





Transforming the skill landscape



# Participant Handbook

Sector Logistics

Sub-Sector

Warehousing (Storage & Packaging) Occupation

**Documentation and Reporting** 

Reference ID: LSC/Q2306, Version 3.0 NSQF Level 3

# **Data Feeder - Warehouse**



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#### COMPLIANCE TO QUALIFICATION PACK - NATIONAL OCCUPATIONAL STANDARDS

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Cynis Guzlen

Authorized Signatory (Logistic Sector Skill Council of India)

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# - About this Book

This Participant Handbook is designed to enable training for the Data Feeder Qualification Pack (QP). Each National Occupational standard (NOS) is covered across Units.

After reading this book one would be able to understand all the requirements and various processes to be followed by Data Feeder. Insights about various activities performed by a Data Feeder have been covered in this book.

#### Key characteristics of this handbook:

- (i) It discusses the concept of Data Feeder in an easy to learn manner.
- (ii) It presents Data Feeder concepts in interactive and professional way.
- (iii) It gives opportunity for learners to foresee themselves in a professional set-up.

Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS. The symbols used in this book are described below.



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#### 7. Employability Skills -30 hours (DGT/VSQ/N0101)

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# Logistics Skills Council

# 1. Introduction to Data Feeder

- Unit 1.1 Logistics and Supply Chain Management
- Unit 1.2 Sub sectors in Logistics Space Key Activities
- Unit 1.3 Introduction to Warehousing
- Unit 1.4- Warehouse Organization Structure Roles and Responsibilities
- Unit 1.5 Equipment used in a Warehouse
- Unit 1.6 Documentation in Warehousing

# -Key Learning Outcomes



At the end of this module, participant will be able to:

- 1. Classify the components of Supply Chain and Logistics sector
- 2. Detail the various sub-sectors and the opportunities in them
- 3. Identify various activities in warehousing, courier, port yard, land, ship and air transportation
- 4. Explain job roles in warehousing
- 5. Detail your job role as data feeder warehouse and its interface with other job roles
- 6. Describe the various MHEs and equipment used in warehouse
- 7. Discuss the documentation requirements in warehouse

# **UNIT 1.1: Logistics and Supply Chain Management**

# Unit Objectives



At the end of this unit, participant will be able to:

- 1. Define Supply Chain Management
- 2. Define Logistics Management
- 3. Explain the important flows in Supply Chain Management

## 1.1.1 Supply Chain and Logistics Management

"Supply Chain is like nature; it is all around us." Dave Waters.

We start our day with a toothpaste and end with a glass of milk. Everything that we consume throughout the day has underlying Supply Chain. Raw material is procured and transported to the factories to be converted into finished products. Finished products are then transported and warehoused at various locations till they reach our home. Supply chain is a "Chain" of organizations, activities, people who manage flow of "material" in the form of Raw Material, Semi-Finished-Goods and Finished Goods across various "entities" like Suppliers, Manufacturers, Warehouses, Distributors and Retailers to move goods from point of origin to point of consumption.



Fig 1.1.1 Supply Chain Management

SCM is also called the art of management of providing the Right Product, At the Right Time, at the Right Place, at the Right Cost to the Customer in the Right Quantity and in the Right Quality. Supply Chain Management is defined as *"The movement of materials as they flow from their source to the end customer. Includes purchasing, manufacturing, warehousing, transportation, demand*  &supply planning and inventory management. It is made up of people, activities, information and resources involved in moving a product from its supplier to customer."

Supply Chain Council SCOR has given the following lucid depiction of Supply Chain.



Fig 1.1.2 Components of Supply Chain Management

As per SCOR , the five important components of Supply Chain Management are -

PLAN - SOURCE- MAKE- DELIVER- RETURN sourcing Raw Material.

SOURCE: This is the step where we mus

**PLAN:** This stage addresses how customer demand will be met through the supply. As can be seen in the picture, Plan function interacts with Customer to get demand forecast. This gets translated into Supply Plan and communicated to the Supplier for identify the various possible vendors for the raw materials required for the manufacturing. Just identifying suppliers will not be enough. It should also include the availability of products, the cost involved, ease in transporting goods and even the payment terms.

**MAKE:** The third component involves designing, producing, testing, packaging and then synchronizing all these activities for delivery. The raw material from suppliers is transformed into finished goods for the customer.

**DELIVER:** This stage involves delivering the right product at the right place at the right time in the right quantity and at the right price. Here the supply chain transports the Finished Goods from Factory to the Warehouses, Warehouse to Distributors, Distributors to Retailers and finally Retailers to final consumer.

**RETURN:** This is the latest stage in supply chain, which is becoming increasingly important. Here the defective, damaged or even the rejected goods are returned by the customer. The supply chain must respond to the customer quickly and return the goods by optimizing the cost.

#### Logistics Management

Logistics management is the part of supply chain management that plans, implements, and controls the efficient, effective forward, and reverse flow and storage of goods, services, and related information between point of origin and point of consumption to meet customer's requirements. Logistics management includes activities such as warehousing, inventory control, and transportation management. Logistics management mainly focuses on the transportation and storage of goods within the supply chain.

Logistics management comprises two main activities:

<u>Inbound logistics</u>: Surrounds the activities related to procurement, storage and transportation of Raw Materials.

**Outbound logistics**: Involves the storage and delivery of final products to customers.

#### How is it different from Supply Chain Management?

SCM is an overarching concept, and it includes Logistics Management as one of its components. Logistics mainly deals with Warehousing, Inventory Management, Transportation, Import and Export Management, Track and Trace and related processes.

SCM is a wider concept and is a tool to create competitive advantage for any company. Beside Logistics it carries various other functions like Supply Chain Planning and Strategy, Forecasting and Demand Planning, Production and Supply Planning, Procurement and Vendor Management, Collaborations and coordination with Upstream and Downstream Partners, Information flow Management.

# **UNIT 1.2: Sub sectors in Logistics Space - Key Activities**

# Unit Objectives



#### At the end of this unit, participant will be able to:

- 1. Explain the various sub sectors in Logistics
- 2. Explain various modes of Transportation
- 3. Define Warehouse

# **1.2.1 Sub-Sectors of logistics**

As seen in the previous section, Transportation and Warehousing are the two key activities in Logistics Management.

Transportation can further be by various modes – Air, Water and Land.



Fig 1.2.1 Transportation Activities

Transportation is the lifeline for any country and keeps its economy going. Transportation can be international also when goods are exchanged between countries.

#### **Air Transportation**

Air transport is the fastest means of transportation. It reduces the distances by minimizing the travel time. Air transport acts as a key enabler in achieving economic progress and growth. Air transport provides vital connectivity within the country and allows the integrations of any country the global economy. It helps generate trade, promote tourism, and create employment opportunities. Air Transportation is most suitable for high value cargo which are susceptible to faster transit times. Air transport is normally used for smaller cargoes, though even big shipments are moved by air depending on its urgency and criticality.

The main activities it undergoes can be divided as two

- 1) Activities at the point of origin
- 2) Activities at point of discharge

**Point of origin:** Once the cargo is ready for shipment one most important aspect is the packing of cargo. Packing should be according to the cargo and designed for its mode and duration of transportation.

The packed cargo is taken to the airport for the customs formalities to be completed and after successful completion it is handed over to respective airlines. Airline does the loading of the cargo as per their loading plan. Each cargo will be accompanied by an individual set of documents which will contain all details of this cargo.

**Point of Destination:** On arrival cargo is handed over to the customs authority who in turn will hand over the cargo to respective buyers after customs formalities are done. Airlines facilitate this movement by giving necessary assistance in taking delivery of the cargo.



Fig 1.2.2 Air Transportation Activities

#### Water Transportation

Among all modes of transportation, water is the cheapest mode and accounts for the largest share of the international cargo movement. Also known as Maritime transportation, water transportation is movement of cargo and passengers over Water. Among all modes of Transport, Water is the most environment friendly with least usage of fuel and emissions. Further there are no highways to be built, Rail Tracks or Airports to be laid to use this lode. Water is naturally available, and we just have to float over it.

Water Transportation can further be divided among Ocean Transportation, Coastal Shipping and Inland waterways.

<u>Ocean Transportation</u>: This is the transportation over long distance across seas and oceans. They are realized through ships and Vessels and mainly used for international Trade. They can further be classified as Bulk and Containerized.

- Bulk: In case of Bulk Ocean movement, bulk commodities like Ore, Gas, Crude Oil, Chemicals, Steel are stored in Bulk in the vessel and moved over long distances.
- Containerized Transportation: In this case, cargo is stored in standardized containers and containers are moved using specialized container carrying vessels. This mode of

transportation has mode very large progress in last 50 years and now accounting for one of the largest shares of international transportation.

<u>**Coastal Shipping</u>**: Also known as short Sea transportation, this is a transportation within a country using its Coastal lines. For example, movement from Kolkata to Chennai using the Bay of Bengal or from Mumbai to Cochin using Arabian Sea. This can again be in Bulk or containerized. This is mainly used for low value commodities where the cost of moving by Road or Rail is much higher.</u>

<u>Inland Waterways</u>: This is the movement of cargo using Rivers and Canals. Wherever this mode is available is the most economical mode of transportation. India has 111 official National Waterways and out of them two on Ganga and Brahmaputra are the longest.

**PORT AND PORT YARD**: Cargoes are received at the Sea port. This is the place where the cargo is handed over to the shipping lines, loaded on to the vessel after completing all customs formalities. At the port of destination, the buyer can receive their cargoes from the port after completing all necessary formalities.

In land locked destinations or due to any other reasons the authorities can designate a separate place for handling of cargoes. These places will be known as Internal Container Depot, Container Freight Station or just a Port Yard. There port yards also undertake all activities of a port.

#### Land Transport

Land transport is the transport or movement of people and goods from one location to another location on land. The two main forms of land transport are rail transport and road transport.

<u>Road Transportation</u>: As the name suggests, it is the transportation using Roads. It is used for transportation of goods and people. Cargo can be transported using Roads by Trucks, Trailers, Vans, Auto, Bikes and even Animals. Various classes of Road exist from a local two-lane to State Highways to National Highways to Freeways. Modern Roads carry lanes and signages to manage the traffic. There are trucking companies who mainly specialize in Road Transportation.

<u>**Rail Transportation**</u>: Rail transport is a means of transporting passengers and goods on wheeled vehicles running on rails, which are located on tracks. In contrast to road transport, where vehicles run on a prepared flat surface, rail vehicles (rolling stock) are directionally guided by the tracks on which they run. Rail is a very strong means of Mass Transportation, both cargo and passenger.

#### Warehousing

A very important component of Logistics Management is Warehousing. Warehouse are commercial building used by Manufacturers and Traders to store Raw Material, Finished Goods, Work In Process Inventory or Spares till they are either consumed or sold. Warehouse provides the buffer between Demand and Supply. Wheat is harvested in April but consumed throughout the year. This is only possible through storage in the warehouses. There are other where demand is once a year and supply/production throughout the year. Winter clothes, Air conditioners, Diwali goods are required only during a time period but produced throughout the year. This is again possible only through warehouses which house them till they are sold.

# **UNIT 1.3: Introduction to Warehousing**

# Unit Objectives



#### At the end of this unit, participant will be able to:

- 1. Explain the role of a Warehouse in Supply Chain
- List the various activities carried inside a warehouse

## 1.3.1 Warehouse Activities

Warehouses play a pivotal role in supply chain management. As the word indicates Supply Chain consists of various links and warehouse is one of its strongest links. As mentioned earlier the biggest challenge of Supply Chain is the ever-widening gap between the demand and the supply. Warehouse plays the role of a stabilizer during these fluctuations. Warehouse can be called as a place for everything and everything in its place.

Some of the major roles of Warehouse are:

- 1. Facilitating regular and constant flow of goods: This is doneby balancing between the demands forecast and supply constraints.
- 2. Provide safe custody of goods: In supply chain goods are always exposed to various risks. A warehouse can mitigate these risks by playing the role of an intermediary.
- 3. Consolidation of cargo: Volume always provides cost benefit. The goods can be procured from various sources. Warehouse is a place where these goods can be stored for maximization of various cost benefits.
- 4. Break bulk point: While consolidation can be one advantage, then even breaking the bulk can also provide much benefit. In this case bigger shipments can be customized thus making it easier for the supplier and the customer.
- 5. Value added services: The strength of supply chain is in adding value at every step in the process. It is difficult to add value while the goods are in motion or in transit. Warehouse is an ideal place for many value additions for the goods.
- 6. Managing seasonal supplies: This is one big challenge many of the stake holders face. Seasonal goods demand many facilities which will vary from season to season. A warehouse can act as a transshipment point where all such facilities can be tailor made.
- 7. Product Mixing: Product mixing gives great cost benefit to the supplier who in turn can pass on this benefit to the end user. Warehouse is a place where different products can be gathered and stored. Thus, it becomes the ideal place for the companies to mix their products for maximization of profits.
- 8. Defining the time to market: Markets always demand the right product at right place in right quantity for the right price. The unreliable production, unpredictable transits and unforeseen constraints during movement of goods makes this a difficult task. However, this can be easily achieved by holding the right amount of inventory at the warehouse.
- 9. Specialized Services: Warehouse also provides many specialized services like Customs bonding and so on.



