



Model Curriculum

QP Name: Material Handling Equipment (MHE) Operator

Operate Battery Operated Pallet Truck/ Operate Reach Truck/ Operate Forklift/ Operate Order Picker/ Utilise special MHE attachments for special goods

QP Code: LSC/Q0401

QP Version: 3.0

NSQF Level: 4

Model Curriculum Version: 3.0

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Training Parameters

Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Engineering/Maintenance
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8334 and ISCO-88/8334
Minimum Educational Qualification and Experience	<p>12th grade Pass or equivalent with 1 year of relevant experience in warehousing.</p> <p>OR</p> <p>10th grade pass or equivalent with 3 Years of relevant experience in warehousing.</p> <p>OR</p> <p>Previous relevant Qualification of NSQF Level 3.5 with 1.5 Years of relevant experience in warehousing.</p> <p>OR</p> <p>Previous relevant Qualification of NSQF Level 3 with 3 Years of relevant experience in warehousing</p>
Pre-Requisite License or Training	Valid permanent LMV driving license (as applicable to the type of MHE operated)
Minimum Job Entry Age	18
Last Reviewed On	06/02/2026
Next Review Date	06/02/2029
NSQC Approval Date	06/02/2026
QP Version	3.0
Model Curriculum Creation Date	26/09/2025
Model Curriculum Valid Up to Date	06/02/2029
Model Curriculum Version	3.0
Minimum Duration of the Course	480
Maximum Duration of the Course	720

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner will be able to:

- Describe the basic structure and functions of the MHE Operator and warehousing
- Describe layout and zones in the warehouse
- Describe operational control and load handling mechanisms.
- Explain planning and perform material handling activities inside the warehouse
- Describe MHE and assisting in inspection visit
- Inspect the activity area and equipment, for appropriate and safe conditions

Electives:

- Demonstrate how to operate Battery Operated Pallet Truck
- Demonstrate how to operate Reach Truck
- Describe inspection and maintenance of the Forklift on a daily basis
- Explain the duties of an Order Picker
- Maintain safety, cleanliness and documentation while using special attachment

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Bridge Module	20	10			30
Module 1: Introduction to Material Handling Equipment (MHE) Operator	20	10			30
LSC/N0424: Understand Warehouse Layout and Signage NOS Version 1.0 NSQF Level 4	20	60	10		90
Module 2: Warehouse Layout and Signage	20	60	10		90

LSC/N8901: Conduct pre-operative checks NOS Version 3.0 NSQF Level 4	20	30	10		60
Module 3: Pre – operative checks	20	30	10		60
LSC/N0401: Perform material handling inside Warehouse NOS Version 3.0 NSQF Level 4	20	30	10		60
Module 4: Material handling inside Warehouse	20	30	10		60
LSC/N0425: Coordinate with manufacturers for preventive maintenance NOS Version 1.0 NSQF Level 4	20	40			60
Module 5: Preventive maintenance	20	40			60
LSC/N9911: Follow health, safety, security procedures and maintain integrity, ethics at workplace NOS Version 1.0 NSQF Level 4	20	40			60
Module 6: Compliance with health, safety, integrity and ethics at workplace	20	40			60
Employability Skills (60 Hours) DGT/VSQ/N0102 NOS Version 1.0	30	30			60
Total Duration	150	240	30		420

Elective Modules

The table lists the elective modules, their duration and mode of delivery.

