Open Awards Qualification Unit

This unit forms part of a regulated qualification.

9 Unit Details

Unit Title:	Warehouse Operations within Supply Chain Logistics
Unit Reference Number:	Y/618/2513
Level:	3
Credit Value:	4
Minimum GLH:	32

2 Learning Outcomes and Criteria

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand the role of warehousing in the supply chain logistics operation	1.1 Describe the job roles found within a warehouse operation
	1.2 Describe the different types of warehouses and their functions
2. Understanding the role of automation in a warehouse operation and how critical this is to an effective operation.	2.1 Discuss the role of automation in a warehouse environment
	2.2 Describe a range of automation types used in warehousing operations
3. Understand a range of warehouse data and interpret this in terms of operational performance.	3.1 Explain the role and relevance of Key Performance Indicators (KPI) and Service Level Agreements (SLA) in warehouse operations.
	3.2 Describe the role of Warehouse Management Systems (WMS) and the type of data output this provides.
	3.3 Describe the process of stock or inventory monitoring and control systems and the type of data output this provides.

Learning Outcome 1 - Indicative Content

Warehousing functions are very diverse, varied and complex in nature therefore a wide range of job roles, some with very specialist knowledge and skill sets, can be found in this area of logistics operations. Students will understand and be able to discuss the roles of management and supervision, stock and inventory control, quality compliance, warehouse operatives, and the skills needed to fulfil these vocations.

There are a number of different types of warehousing operations, some that are particularly specialist which are needed to support the global supply chain supply chain operations. Students will be introduced to some of these examples and will understand the main characteristics and role of Distribution Centres (DC), Regional Distribution Centre (RDC), Ambient, Cold Storage, Fulfilment Centres, Bonded and Outdoor warehousing operations.

Students will also understand apart from general storage of goods and products, warehouse operations can also provide valued added services, act as a cross docking or transit function, serve as a HMRC or security facility.

Learning Outcome 2 - Indicative Content

Warehouse operations are traditionally very manual in nature but over the past 15 years the level of automation being introduced is dramatically changing the face of this element of logistics operations. The student will understand the key role and rationale of automation investment in warehouse operations, which include cost reduction, increases in productivity, improvement in quality with the reduction in human error, reduction in H&S risk and subsequent accidents in the workplace. The student will understand how all these benefits can help deliver competitive advantage to a warehouse operator.

Understanding the role automation can play in warehouse operations, learners will be introduced to some of the key automation products and machine systems, that are often employed in a warehouse function and will understand where they deliver value to the operation. Students will understand the role of conveyors, cranes, automated storage and retrieval systems, robotics and autonomous vehicles that are now becoming common place in contemporary warehouse operations.

Learning Outcome 3 - Indicative Content

A warehouse operation invariably is managed through a range of Key Performance Indicators (KPI) and Service Level Agreements (SLA) with a view to driving efficiency of performance whilst meeting client obligations through defining service expectations. Having been introduced to a range of KPI and SLA examples, students will understand the role of both these informal and formal contracts and how these are devised, communicated, monitored and reviewed in the context of warehouse operations. KPI examples will be utilised to determine the work rate of warehouse operatives based on an hour by hour monitoring process, the flow and volume of goods and products through a processing system, quality and compliance of goods and products at key areas within the operation. SLAs are common with the client or customer or external party and may outline the service “on time” obligation of delivery or availability of a product, the quality and accuracy of order fulfilment as examples.

Warehouse Management Systems (WMS) are a key element of effectively managing any warehouse operation as this central system draws together all the desperate activities or functions that are undertaken. Students will understand the functionality of WMS and how contributes to the daily planning of the operation, staffing resource and visibility of inventory and the “in time” performance of the operation, particular in a picking, packing and despatching function. Students will be understand some of the data the WMS can provide, analysing this they will understand the operational performance of the warehouse operation.

In any warehouse operation there is a need to have some form of understanding and control of the stock that is on hand and the flow of material that is moving through the facility. An established warehouse operation will adopt some form of system in order to control, and monitor their stock and inventory, which can be an IT system or a manual process. Learners will be introduced to some examples of this particular process and the complexities that often occur in this specific domain of warehouse operations. They will understand how stock this management and monitoring process tracks inventory levels, orders and sales and how inventory management is necessary with supporting Material Resource Planning (MRP) activity. Students will also appreciate how historic inventory data can help warehouse operations identify trends and seasonality behaviour and therefore can help them forecast can capacity plan their function in order to adapt accordingly.