Systems in Motion

AFTERMARKET SERVICES

ELECTRICAL OBSOLESCENCE AUDIT

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 Electrical Obsolescence Audit 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 Electrical Obsolescence Audit and report are offered as our expert opinion of the items viewed during the inspection. Every effort is made to discover and correctly identify critical obsolete equipment. No guarantee of finding all obsolete equipment 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 Electrical Obsolescence Audit may be limited by accessibility and time constraints.

1. Visual Survey
Perform a visual inspection to identify electrical key equipment that is at or nearing obsolescence.

2. Budget for Replacement/Upgrade
Budget pricing for obsolete electrical equipment replacement or upgrade will be included in our report. With this information, you will be able to make educated decisions and plan for equipment replacement or upgrades.

*The full amount of the Electrical Obsolescence Audit will be credited towards a replacement or upgrade project that is contracted within 12 months of the audit report. Minimum replacement or upgrade contract value that is eligible for this credit is $35,000.

5. Inclusions
The items in this report are for key electrical 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 AUDIT

Software

Warehouse control software is a type of software designed to manage and optimize the operations within a warehouse. It typically includes functionalities such as inventory management, order processing, tracking shipments, and coordinating the movement of goods.

WHAT WE ARE LOOKING FOR:

Software Type. Document the software provider, version number, etc.

Configuration. Is the software installed on a physical server or virtual server? Is the server on site or remote?

Product Lifecycle. Where is the software in its lifecycle? Has the manufacturer announced an end of life or end of support date?

Servers

A warehouse control system (WCS) server is a specialized server that manages and coordinates the operations of a warehouse control system. The WCS is responsible for the real-time control and optimization of material handling equipment and processes within a warehouse.

WHAT WE ARE LOOKING FOR:

Server Type. Document the manufacturer, and model number of the server.

Configuration. Is the server installed on site or in a remote location? What components make up the server configuration?

Product Lifecycle. Where is the server in its lifecycle? Has the manufacturer announced an end of life or end of support date?

Programmable Logic Controllers (PLC)

The Programmable Logic Controller (PLC) is the heart and brains of your conveyor system. The PLC is responsible for collecting inputs like photo eyes, limit switches, and motor running signals and controlling outputs like motors, beacons, and horns.

WHAT WE ARE LOOKING FOR:

Make and Model. Document the manufacturer, and model number of the PLC.

Configuration. Is the PLC installed in an enclosure? Is there associated input, output, serial, ethernet modules?

Product Lifecycle. Where is the PLC in its lifecycle? Has the manufacturer announced an end of life or end of support date?

Input/Output Modules

The input modules collect information from input devices such as photo eyes, limit switches, auxiliary contacts, temperature and vibration sensors, and pushbuttons. Output modules are used to control output devices such as motors, beacons, lights, horns, and diverts.

WHAT WE ARE LOOKING FOR:

Make and Model. Document the manufacturer, and model number of the module.

Configuration. Is the module installed in an enclosure? How many are there and are they wired to a terminal strip?

Product Lifecycle. Where is the module in its lifecycle? Has the manufacturer announced an end of life or end of support date?

Network Adapters

Network adapters allow integration of industrial devices with enterprise-level systems, enabling data collection, monitoring, and control from a centralized location. This integration helps in improving efficiency, reducing downtime, and optimizing operations.

WHAT WE ARE LOOKING FOR:

Make and Model. Document the manufacturer, and model number of the module.

Configuration. Is the module installed in an enclosure? What type of ethernet network are they connected to?

Product Lifecycle. Where is the module in its lifecycle? Has the manufacturer announced an end of life or end of support date?

Variable Frequency Drives (VFD)

A Variable Frequency Drive (VFD) is an electronic device used to control the speed and torque of an electric motor by varying the frequency and voltage supplied to the motor.

WHAT WE ARE LOOKING FOR:

Make and Model. Document the manufacturer, and model number of the VFD.

Configuration. Is the VFD installed in the main control enclosure, directly on the equipment, in a remote enclosure? How many are there? Are they discreetly controlled or controlled via a network?

Product Lifecycle. Where is the VFD in its lifecycle? Has the manufacturer announced an end of life or end of support date?

Barcode Scanners/Cameras

A barcode scanner is a device used to read and decode the information contained in barcodes. Barcodes are patterns of parallel lines or other shapes that represent data in a machine-readable format. By reading the barcode, the system can determine the destination of each item. This information is used to automatically sort and route products to the appropriate locations, such as different conveyor lines, storage areas, or shipping docks.

WHAT WE ARE LOOKING FOR:

Make and Model. Document the manufacturer, and model number of the scanner or camera.

Configuration. How is the scanner or camera mounted and what is it used for? How many are there? How does the scanner or camera communicate to the PLC or Host?

Product Lifecycle. Where is the scanner or camera in its lifecycle? Has the manufacturer announced an end of life or end of support date?

In Motion Scales

An in-motion scale is a weighing system designed to measure the weight of objects while they are moving, rather than requiring them to stop for measurement.. These systems improve efficiency by allowing continuous operations without stopping for weighing, making them ideal for high-speed production environments.

WHAT WE ARE LOOKING FOR:

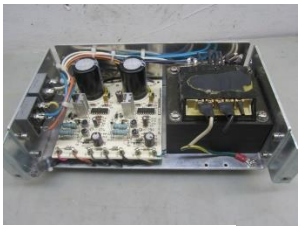
Make and Model. Document the manufacturer, and model number of the in-motion scale.

Configuration. How is the scale installed and what is it used for? How many are there? How does the in-motion scale communicate to the PLC or Host?

Product Lifecycle. Where is the in-motion scale in its lifecycle? Has the manufacturer announced an end of life or end of support date?

Other Electrical Components

Old control panels also contain many “low tech” legacy devices that should be considered for upgrade or replacement. In addition, new components are smaller, more efficient, generate less heat, are readily available, and usually cost less than the older obsolete devices.







WHAT WE ARE LOOKING FOR:

Make and Model. Document the manufacturer, and model number of the legacy devices. Examples of device types: power supplies, transformers, motor starters, fuses/fuse blocks, photoeyes, relays, soft starts

Location & Configuration. Where are the devices located and what do they control?

Product Lifecycle. Where is the device in its lifecycle? Has the manufacturer announced an end of life or end of support date?

AUDIT SUMMARY

Software

WHAT WE FOUND:

No issues need to be addressed this time.

Servers

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No issues need to be addressed this time.

Programmable Logic Controllers (PLC)

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Input/Output Modules

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Network Adapters

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Variable Frequency Drives (VFD)

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Barcode Scanners/Cameras

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In-Motion Scales

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Other Electrical Components

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No issues need to be addressed this time.

RECOMMENDATIONS