#### Fig 1.3.1 Warehouse Activities

After goods are received and before goods are shipped, a series of internal warehouse activities take place to ensure an effective flow of inventories (goods) throughout the warehouse and to organize and maintain company inventories. The following list includes the activities found in most of the warehouses -

- ✓ Receiving Schedule Transporter, Unload Vehicle, Inspect for damage
- Putaway Identify Bin Location, Move Products, Update Records
- ✓ Storage Storage location Logic. Equipment for storage, Cycle and Physical Count
- ✓ Order Picking- Customer Order Processing. Pick List generation, Location identification, Picking
- Shipping Schedule Transporter, Load Vehicle, Bill of Transport, Record Update

# **UNIT 1.4: Warehouse Organization Structure - Roles and** Responsibilities

# - Unit Objectives 🎯



#### At the end of this unit, participant will be able to:

- 1. Elaborate the various job roles which exist inside a Warehouse
- 2. Describe the roles and responsibility of a Warehouse Data feeder
- 3. Explain his interface with other job roles

# 1.4.1 Warehouse People Management

Warehouse is all about the people who manage it. Staffing the warehouse with right number or people with right set of skills will ensure the most efficient and effective warehouse operations. Following is a typical organization chart within a warehouse:



Fig 1.4.1 The organization chart of a warehouse

The following section discusses in brief the job description for the various positions inside the warehouse.

#### A. Warehouse Manager (Site In charge)

Key Objective of this position: This position is focused on the management of Warehouse Operations with "Delivery of Promise".

#### B. Warehouse Inventory & Transport Manager

Key Objective of this position: This position is responsible for managing all outbound transportation from the warehouse to the delivery location

#### C. Inventory, Materials Manager

Key Objective of this position: This position is responsible for all the inventory inside the warehouse. This position needs to ensure that inventory is properly stacked, counted and always matching with system stock.

#### D. Data Feeder-warehouse

**Key Objective of this position**: This position operates on the computer and is responsible for system entries and MIS of the warehouse operations including operating WMS. **Data Feeder - Warehouse** Data Feeder Warehouse, in the Logistics industry is also known as system executive, data analyst, data entry operator and system analyst. Individuals in this role need electronically process all orders and provide database management support for warehouse operations. Responsibilities include logging orders, maintaining reports, generating pick lists and schedules.

#### E. Warehouse Picker

**Key objective of this position**: Warehouse Picker in the Logistics industry is also known as Picker, Floor Staff, Warehouse Associate. Individuals in this role need to pick items from storage. Individuals are responsible for picking items according to an inventory list. Additional Participant Responsibilities could at times include loading and unloading cargo, labeling, re-packaging items and documenting cargo that has been moved. The difference in tasks performed under the picker role thus varies according to the volume of operations, however the core function of the role is to pick items from storage and ensure they are ready to be sent out.

#### F. <u>Warehouse Packer</u>

**Key objective of this position**: Warehouse Packer in the Logistics industry is also known asPacker, Floor Staff, Warehouse Associate. Individuals in this role need to pack items that have been picked or require binning. Individuals are responsible for packing items that require additional pre-packing or outbound packaging. Additional responsibilities could at times include loading and unloading cargo, labeling, re-packaging items and documenting cargo that has been moved. The difference in tasks performed under the Packer role thus varies according to the volume of operations, however the core function of the role is to pack items according to the nature of the product either for storage or transportation.

#### G. Warehouse Binner

**Key objective of this position :** Warehouse Binner in the Logistics industry is also known as Binner, Floor Staff, Warehouse Associate. Individuals in this role need to bin items to put away into storage. Individuals are responsible for binning items according to an inventory list. Additional responsibilities could at times include moving cargo, repackaging items and documenting cargo that has been moved. The difference in tasks performed under the Binner role thus varies according to the volume of operations, however the core function of the role is to bin items and put away into storage

#### H. Loader Unloader

**Key objective of this position**: Loader/Unloader in the Logistics industry is also known as Loader, Transport Associate. Individuals in this role need to identify goods based on the product code, unload them from the truck onto the inbound area and move them to the staging area. A similar sequence is done for loading. Their responsibilities include identifying damaged goods and moving goods safely

# **UNIT1.5: Equipment used in a Warehouse**

# Unit Objectives



#### At the end of this unit, participant will be able to:

- 1. Explain the classification of Equipment used in the Warehouse
- 2. Identify different types of Material, Storage and Safety Handling Equipment and its uses

# **1.5.1 Warehouse Handling Equipment**

Warehouse equipment are used for storage, movement, protection and control of material and people throughout the end to end process of the Warehouse. Materials handling includes moving, packaging, and storing all the materials used inside the warehouse. The different kinds of equipment which are used in a warehouse can be broadly classified into three categories, viz, storing equipment, material handling equipment and safety equipment. A judicious selection of different store equipment is a key to the successful operation of a storeroom.

Forklifts, Reach stackers, Pallet Trucks, Heavy duty racks, Slotted Angle Racks, Cranes, Hoists, Hand Rails, Bollards, Wire Partitions are all example of Warehouse Handling Equipment.

Warehouse equipment are used to increase output, control costs, and maximize productivity. A well designed handling system attempts to achieve the following:

- Improve the efficiency of the warehouse by doing more with less efforts.
- Allow handling of several types of goods which cannot be manually handled or lifted. •
- Cut down on manual efforts and this labor costs. •
- Reduce potential damage to material during storage and handling.
- Maximize the utilization of the cube space inside the warehouse. •
- Minimize the accidents inside the warehouse. •
- Reduce the overall cost of operations of the warehouse. •
- Improve service levels of the warehouse. •

Following are the way Warehouse Equipment may be classified:

- Storage equipment
- Material Handling Equipment
- Safety equipment

Name	Picture	Description
Selective Pallet Racking		Selective Pallet Racking is the simplest & economical racking system which allows 100% accessibility to each pallet. This racking is suitable for large variety of SKU's irrespective of quantity.
Heavy Duty Racks		Heavy duty shelving is a simple storage solution which facilitates storage of non-palletized items. Ideal for large variety of medium to big sized items that can be handled manually.
Longspan Shelving Racks		Longspan Shelving is ideally suited for items which are light/medium in weight and voluminous in nature. This types of racking is used for Auto, Retail, Engineering Sectors
Bin Racking		Usually used in Spares part storage for storing smaller items.
Slotted Angle Racks		This shelving is a versatile system best suited for storage of small components, bins, cartons having light loads up to (300 kgs) level.
Mezzanine Flooring		Column based Mezzanine floor system is a light weight steel flooring system provided at a suitable height above the ground. The system can be configured to suit the layout of the room, taking into account pillar positions, door positions etc.
Cantilever Racking System		Generally used where the need is to hang the products like tyre.

Table 1.5.1 Storage Equipments

\_\_\_\_

#### Material Handling Equipment (MHE)

Name	Picture	Description
Hand Pallet Truck (HPT)		One of the widely used equipment in the Warehouse. Used to lift and move pallet within the warehouse.
Battery Operated Pallet Truck (BOPT)		This is Battery Operated version of Hand Pallet Truck. Used in large warehouses for fast movement of Material.
Integrated Dock Levelers		Aids loading and unloading of goods by acting as bridge between truck and Loading Bay edge.
Forklifts		Another very important equipment in the Warehouse. A forklift is a motorized industrial vehicle used to lift and move materials short- range or inside a warehouse. It can pick up goods a height with HPT or BOPT cannot do.
Reach Trucks		Reach trucks are designed for 'reaching' extreme heights. They are used for highly racked warehouses for lifting of Pallets.
Stackers		Suitable for stacking, double pallet handling, order picking and horizontal transport. Available both in Manual and Electric version.

Chain Pulleys and Hoists		These are used to lift and lower heavy loads in the warehouse. Again, available in Electric of Manual versions.
Dollies		Used to move heavy equipment, boxes, and other bulky items within the warehouse.
Trucks	0	Can be made wooden, steel, aluminium, or plastic, used for movement within the warehouse.
Utility Carts		Movement of material like Garments and tools inside the warehouse.

Table 1.5.2 Material Handling Equipment (MHE)

#### Safety Equipment

Name	Picture	Description
Emergency Wash Station		Used in Chemical Warehouses for body and Eye Wash in case of any spillage or leak.
Anti-fatigue		Used in the warehouses which deal with oil,
Mats		grease and other slippery material.

Barrier Rails		These barricades protect valuable equipment and
		workers from hazards in the workplace.
Bollards		Heavy-duty bollards provide a physical barrier
		between fork trucks and valuable equipment.
Column		Universal rack protectors protect rack columns
Protectors		from damaging impact that can be caused by
		forklifts or heavy machinery.
Wire Partitions		Wire enclosures work well as tool rooms, security
		cage, or to store hazardous material.
Traffic Visibility		Wide angle convex mirrors designed to increase
Mirrors		surveillance, provide security, and promote safety.
Handrails		Safety guardrails make overhead walkways and
	H	mezzanines safe with easy to install guardrails.
Miscellaneous	2	Floor signs and other range of products for safety
Equipment		in the warehouse.

# **UNIT 1.6: Documentation in Warehousing**

# Unit Objectives



#### At the end of this unit, participant will be able to:

- 1. Discuss the importance of Documentation in Warehousing.
- 2. Explain the various documents being used in Warehousing Operations.

### **1.6.1 Types of Warehouse Documents**

Documentation is another very vital part of Warehousing operations. The way Bank is the custodian of depositor's money, Warehouse is also the custodian of the value in the form of inventory. Any loss to inventory is a loss of money.

Documentation carries following purposes in a Warehouse:

Operations Management: Documents like Pick List, Goods Receipt Check List (GRCL), Bill of Material (BOM) are several others are essential to conduct warehousing operations on day to day basis. They facilitate the allocation of work, picking and putaway of right quantities and timely and correct processing of customer orders.

**Record Keeping**: The inventory stored in the warehouse carries economic value. One of the basic functions of warehousing is to record every material received by maintaining proper records of all the incoming, stored and outgoing materials so that proper accounting and audit trail is maintained. Transit Documentation: Whenever the goods are transported out of the warehouse to the consignee, they need to carry the transit documentation. Transit documents meet the regulatory requirements during transit in India and establish the consignor, consignee and nature of the goods being transported.

Audits: Warehousing are subject to frequent Audits for inventory reconciliations, adherence to Standard Operating Procedures (SOP) and regulatory compliances. Documentation provides the complete history and trail of all the transactions which happened in the warehouse.

In section 1.4 we studied the following five stages in the warehousing operations. Following are the key documents used during these five stages.



Fig 1.6.1 Documentation in Warehouse

#### Goods Receipt Check List (GRCL)

It is a check list to be followed at the time of receipt of material at the warehouse.

Sample C	Goods Receipt Check Lis	<u>it</u>		
Date and Time of				
Reporting				
Vehicle Number				
Consignor Name		To be filled by		
Invoice No.		Warehouse		
Allowed for Unloading	Yes / No - If no, why:-	Associate/		
Remarks		Supervisor		
Name				
Signature				
_	Security		1	
Gate Entry #			1	
Signature	-	To be filled by		
Date		Security		
Time				
	Blind Cou	unt		·
Item	Name	Quant	ity	
			TOTAL	To be filled by
			QTY: -	the person
Blind Count Remarks				did blind
Damage Remarks				count
Name, Signature				
Date & Time				
Samp	le Quality and Complian	ce Check	1	
Legal Metrology Check		Yes / No		
Any Unit Damaged		Yes / No		
Any Unit Leaking		Yes / No		
Labels Check		Yes / No		
Packaging Check		Yes / No		
Sample Weight Check	1			
No. of Boxes				
Remarks				
Name, Signature				
Date & Time				
Scanning				
Qty.		To be filled by		
Remarks		person who did		
Name, Signature		Scanning		
Date & Time		8		
	SAP Updation		r	
		Date	Time	Filled by
GRN				person who
Remarks				did Data
Sign and Signature				entry
ASSUCIATE)			(SUPERV	150R)

Fig 1.6.2 Goods Receipt Checklist

#### **Inward Consignment Register**

This is a register which is being used to record all the incoming shipments into the Warehouse.

	Gate Inward Register									
	Material				Name of				Material	
SI	Receiving	Invoice	Invoice	Supplier	Place /	Material	Qty	Qty	Deliver's	Invoice
no.	Date	Number	Date	Name	City	Description	Received	Delivered	name	Details

Fig 1.6.3 Inward Consignment Register

#### Putaway List

This list also called as Binning list, guides Data feeder to the appropriate Bin of location where the incoming goods have to be kept.

		Putawa	y List		
l w	/arehouse			Date	
Suppl	ier Invoice No.			Time	
Sr No.	Item Code	Item Description	n UOM	Quantity	Bin Location

Fig 1.6.4 Putaway List

#### Goods Receipt Note (GRN)

When the incoming shipment details are entered into the system, the computer system generates an documents Called Goods Receipt Note (GRN).

Majura Gate									
			Goo	ds Rece	ipt Note				
GRN # Voucher No Date Receiving Store Purchase Order#	CSGRN20 123 29-03-2019 Central Store CSON22			V R P P	endor eg. No. rint Date rint By	Seve 12 29-0 Adm	n Eleven 3-2019 1227 in	:39	
Item Name		Quantity	Unit		Rate	Dis. Amou	unt	Tax	Amount
Ajwaan Action		2.000 10.000	Kgs Pair		120.0000 6.8100	0. 0.	0000 0000	48.0000 0.0000	288.0000 68.1000
Total	Amount 308.1000	<b>Tax</b> 48.000	0	Discount % 0.0000	DiscountAr	nount )	Add/Less 0.0000		Bill Amount 356.1000 \$
Purchasing Clerk						Store	1		
a starting starting				· · · · · · · · · · · · · · · · · · ·					

Fig 1.6.5 Goods Receipt Note (GRN)

#### **Stock Ledger**

This is a ledger which maintains the inwards and outward entries of various products and indicates the current stock level at any point of time.

	STORE STOCK LEDGER									
					Facility Co	ode				
Name	of facility				Item code	•				
Item [	Description				Unit of iss	ue				
		Delivery note/								
	Received	Issue V.	Batch	Expiry	Qty	Qty	Stock			
Date	From/Issued to:	No.	no.	Date	Received	issued	balance	Signature		

Fig 1.6.6 Stock Ledger

#### **Inventory Count Sheet**

This is a sheet used to count the physical stock of the warehouse, tally with the system stock and identify shortages or Excess.

