Course Design Information	
Course Code	WHS100
Course Title	Warehouse Logistics
Course Owner(s)	Kathee, Scott, David
Course Developer	Patrick
Target Audience	Primary: All warehouse employees Secondary: All Company employees
Prerequisite Course(s)	None
Classroom Duration	2 hours
Document Version	Final

Course Overview	
Purpose	This course is intended to provide participants with an overview of Company warehouse logistics and major warehouse management processes. The course describes the general layout of the warehouse and how the inbound and outbound processes, inventory maintenance, and warehouse office procedures support the delivery of the right product, to the right place at the right time.
Objectives	Upon completing this course participants will be able to: • Define important terms and concepts • Explain the benefits of the Company warehouse management processes and systems • Discuss the positive impact on our customers of the effective execution of warehouse management procedures • Describe the physical warehouse layout, zones, numbering schemes, travel paths, and product storage types • Identify primary and secondary systems supporting the major warehouse processes and their touch points across the business • Describe the inbound processing workflow, systems, and roles • Describe the inventory maintenance procedures used to control inventory within the warehouse • Describe the outbound processing workflow, systems, and roles • Explain how warehouse office procedures support the inbound, outbound and inventory maintenance procedures

Module 1 – Company Warehouse Overview

Upon completion of this module participants will be able to:

- Define important terms and concepts
- Explain the benefits of the Company warehouse management processes and systems
- Discuss the positive impact on our customers of the effective execution of warehouse management procedures
- Describe the physical warehouse layout, zones, numbering schemes, travel paths, and product storage types
- Identify the major warehouse processes and procedures and define their purpose within the warehouse
- Identify primary and secondary systems supporting the major warehouse processes and their touch points across the business

The following topics are covered in this module:

Define important terms and concepts:
Defines the meaning of business and system terminology.

- Inbound processing
- Outbound processing
- Warehouse Inventory Maintenance
- Warehouse Office Management
- SX.enterprise
- TWL Online
- TWL RF
- Warehousing Standards
- Item
- Logistics
- Logistics Network
- Zone
- Velocity

Explain the benefits of the Company warehouse management processes and systems:
Provides a consistent, proven and repeatable method for performing warehouse procedures which results in more efficient operational activities and increased profitability for Company. Learning and performing these processes will:

- Increase warehouse operational efficiencies and reduce Company operating costs
- Increase employee productivity by providing a consistent method for training and cross-training warehouse associates
- Communicate best demonstrated practices allowing for quicker enhancements to our existing processes
- Accurately manage inventory movements and item storage within the warehouse

Discuss the positive impact on our customers of the effective execution of warehouse management procedures:
The right product, delivered at the right time and at the right price are key values that customers evaluate when determining whether to partner with Company for their utilities needs. Learning and performing these processes will increase our:

- Order fulfillment accuracy and speed of delivery to the customer
- In-stock materials, decreasing backorder item processing and lost-sales
- Market share by allowing Company to provide highly competitive pricing to our customers

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Describe the physical warehouse layout, zones, numbering schemes, travel paths and product storage:
Discusses the design of the Company warehouse and touches on the concept of system driven item movements.

- Explain the Company logistics network
- Explain that the warehouse is divided into multiple numbered zones
- Describe product and storage types
- Identify the numbering scheme used in the warehouse and yard
- Describe the concepts of the travel paths for item putaway and picking

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Identify the major warehouse processes and procedures and define their purpose within the warehouse:
Identifies major warehouse processes and their respective activities. Describes the purpose and connections of warehouse areas.

- Inbound Processing
  - Offloading, receiving, putaway, returns processing
- Inventory Maintenance
  - Annual physical inventory, cycle counts, item maintenance
- Outbound Processing
  - Picking, staging, auditing, packing, shipping
- Back Office
  - Receiving audit, personnel management, troubleshooting, inventory discrepancy reconciliation, damaged items, freight claims

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Identify primary and secondary systems supporting the major warehouse processes and their touch points across the business:
Describes the systems utilized by Company and how they are utilized within the warehouse processes.

- SX.enterprise
  - Company enterprise resource planning system which is used to manage all areas of the Company business (finance, Inventory, Human Resources, etc)
- TWL Online
  - Company warehouse management system which tracks the location and quantities of all items within the warehouse
- TWL RF
  - Wireless communication device integrated with the TWL Online system which provides efficiencies across all warehouse procedures for item movements within the warehouse
- Company Quality Management System (CQMS)
  - Incident control module which is used to resolve customer issues
- Company Automated Logistics Operations (CALO)
  - Automated GPS truck routing system which is used to optimize truck loading, routing, and delivery fulfillment
- Company Policies & Procedures Guide (CPP Guide)
  - Online reference tool documenting Company policies, procedures, and processes that must be followed

Module 2 – Inbound Processing

Upon completion of this module participants will be able to:

- Define important terms and concepts
- Describe the inbound processing workflow
- Identify the inbound roles
- Discuss the systems used to perform the work and their touch points across the warehouse and Company

The following topics are covered in this module:

Define important terms and concepts:
Defines the meaning of business and system terminology.

- Warehouse transfer
- Purchase order
- Customer return
- Audit

Describe the inbound processing workflow:
Provide a visual and animated diagram of the inbound activities within the warehouse.

- Three ways items are received into the warehouse are:
  - Warehouse transfer – stock transport order in SX.enterprise
  - Vendor purchase order – receive against the purchase order in SX.enterprise
  - Customer return – receive against the return merchandise order in SX.enterprise
- All items are offloaded into the staging area
- All items received are accounted for and quantities verified
  - Receive items that do not have a current warehouse location (new and non-stock items)
- All items are putaway in the system driven location within the warehouse rack

Identify the inbound roles:
Describes the warehouse roles associated with inbound processing activities.