Elective 1: Operate Battery Operated Pallet Truck

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0403 - Operate Battery Operated Pallet Truck NOS Version 3.0 NSQF Level 4	30	30			60
Module 8: Operating Battery-Operated Pallet Truck	30	30			60
Total Duration	30	30			60

Elective 2: Operate Reach Truck

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0404 - Operate Reach Truck NOS Version 3.0 NSQF Level 4	30	30			60
Module 9: Operating Reach Truck	30	30			60
Total Duration	30	30			60

Elective 3: Operate Forklift

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0405 - Operate Forklift NOS Version 3.0 NSQF Level 4	30	30			60
Module 10: Operating Forklift	30	30			60
Total Duration	30	30			60

Elective 4: Operate Order Picker

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0406 - Operate Order Picker NOS Version 3.0 NSQF Level 4	30	30			60
Module 11: Operating Order Picker	30	30			60
Total Duration	30	30			60

Elective 5: Utilize Special MHE attachments for Special Goods

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0426 – Utilise special MHE attachments for special goods NOS Version 3.0 NSQF Level 4	30	30			60
Module 12: Utilise special MHE attachments for special goods	30	30			60
Total Duration	30	30			60

Module Details

Module 1: Introduction to Material Handling Equipment (MHE) Operator

Mapped to Bridge Module

Terminal Outcomes:

- Describe the functions of the MHE Operator
- Explain the various MHEs and equipment used in warehouses

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the key components involved in the supply chain and logistics sector. • List the various sub-sectors of logistics and the opportunities in them • Explain the various job roles in warehousing • Describe the role of a Material Handling Equipment (MHE) operator and their interface with other job roles • Explain the various MHEs and equipment used in warehouses • Discuss the documentation requirements in warehousing operations 	<ul style="list-style-type: none"> • Identify various activities in the warehouse • Demonstrate the functions of Material Handling Equipment (MHE) operator
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Scanners, system tools, printers, LLMS (Learning version)	

Module 2: Warehouse Layout and Signage

Mapped to LSC/N0424, V1.0

Terminal Outcomes:

- Describe layout and zones in the warehouse
- Explain how to identify and follow signages

Duration: 20:00	Duration: 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe and interpret warehouse layout maps and plans provided by the supervisor • Explain how to identify key zones and recognize designated storage type • Describe the location and function of Equipment parking areas, battery charging zones and maintenance bay • Explain warehouse signs, symbols, colour code and its purpose • Explain the importance of height clearance signs, the purpose of pedestrian-only paths and access to restricted areas • Describe warehouse traffic flow rules, right-of-way rules. 	<ul style="list-style-type: none"> • Identify layout maps and plans • Identify key zones and designated storage type • Find the location and functions of dedicated areas • Identify the nearest emergency exit, fire extinguisher, and assembly point • Demonstrate how to navigate the warehouse effectively within correct zones using layout maps in real time and promote safety. • Identify and avoid areas with insufficient clearance based on signage, pedestrian pathways and access control procedures for restricted roles • Identify pedestrians at marked crosswalks, junctions with stop signs before proceeding
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS Office, Tire Pressure Gauge, Multimeter, Hydrometer, Torque Wrench, PPE	

Module 3: Pre-operative checks

Mapped to LSC/N8901, V3.0

Terminal Outcomes:

- Describe the visual inspection of safety devices
- Inspect fluid levels and power supply
- Describe operational control and load handling mechanisms.

Duration: 20:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Explain the importance of pre-operational inspections to prevent failure and accidents. ● Explain the types of safety devices (e.g., brakes, horns, lights, seat belts, fire extinguishers, emergency stop buttons, reverse alarms) ● Discuss the reporting procedure for unsafe equipment and lockout/tagout protocols. ● Describe the importance of fluid levels, the consequence of low or contaminated fluids and correct specifications ● Describe the importance of control and responsiveness ● Explain the risks associated with fluid leaks or improper levels of oil and how they impact equipment safety and performance ● Explain the battery maintenance procedures ● Discuss the tilting and lifting mechanisms and their relevance to load handling and equipment balance ● Explain the protocols for reporting equipment faults and safety concerns, especially when urgent defects pose operational risks 	<ul style="list-style-type: none"> ● Perform a systematic visual inspection (checking tires, hydraulics, controls, lights, guards, load capacity markings). ● Inspect safety devices (horn, alarm, emergency stop, brakes, warning lights, fire extinguisher) ● Maintain checklist-based inspection routines consistently before use. ● Record inspection findings clearly, noting any abnormalities or safety issues using standard company forms or digital systems ● Maintain daily logs of equipment condition and ensure completeness and accuracy of safety recordkeeping.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS Office, Tire Pressure Gauge, Multimeter, Hydrometer, Torque Wrench, PPE	