	-		S	тоск с	OUNT SH	IEET	-		
Date									
Name	e of facility	/							
			Unit of	Physical	Physical	Total	Stock Balance		
SI	Product	Product	Mesaure	Good	Damage	Physical	as per	Excess /	Remarks
No.	Code	Description	ment	Stock	Stock	Stock	System	Shortage	if Any
				A	В	C=A + B	D	C-D	10
Na Sign As	Name & Signature of Associate		Signature Of Verifyng Officer				Signatu	ure of WH I	Manager

Fig 1.6.7 Inventory Count Sheet

#### Pick List

This document indicates the various products, their quantities and locations to process a customer order.

		P	ick List	;			
V	/arehouse				Date		
	Order No.				Time		
				Required			Picked
Sr No.	Item Code	Item Description	UOM	Quantity	in Hand	Location	Quantity
1	ABCD01234	Plastic Pots	No.s	7	84	BIN 365	
2	XYZ78910	Compost	Kgs	10	95	BIN 789	

Fig 1.6.8 Pick List

#### **Sales Invoice**

This is an important document evidencing the sale and transfer of ownership of the goods to the buyer.

	Т	AX INVO	DICE				
	ABC ENTERPRISES 123 B 20/8 XXXXXX PUSA ROAD, NEW DELHI-110005 GSTIN No 07APAFD8245XXXX						
Bill to	Place of Supply		-	1	HEROICE H.	Dated	
RK Electrical Works	RK Electrical Works			INVOICE NO	Dated		
A-10 Rajouri Garden,New Delhi GSTIN No:-07BBUPS5252XXXX	A-10 Rajouri Garden,New Delhi				DD-TI-01	1-Jul-17	
Description of Goods	HSN CODE	QTY		Units	RATE	Amount	
LED LIGHTS Bulbs Total Less Discount 20%	850 850	1	50 5	pcs Dozens	200 3000	10000 15000 <b>25000</b> 5000	
ADD CGST 6%					6%	1200	
ADD SGST 6%					6%	1200	
Testel							
Fotal	1	1		-	L	22400.00	
Rupees Twenty Two Thousand Four Hundred on Company's PAN: AAKFD6723D Note-Please make cheques in favor of "DD Enterprises"	ly				For ABC ENTER Authorised Str Queers	aprises	

Fig 1.6.9 Sales Invoice

#### Lorry Receipt (L/R)

It is an acknowledgement of goods given by the lorry owners (transport companies) to the persons who sending the goods, in this case the Warehouse.

			(	ONSIGNEE COP	Y				
PICK UP TYPE DELIVERY TYPE			CONSIGNEE NAME AND ADDRESS- DRIVEINDIA ENTERPRISE SOLUTIONS LTD / CONTACT NO 9320141341 1617 6/18 GUNDAL POC HAMPALLY VILLAGE			VEHICLE TYPE :-		OCTROI PAID BY>	
						TATA 1109		-	
						VEHICLE NO -	FREIGHT	TBB AT	
FROM 400059_MUMBAI_MAROL BAZAR		MEDCHAL MANDAL R R DIST SECUNDERABAD		3110477.955	BILLED AT	UNIGEN			
VIA		CONSIGNOR'S NAME AND ADDRESS:- a/c : 160000131-			DATE > 22-05-2013	PAY AT	-		
то	500003 SEC CUNDERAE	UNDERABAD_SE SAD	<ul> <li>DIESL TRADING Pickup Address: R J GUEST WORLD,201 AWAS APARTMENT SAHARA PIPELINE RD ANDHERI (E) MUMBAI MAHARASHTRA</li> </ul>		(E)		FREIGHT DETAILS		
PACKAGE NO: CONSUMER_GOODS		SAID TO CONTAINS (DESCRIPTION) CONSUMER_GOODS		DOCUMENT ENCLOSED		1			
FROM									
1	B Ĥ								
-	-	-	SHIPMENT VALUE S	175- 565053.48		INVOICE/STN NO : 13-14/2258		r -	
TOTAL NO OF PACKAGES 133				DATE . 22-MAY-2013		PER KG			
TYPE OF P.	ACKING -1 AI	RGEBOX	CONSIGNMENT NOTE NO:-		PERMIT NO:		PER PKG		
THE OF PACIENCE . LANDE DOX			MH101413B00024		VALID UPTO :		FIXED		
ACTUAL 1955 KG		RECEVIER COMMENTS:-		SALES TAX FORM		CMT	1		
WEIGHT			and a series of the series of		OTHER	R	CFT		
					TERM	INAL ADDRESS - MH1014	1		
CHARGED		D		DRIVE INDIA ENTERPRISE		TOTAL FREIGHT			
WEIGHT				SOLUT	TIONS LTD BTM	AMOUNT IN WORDS			
CONSIGNEE (As per GTA calculation)		TRUCK ARRIVED TRUCK UNLOADED		COMPOUND, NORTH SHED. BEHIND SBI BANK, LBS MARG. BHANDUP (WEST), MUMBAI- 400078.		DO NOT PAY CASH TO LORRY DRIVER			
INSURANCE PAYABLE BY		DATE DATE							
CONSIGNOR DIESL									
					1.				
		TIME	TRE	STAFF	NAME CODE	1			

Fig 1.6.10 Lorry Receipt

#### **Transit Documents**

These are regulatory documents which are required during transit in India. These could be documents like filled GST Transit forms. Whenever the goods are transported out of the warehouse to the consignee, they need to carry the transit documentation. Transit documents meet the regulatory requirements during transit in India and establish the consignor, consignee and nature of the goods being transported.

# Tips 🖳

#### To be a successful Warehouse Data feeder

- Achievement motivation can be learned.
- Don't be afraid to make mistakes.
- Train yourself to finish what you start.
- Dream big.

# Notes

# **Summary**

The basics of Supply chain management is discussed at the ground level and the importance of logistics linkage in managing an efficient supply chain. Three main flows of supply chain management is clearly explained in this chapter. You will be able to understand the main roles of the individual as a warehouse associate with the set targets. This unit also discusses the necessity of a warehouse and different activities carried inside the warehouse.

# Exercise

#### **Multiple Choice Questions**

- 1. The correct sequence of supply chain process is
  - A. Plan Make Source Make Return
  - B. Plan Source Make Deliver Return
  - C. Plan Make Deliver Source Return
  - D. Plan Source Deliver Make Return
- 2. Which of the following is not a classification of equipment being used in the warehouse?
  - A. Storage
  - B. Safety
  - C. Earth moving
  - D. Material handling
- 3. Which of the following activity is part of the shipping activity in the warehouse process?
  - A. Order processing
  - B. Unload vehicle
  - C. Cycle count
  - D. Filling bill of transport

- 4. Which of the following is not a role played by the warehouse?
  - A. Consolidation hub
  - B. Break bulk
  - C. Value added services
  - D. None of the above

#### Fill in the Blanks

- 1. The movement of cargo over river and canals is called \_\_\_\_\_\_.
- 2. This position responsible for managing all outbound transportation from the warehouse is

3. \_\_\_\_\_\_is an acknowledgement of goods given by the transporter to the warehouse at the time of dispatch of goods.

4. The document used to gather the material as demanded by the customer is called the \_\_\_\_\_\_.

#### True or False

- 1. Logistics management is part of supply chain management.
- 2. Among all modes, water is the cheapest mode of transport.
- 3. Audit is not one of the requirements for conducting documentation in the warehouse.

4. Security guards and warehouse associate are two independent set of people in the warehouse who hardly interact with each other.

Scan the QR code to watch the related videos



Logistics Mangement https://www.youtube.com/ watch?v=4-QU7WiVxh8



Supply Chain Management https://www.youtube.com/ watch?v=IZPO5RcIZEo




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## 2. Preparation for Operations

Unit 2.1 - Updation of Data Unit 2.2 – Pick list ,labels and signage



LSC/N2301

## Key Learning Outcomes

#### At the end of this module, participant will be able to:

1. Explain the process of setting up computer for starting operations as per SOP

Ö

- 2. Detail the steps involved in data updating activity as per requirement
- 3. Discuss the procedure to ensure effective connection of all warehouse facilities
- 4. Detail the steps involved in printing of pick list, labels, sign off forms, contact details as per requirement
- 5. Discuss the safety, security and organizations procedures and guidelines.

## **UNIT 2.1: Updation of Data**

## Unit Objectives 6

#### At the end of this unit, participant will be able to:

- 1. Explain the process of setting up a computer for starting operations
- 2. Detail the importance of data
- 3. Define ERP and its benefits

## 2.1.1 Setting up of Computer for Operations

The following are the various steps in setting up computer for starting the day to day operations

STEP 1: Follow the time Limits given by the given manager

**STEP 2:** Turn on your computer and login with your given company's official E-Mail ID and passwords

**STEP 3:** Check for the updated entries on the warehouse management system (WMS)/Enterprise Resource Planning (ERP)/GCIS (Global Inventory Control System) homepage before the start of daily operations.

**STEP 4:** Ensure that your computer is ready for the operations and complete any software updates required before start of operations

#### 2.1.2 Importance of data

Warehouse is the repository of several important data and information. All inward movement, outward movement and stock information are recorded in the warehouse. Warehouse carries information about the pricing of the products, the discount structure, the sales numbers, stock data and several other vital information. All these information needs to be protected and should be in the right hands only.

Secured information may take any form, e.g. electronic or physical

- 1. Tangible in the form of paperwork and records of various transactions which happen at the warehouse
- 2. Intangible various data in electronic form stored inside the computers and servers.

#### **Information Security:**

Information security is the practice of protecting information. It typically involves preventing unauthorized/inappropriate access to data, or illicit use, disclosure, interference, removal,

corruption, modification, inspection, recording or devaluation of information. It also involves actions intended to reduce the adverse effects of such incidents.

Information security's primary focus is the balanced protection of the confidentiality, integrity and availability of data while maintaining a focus on efficient policy implementation, all without hampering organization productivity. This is largely achieved through a structured information risk management process.

#### Following are some of the steps which can be used to protect the integrity of information:

#### Lock down hardware

The computer systems should be switched off at the end of the day, holidays and while not in use.

#### Turn off private browsing

The warehouse team should have access to limited sites which are required only for delivering the duties. All private browsing sites should be turned off.

#### Practice good password management

Passwords should have limited access. They should be available only with the relevant people in the warehouse. They should be strong and unique and difficult to remember. They should ideally be a combination characters, numbers and special characters. Further, they should be amended periodically.

#### Use two-factor authentication

In case of very discrete information, companies may implement the policy of two level of authentication for the access.

#### Keep software up to date

Install the latest updates of the software that you use. The newer updates carry better features in terms of security and data protection.

#### Avoid Phishing - beware of suspicious emails

Do not open any email or data from unreliable sources. Be constantly suspicious and avoid any phishing related risks.

#### Do not download Software

No software should be downloaded by the employee in the warehouse unless approved by the company IT team. Do not visit unknown websites or download from unreliable sources. These sites often contain malware that will automatically, and often silently, compromise the data computer.

#### Install anti-virus protection

A strong anti-virus software is a must. Most of the times companies follow company wise anti-virus software and protection systems

#### **No External Memory devices**

No external memory devices like hard disks, pen drives should be allowed in the warehouse. Ideally all the USB ports also should be blocked to avoid any access to information.

#### Back up your data

Back up regularly. If there is a data security violation, the only assured way to repair your computer is to erase and re-install the system.

### -2.1.3 Creating the Master Data

In sales and distribution, products are sold or sent to business partners. Data about the products as well as about the business partners is the basis for sales processing.

#### **Customer Master**

Customers are business partners whom the organization does sales related transactions. It is the central unit in the overall order fulfillment cycle and can denote internal users, external customers or direct end consumers. It is advisable to maintain data centrally in order to avoid duplicates and exercise effective control over master records.

The various data elements for customer master records pertain to general information like name, address, contact persons; accounting information pertaining payment terms, shipping terms, G/L reconciliation account, customer classification towards tax determination and relevant partner functions for the same.

#### **Customer Account Groups**

Customer records are created for specific account groups (Sold to party, Goods Recipient (Ship to party), Payer and Bill to Party). These groups control:

- Required fields for entering master data.
- Number Range assignment, internal or external for master records.
- Valid partner functions.
- One time customer.

The important job of a data feeder is to prepare for the day's work by getting the job allocation from the supervisor and planning the activities for the day. To get the detailed list and relevant documents to start the work, the data feeder needs to get help from the **Data Entry Operator** 

Types of documents includes pick list, BOM - (Bill of Materials), incoming truck schedules, inventory tracking sheet, product labels etc.

## 2.1.4 Updating Database

The following steps must be folowed by the Data feeder for updating the database. Step 1 : receive any new data such as

- o diant coftware sures
- client software syncs, new client details from DEO in-charge/client liason
- update new clients onto the computer/information system

Step 2: ensure all warehouse facilities are connected on the server for seamless inventory assessments/ order checks

Step 3: verify all existing client's details are available on the information system

#### **Data Logger**

Data loggers are electronic devices which automatically track and record environmental parameters over time, allowing conditions to be measured, documented, analyzed and verified. The data logger contains a sensor to get the data and a computer chip to store it. The information stored in the data logger is transferred to a computer for further analysis.



Fig 2.1.1 Data logger

### 2.1.5 What is ERP?

Enterprise resource planning (ERP) refers to a large software which manages the day to day activities for any organization including Accounting, Sourcing, Supply chain operations, Human resource management and Manufacturing. ERP is a software that helps plan, budget, manage, control and report on an organization's performance.

ERP systems tie a multitude of business processes together and enable the flow of data between them. ERP systems eliminate data duplication by collecting an organization's shared transactional data from multiple sources and offer data integrity with a single source of truth.

Today, ERP systems are being used across the world by thousands of companies of all sizes and types, ERP is as now almost as indispensable as the electricity.