- Receiver is responsible for:
  - Offloading trucks
  - Verifying product received against warehouse transfer, purchase order, or return merchandise order
  - Checking for and reporting goods damaged in transit
  - Checking product into inventory
- Putaway is responsible for:
  - Identifying, locating, and putting away product
  - Entering the location and quantity putaway into TWL RF

Discuss the systems used to perform the work and their touch points across the warehouse and Company:
Describes the systems and their cross-functional touch points associated with inbound activities.

- Receiving
  - Once an item is received it is tracked in the TWL warehouse management system and the SX.enterprise inventory management system
  - Increases Company inventory levels; impact on financial general ledger
  - The item is now available to promise
- Putaway
  - The item is now available to fulfill sales orders and warehouse transfers

Module 3 – Warehouse Inventory Maintenance

Upon completion of this module participants will be able to:

- Define important terms and concepts
- Describe the warehouse inventory maintenance procedures
- Identify the warehouse inventory maintenance roles
- Discuss the systems used to perform the work and their touch points across the warehouse and Company

The following topics are covered in this module:

Define important terms and concepts:
Defines the meaning of business and system terminology.

- Annual physical inventory
- Cycle counts
- Replenishment

Describe the warehouse inventory maintenance procedures:
Describes the activities performed for warehouse inventory maintenance.

- Annual physical inventory
  - A yearly inventory reconciliation of all warehouse inventory
- Cycle counts
  - Inventory reconciliations are performed daily based on the turnover levels of specific items (fast/slow)
- Order shipment verification
  - Verification of item counts pulled for order shipments and warehouse transfers
- Item maintenance
  - Adjustments to inventory levels
  - Relocation of seasonal items
  - Replenishment of items from overstock and reserve locations
  - Adjustments to inventory based on item velocity and times picked

Identify the warehouse inventory maintenance roles:
Describes the warehouse roles associated with warehouse inventory maintenance procedures.

- Inventory Control Analysts are responsible for:
  - Maintaining accurate warehouse inventories in SX.enterprise
  - Adjusting inventories for items found damaged or discrepancies
  - Determining the relocation of items in the warehouse
  - Verifying item counts pulled for orders

Discuss the systems used to perform the work and their touch points across the warehouse and Company:
Describes the systems and the touch points associated with inventory maintenance activities.

- Annual physical inventory and cycle counts
  - Managing inventory records in the SX.enterprise inventory management system
  - Processing by providing accurate information of inventory to customers
- Item maintenance is driven by the TWL warehouse management system
  - Tracking the relocation and movement of items in the warehouse
  - Maintaining inventory level adjustments

Module 4 – Outbound Processing

Upon completion of this module participants will be able to:

- Define important terms and concepts
- Describe the outbound processing workflow
- Identify the outbound roles
- Discuss the systems used to perform the work and their touch points across the warehouse and Company

The following topics are covered in this module:

Define important terms and concepts:
Defines the meaning of business and system terminology.

- Will-call
- Sales orders
- Wave
- Pick Ticket

Describe the outbound processing workflow:
Provides a visual and animated diagram of the outbound activities within the warehouse.

- Three ways orders are shipped out of the warehouse are:
  o Sales order
  o Will-call order
  o Warehouse transfer
- All items for an order are picked from warehouse locations and placed in the order shipment staging area
- All items are verified and processed for each order
- Orders are packaged for shipment
- Orders are placed on the appropriate truck and shipped to customers or other Company warehouses or picked up directly from the warehouse by the customer

Identify the outbound roles:
Describes the warehouse roles associated with outbound processing activities.

- Pickers are responsible for:
  o Locating, identifying, and picking all items on an order
  o Staging the orders for shipment
- Shipping associates are responsible for:
  o Verifying all items picked for an order
  o Packing orders for shipment
  o Loading order onto the appropriate trucks

Discuss the systems used to perform the work and their touch points across the warehouse and Company:
Describes the systems and the touch points associated with outbound activities.

- Picking
  o Once an item is picked, it is committed to a specific order in the TWL warehouse management system and the item and quantity is no longer available to fulfill other customer orders
- Packing
  o Packing labels are generated from the TWL warehouse management system
- Shipping
  o Once an order is shipped, the item inventory levels are decreased in the SX.enterprise inventory management system
  o A financial document is created for Accounts Receivable in SX.enterprise
  o A sales invoice is created and sent to the customer

Module 5 – Warehouse Office Management

Upon completion of this module participants will be able to:

- Define important terms and concepts
- Describe the warehouse office management procedures
- Identify the warehouse office management roles
- Discuss the systems used to perform the work and their touch points across the warehouse and COMPANY

The following topics are covered in this module:

Define important terms and concepts:
Defines the meaning of business and system terminology.

- Freight claim
- Inventory reconciliation

Describe the warehouse office management procedures:
Describes the activities which support the warehouse processes and functions.

- Administration
  - o Personnel management
- Inbound
  - o Receiving audits
  - o Troubleshooting
  - o Freight claims
- Inventory Maintenance
  - o Inventory reconciliation
  - o Damaged items
- Outbound
  - o Troubleshooting
  - o Freight approval

Identify the warehouse office management roles:
Describes the warehouse roles associated with warehouse office management procedures.

- Warehouse office management is responsible for:
  - o Opening and closing the warehouse
  - o Resolving warehouse exceptions
  - o Approving outbound freight
  - o End of day warehouse reporting
  - o Warehouse employee audit and performance reporting

Discuss the systems used to perform the work and their touch points across the warehouse and Company:
Describes the systems and the touch points associated with back office management activities.

- Receiving audits and inventory discrepancies
  - o Adjustment of inventory levels in the SX.enterprise inventory management system