Module 4: Material handling inside warehouse

Mapped to LSC/N0401, V3.0

Terminal Outcomes:

- Explain the steps involved in performing material handling activities inside the warehouse
- Describe the process of reporting and documenting

Duration: 20:00	Duration: 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Explain the documentation used in the organization and the impact of not following the defined procedures ● Explain workflows and routing to minimize congestion, travel distance, and double handling. ● Describe safety standards and regulations ● Explain the reporting procedures for damaged goods, unsafe conditions, or equipment failure. ● Discuss the loading and unloading principles ● Describe the procedures for filling out incident and maintenance forms according to organizational policies 	<ul style="list-style-type: none"> ● Perform shift-wise material handling plan aligned with warehouse operations. ● Allocate resources effectively and organise storage and retrieval sequence ● Ensure compliance with safety procedures while optimizing productivity ● Identify and report unsafe working condition ● Report damaged or miscounted goods immediately to the supervisor and transport them to the quarantine area
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, PPE, Forklifts, Pallet Jacks, Conveyor Belts, Reach Trucks, Order Pickers, Stackers.	

Module 5: Preventive maintenance

Mapped to LSC/N0425, V1.0

Terminal Outcomes:

- Explain the process of collecting and reviewing preventive maintenance schedule
- Explain record maintenance and reports follow-up

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Discuss the principles of preventive maintenance and its importance in reducing equipment downtime and extending service life ● Explain the importance of technical documentation ● Describe lubrication techniques and selection of appropriate lubricants, with the importance of avoiding over-application or contamination ● Explain the process of evaluating equipment health through visual inspection, test runs, and diagnostic tools ● Discuss the best practices in maintenance documentation ● Explain the importance of verifying electrical systems. 	<ul style="list-style-type: none"> ● Conduct a thorough visual check of electrical wiring, terminals, and connections for signs of corrosion, overheating, or wear ● Conduct equipment test runs after maintenance to identify abnormal sounds, vibrations, or resistance in moving parts ● Check maintenance schedules and plan inspections during downtime or non-peak hours to prevent disruptions in operations ● Perform a proper maintenance handover by summarizing equipment condition and outstanding issues ● Perform a safe and clean removal of old grease or oil residues before reapplying lubricants to avoid mechanical issues ● Perform lubrication of designated moving parts using correct techniques and tools to prevent contamination and ensure smooth operation
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Multimeter, Battery Tester, Sound Level Meter, Brake Fluid Tester, Cleaning Cloths, PPE	

Module 6: Compliance with health, safety, integrity and ethics at workplace

Mapped to LSC/N9911, V1.0

Terminal Outcomes:

- Discuss the health, safety and security procedures in warehousing
- Inspect the activity area and equipment, for appropriate and safe conditions

Duration: 20:00	Duration: 40:00
<p>Theory – Key Learning Outcomes</p> <ul style="list-style-type: none"> ● Detail the safety regulations and procedures w.r.t fire hazards, biohazards, etc. ● Explain various PPE utilized in logistics and their uses. ● Describe data safety regulations and clear worktable policy. ● Explain the importance of taking care of personal health and hygiene. ● Detail the standard procedures to be followed during emergencies. ● Explain the 5s at the workplace and the code of ethics. 	<p>Practical – Key Learning Outcomes</p> <ul style="list-style-type: none"> ● Follow health, safety and security measures during all activities. ● Wear all safety equipment, including protective gear, helmets, etc., in relevant bay areas. ● Recognize unsafe conditions and safety practices at the workplace and report them to concerned authorities. ● Comply with data safety regulations of the organization and follow clear worktable policy. ● Maintain personal health and hygiene. ● Practice basic first aid methods and Follow procedures to handle emergencies. ● Protect data and information related to business or commercial decisions. Prevent company and customer information leakage. ● Refrain from indulging in corrupt practices and consult senior management when in an ethical dilemma. ● Follow organization procedures with respect to documentation.
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Personal Protective Equipment (PPE): Gloves, Safety Shoes, goggles, ear plugs, boiler suit, Workshop Safety: Fire extinguishers, First Aid kits, Safety signs, SOP Charts on safety norms and drills, Charts of Do's and Don'ts in work area, LLMS (Learning version)	