#### The Business Value of ERP

ERP delivers numerous business benefits including:

- Better business insights using reports based on real-time information
- Reduction in operational costs through efficient business processes and deployment of best practices.
- Sharing of data and widespread collaboration among user across functions.
- Consistent infrastructure and the look and feel of all the business activities being done.
- Data integrity and financial controls ensure reduced risk for the organization.
- Ability to meet the dynamic requirements of the customers.
- To help the decision-makers in achieving set business targets.
- To integrate all the business functions like Sales & Distribution, Materials Management, Finance and Controlling on one common system
- To optimize supply chain operations in terms of delivery, quality, and cost.
- To prepare for expansion and growth plans in the coming years

#### **Benefits of ERP**

The Warehouse Data feeder can use the ERP system, to better service the customers. ERP can help warehouse Data feeder to:

- Timely execute the Customer Order.
- Inform customer about delivery schedules
- Prioritize customer orders
- Inform them about delivery dates
- Respond to their queries and complaints
- Process Sales Returns

Warehouse Data feeder may use some of the following reports to service the customer.

- Sales orders- Product wise -Customer wise-Location wise- Daily
- Pending Sales orders- Product wise-Customer wise-Location wise
- Cancelled Sales orders- Product wise-Customer wise-Location wise
- Order/Invoice wise Product wise -Customer wise-Location wise- Daily
- Sales returns- Product wise -Customer wise-Location wise- Daily
- Sales register- Product wise -Customer wise-Location wise- Daily
- GST Tax payable with Taxable Turn over-Location wise-Monthly
- Sales Report- Distributor wise -Cluster wise-MT

- Notes

## UNIT 2.2: Pick list, Labels and Signage

## Unit Objectives



At the end of this unit, participant will be able to:

1. Elobarate pick list

## 2.2.1 Pick List

The pick list or an order list might be a computer-generated list given by a supervisor or an automated instruction received in a hand-held device. A typical pick list will carry the following information:

Product Code: Every product in the warehouse has a code number for easy identification of goods. This also helps in the easy picking, storage and delivery of cargo. Every pick list clearly mentions this product code.

Product Description: A pick list may even have product description which helps the associate to reconfirm that they are handling the right cargo. This is in addition to the code number.

Part Number: A product can be further classified into parts. So, the part numbers helps in identifying the exact part of the product.

Units of Measurement: This basically clarifies how each cargo is measured. In some cases, it will be generalized as one pack. But in some other cases, it can be specific as kilograms, cms or any such measurements. This ensures only the right quantity of the cargo is picked up by the team.

Storage Location: This clearly denotes where exactly the cargo is stored in the warehouse. This enables smooth pickup and delivery of cargo. It also ensures that the right material is picked up.

Required Quantity: Pick list specifies the quantity to be picked up. Since goods are stored in bulk, this information is vital.

Picked quantity: There might be situations, where there is a mismatch between the required quantity and the quantity available. This is solved by mentioning the picked quantity in the Pick list. It also helps in keeping inventory intact.

Pick List									
Wareh	ouse				Date				
Order I	No.				Time				
Sr		Item		Required			Picked		
No.	Item Code	Description	UOM	Quantity	in Hand	Location	Quantity		
1	ABCD01234	Plastic Pots	No. s	7	84	BIN 365			
2	XYZ78910	Compost	Kgs	10	95	BIN 789			

Table 2.2.1 Pick List

The associate has to count the picked goods in the staging area and verify with the given pick list to ensure that the correct number of items are sent out. After verifying the picked goods, S/he needs to sign off on goods in the staging area so that they can be moved into the outbound area for shipping. **Different forms of Pick List** 

**A. Computer Generated Pick List:** This is the most common type of a pick list generated using a computer and printed using a printer. A copy is handed over to associate to perform a picking activity. Below mentioned is a sample form of such pick list.

Bryan - MFG DB			PICKLIST
Sales Order Number	1434		
Ordered By:	4002		
Warehouse	Location	Item Code	Quantity
1	LOC1	PICK001	10
	LOC2	PICK001	20
	LOC3	PICK001	20
2	LOC1	PICK001	10
	LOC2	PICK001	20

Table 2.2.2 Computer generated pick list

**B.** Automated Pick List: The information regarding picking and the details of items to be picked will be communicated to an associate through a "Handheld Device". The screen in the device will display the details of the pick list. The device and the computer will be connected through Wi-Fi connectivity (wireless). Below mentioned sample figure depicts an automated pick list using a handheld device.



## 2.2.2 Labels & Signages\_

In a warehouse there are two categories of labels used - warehouse labels, and product labels. Warehouse labels enable the picker to pick the items accurately and at a greater speed.

Product label can be of the following materials paper, plastic film, cloth, metal, or anyother material which can be affixed to a container or product, on which is written or printed details or symbols about the item. Details printed directly on a container or article can also be considered as labelling.

Product labels affixed on the items to give standard instructions about the handling of goods. The barcode label gives information about the serial number and pricing of the product.

After completing the picking process and selecting suitable packaging requirements, the items are handed over for suitable tagging and labelling.

There are two main categories of labels applied after picking and packaging:

- Shipping Labels
- Safety Labels



Fig. 2.2.4. Label Specimen

#### shipping Labels:

Shipping labels carry the key information for a carrier to transport a package from their start (warehouse) to its end destination (client's hands).

Shipping labels may include some or all of the following information:

The consignee's name and address, the consignor's name and address (including postal code), date of shipment, package quantity as well as the weight, the description of material inside, number of pieces.

At times, a packing list of the products may also be pasted.

Labels also include details concerning the method of shipping (e.g. express, standard, etc.) for the transporter to ensure the service that was paid for is provided.

Following is an example of sample shipping Label.



Fig. 2.2.5. Shipping Label

#### Safety and Handling Labels:

These labels contain headers, graphics, and messages that enable clear communication about hazards and handling instructions for the product being packed. Safety labels for consumer durables and machines are common.

These labels also convey a lot of information about handling of the cargo; what is the stacking level possible, if it is fragile and needs to be handled with care, what handling equipment can and cannot be used.

Following are some sample information carried on this kind of labels.



#### **Safety and Handling Labels**

Fig 2.2.6 Safety and Handling labels

Tips 🖳

- Be aware of the emergency number to call at the time of a workplace accident or mishap.
- Practice evacuation drills regularly to avoid chaotic evacuations.
- Keep an updated cleaning schedule. One of the most important aspects of maintaining a warehouse is keeping it clean on a daily basis.


## Summary

In this chapter we discussed the different types of processes in warehouse like picking, kitting, binning with pictorial examples and how to report, record each and every process and operations. Material handling equipment are the important tool for a warehouse operations, this will ease the work of the efficient operations. Some of the commonly used Material handling equipment and its advantages are clearly depicted in this unit. Different forms of labels and coding used inside the warehouse and various packing technologies used in the warehouse operations are explained in this unit.

## Exercise

- 1. What are details involve in the pick list?
- 2. Explain the process of setting up a computer for starting operations
- 3. Discuss the some of the steps which can be used to protect the integrity of information
- 4. List out the benefits of ERP?

Scan the QR code to watch the related videos



https://youtu.be/tYYYIfkkjVQ

Warehouse Labels & Signs



https://youtu.be/8n8PhwtwpLk

**Print Pick List** 





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## 3. Documentation and Quality Control

- Unit 3.1 Insurance Coverage
- Unit 3.2 Inventory check and documentation
- Unit 3.3 Types of Reports
- Unit 3.4 Inspections/ Physical Check on Shop floor



LSC/N2320

## KEY LEARNING OUTCOMES:

#### At the end of this module, participant will be able to:

- 1. Explain the process of checking insurance coverage for transports
- 2. List the documentation required for Quality Control
- 3. Demonstrate transcription of information from customer's bill of lading into cargo management system
- 4. Detail the steps involved in inspection of movement and storage of goods
- 5. Discuss the safety regulations

## **UNIT 3.1: Insurance Coverage**

Unit Objectives 6

At the end of this unit, participant will be able to:

1. Explain types of insurance at warehouse

## **3.1.1 Insurance at Warehouse**

Warehouses store inventories worth Crores of rupees. Due to large sums of money tied in inventory companies generally avail two types of insurance:

**Warehouse Insurance:** It covers natural calamity like earthquake, lighting, floods, fire and similar unforeseen situations. It also covers human-made hazards like theft and burglary.

**Transit Insurance:** When valuable trade products are transported from one location to another, for example, from warehouse to the distributor or retail outlet or from Factory to the Warehouse, goods are covered under transit insurance to cover any loss due to damage or loss of the shipment.

The responsibility of taking the transit insurance policy must be determined in the sales contract, and the insurance must be taken well before goods leave the supplier's / Warehouse premises. The following incidents will invite an Insurance claim process

- o Loss during transit
- o Damage during transit
- $\circ$  Theft at the Warehouse
- Fire at the Warehouse
- o Natural calamity like Lighting, cyclone, Earthquake

In case any of incidents listed above occurs, the data feeder must ensure appropriate insurance coverage for all transports and apply for new coverage if required.

## 3.1.3 Handling Quarantined Material

The damaged cargo or the brunt cargo (in case of Fire) needs to be quarantined. It is also essential to keep record of all missing and damaged cargo and its supplier and carrier.

The quarantined material needs to:

- 1. Kept separately demarcated from the good Saleable material
- 2. Submitted to the Engineer for assessing the value of the loss
- 3. Shown to the Surveyor of the Insurance company as evidence and for him to assess the loss.
- 4. The quarantined material may have to kept in the warehouse till the insurance claim is settled by the insurance company.

5. Once claim has been settled the material needs to be disposed off based on the policies of the company.

Record keeping of all the quarantined material is essential. Warehouse Data feeder should post them in the blocked category of the ERP system so that there are no orders against them. Once this inventory has been scrapped, they should be suitably treated in the ERP system by the Warehouse Data feeder and removed from the block category. In case they are repaired/refurbished, the Warehouse Data feeder should move the inventory into the saleable category.



Fig 3.1.1 Quarantine area

## **3.1.4** Bill of Lading

A bill of lading (BL or BoL), commonly used in transportation by water, is a legal document issued by a carrier to a shipper that details the type, quantity and destination of the goods being carried. A bill of lading also serves as a shipment receipt when the carrier delivers the goods at a predetermined destination. This document must accompany the shipped products and must be signed by an authorized representative from the carrier, shipper and receiver.

The data feeder must transcribe information from customers' bills of lading into the cargo management system and also must complete all administrative documentation such as maintaining information files and processing paperwork.

					<u>.</u>
				Hapa	ag-Lloyd
			Cartier's Reference: B/L-N	D.:	Pagé:
			Export References:		
Consignee (not negoliable	unlass consigned to order):				
			Forwarding Agent:		
Notify Address (Carller not	responsible for feilure (a notify	5 200 (18056 20 (1) horoof)	Consignee's Reference:		
			Place of Receipt:		
			1		
			1. 1		
Vessel(s):		Voyage-No.:		é	
			Place of Delivery:		
Port of Loading:				1. S.	
Port of Discharge		1		1.1	1.
r or or bioonalge					1
	~	2	JP	N N	
	S	0	JP.		
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## **UNIT 3.2: Inventory check and documentation**

## Unit Objectives



#### At the end of this unit, participant will be able to:

- 1. Discuss the Inventory verification process. Their types and significance.
- 2. Discuss the PPE required during the inventory process
- 3. Explain the process of counting the inventory and managing the discrepancies.

## 3.2.1 The methods of managing Inventory Accuracy

One of the very vital activities in Warehouse management is inventory counting. The Physical inventory lying at the warehouse should always match the inventory as per the Stock ledger. Any deviations could mean loss of inventory or loss of value.

Almost all warehouse spends a lot of time and efforts on keeping their inventory accurate. As they say, "To control you have first to measure". There are three main techniques warehouses follow to measure the physical stocks and to tally them against System stock.

#### **Physical inventory:**

This is a practice of counting the complete inventory wall to wall at-once in one go. Most companies must do it once a year during the year end as it is a regulatory reequipment. This is also required for Balance sheet finalization and Income Tax filing. However, several other companies follow a more periodic reviews after the end of every month or after the end of every quarter. Though the inventory count process is long and tedious, it is in best interest of the company to do it once every month or least a quarter. It is best to shut the operations for some days during the count period and conduct end to end counting. The more frequently it is done, better are the chances to identify the reasons for variances and correct them.

#### Spot checking:

If we do physical inventory check once a year, it is very difficult to identify variances' reasons. Lot of companies follow the process of spot checking. Spot checking means choosing a product or set of products and conducting the physical count of the material at that moment and tallying with the system count. This is an unscheduled checking of inventory. This is done for more costlier items, Problematic or Fast-moving Goods. Spot checking is quite common for Auditors or Senior Management to conduct when they are visiting the warehouse.

#### **Cycle counting or Perpetual Inventory Count:**

This is one of the most effective technique to keep the inventory in control. Here instead of doing the whole physical count during year-end, the warehouse counts its inventory every day, throughout the year. Each day a certain set of SKUs are identified and counted. They are tallied and in case of any variance's corrections are taken immediately.

# **3.2.2** Methodologies for identifying the SKU for daily perpetual count

There are various logic which can be used to identify the SKU to be counted on a given day. Following are the most popular ones:

Cycle Count Methodology	Details				
Previous day touch, today count	In this method, all SKU received or dispatched in the previous day are counted. This method allows you to identify any error of counting or excess dispatch immediately.				
All SKUs in a period	When No. of SKUs / fast moving SKUs are less, to cover all the SKUs, divide the total number of SKU with the number of working days in the period. Ex 500 SKU counted once every month. This will mean $500 / 25$ (Working days) = 20 SKU to be counted each day.				
Random Basis.	Here the computer system generates the SKU list to be counted on the given day on Random basis. This also keeps the team on the toe as there is no pattern to SKU to be counted.				

Table 3.2.1 Methodologies for identifying SKUs

# **3.2.3** Obtain Personal Protective Equipment (PPE) for - working on the shop floor

Personal protective equipment (PPE) is clothing, or equipment designed to be worn by operators or visitors to protect or their bodies from workplace hazards. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter.

