



The Flexible and Scalable WMS

# Tips for Getting Started with a Warehouse Management System (WMS)

A little planning goes a long way



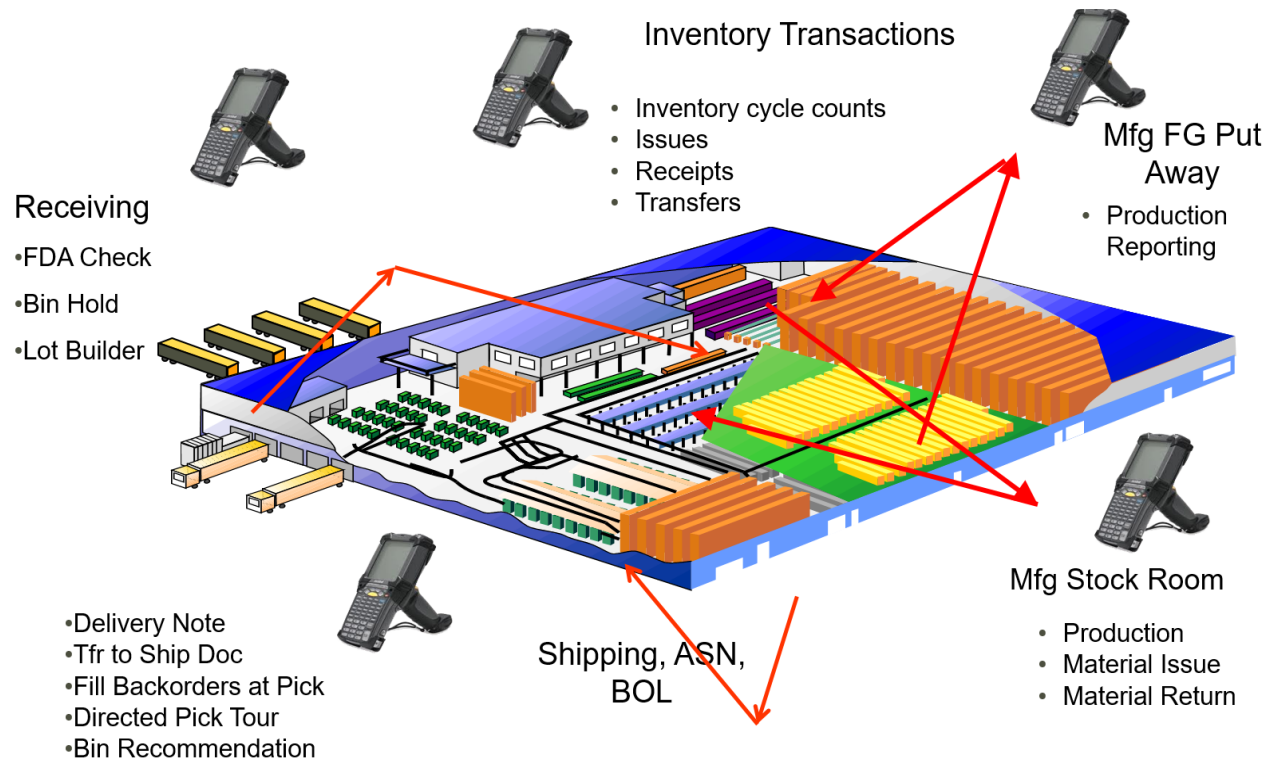
# About WiSys

- ❖ 15 years experience delivering WMS Solutions
- ❖ Over 550 businesses have relied on WiSys
- ❖ Our solutions are purpose-built to fit unique business processes
- ❖ We integrate directly with Macola Software

# Top 5 Things to Consider When Getting Started with WMS

- 1) Warehouse Organization
- 2) Marking
- 3) Wireless Infrastructure
- 4) Mobile Device Selection
- 5) Printing Options

# 1) Warehouse Organization



- Think about how raw materials and finished goods flow through the facility from receiving to shipping
- Consider each touch point in that workflow and where the business system transactions need to occur
- Consider space available in each key area
- Maximize square footage - are ceilings high enough for pallet racking or is floor storage the only option?

# 1) Warehouse Organization – Importance of Bins

A Bin is the smallest available unit of space in a warehouse. It describes the position in the warehouse where goods are stored.

Benefits of Bins	Common Bin Concerns
✓ Warehouse Organization	✗ Takes away the freedom to just put items anywhere
✓ You know the actual quantities of what's in inventory and where	✗ You must do more transactions to keep the system up to date
✓ Validate your inventory more quickly when counting at the bin level	✗ It takes more time to do the transactions
✓ Direction	✗ Users have to write down more info

**Using a WMS  
eliminates  
these concerns!**



# 1) Warehouse Organization – Importance of Bins

For a WMS to be successful, a logical numbering scheme is needed.

A common pallet racking scheme noted in this picture is:

Aisle – Bay– Level – Bin

Consider making the floor bin a picking bin for each item. Floor bins can be replenished from positions directly above.

A common floor scheme is:

Aisle – Bay – Bin

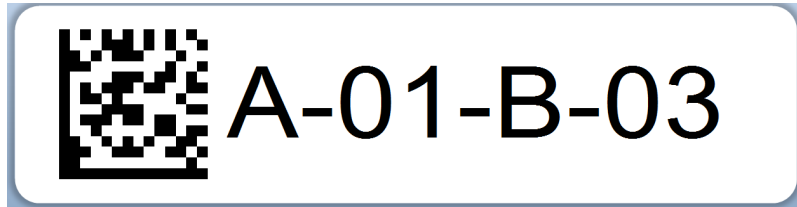
Lines can be painted on the floor to denote each bin location.

