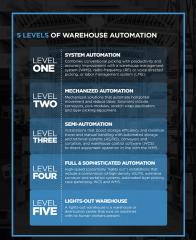# WAREHOUSE AUTOMATION
BY THE NUMBERS

Automation is the fastest-growing category of supply chain innovations that significantly improve efficiencies and lower overall costs. It helps improve workflow, boost throughput, and optimize space. When you are ready to take the next step to move forward with automation, keep in mind this important data.

5 LEVELS OF WAREHOUSE AUTOMATION

LEVEL ONE
SYSTEM AUTOMATION
Combines conventional picking with productivity and accuracy improvement with a warehouse management system (WMS), radio-frequency (RF) or voice directed picking, or labor management system (LMS).

LEVEL TWO
MECHANIZED AUTOMATION
Mechanized solutions that automate horizontal movement and reduce labor. Solutions include conveyors, pick modules, stretch wrap applicators and layer picking equipment.

LEVEL THREE
SEMI-AUTOMATION
Installations that boost storage efficiency and minimize travel and manual handling with automated storage and retrieval systems (AS/RS), conveyors and sortation, and warehouse control software (WCS) to direct equipment operation in line with the WMS.

LEVEL FOUR
FULL & SOPHISTICATED AUTOMATION
High-speed (potentially "lights out") installations that include a combination of high-density AS/RS, extensive conveyor and sortation systems, automated layer picking, case palletizing, WCS and WMS.

LEVEL FIVE
LIGHTS-OUT WAREHOUSE
A lights-out warehouse is a warehouse or distribution center that runs on machines with no human workers present.

5 LEVELS OF WAREHOUSE AUTOMATION

9 SIGNS YOU MAY BE READY TO AUTOMATE

1. Your current processes are too labor and time-intensive

2. Order fulfillment is inaccurate with high rates of order errors, returns, or delays

3. Overstocking or running out of stock because inventory level counts are rarely correct

4. Inefficient utilization of warehouse employees or increased headcount to check and recheck order accuracy

5. You have paper-based processes

6. Your legacy solution requires too much upkeep

7. You are misplacing inventory or losing inventory after it is received

8. There is low morale among warehouse workers and managers

9. Your customers are unhappy

9 SIGNS YOU MAY BE READY TO AUTOMATE

3 STEPS TO ASSESS AUTOMATION

Once you decide your business can benefit from automated systems and processes, it is important to build a plan based on your unique needs. When deciding to invest in automation for any warehousing and distribution operation, start with these three steps.

STEP 1
ANALYZE DESIGN AND DATA
Analyze existing assets, such as the existing design and framework of the warehouse. This is necessary for determining the requirements of the operation.

STEP 2
DETERMINE YOUR APPROACH
Determine which parts of the operation are best suited for automation and determine what to tackle first.

STEP 3
JUSTIFY COSTS
After examining the metrics and customer data, outline the benefits of a design that generates the maximum savings.

3 STEPS TO ASSESS AUTOMATION

7 KEY QUESTIONS TO ASK WHEN CONSIDERING AN AGV

Identifying the most beneficial task to automate is the first step when considering AGV implementation. Asking these key questions can help you determine where to focus your efforts and which equipment and systems to invest in.

- What is the **load/unit**?
- What is the **volume** or **throughput** of the product movement?
- What are the **temperature conditions**?
- How many **shifts** are you currently running?
- What is the **labor** content?
- What are the **space** requirements?
- What type of **Warehouse Management Software** do you have?

7 KEY QUESTIONS TO ASK WHEN CONSIDERING AN AGV

Call 832.376.5305 to speak with an EQ SOLUTIONS™ expert today and get a free site evaluation with recommendations on how automation could benefit your operations.

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