PPE can include: -

- 1. hearing protective devices, such as earmuffs and earplugs
- 2. respiratory protective equipment
- 3. eye and face protection, such as safety glasses and face shields
- 4. safety helmets
- 5. fall arrest harnesses for working at heights
- 6. skin protection, such as gloves, gauntlets, and sunscreen

- 7. clothing, such as high visibility vests, life jackets and coveralls
- 8. footwear, such as safety boots and rubber boots.



Fig 3.2.2 Personal Protective Equipment



Fig 3.2.3 Different types of PPE

Notes 📋

## **UNIT 3.3: Types of Reports**

## Unit Objectives

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At the end of this unit, participant will be able to:

- 1. Discuss the Inventory verification process. Their types and significance.
- 2. Discuss the PPE required during the inventory process
- 3. Explain the process of counting the inventory and managing the discrepancies.

## 3.3.1 Physical count of the material

The next activity in the process is to count the material in the warehouse physically.

The following sheet indicates a typical document which is used in the warehouse to physically count the material and tally with the system stock and identify variances.

INVENTORY COUNT SHEET										
Date										
Nam	e of facilit	ty								
				Phy	Physical Stock					
								Stock		
		Product	Unit of				Total	Balance		
SI	Product	Descript	Mesaure	Unrestric			Physical	as per	Excess /	Remarks
No.	Code	ion	ment	ted	Blocked	Hold	Stock	System	Shortage	if Any
				A	В	С	D=A + B + C	E	D-E	
Name & Signature of Associate			Signat Verifyn	cure Of g Officer				Signature of WH Manager		

Tuble 5.5.1 Inventory count sheet

# **3.3.2** Preparing a daily inventory report and highlighting discrepancies

The physical count is always a blind count. The Warehouse data feeder will fill in the SKU code and details and handover the inventory sheet to the Warehouse Supervisor and Associate.

The Supervisor will conduct the count and bring back the sheet to the Warehouse Executive. He will now fill in the ERP stock from the system for each SKU.

The system stock will be mapped against the physical counted stock.

In case of any variance, the Warehouse Executive will ask the Supervisor to recount the material. If the difference persists, the Warehouse Executive and supervisor will report to the Warehouse Manager for further action.

## **3.3.3 Reporting Process**

After completing all the activities for the day, the warehouse data feeder must update status of the entire activities to his/her reporting manager and make notes of the pending tasks in each activity to plan for the next day work.

The manager will conduct a sundown (closing) meeting with the associates and explain work to be done for the next day. He may perform safety inspection in all areas in the warehouse and check on the condition of every equipment and personal protective equipment.

Report to management for any shortage shipments, customer claims, cycle count discrepancies, breakages, damages, accidents, near misses happened during the day. Notify manager regarding any concerns faced during the day for appropriate actions. Complete the daily activity forms as required by management.

	DAILY WORK REPORT									
NAM	E OF WAR	EHOUSE:								
NAME OF ASSOCIATE: DATE:										
S.NO	DATE	NAME OF TASK	COMPLETE		D PENDING				SIGNATURE	

#### Below are the reports which can be maintained on daily activities -

Table 3.3.2 Daily work report

### 3.3.4 Inventory related Reports

Every ERP system provides host of reports. An ERP report is generally an executable program that reads data from the database and generates output based on the filter criteria selected by the end user. Execution of an ERP report almost never leads to an update of the database.

The various categories of reports are

- 1. Standard reports
- 2. Custom reports developed by your organization
- 3. Ad hoc queries

Any ERP system generates multiple reports covering all areas of the business. However, there are three types of reports which will be most important for Warehousing Operations.

- 1. Inventory Related Reports
- 2. Sales Related Reports
- 3. Purchase Related Reports.

Some of the common reports in the Inventory module of an ERP are:

- Items List
- Inactive Items
- Inventory Status
- Inventory in Warehouse Report
- Inventory Audit Report
- Batches and Serials Inventory Audit Report
- Inventory Valuation Report
- Serial Number Transactions Report
- Batch Number Transactions Report
- Price Report
- Inventory Counting Transactions Report
- Inventory Turnover Analysis

#### Example

Some of the Inventory related reports from SAP ERP system

#### **Inventory Management**

- MB 24: Reservations for Material
- MB51: Material Document List
- MB52: List of Warehouse Stocks on Hand
- MB53: Display Plant Stock Availability
- MB54: Consignment Stocks
- MB59: Material Document List
- MB5B: Stocks for Posting Date
- MB5L: List of Stock Values: Balances
- MB5S: Display List of GR/IR Balances
- MB5W: List of Stock Values
- MBGR: Display Material Document by Movement Reason
- MMBE: Stock Overview
- MR51: Material Line Items
- MB5T: Stock in Transit CC

## 3.3.5 Sales Reports

Some of the common sales related reports from an ERP are:

- Customer List
- Sales Organization
- Shipping Points (Warehouses)
- Sales Orders
- Back Orders
- Blocked Orders
- Orders pending for Credit Approval
- Sales Returns
- ales Analysis

#### Example

Some of the Sales related reports from SAP ERP system

#### Sales and Distribution Management

Reports Name	Description
VA15N	Inquiries List
VA25N	Quotations List
VA05N	List of Sales Orders
SDO1	Orders Within Time Period
V.02	Incomplete Orders
VA35N	List of Scheduling Agreements
VA45N	List of Contracts
VA14L	Sales Documents Blocked for Delivery
V.23	Sales Documents Blocked for Billing
VL06O	Outbound Delivery Monitor
VF05N	List of Billing Documents
VB(8	List Rebate Agreements
S_ALR_87012218	Credit master sheet
F.31	Credit Management Overview
FCV3	Credit Management Early warning list
MCTA	SIS: Customer Analysis
MCTC	SIS: Material Analysis
MCTE	SIS: Sales organization
МСТК	SIS: Shipping point
MC(A	SIS: Incoming orders
MC+A	SIS: Returns
MC+E	SIS: Customer Analysis: Invoiced Sales
MC+I	SIS: Customer Analysis: Credit memos
F.35	SIS: Credit master sheet
MC(E	SIS: Material Analysis: Incoming orders
MC+M	SIS: Material Analysis: Returns

MC+Q	SIS: Material Analysis: Invoiced Sales
MC+U	SIS: Material Analysis: Credit memos
MC(I	SIS: Sales Orgn Analysis: Incoming orders
MC+Y	SIS: Sales Orgn Analysis: Returns
MC+2	SIS: Sales Orgn Analysis: Sales
VC/2	Sales Summary (Customer Fact Sheet)
V/LD	Pricing Reports
VD59	List Customer Material Info
VB25	List of Sales Deals
VC05	List of Sales Activities
VB25	List of Sales Deals
VCUST	Customer List
VA06	Sales order Monitor

Table 3.3.3 Sales and Distribution Management

### **3.3.6 Reporting Damages**

Warehouse is an action-packed place. Goods are continuously coming in, getting stored and moving out. Despite all precaution there are still some chances of damage or breakage during warehouse operations (put away, picking, packing, returns etc.)

In case of any such incident, the associate is supposed to report immediately to the warehouse supervisor and fill in a damage report along with supervisor on immediate basis. Following figure is a small example of a damage report. The key thing in this report is to describe the event as it happened and what actions will be taken in the future to prevent it.

		LOS	5S / I	)AM	AGE F	REPOR	Т			
Format No.: Rev. No. Rev. Date. :		<ul> <li>Loss Report</li> <li>Damage Report</li> </ul>			Report No: Report Date:					
Internal References Shipment Ref. No.	Ship	ned Date	Orde	r No	Material ID	Material Otv	Values	BI No		
Shiphishi 161, 110.	514	openitzae	Olde	1110.	IVIGICING IL	Indicital Qiy	Valaco	DE 110.		
Description of Shipme	nt									
Destination 1	Nos. of E	lays In	isurance No	). Desci	iption of Insura	nce on Loss / Dai	nage			
Loss / Damage Date & Time	Re	sponsible pe	erson	A	uthority		Detail	la -		
Item Loss / Domage										
Particul	ars		Item N	ame	Qty V	Jalue Repai	r / Recovery / I	Loss / damage status		
Investigation / Impact	– Correci	tive Actions .	/ Preventiv	e Actions						
								-		
Nature of Loss / Dama	Responsible	Agency		Current Location of Material			Contacts			
Remarks					1		1			
							1	Prepared by		
							A	pproved by		

Fig 3.3.4 Loss/Damage report



Notes

## **UNIT 3.4: Inspections/ Physical Check on Shop floor**

## Unit Objectives



At the end of this unit, participant will be able to:

1. Discuss the various types of inspection of the material?

## 3.4.1 Quantity Tallying

The first step in inspection of material is tallying the physical quantity with the quantity on the documents.

For the inbound shipment, lot of warehouses follow the system of blind count sheet. The security at the entry gate of the warehouse carries a blind count sheet. They will count the material as it is unloaded from the vehicle. When conducting the blind count, they have no clue on the total quantity expected or as per documents.

Once blind count sheet has been filled, it is tallied with the quantity as per documents. In case they match, next steps are taken, in case of any discrepancy, the physical material is counted again to check. If the discrepancy persists, then all the steps related with short receipt are initiated.

An alternate to blind count sheet is the tally sheet. For example, once the picker has picked the material for an outbound shipment, a supervisor or a security guard can count the material and check with the pick list or the tally sheet. If there is a discrepancy, then further steps are taken to correct it.



Fig 3.4.1 Quantity tallying

The usage of warehouse technology such as barcode scanners or RFID integrated with the Warehouse Management System (WMS) helps speed up counting and reduce errors.

## **3.4.2** Visual Inspection of the material

Visual inspection of the goods to check the physical condition of the material. The material incoming/outgoing products should be free from any dents, damages, leaks etc. In the case of packaged products, ensure to check if the packaging is proper and not mutilated.

The warehouse may also check the following during the visual verification process:

- Description of goods matching the documents
- Product Code,
- Batch/Lot number,
- o The temperature in case of temperature-controlled cargo
- o Labelling,
- Weight of the cargo and
- Condition of cargo whether damaged, dented or leaking or not.

The data feederis required to verify weight and dimensions of the incoming cargo. In such case, all the incoming cartons/pallets are weighed on the weighing scale before being moved inside. The actual weight is tallied with the documented weight to identify any discrepancies. At times, weight checking also highlights any theft or loss during transit to the warehouse. Weighing scales integrated with packet/pallet dimensioning systems and the warehouse management system are an excellent option for capturing all this information quickly and without errors.

One of the most time-consuming, labour-intensive, and critical tasks is counting and verifying damaged cargo. It is essential to keep a record of all missing and damaged cargo and its supplier and carrier. Once data has been collected, receiving supervisors will use this data to make these companies, suppliers, and carriers aware of the problem.

For companies needing to prove to their suppliers the state and way cargo was received, the use of digital cameras or CCTV cameras installed at unloading bays can help capture the cargo's images and lodge a claim with supplier or carrier in case of any damage or short received. The images may also be integrated with the WMS system.



Fig 3.4.2 Visual inspection

### 3.4.3 Quality Inspection of the material

Quality is important during manufacturing and Supply Chain, whether monitoring the quality of material from the suppliers, checking the quality during the production line or checking the quality before it is delivered to the final customer.

In case of manufacturing the raw materials, one important area in examining quality is the inspection of items that arrive at the facility from suppliers. Ensuring that the parts and raw materials are of correct quality or specifications before the item even enters the plant is key to ensure total quality of the finished goods.

In the case of trading too, the quality of the incoming shipment needs to be checked before it is supplied to the customer to avoid any claims and adverse effect on the client's relationship.

Though the quality department is responsible and equipped to check the quality of the material in terms of Chemical analysis, testing of physical properties and measurements, testing of mechanical properties and Regulatory testing, however, some part of quality checking may be allocated to the warehouse as it is the first point of contact of the material being received.

Some of the quality aspects that the warehouse data feeder may verify:

- The description and specifications of the material on the carton matching the one given in the Purchase Order.
- The packaging of the product matching the packaging specifications given in the Purchase order
- Any damage or leak in the product
- The expiry date of the incoming material
- o Any infestation or rottenness in case of Agriculture products

The quality department will provide the warehouse data feeder with instructions on how to deal with incoming materials. Not all parts incoming shipments need to be inspected. Some low-cost standard items may not require inspection at the time of receipt.



Fig 3.4.3 Quality inspection

## Tips 🖳

A person whoever enters the warehouse operation area (storage location, handling machine, equipment etc.) must wear Personal Protective Equipment all the time. Usage of PPE is much important considering the safe workplace.

- Notes 🗐			

#### Summary

The basic handling of material handling equipment and personal protective equipment is explained in this chapter. Various usage of tools like ropes, chains to lash the big cargoes are demonstrated here. Breakage and spillage of hazardous and liquid cargo should be handled carefully. The necessary safety precautions, DO's and DON'T's be followed while operating MHE's, parking it and during other checks are clearly explained in this chapter.

### Exercise

- 1. What is visual inspection of the material?
- 2. List out the methods of managing Inventory Accuracy ?
- 3. What is insurance coverage and list out them?
- 4. Write a brief note about reporting process?

Scan the QR code to watch the related videos



https://youtu.be/He2zvhLANI8

Improve Inventory Accuracy



https://youtu.be/hluW3rjk2Es Warehouse Activity Report





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## 4. Data entry services

Unit 4.1 - Functions of data feeder

Unit 4.2 - Customer Management




## **Key Learning Outcomes**

At the end of this module, participant will be able to:

- 1. List the necessary information to be collected from client
- 2. Discuss the data entry process as per SOP and company guidelines
- 3. Detail the process of checking the transcribed data with source to eliminate errors

Ö

4. Detail the steps involved in recording source documents and backup files

## Unit 4.1: Functions of data feeder

## Unit Objectives 6

At the end of this unit, participant will be able to:

1. Explain the functions of a data feeder

## 4.1.1Role of data feeder

The data feeder must undertake the data entry services and is responsible for performing data entry work using a personal computer and appropriate software. He/ She must perform the following:

- Entering
- updating,
- researching,
- verifying
- retrieving data into/from various systems and
- ensuring the accuracy and confidentiality of information recorded..

