowe's is hereby assigned all project manufacturer's warranties, if any.

5.3 Tier 1 Extended Site Support

As part of Savoye's commitment to the Pitney Bowes partnership, Savoye has included a single resource to remain on site for 3 months after go-live to support Pitney Bowes operations as the Pitney Bowes team familiarizes itself with the system. This Savoye resource will be present Monday-Friday each week on 1st shift.

5.4 Spare Parts

Savoye will provide a detailed spare parts list to the customer once the system has been engineered, finalized, and equipment bills of material released to manufacturing.

Availability of spare parts is critical to your operation. Savoye's spare parts list will detail a list of critical spare parts that should be kept in inventory in case an emergency repair is required. Savoye to secure critical spare parts on-site prior to go live date at PBI's expense.

Savoye has provided an ESTIMATED cost of spare parts for Pitney Bowes Budgeting purposes only. Spare parts are not included in this system quotation.

6. CLARIFICATIONS AND EXCEPTIONS

6.1. General Clarifications

1. The customer shall accept responsibilities to ensure that the roof structures, support structure and floor structures are of suitable design to withstand the loadings which may be imposed by the equipment. Loading information as required will be provided by Savoye during the engineering phase of the project.

2. The customer is responsible for providing a source of compressed air. The customer is also responsible for providing air drops with a shutoff valve near (within 15 feet) of where the air is to be consumed. Savoye anticipates an air drop needed for each ARB sorter.

3. The system and equipment as described herein is designed for Seismic Zone (1) requirements. It is assumed that this project does not trigger any global seismic issues within the existing building. Additional costs have not been included in the project to cover additional reinforcement of the building.

4. Any required removal/relocation of existing equipment, steel, pipes, conduits, lights, etc. to provide a clear conveyor path is not included as part of this proposal.

5. Customer approval of this proposal authorizes Savoye to proceed with engineering and manufacturing per the proposal and layout. If updated customer specifications or layout changes are requested, this may result in additional charges or impacts to schedule.

6. Installation pricing is based upon the customer providing a dedicated lay down area for staging and storage of the new equipment within the facility. Savoye has provided an approximate laydown area required within this proposal.

7. Savoye has included the required personnel to be on-site to install and commission the conveyor system. If, however, because of customer schedules, the crew is not able to perform this service during the scheduled timeframe, and must be re-scheduled, the costs of additional travel, expenses and/or service time will be billed per the terms of Savoye T&M bulletin.

8. All materials to be handled must be confirmed and agreed to prior to the start of engineering.

9. Savoye does not warranty any existing equipment which Savoye intends to modify, re-use or incorporate as part of the proposed system.

10. This proposal is based on furnishing Savoye standard specifications for equipment, engineering practices, components, and documentation unless specified herein. Deviation from Savoye standards is available upon request but may result in additional charges or impacts to timing.

11. This project includes equipment provided by third party vendors. Vendor specifications can be furnished upon request. Deviation from vendor standards is available upon request but may result in additional charges or impacts to timing.

12. Buyer is to provide any mechanical and electrical interface with peripheral equipment, process control or process supplies not specifically included in this proposal.

13. Any required removal/relocation of existing equipment not explicitly stated herein is not included as part of this proposal.

14. Products if required for factory demo testing will be provided by buyer at no charge, including all freight expenses.

15. Savoye has not provided for labor to load and/or unload the buyer's product onto conveyors during testing. In order for Savoye to complete acceptance testing, Pitney Bowes Inc. must make personnel available to load and/or unload the system with boxes when needed.

16. Savoye has not provided for labor to operate or maintain the equipment beyond acceptance testing.

17. Savoye has not provided for or made access to any utilities (water, gas, electricity, sprinklers, etc.) in or around the project area.

18. Installation is to take place as stated in schedule provided in section 4.1. If schedule needs to be modified to support Pitney Bowes Inc operation additional costs will be incurred.

19. The customer will provide a VPN connection to Savoye prior to the start of commissioning to allow for remote access. This VPN connection will be maintained throughout the commissioning and acceptance process. After acceptance, the VPN connection will only be needed for support in conjunction with a 24x7 support contract.

20. The customer will provide 480V power drops to all control and power distribution cabinets as well as gaylord dumpers, and extendable conveyor units.

21. The customer will provide 120V outlets as required. This includes but is not limited to outlets for the scan tunnels, scales scales.

22. All integration testing, commissioning and final acceptance required to validate performance and functionality as a means of meeting contractual obligations will be conducted with personnel performing required functions at all interface points including sorter induction at sort tower. If robotics cells are implemented, Savoye will perform a secondary integration and acceptance test based on a newly defined set of acceptance criteria. This additional integration and acceptance test will be executed as a stand-alone change order on a T&M basis.

23. Savoye has included pricing for Six (6) sided scanning prior to the linear sorters only. Please note that six (6) sided scanning will include bottom scanning and thus will require an approximate 1.5" gap in the conveying surface to allow for the scanner beam. Product whose lengthwise dimension is less than 3", and / or with a non-solid bottom (bags) may have difficulty traversing this gap and / or may create a jam point.

24. Savoye has provided "waterfall" type transitions & "kicker belt guides" to mitigate product jams where there are adjacent conveyors in lieu of slide style chutes at all bulk conveyor perpendicular transition points. While every attempt will be made to reduce product jams at

these transitions, Savoye cannot guarantee overall performance and / or that product will not be damaged at these transitions due to overall drop required.

25. Eurosort Sorter induction platforms do not include accommodations for PlusOne Robotics integration as Eurosort Push Tray does not support Robotic induction to the sorters.

7. PRICING

7.1. Sort Center

References:

- Savoye Drawings: Q21358-CL20.1-220425-BB.dwg

The Sort System Price includes the mechanical hardware, mechanical engineering, controls hardware, controls engineering, project management, mechanical installation, electrical installation, and commissioning as detailed herein. Spare parts ESTIMATE has been provided for budgeting purposes only and will be finalized after engineering is complete. All pricing excludes freight, taxes and associated permit fees.

Sort System ..... $ 17,320,535

Costing Breakout:

Mechanical Hardware ..... $ 3,989,062

Mechanical Buyouts..... $ 9,484,007

Electrical Buyouts..... $ 775,510

Project/Site Management ..... $ 582,398

Mechanical Engineering ..... $ 427,157

Electrical Engineering ..... $ 450,438

Mechanical Installation ..... $ 733,107

Electrical Installation ..... $ 878,856

Optional Work Scope

Three (3) Fluid Outbound Lanes ..... $ 613,300

Two (2) Additional Direct Feed Dumper Lines ..... $ 181,550

Estimate (For Budgeting Purposes) for Spare Parts ..... $ 635,000

Sort System Total w/Dumper Lines Optional Work Scopes ..... $ 17,502,085

Sort System Total w/Both Optional Work Scopes..... $ 18,115,385