Module 7: Employability Skills

Mapped to DGT/VSQ/N0102, V1.0

Terminal Outcomes:

- Discuss the Employability Skills required for jobs in various industries
- Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
- Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Discuss the Employability Skills required for jobs in various industries ● List different learning and employability related GOI and private portals and their usage ● Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen ● Discuss importance of relevant 21st century skills. ● Describe the benefits of continuous learning. ● Explain the importance of active listening for effective communication ● Discuss the significance of working collaboratively with others in a team ● Discuss the significance of escalating sexual harassment issues as per POSH act. ● List the common components of salary and compute income, expenditure, taxes, investments etc. 	<ul style="list-style-type: none"> ● Practice different environmentally sustainable practices. ● Exhibit 21st century skills like Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life. ● Demonstrate to use basic English sentences for everyday conversation in different contexts, in person and over the telephone ● Read and interpret text written in basic English ● Write a short note/paragraph / letter/e -mail using basic English ● Create a career development plan with well-defined short- and long-term goals ● Communicate effectively using verbal and nonverbal communication etiquette. ● Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD ● Outline the importance of selecting the right financial institution, product, and service ● Demonstrate how to carry out offline and online

<ul style="list-style-type: none"> ● Discuss the legal rights, laws, and aids ● Describe the role of digital technology in today's life ● Discuss the significance of displaying responsible online behaviour while browsing, using various social media platforms, e-mails, etc., safely and securely ● Explain the types of entrepreneurship and enterprises ● Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan ● Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement ● Detail the significance of analyzing different types and needs of customers ● Explain the significance of identifying customer needs and responding to them in a professional manner. ● Discuss the significance of maintaining hygiene and dressing appropriately ● Explain the significance of maintaining hygiene and confidence during an interview ● List the steps for searching and registering for apprenticeship opportunities 	<p>financial transactions, safely and securely</p> <ul style="list-style-type: none"> ● Operate digital devices and use the associated applications and features, safely and securely ● Create sample word documents, excel sheets and presentations using basic features ● Utilize virtual collaboration tools to work effectively ● Devise a sample business plan, for the selected business opportunity ● Create a professional Curriculum Vitae (CV) ● Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively ● Perform a mock interview
<p>Classroom Aids</p>	
<p>Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser, UPS, LCD Projector, Computers with MS office Tables & chairs</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>Computers with MS office (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below), Scanner cum Printer</p>	

Module 8: Operating Battery Operated Pallet Truck

Mapped to LSC/N0403, V3.0

Terminal Outcomes:

- Demonstrate how to operate battery operated pallet truck

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the components and functions of pallet trucks • Explain the significance of pre-operational checks • Describe OSHA guidelines • Discuss load stability principles • Explain the importance of controlled lift and lowering speeds in maintaining productivity • Describe the proper use of control handles or tiller arms to ensure safe and efficient manoeuvring of the pallet truck • Explain proper parking and shutdown procedures for securing the pallet truck after use 	<ul style="list-style-type: none"> • Perform pre-operational safety checks • Perform a safe lifting operation by adjusting the forks to raise the load just enough for clear floor movement • Conduct functional check of lift/lower speeds and ensure they meet both safety and productivity requirements • Conduct an efficiency review by comparing travel speeds under loaded vs. unloaded conditions to operational benchmarks • Check that all items are accurately picked and matched with the pick list
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
BOPT, pallet jacks, Standard operating procedures (SOP), reporting forms, Personal protective equipment (PPE), bins, crates, pallets, etc	