#### The various incidents involved in this process are

- storage
- databases
- applications
- security

The data feeder is responsible for solving various problems mainly about

- networking/connectivity
- operating system/software
- installation/configuration
- computer hardware

The data entry errors may include:

- database error management
- database access management
- application installation
- security hardening

The data feeder must coordinate with the line manager and supervisor and should be able to perform the tasks given by the supervisor

The data feeder must perform the below mentioned functions:

 obtain sufficient information from the customer /client to understand the need and perform initial task

- assist the customer in providing right information to be entered
- provide the customer with a reasonable estimate time of entering data
- prioritize service requests according to organizational guidelines
- refer the problem to a competent technical support team if it cannot be resolved by the operator
- record and perform the service request accurately as per organizational processes and policies
- transcribe, enter, and verify data from a variety of source material including financial, personnel, police and other records or reports
- receive source documents from various departments, public, agencies, etc. and verifies accuracy of material, prior to input
- transcribe selected data into a computer and scans source documents in accordance with specific program instructions
- compare transcribed data, as displayed on a visual screen, document and corrects any errors with the source
- obtain help or advice from specialist if the problem is outside his/her area of competence or experience
- determine the cause of error message while entering data and makes appropriate corrections
- maintain files of source documents or other information relative to data entered
- perform various related functions to insure that the computer is maintained in a neat and orderly manner
- assist in (or performs) the filing and storage of security and back up data files
- perform various back-up or relief clerical duties as needed (i.e., switchboard, receptionist, fingerprinting, etc.)
- monitor the problem and keep the customer informed about progress or any delays in the process



Fig 4.1.1 Data's at warehouse

- Notes

## Unit 4.2: Customer Management

## Unit Objectives 6

#### At the end of this unit, participant will be able to:

- 1. Explain the necessary information that has to be collected from client
- 2. Explain the transcribed data with source to eliminate errors

### 4.2.1 Customer Management

The Warehouse Data feeder can use the ERP system, to better service the customers. ERP can help warehouse Data feeder to:

- Timely execute the Customer Order.
- Inform customer about delivery schedules
- Prioritize customer orders
- Inform them about delivery dates
- Respond to their queries and complaints
- Process Sales Returns

Warehouse Data feeder may use some of the following reports to service the customer.

- Sales orders- Product wise -Customer wise-Location wise- Daily
- Pending Sales orders- Product wise-Customer wise-Location wise
- Cancelled Sales orders- Product wise-Customer wise-Location wise
- Order/Invoice wise Product wise -Customer wise-Location wise- Daily
- Sales returns- Product wise -Customer wise-Location wise- Daily
- Sales register- Product wise -Customer wise-Location wise- Daily
- GST Tax payable with Taxable Turn over-Location wise-Monthly
- Sales Report- Distributor wise -Cluster wise-MT



Fig 4.2.1 Customer service

## -4.2.1 The process of checking the transcribed data:

#### 1. Calibrate everything twice

The best way to avoid common transcription errors is to proofread the finished transcription and then proofread it again. Ideally, you only need to proofread the text for one error at a time. This means that the transcript requires multiple calibration sessions. You can read the transcript aloud or vice versa as it helps you find spelling mistakes.

#### 2. Invest in high quality audio recording equipment

As mentioned above, transcription errors occur due to poor voice quality and incorrect word listening. To avoid these mistakes, you need to invest in high quality audio recording devices. For such devices, use an external microphone instead of the built-in microphone, a lapel microphone connected to the phone, a landline instead of a mobile phone, and a highly rated voice recorder. Include purchasing.

#### 3. Create templates and checklists

Create templates and checklists for yourself and your medical staff to follow during the dictation process. These tools add structure to the dictation and make sure nothing is left.

#### 4. Disable AutoCorrect

If you use your phone or computer for voice recording, turn off the AutoCorrect feature. AutoCorrect can cause common transcription errors during audio recording and input. AutoCorrect can be disabled in Windows Settings> Devices> Input. To disable it on your Mac computer, go to System Preferences> Keyboard> Text.

#### 4. Consider transcription outsourcing

The final tip is to outsource speech conversion to professionals. Professional transcription companies have the necessary language skills, medical knowledge, and associated experience. You will also receive appropriate training. You can take recorded notes and convert them into high-quality transcripts, or review and edit voice-recognized documents to create accurate medical documents.

Ultimately, you can save time and money by outsourcing your postings. Of course, it can significantly reduce stress in the workplace, so you can focus on providing better care to your patients.



Fig 4.2.2 Checking transactions

– Notes			

## - Exercise

- 1. What are various incidents involved in role of data feeder process?
- 2. List out some data entry errors
- 3. What is customer management?
- 4. Discuss the process of checking the transcribed data

Scan the QR code to watch the related videos



https://youtu.be/XTJnL66wLnY

**Customer Management** 





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# 5. Manage your work

Unit 5.1 - Various Compliances Unit 5.2 – Code of Conduct



SSC/N9001

## Key Learning Outcomes

#### At the end of this module, participant will be able to:

1. Detail various safety and privacy regulations of the company and customer

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- 2. Explain effective time management
- 3. Discuss how to use resources efficiently
- 4. Detail the steps involved in managing confidential information
- 5. State the organization's policies and procedures
- 6. Describe the procedure to ensure that the work meets the agreed requirements

## **UNIT 5.1: Various Compliances**

## –Unit Objectives 🦾

At the end of this unit, participant will be able to:

- 1. List the various acts and laws that govern the logistics industry.
- 2. Describe how to comply with the regulations.

## **5.1.1 Regulatory Compliance**

Adherence to laws and procedures laid down by the government for running an organization. Every business must comply with the laws laid by the central and state government. All good organizations ensure that they are hundred percent compliant with the laws of the land. Any non-compliance invites large penalties and huge loss of reputation.



Fig 5.1.1 Regulatory compliance Following are the key laws that the warehouse should comply with:



#### A. Contract Labour (Regulation & Abolition) Act:

Applicability of act:

To every establishment and contractor employing twenty or more workmen as contract labour. Primary role:

Principal employer - (obtain registration employing contract labour)

Contractor - (obtain license executing any work through contract labour)

#### B. Shops and Establishment Act:

Applicability: Every shop or commercial establishment which is not connected with the manufacturing process of a factory, the provisions of the act will apply to it.

#### C. Employees Provident Fund Act:

Applicability: Every establishment that employs 20 or more persons.

Membership: Get employers code number under the PF Act.

Eligibility:

Any person who is employed directly or employed through contractor. Employees contribution up to a Salary (Basic + DA) less than or equal to Rs.15000/- is required to become a member. An employee is eligible for membership of fund from the very first date of joining the establishment.

Rate of contribution:

Employees' share: 12% of (Basic + DA)

Employer's contribution: 13% of (Basic + DA)

#### D. Employees State Insurance Act:

Applicability:

Shops and establishments employing 20 or more persons.

If the above conditions are fulfilled the employer's primary role is to get employers code number under ESIC ACT.

Registration of the employees to be done within 10 days from the day the act becomes applicable. Eligibility:

Any person employed (directly or indirectly) for wages (up to Rs.21,000) a month, excluding overtime work or in connection with the work of the establishment.

Contribution ESIC (4.0 %)

Employers Share:	3.25	%
Employees Share:	0.75	%

#### E. Payment of Bonus Act:

Bonus represents a payment (profit sharing) made in additions to wages.

Applicability:

Every establishment employing 20 or more persons

The government can, however, apply the act to any establishment employing less than 20 but not less than 10 persons.

Eligibility: Employee drawing salary up to Rs 21000/P.M and worked for a minimum period of 30 days in a year.

Employees, whose salary exceeds Rs 21000/-, are not entitled to get bonus as per the act.

For the calculation of bonus (Basic + DA) has to be taken as Rs.7000

Minimum bonus: 8.33 % of salary or wage

Maximum bonus: 20 % of salary or wage

Bonus must be paid within a period of 8 months from the closure of accounting year

#### F. Minimum Wages Act:

Applicability: The act is applicable to all employees whether they are casual, daily rated, temporary or on a permanent basis.

The minimum wages is fixed by the state government and the rates vary from state to state from

region to region and get revised from time to time.

Records should be maintained:

Form I - Abstract of the Minimum Wages Act

Form II - Muster roll and wage register

#### Role of a Contractor:

In case, the warehouse associate has been employed through a contractor and not directly by the company, following are the key actions to be taken by the contractor:

- 1. Obtain contract labor license whenever applicable.
- 2. Maintain documents and registers and submit a copy to principal employer every month.
- 3. Payment of wages as per the Minimum Wages Act.
- 4. Working hours not more than 48 hours per week or 9 hours per day.
- 5. Supervise and reports all routine work.
- 6. Attend to all inspections.
- 7. Abide by all labour laws including payment of wages properly on time.
- 8. Payment of statutory dues like PF / ESI / bonus on time.

#### **Checklist for Compliance:**

Compliance to all statutory laws is mandatory for all warehouses. The warehouse manager must follow a sample check list on monthly basis to ensure that the warehouse is fully complaint.

Act	Compliance				
	To obtain registration certificate under S&E				
	Check renewal of registration				
S & E Act	To take renewed S&E certificate				
JAEALI	Maintenance of attendance register				
	Display of S&E registration certificate				
	Display of DIESL holiday list for the respective state				
	Check registration taken (if applicable)				
	Take RC under CLRA Act				
	Check renewal/ amendment of contract labour				
	To take renewed CLRA Certificate				
	Check yearly return submitted				
Contract Labour	To file yearly return under CLRA				
Act	Obtaining license from contractor				
	Attendance register maintained				
	Maintenance of wages register				
	Check half yearly return submitted by contractor				
	Check identity cards issued to associates engaged by				
	contractor				

	Acknowledge copy of PF challan submitted	
PF Act	Check monthly return as generated by PF online system	
	submission.	
ESIC Act	Acknowledge copy of ESIC challan of the previous month	
	submitted	
	Check ESIC (temporary or permanent) cards generated by ESIC	
	online system issued to associates	
Min Wages Act	Check whether minimum wages are paid	
Bonus Act	Submission of yearly register in Form C	
	Submission of annual return in Form D	
Table 5.1.3 Checklis	t for compliance	

Scan the QR code to watch the related videos



https://youtu.be/vYoysbkC8g0

Various Compliances

## **UNIT 5.2: Business Etiquettes and Code of Conduct**

## Unit Objectives | 6



At the end of this unit, participant will be able to:

- 1. Describe the key principles of code conduct.
- 2. List the possible corrupt practices in a warehouse.
- 3. Explain the meaning and importance of etiquette.
- 4. Describe the key business etiquettes.

## 5.2.1 Code of Conduct

A Code of Conduct (CoC) defines how a company's or warehouse employees should act on a day-today basis. CoC originates from the company's core value and cultures and guides its daily behaviour and operations. Most of the companies have documented CoC. Though every company will follow its own CoC, following are some of the common characteristics of most of the CoC.

- 1. Documented: Most companies document their CoC and it is readily available to all employees for understanding and reference.
- 2. Management Support: The CoC carries endorsement and approval of the senior management team. Being the leadership team, they have to constantly demonstrate their commitment to CoC.
- 3. Comprehensive: Most of CoC are elaborate and try to cover every aspect of company's business. They try to answer every possible question which employees may have during their day to day functioning.
- 4. Lucid: Most CoC are written in simple language which is easy for people to understand and comprehend. It should be visually appealing and generally created in the form a small booklet.

The ethical behaviour of the employees is regulated by codes of conduct. Common ethics violations can include the misappropriation of funds, conflicts of interest, sexual harassment, leak of sensitive information, fraudulent billing etc.

CoC clearly mentions the consequences, an employee, must go through in case of any violation of ethical norms or of the CoC guidelines. CoC guides the behaviour and conduct of the employees while dealing with external partners, customers and vendors.

Following are the ways in which manager can drive the CoC guidelines to its team:

- Engage and explain the CoC to them. •
- Invest in ethical training. Frequent reinforcements.
- Lead by example.
- Pair them with ethical peers.
- Reduce their opportunities or temptation for violations.
- Create an ethical culture. •

As soon as an employee notices breach of CoC guideline or integrity by his colleague, he should immediately inform to his senior about the same. Depending upon the nature of the breach the senior may report to Ethics committee or HR Head. Several companies follow a formal whistleblower policy along with CoC. The management of the company should encourage periodic programs to make sure that employees follow the CoC and ethics guidelines by the organization.

#### **Identify Corrupt Practices:**

Corruption is understood as bribery and granting and accepting undue advantages. Related offences could be fraud, embezzlement, document forgery and money laundering. Preventing corruption is essential for any organization. It not only prevents any financial loss but also saves the company from any loss of reputation.

## Following are some of the corrupt practices that can take place in a warehouse if the system is not at check -

- Stealing of materials if there is no proper picking system in practice and no security system on entry and exit of employees.
- Colluding with the transporter and excess dispatch of the material. Alternatively, receipt of short material and not reporting.
- Fraudulent usage of warehouse receipts multiple times to raise credits.
- Inflating the transporter bills to raise more money.
- Dispatching the wrong or costlier material to the consignee.
- Obsolete safety and security equipment's installation.
- Purchase of second hand MHE's and forging with the bills to raise funds.
- Maintaining wrong attendance records.
- Nepotism in hiring of warehouse employees.
- Stealing of data or information.

The warehouse manager has to ensure that there are enough check and balances in place to ensure no such violation takes place.

## **5.2.2 Business Etiquette**

Etiquette simply means how to behave in various situations, it relates to a code of behaviour among people within an organization group or society. For various office situations such as office meeting, client meeting, writing a mail, traveling, office party, meeting a client for the first time, require certain rules to be followed.