A WMS can direct pickers through the aisles in logical sequence to maximize efficiency.



## 2) Marking

Marking is a barcoded visual representation of the bin numbering scheme as seen in the examples below.



By barcoding bins, transactions can be done using a handheld scanner for data entry. This maximizes productivity and improves data entry accuracy. It also minimizes opportunities for mistakes.



When deciding on placement of bin barcodes, consider how employees will interact with the inventory (fork truck, cherry picker, pallet jack, picking cart, etc.). How they interact with inventory will determine what type of equipment is needed (see section 4 about mobile device selection) as well as where scanning needs to occur. Considering these things will help with placement of the barcoded bin labels.

Placing the barcode at the exact inventory location will reduce scan errors. The picture on the left with five barcodes stacked on top of each other denotes all five levels of pallet racking in one spot at eye level. This is an example where an employee can put inventory away in level five and accidentally scan the barcode for level four.

### 3) Wireless Infrastructure

A wireless infrastructure in the facility is necessary for transactions with mobile devices.

Wireless networks require careful planning and execution in order to achieve optimal results.

This is not an area to cut corners in budgeting.

A wireless site survey is strongly recommended. The survey will provide:

- Accurate count of access points required to provide sufficient coverage throughout the facility
- Detailed map with recommendations of exact mounting locations (see Image 1).
- Provide recommendations of specific access point hardware and antenna accessories best suited to needs
- Ensure up to 40% redundancy in coverage (see Image 2)
- Identify potential barriers and other existing conditions which would limit the effectiveness of devices

Image 1

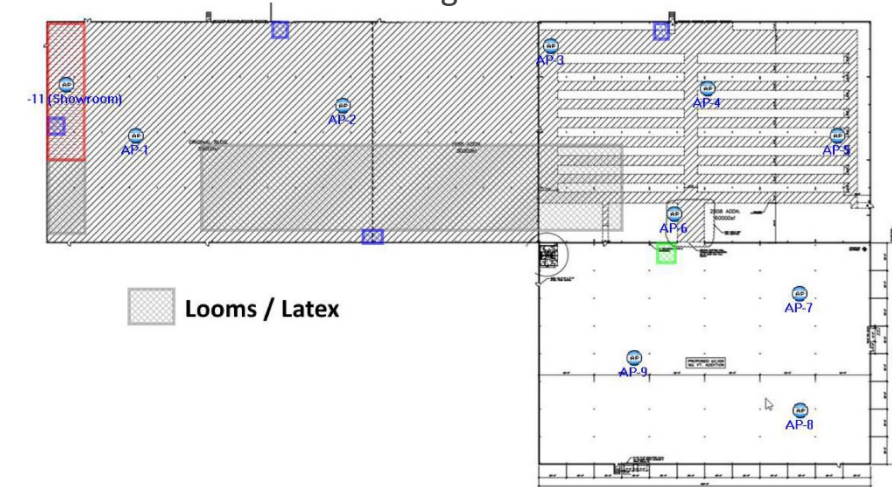
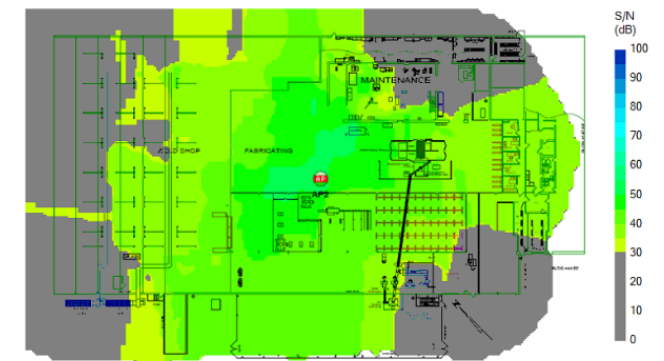


Image 2





## 4) Mobile Device Selection

These are some of the most common mobile barcode scanning devices.

When choosing a mobile device, consider the type of transactions required and the person performing the transactions.

### Handheld with pistol grip

Long Range vs. Short Range scanning. Long is up to 45', Standard is up to 15'. Extended range is most common as it supports 3" to 70'.

1D vs. 2D barcode reader. 2D is becoming very popular and reads both 1D and 2D barcode formats.

### Wearable

Ring finger scanner allows for both hands to be free at all times without laying the device down

### Tablet

Not as rugged. Can be as expensive as devices above to make rugged. Ideal for certain applications.

Handheld with pistol grip



Wearable



Tablet



## 5) Printing Options

When choosing a printer, it is important to consider the type of printing you are doing and by whom it is being done.



Think about locations such as receiving, production and shipping. Identify the quantity of printers by location and think about how the users will interact with the documents being printed:

- Determine if multiple users per printer can cause mixed up labels or documents
- One printer per production line

Determine the volume of labels or documents required and size the printer(s) accordingly.

Decide if mobile printing is needed.

- Packing in the aisles
- Print and apply on demand at the time of a transaction

Network printers are always recommend.

Ready to learn more about how WiSys can help?

Contact us today!

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