



SORTER ASSESSMENT



Date of the Assessment:

Address:

Client:

Location:

Approximate Age of The System:

Assessment Performed by:

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INTRODUCTION

Thank you for the opportunity to conduct this Sorter Assessment for you! After reviewing your report, please let us know if you have any questions. If applicable, we will generate a quote for any parts and services we recommend for your system.

PURPOSE AND SCOPE

This document was prepared as a report of all visual equipment inspected at the time(s) and date(s) of the assessment. It is not all-inclusive, and some items may need further investigation during downtime.

The Sorter Assessment and report are offered as our expert opinion of the items viewed during the inspection. Every effort is made to discover and correctly identify the condition of your sorter. No guarantee of finding all issues is expressed or implied.

Systems in Motion strives to provide services with the safety of our employees and customers in mind. We inspect the visually accessible components of systems. This report has observations of those components that are, in the professional opinion of Systems in Motion, a high priority for replacement or upgrade.

The Sorter Assessment may be limited by accessibility and time constraints.

1. Visual Survey

Perform a visual inspection to identify mechanical and electrical components that are damaged or worn to the point of needing replacement. Our team will also identify opportunities for equipment upgrades or modifications that will enhance sorter performance.

2. Budget for Repairs/Replacements/Upgrades

Budget pricing for repairs, parts replacements, and upgrades will be included in our report. With this information, you will be able to make educated decisions and plan for necessary investments.

***The full amount of the Sorter Assessment will be credited towards a repair, parts replacement or upgrade project that is contracted within 12 months of the assessment report. Minimum repair, parts replacement or upgrade contract value that is eligible for this credit is \$35,000.**

5. Inclusions

The items in this report are for sorter components that are visually accessible. Proper software operation is not part of this report.

6. Confidentiality

Your report is confidential and will not be shared with anyone outside of your organization.

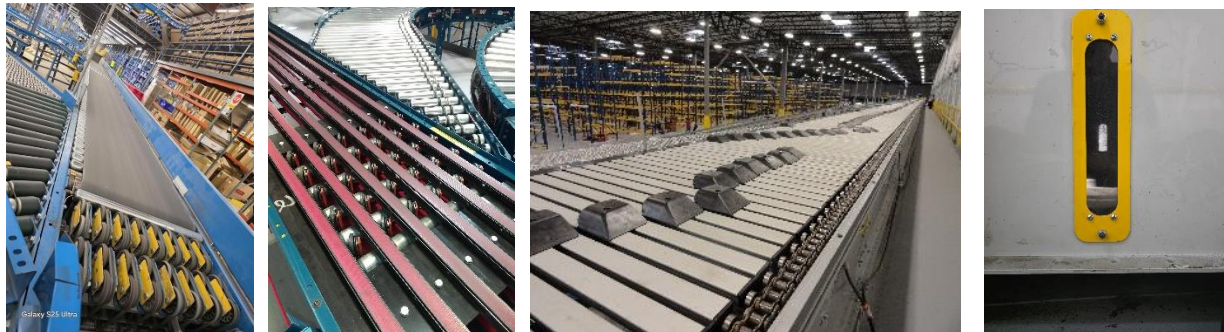
WHAT WE'RE LOOKING FOR IN AN ASSESSMENT

Item 1. Sorter Belt/Chain integrity, tension, and tracking

Our technicians will inspect the sorter belt or chain for integrity, tension, and tracking. Different sorter technologies include shoe sorters, belt sorters, multi-belt sorters, or powered roller sorters.

WHAT WE ARE LOOKING FOR:

Description



Belt or slat chain integrity- We will rotate your conveyor and look for belt damage, and or dry rot. We will look for O-rings, slats or chain sections that need to be replaced. We check your shoe sorter chains by measuring the catenary sag at the discharge (bottom right).