Code of Conduct are written rules of behavior, whereas Etiquettes are unwritten rules of behavior in the workplace.

Etiquette includes knowing and respecting people's customs and traditions, observing certain behaviour, actions in a group & appropriate manners.

Etiquettes are important for the following reasons:

- Helps you to earn respect
- Charms your personality
- Enables you to be confident in a variety of settings with a variety of people
- Helps to improve relationships with colleagues, seniors and clients
- Shows commitment to excellence and quality
- Keeps you happy and motivated
- Exhibit professionalism and develop a polished image

Certain important business etiquettes areas are:

- Dressing
- Office party etiquette
- Business travel etiquette
- Proper greetings
- Email etiquettes
- Telephone/mobile manners
- Office etiquette
- Meeting etiquette
- Cubicle etiquette
- Business card etiquette
- Different cultural etiquette & protocol

## Six "S" of Meeting & Greeting



Fig. 5.2.2. Six 'S' of greeting



Fig. 5.2.3 Telephone Etiquette



Fig. 5.2.4. Office Etiquette

Notes		
<u> </u>	 	 

## Summary 🔎



How to stop corrupt practices from happening within the warehouse is clearly explained in this chapter. There are a set of code of conduct and etiquettes which needs to be followed and practiced by all the employees. Any violations of ethics and code of conduct should be properly dealt with and escalated to the seniors as per the matrix set by the organization.

## **Exercise**

- 1. What are the key laws that the warehouse should comply with regulatory compliance?
- 2. What is regulatory compliance?





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Transforming the skill landscape

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# 6. Compliance to health and safety

- Unit 6.1 Implementing Safety in the Warehouse
- Unit 6.2 Handling Dangerous and Hazardous Goods
- Unit 6.3 5S Concept
- Unit 6.4 Managing Breach of Safety, Accidents and Emergency Situations

SSC/N9003

## -Key Learning Outcomes

At the end of this module, participant will be able to:

1. Detail health, safety and security procedures to be followed in the workplace

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- 2. Detail the concept of 5S
- 3. Explain how to identify unsafe working conditions
- 4. Explain the escalation matrix for reporting deviations/ violations

## **UNIT6.1: Implementing Safety in the Warehouse**

## <sup>–</sup> Unit Objectives 🛯 🙆

At the end of this unit, participant will be able to:

- 1. Explain the criticality of Safety
- 2. Describe the various safety precautions during the various warehousing activities
- 3. State the importance of Training to Warehouse Team

## 6.1.1 Safety and its Criticality

## "Nothing is more important than the safety of the people and goods stored inside the warehouse".

Working in warehouse creates several health and safety risks. In case we do not control them, it may lead to accidents, injury to people, illness. High employee turnover, lost working hours and at worst even fatalities. Safety rules and procedures are often disregarded to save money, cut corners, lack or focus or insufficient time. Well implemented safety procedures lead to minimum risk of injury, fewer disruptions, lesser absenteeism, higher employee satisfaction and finally better productivity.

As discussed in earlier chapters, companies store their Finished Goods inventory in the warehouse, they store Raw Materials on the manufacturing side. The nature of the products stored in the warehouse determine the rules and practices to be adopted to save the people from injuries of any mishaps.

As a corporate, companies are also officially bound to implement and maintain safety procedures. The safety procedures should protect the workers from any danger and ensure that they operate in safe and comfortable environment. However, the companies should maintain safety procedures not just or legal compliance, well implemented safety rules indicate the concern the company carries for its people well-being.

#### Safety Rules In a Warehouse -

- 1. Ensure Safety Equipment is Used at all Times.
- 2. Eliminate Any Potential Safety Hazards.
- 3. Clearly Label Designated Hazardous Zones.
- 4. Always Use Safe Lifting Techniques.
- 5. Provide Training and Refresher Courses.
- 6. Promote Safety Awareness in the Warehouse.

## 6.1.2 Safety Procedures to be observed in a Warehouse

#### A. Vehicle Safety

When Forklifts and reach trucks are sued in the warehouse it is essential to prevent an injury due to impact or crush. It is observed that most of the times the accidents happen while reversing. Following are some of the safety procedures for using Forklifts:

## Rules for Forklift Safety

- 1. Only trained personnel can drive the vehicles
- 2. Make sure operators follow speed limits
- Install mirrors to assist the driver's vision when cornering or reversing
- Keep pedestrian crossings away from obstacles
- Organize regular inspections and maintenance work on the vehicles
- 6. Provide drivers with a daily checklist
- 7. Display driver warnings and safety signs
- Support the floor to prevent the vehicle from tipping over or being damaged

Fig 6.1.1 Rules for forklift safty

B. Slips, Trips, and Falls



Various reports indicate Slips and Falls are the single biggest reason for work related injuries across the world.

#### To prevent slips, trips, and falls, Company should:

#### Slips, Trips, and Falls

- 1. Good housekeeping. Clean up spillages, remove obstructions from paths, etc
- 2. Ensure cleaning staff display appropriate warning signs
- 3. Use anti-slip paint
- 4. Use anti-slip tape and shoes
- 5. Make sure floors are level
- 6. Train staff to work at height safely

Fig 6.1.2 Slips, Trips, and Falls





#### C. Lifting

Lifting can be done both manually and using MHE. Both the situations pose safety hazards if not done properly.

To minimize lifting risks, Company should:

## Lifting

- KKALL
- 1. Ensure operators know the maximum safe working load of lifting equipment.
- 2. Train staff in manual handling safety
- 3. Avoid the need for manual handling if possible
- 4. Train how to use proper handling techniques to minimize strain.
- 5. Ensure staff use and store chains properly

Fig. 6.1.3 Lifting

#### D. Fire Safety

Fire is the biggest hazard Warehouse faces. Along with loss of valuable material stored in the warehouse, Fire can even lead to injuries or fatalities to the people working there. To maintain fire safety, company should:





1. Carry out fire drills at least once a quarter.

- 2. Test fire alarms weekly
- 3. Create a fire evacuation and emergency plan
- 4. Designate a fire warden
- 5. Fire escape routes, exits, and signs need to be well-lit .
- 6. Handle hazardous substances with extreme care. Make sure you know how to store chemicals safely in a warehouse.

Fig 6.1.4 Fire safety

#### E. <u>Charging Stations</u>

Charging stations in warehouse facilities are used to recharge Forklifts, BOPT and other Power Equipment. If proper guidelines are not followed, fires and explosions can occur.

## **Charging Station**

- Charging stations should be away from open flames.
- Smoking should be prohibited.
- An adequate ventilation system must be installed to disperse harmful gases.
- Proper PPE should be worn.



#### Fig 6.1.5 Charging station

F. <u>Conveyors</u>

Conveyor equipment is commonly used in warehouse facilities to move goods within the premise. However, conveyors pose serious dangers to workers including getting caught in equipment and being struck by falling objects. To remain safe, it is important to:



- Ensure proper safeguarding equipment between the conveyor and the worker.
- 2. Periodic conveyor maintenance and repairs
- 3. Ensure that belts are checked and inspected regularly.
- 4. Place adequate guards on pinch points
- 5. Use lockout options so employees can shutdown conveyor operations quickly

Fig 6.1.6 Conveyors

#### G. Docks

**Warehouses** use docks to load and offload material from the trucks. The hazards that exist with docks include driving forklifts off docks and equipment accidents involving products improperly placed that fall on employees.

### Docks

- · Clearly mark the edge of the dock
- Ensure that docking plates can safely support the load weight of equipment, inventory or raw materials.
- Stay clear of dock edges and don't use forklifts in reverse near the edge of a dock.
- Post warnings at eye level for employees.
- Dock stairs and ladders must meet standards.
- Prohibit employees from jumping between docks.





#### Fig. 6.1.7 Docks

Beside the above precautions, two very important points in Safety are usage of PPE and Employee Training.

#### H. Personal Protective Equipment

Employees need to wear PPE all the times while working in the warehouse. If PPE is not worn and an accident occurs, it can lead to serious injuries or even fatalities.

## We have seen in previous sections PPE to be used to protect Head, Fingers, Feet, Eyes and the rest of the body.

One need to assess the risks in the warehouse to determine which type of PPE the Data feeders need to wear.

#### I. Training to Staff

Sense of awareness about Safety is the most important factor in Safety Implementation. Most of the companies run formal Safety training programs where all safety related measures are explained and formally practiced. There are regular refresher courses to further reinforce the concept of Safety.

- o Ensure That all employees are trained and carry up to date knowledge on safety procedures
- Employee should be educated about the consequences which originate by following unsafe work practices
- Any employee not following Safety procedures should be strongly dealt including terminating services if required.
- All staff members should be encouraged to be constantly aware of what's around them and to communicate where they are to ensure the avoidance of collision accidents.
- o Companies may implement incentives for zero-accidents and zero Near-misses.

## 6.1.3 Inspection of Work Area \_\_\_\_\_

A Warehouse is an active place and its fast-paced nature often leads to injuries. The safety management program should ensure safety of the employees at all times.

The warehouse must continually inspect all areas of the warehouse, identify unsafe operating conditions and properly correct them for safe operation. Tools and equipment should be checked, cleaned and repaired regularly, and damaged or worn tools should not be used.

- The stored materials must not block corridors, stairs, exits, fire extinguishers, emergency wells, emergency showers or first aid stations. All storage areas must be clearly marked.
- Check the fire hoses and fire extinguishers regularly. Remove all obstacles and make these articles available immediately. Only personnel trained in appropriate firefighting methods should handle this equipment.
- Ensure that approved containers are used to store flammable, combustible, toxic and other hazardous materials in designated areas.
- Make sure that all power cables are disconnected by holding the connector and pulling it gently. Never pull on the rope. If the power cord is broken or the cables are exposed, take it out of service.
- Warehouse should not store highly combustible chemicals in a warehouse. There should be a separate location for it.
- o Inspect the dock area daily to ensure that fire extinguishers are not blocked or damaged.
- Check the conveyor belts regularly to ensure that they are not damaged and in a safe condition.
- Check the sprinkler systems every month and conduct flow and alarm testing. Document inspections.
- If pulleys or hoists are used lift heavy material, inspect pulley and hoisting slings. Ensure that hook latches and appropriate PPE are available.
- Inspect all ladders on weekly basis for any damage. All types of ladders, whether wooden, metal, or fiberglass, should be checked frequently for possible defects resulting from prolonged wear and necessary repairs and/or replacements must be made.







Continuous Inspection



Fig 6.1.8 Inspection of Work area and Equipment

#### General unsafe working environment

- Slip or trip of the employee caused by spillages or wet floors.
- Uncovered power cords or hoses .
- Working overtime, much beyond scheduled hours can also cause accident due to fatigue.
- Lack of proper ventilation.
- Broken windows, damaged doors, defective plumbing and broken floor surfaces can cause accidents and affect work practices.
- No proper usage of PPE by the employees while carrying out warehousing activities. It is Warehouse Data feeder's responsibility to ensure that all the workers are using all the required Personal Protective Equipment (PPE) for safe working.



Fig 6.1.8 Unsafe working environment

## **UNIT 6.2: Handling Dangerous and Hazardous Goods**

## Unit Objectives



At the end of this unit, participant will be able to:

- 1. Discuss the hazards present in handling certain chemicals.
- 2. Explain the concept of Safety Data Sheet.
- 3. Describe the various Do's and Don'ts in Handling Hazardous Chemicals.

## **6.2.1 Handling Procedures for Dangerous Goods**

Dangerous and Hazardous materials require special handling and attention whenever they are stored in warehouse. A specific Standard Operating Procedure (SOP) is set for each type of such cargo and strict adherence to it only ensures safety of the employees and the warehouse. Following are some of the key points that should be taken care of when dangerous goods are kept in warehouse. Material Safety Data Sheets (MSDS) and Container Labels will be the basis of reference to conduct the evaluation -

All articles or substances considered as dangerous goods must be identified, classified, and assigned to one of the standard names used in the transport and storage of dangerous goods.

Warehouse must identify the material which cannot be stored together and create separate designated places for them.

Hazardous Material are generally assigned to one or more of the following classifications.

- Flammable Liquid any liquid having a flash point below 100 degrees Fahrenheit.
- Combustible Liquid any liquid having a flash point between 100 and 200 degrees Fahrenheit and the liquid produces enough vapors to ignite if exposed to an ignition source.
- Flammable Solid a substance that can cause a fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, will burn so vigorously that it creates a hazard.
- Oxidizer a substance that readily yields oxygen to stimulate the combustion of organic matter.
- Corrosive a liquid that corrodes steel (SAE 1020) at a rate greater than 0.250 inches at a test temperature of 130 degrees Fahrenheit or has a pH less than 2 or greater than 12.5.
- Organic Peroxide an organic compound containing the chemical bond, oxygen joined to oxygen.
- Poison a substance so toxic that it presents a risk to life or health.

- Compressed Gas a substance in gas or liquid form contained in a vessel under pressure. This includes cylinders, lecture bottles, and aerosol cans. These substances may be flammable, non-flammable, or poisonous.
- Cryogenics substances that are extremely cold such as liquid nitrogen, liquid helium, and dry ice. These substances may also become asphyxiation hazards if spilled in non-ventilated areas.
- Radioactive any material having a specific activity greater than 0.002 micro curies per gram (uCi/g).
- Biomedical tissues, organs, and blood from humans and primates.



Fig 6.2.1 Dangerous goods classification

#### Safety Data Sheet

Safety data sheet (SDS), material safety data sheet (MSDS) or product safety data sheet (PSDS) is a document that contains information on safety and health protection when working with various substances and products.

• Safety data sheet (formerly known as material safety data sheet) contains information such as the properties of each chemical. Risks to health, health and the environment; Safety measures; and precautions when handling, storing, and transporting the chemical.

- Provides clues for each chemical:
  - o Personal protective equipment (PPE)
  - o first aid procedure
  - o Spill cleaning procedure

All employees must be trained to read, understand and access safety data sheets.

#### The safety rules and procedures to be followed in a warehouse Hazardous Cargo:

Hazardous material is one which is capable of producing effects like fire, explosion, sudden release of pressure and may cause acute health effects like burns, injuries, convulsions or even organ damage. In spite of several challenges Hazardous material is required in various stages of manufacturing and need to be stored in a warehouse.

Following are some of the suggestions for handling hazardous material in the warehouse:

#### ✓ Framing the right procedures as per the regulations

Procedures are created to ensure that the company's direction and requirements are met at the warehouse. There could be procedures around safety, handling of cargo, putaway, picking, packing, labeling etc. Carrying the procedures for all activities ensures that warehouse is operating within the company's norms.

✓ Training and certifying the staff

Storing, handling and transporting dangerous goods is a complex process. It requires a very detailed understanding of various procedures and regulations. All the people working in the warehouse must been properly trained and certified in handling Dangerous goods. Without training it is extremely difficult to achieve a detailed understanding of the Regulations.

#### ✓ Storing goods as per their classification

Many hazardous goods are incompatible with each other. Their interaction can create serious risks of accidents It is a regulatory requirement to separately store such goods. A god warehouse carries complete knowledge of such goods and ensures that such material is stored at a distance and barriers are created between them

#### Proper documentation and Display

The Warehouse team should be aware all the quantity and location of hazardous goods being stored all the time. In case any untoward incident happens there should be precautionary statements displayed all along instructing people what to do.

https://we.tl/t-7FJjKRohupdangerous /hazardous cargo in warehouse

	Hazardous Material Ch	neck List
1	Product Name	
2	Hazard Class	
3	PPE required to handle	
4	Engineering Controls/ Ventilation	
5	Special Handling Procedures	
6	Storage Requirements	
7	Special Containment	
8	Accident Procedures	
9	Waste Disposal	
10	Special Precautions	
11	Decontamination	
12	Designated Areas	
13	Approved by	

Table 6.2.2. Hazardous material checklist

## UNIT 6.3: 5S Concept

## – Unit Objectives



#### At the end of this unit, participant will be able to:

- 1. Discuss the concept of 5S at workplace.
- 2. Implement 5S at your workplace in the Warehouse.

## 6.3.1 5S at Workplace

5S is a system for organizing workplaces that allows employee to work efficiently, effectively and safely. This system is designed to put everything-in-its-place and keep the workplace clean so that people can make their job easier without wasting time or risk of injury.

The term 5S comes from five Japanese words:

- o Seiri
- o Seiton
- o Seiso
- o Seiketsu
- o Shitsuke

In English, these words are often translated to:

- o Sort
- $\circ \quad \text{Set in Order} \quad$
- o Shine
- o Standardize
- $\circ$  Sustain

Each S represents part of a five-step process that can improve the overall function of the operating location.

The 5S methodology offers many benefits, including:

- Low cost
- High quality
- Increased efficiency
- Increase staff satisfaction
- A safer work environment

5S involves assessing all available areas, deleting unnecessary items, organizing things logically, performing cleaning tasks, and maintaining this cycle. Organize, clean, repeat. Let's take a closer look at each part of the 5S.

	<ol> <li>Sort</li> <li>Keep only what is used.</li> <li>Remove all unnecessary items.</li> <li>Red tag all unused items &amp; store for management review.</li> </ol>
<b>II</b> II	<ul> <li><b>2. Set In Order</b></li> <li>A place for everything &amp; everything in its place.</li> <li>Easy retrieval for all items.</li> <li>Clear visualisation of all equipment.</li> </ul>
	<ul> <li><b>3. Shine</b></li> <li>Daily checking &amp; cleaning of all areas.</li> <li>Ensure all areas are always safe to work in.</li> <li>Standards are continually maintained by everyone.</li> </ul>
	<ul> <li>4. Standardize</li> <li>Implement effective policies, procedures &amp; routines.</li> <li>Ensure all team members are regularly trained.</li> <li>'Sort', 'Set In Order' &amp; 'Shine' become habit.</li> </ul>
0	<ul> <li>5. Sustain</li> <li>Work together as a team to deliver what is expected.</li> <li>Continue the cycle of improvement.</li> <li>Maintain the policies, procedures &amp; routines.</li> </ul>



Fig 6.3.1 5S at Workplace

1. <u>Sorting</u> - The Act of discarding away all unwanted, unnecessary, and unrelated materials in the warehouse.

- Classify & sort out
- Remove unnecessary items
- Store as per Frequent use/ rare use/ not used at all
- Designate locations for storage
- Monitor progress

Examples: waste strapping Patti and clip, broken pieces of wooden pallets, torn boxes, waster packing material, peeled off BOPP tapes, shrink/stretchable wraps, waste office stationery, waste paper.

2. <u>Set in Order / Stabilize</u> - It consists of putting everything in a designated place so that everything can be quickly accessed and quickly returned to the same place.

- Position the items in the warehouse according to their frequency of use.
- Put the frequently used items next to the workplace
- Keep uncommon parts away from the operating location

Examples: GRN, Invoice, STN, POD, Road permit, LOI and Agreement etc. Equipment and Assets like HPT, stackers, forklifts, fresh stocks, DOA stocks, restricted and unrestricted stocks, FEs, dust bin, etc. Electrical wiring and fittings should be in intact conditions.

3. Shine / Cleaning - Seiso consists of cleaning up the workplace and giving it a 'shine'.

- Cleaning must be done by everyone in the warehouse , from Data feeder to managers (regarding their workplace)
- Every person should ensure that his surrounding place is clean and tidy.
- It works best if every area of the workplace is assigned to a person or a group for cleaning.

Examples: Office area, Security area, outside premises, loading and unloading dock/bay, shutters, windows and safety grills, operation table and area, toilets, pantry, DG & meter room, cobwebs, dusting of racks and stock boxes, corners and flooring of warehouse, desks, computers, dustbins, etc.

4. <u>Standardize</u> - Standardize is the result that exists when the First Three 'S' - Sort, Set in Order and Shine Are Properly Maintained.

• Proper symmetry (regularity) should be maintained for labeling, nomenclature (categorization), filing, report names, stock boards, signage's, safety posters, stationery management, packing material, pallet size, white boards, address boards, etc.

Provide a means for preventing recurrence of errors and minimizing variability.
 <u>5.Sustain/Discipline</u> - Sustain means making a habit of properly maintaining correct procedures.

- Self-awareness and discipline are necessary to carry out and support all activities.
- A checklist should be drawn up to monitor any activity under 5S
- Make sure everyone follows the rules and makes it a habit
- Creates a common understanding about 5s
- Training for all Standards development and success monitoring
# UNIT 6.4: Managing Breach of Safety, Accidents and Emergency Situations

# **Unit Objectives**



#### At the end of this unit, participant will be able to:

- 1. Describe how to handle emergency situations.
- 2. Explain what actions to be taken in case of any accident.
- 3. Describe what documentation to follow in case of any accident
- 4. Explain the details on evacuation plan and safe assembly point.

## **6.4.1 Protocol in case of Emergency Situations**

In ideal warehouse should try to prevent accidents from happening as far as possible. Despite all precautions, if accidents still occur, following action needs to be taken.

#### At the time of incident

- Take control at the scene and try to restore order.
- First aid and emergency calls. Provide immediate assistance to the injured if you can; else call for help. Caring for injured personnel is the top priority.
- Monitor any secondary accidents. This includes banning people who should not be on area.
  For example, if the spill happened, you don't want other employees to pass by.
- Identify people and conditions on the scene. The people are the witnesses to the event.
  Have someone else take down their names. If you're alone on scene, at least try to look around and see who's there.
- Keep material evidence. Protect the scene and control access again. You do not want to modify or delete any evidence.

#### Once the immediate emergency is stabilized, the following measures must be taken:

- Assess how much damage is, how severe it can be, and that you need additional resources to investigate.
- Make proper notifications. Make sure senior management is aware. Also call the affected families, any regulatory agencies you need, and your insurance companies.

#### **Other Actions**

- The initial report should be completed and submitted for all assessments within 24 hours of the accident.
- Subsequent reports, including recommended actions, should be completed within 48 hours and 30 days.

#### Finally

 If an accident occurs, it is best to follow a written procedure and learn about the process from staff and management. • The learning from the incident and how to prevent it in future should be clearly documented.



	in 12 hours of incident/acci
Incident Date:	Incident Time:
Injured Person Name:	
Address:	
Male/Female:	Date of Birth:
Details of Incident:	
Who was injured person?	
Injury Type:	
Does Injury require Hospital/Physician? Yes: Hospital Name:	No:
Injured person/Party Signature/Date:	/
Important Notes and Instructions:	

Fig 6.4.2 Incident Report Format

#### Managing Deviations in Health, Safety and Security -

Warehousing with its whole range of activities can result in various hazards and risks. An effective Safety and Health management system tries to assess to assess every possible safety risk and tries to put in measures to prevent them. By doing this the management is trying to protect its most valuable asset, employees, as well as other members of the public from harm. Safety measures not only protect premises, goods, equipment but the reputation too.

- There should be a regular inspection with regards to safety and security of the warehouse.
- A periodic checklist should be asked to fill in by the employees with regards to following the safety procedures and their personal hygiene.
- Any employee seen violating health and safety norms should be immediately warned. In case if he still does not improve, appropriate actions may be taken.

# - Tips 🖳

• Following healthy and hygienic practices every day will make you feel good mentally and physically.

• Hygiene is two-thirds of health – so good hygiene will help you stay strong and healthy!

# Summary

This chapter deals with the health, safety and security norms to be followed within the warehouse to avoid any accidents. 5S is clearly explained in this chapter and is a very helpful tool in organizing the warehouse. Process to be followed while handling hazardous goods is very much important.

### Exercise

#### **Multiple Choice Questions**

- 1. Which of the following is not an activity to maintain fire safety in the warehouse?
  - A. Banning the entry of any Match boxes and Lighters
  - B. Building an Emergency Response Team
  - C. Identify the escape routes
  - D. Regular Inspection and maintenance of Forklifts
- 2. Assigning every area of the workplace to a person or a group for cleaning is part of which S in the 5S methodology
  - A. Set in Order
  - B. Shine
  - C. Standardize
  - D. Sort
- 3. Which of the following is not a part of Material Safety data Sheet?
  - A. Properties of the Chemical
  - B. Storage and handling instructions of the Chemical
  - C. Price of the Chemical
  - D. Risk to Health of the Chemical
- 4. Which of the following is not a Safety Hazard?
  - A. Employee working for long hours much beyond the shift hours
  - B. Employee not being trained on Safety Procedures
  - C. Safety signs not being displayed in the warehouse
  - D. Not holding a Sunrise or Sunset Huddle meeting

<u>Fill in t</u>	he Blanks	
1.	are the single biggest reason for work related injuries across the world.	
2.	Removing unnecessary items if the part of S in the 5S at the warehouse.	
3.	in warehouse facilities are formal locations used to recharge Forklifts, BOPT and	
	other Power Equipment.	
4.	An employee not following safety procedures should be	
Note	es 🗐	

Scan the QR code to watch the related videos



Safety



PPE

https://www.youtube.com/watch?v=kcM9u4heDVk

https://www.youtube.com/watch?v=J3-5DPWQlj8



#### Annexure – QR Codes

S.	Chapter No.	Unit No.	Торіс	URL	Page	QR Code (s)
NO			Name		No.	
1	Chapter 1- Introduction to Data Feeder	Unit 1.1- Logistics and Supply Chain Management	1.1.1 Supply Chain and Logistics Manageme nt	https://ww w.youtube. com/watch ?v=4- QU7WiVxh <u>8</u>	27	Logistics Mangement
2	Chapter 1- Introduction to Data Feeder	Unit 1.1- Logistics and Supply Chain Management	1.1.1 Supply Chain and Logistics Manageme nt	https://ww w.youtube. com/watch ?v=IZPO5R cIZEo	27	Supply Chain Management
3	Chapter 2- Preparation for Operations	Unit 2.2 – Pick list , labels and signage	2.2.1 Pick List	<u>https://yo utu.be/tYY YIfkkjVQ</u>	42	Warehouse Labels & Signs
4	Chapter 2- Preparation for Operations	Unit 2.2 – Pick list , labels and signage	2.2.1 Pick List	<u>https://you tu.be/8n8P hwtwpLk</u>	42	Print Pick List
5	Chapter 3- Documentatio n and Quality Control	Unit 3.2 - Inventory check and documentation	3.2.1 The methods of managing Inventory Accuracy	https://yo utu.be/He 2zvhLANI8	62	Improve Inventory Accuracy

S. NO	Chapter No.	Unit No.	Topic Name	URL	Page No.	QR Code (s)
6	Chapter 3- Documentatio n and Quality Control	Unit 3.3: Types of Reports	3.3.3 Reporting Process	<u>https://y</u> outu.be/ hluW3rjk 2Es	62	Warehouse Activity Report
7	Chapter 4- Data entry services	Unit 4.2 - Customer Management	4.2.1 Customer Manageme nt	<u>https://yo utu.be/XTJ</u> nL66wLnY	71	Customer Management
8	Chapter 5- Manage your work	Unit 5.1 – Various Compliances	5.1.1 Regulatory Compliance	<u>https://yo</u> utu.be/vYo <u>ysbkC8g0</u>	78	Various Compliances
9	Chapter 6- Compliance to health and safety	Unit 6.1 - Implementing Safety in the Warehouse	6.1.1 Safety and its Criticality	https://ww w.youtube.c om/watch? v=J3- 5DPWQlj8	105	Safety
10	Chapter 6- Compliance to health and safety	Unit 6.1 - Implementing Safety in the Warehouse	6.1.1 Safety and its Criticality	https://ww w.youtube.c om/watch? v=kcM9u4h eDVk	105	PPE





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