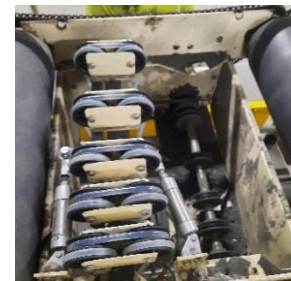
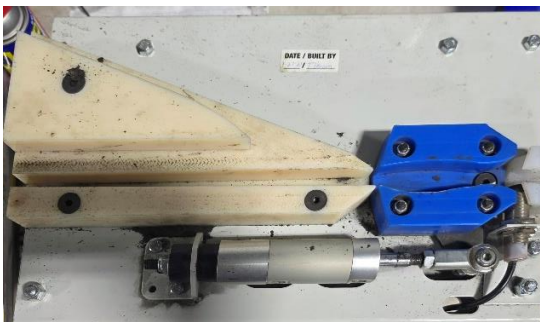
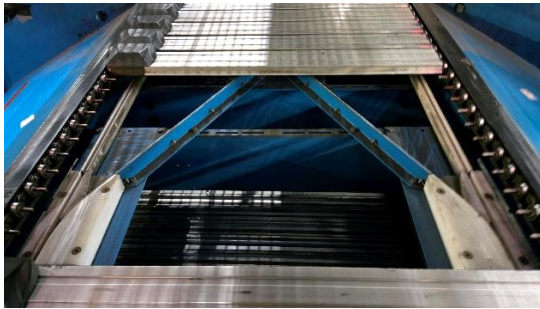
Tension- The belts, O-rings, or slat load chains on your sorter need to be at the proper tension. Loose tension on the sorter can cause timing issues when diverting and damage to your equipment and product. Loose tension can cause damage to the end of the sorter, chains to skip a too tooth on the sprocket, etc. We will check that the tension of the belt or chain in comparison to manufacturer recommendations. Over tension on the sorter can cause tearing of belts, and premature wearing of sprockets which will result in a costly repair.

Tracking- We will check that your belt sorter is tracking correctly for proper diverting. Divert orientation will determine how the belt should be tracked.

Item 2. Internal Component Inspection

Inspection of the inner components of your sorter to help prevent costly unplanned downtime.

WHAT WE ARE LOOKING FOR:



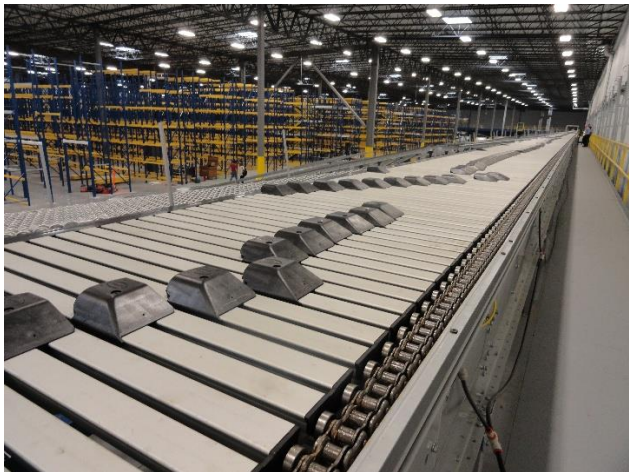
Description

Your sorter needs to be slowly jogged and inspected. One person will jog while the other will inspect. Internal frames (upper left) need to be inspected for damage. Worn nylon guides (upper right) need to be found early before they cause damage. Divert switches (lower left) need to be carefully inspected for nylon, piston, or bracket damage. If you have a 2-sided shoe sorter the center switch (bottom middle) needs to stay in near perfect condition to not cause shoe or guide damage. Divert bucket (bottom right), shafts, pulleys, and pistons need to be inspected as well.

Item 3. External Component Inspection

Inspection of the external components of your sorter that assist with belt/chain movement, and proper diverting.

WHAT WE ARE LOOKING FOR:



Description

While onsite we will make sure there are no oil leaks from your gear reducer, and that your motor is functioning normally. We will check all bearings (top left). Bad bearings can cause the shafts of your pulleys to wear down and cause potential downtime if not caught in advance. Diverter bucket wheels, wheel O-rings, and drive O-rings will be inspected for wear (top middle recently rebuilt divert). O-rings that are worn will cause mis-diverts which can cause damage to the conveyor, product, and even cause safety issues. For shoe sorters, we will slowly jog and check your shoe assemblies (top right is what one looks like outside of the machine). A bent pin can cause damage to your internal guides.

Item 4. Divert Timing Inspection

The sorter divert timing will be monitored during production as well as proper flow of cartons on the takeaway conveyor.

WHAT WE ARE LOOKING FOR:



Description

The sorter will be inspected for proper positioning and diverting of cartons with no hesitation of flow. We want to make sure that the carton gets all the way off the sorter without issue.

ASSESSMENT SUMMARY

Item 1

WHAT WE FOUND:

No issues need to be addressed this time.

Item 2

WHAT WE FOUND:

No issues need to be addressed this time.

Item 3

WHAT WE FOUND:

No issues need to be addressed this time.

Item 4

WHAT WE FOUND:

No issues need to be addressed this time.

RECOMMENDATIONS