Module 9: Operating Reach Truck

Mapped to LSC/N0404, V3.0

Terminal Outcomes:

- Explain the process of inspection and maintenance of Reach Truck on daily basis
- Demonstrate how to operate Reach Truck

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Discuss the operational workflow of pick-up and put-away tasks, including reading and interpreting goods lists and location data. ● Explain the importance of pre-operation inspections of reach trucks and how they contribute to safe operation and equipment longevity ● Explain the components and functions of hydraulic, mechanical, and electrical systems in a reach truck ● Describe load dynamics and how they impact safe lifting. ● Describe OSHA guidelines. ● Explain proper fork alignment and positioning techniques ● Discuss the best practices for ensuring clear visibility and path planning during reach truck operation 	<ul style="list-style-type: none"> ● Perform daily operational checks on the reach truck to ensure functionality before use. ● Ensure goods are placed accurately in high-rack storage ● Inspect forks for signs of wear that could compromise the load security and ensure the load backrest extension is secure for supporting the load ● Conduct a hazard assessment of the working area before beginning any reach truck operation, checking for obstacles or floor damage ● Check all gauges and warning lights on the control panel for signs of malfunction before starting the equipment
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Personal protective equipment (PPEs), Reach truck, pallets, SOP, etc	

Module 10: Operating Forklift

Mapped to LSC/N0405, V3.0

Terminal Outcomes:

- Describe the inspection and maintenance of the Forklift on a daily basis
- Demonstrate how to operate a Forklift

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Discuss the importance of pre-operational checks ● Explain OSHA guidelines ● Describe the mechanical components of a forklift and their inspection criteria. ● Describe the significance of proper engine starting procedures ● Explain the principles of load balancing ● Describe proper visibility practices when handling loads at height ● Discuss the implications of exceeding forklift load capacity and how it affects stability and safety. ● Explain the safe operating procedures for forklift movement in designated areas 	<ul style="list-style-type: none"> ● Perform a daily inspection checklist to verify that all forklift components meet operational safety standards. ● Inspect the forks for visible damage and confirm the positioning latches are secure ● Perform safe manoeuvring techniques ● Conduct operational check of the forklift and document any defects or maintenance issues ● Perform proper positioning of forks before lifting, ensuring they are fully inserted and evenly spread under the load ● Perform appropriate engine shutdown and forklift parking procedures ● Check that the area around the forklift is clear before moving or starting, using mirrors and signals as needed
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computer with MS office, Forklift, SOP etc.	

Module 11: Operating Order Picker

Mapped to LSC/N0406, V3.0

Terminal Outcomes:

- Demonstrate the duties of an Order Picker
- Describe the Reporting Processes.

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● List the items to be checked from the pick list. ● Detail the PPE required for the operation of the Order Picker ● Discuss the process of retrieving goods as per the picklist ● Explain the inspection procedure to be followed. ● Explain how to prepare damaged goods and packaging report. ● Prepare reports for accidents, damages, spillages etc. 	<ul style="list-style-type: none"> ● Check labels with picklist items for any errors/changes ● Inspect the order picker for suitability for work in terms of greasing, availability of fuel, tyre pressure, etc. ● Assess correct usage of PPE by the picker ● Operate Order Picker to retrieve the goods as per the picklist ● Inspect picked items for appropriate labelling and packaging as per delivery requirements ● Report damaged goods and packaging ● Report accidents, damages, spillages etc.
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Order picker, Personal protective equipment (PPE), Standard operating procedures (SOP), reporting forms, bins, crates, pallets, bar code scanner etc.	

Module 12: Utilize Special MHE attachments for special goods

Mapped to LSC/N0426, V3.0

Terminal Outcomes:

- Explain the load characteristics and select suitable attachments
- Explain how to operate MHE safely with the selected attachment
- Maintain safety, cleanliness and documentation while using special attachment

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Describe the concept of load characteristics in terms of weight, shape, size, stability, balance requirements. ● Describe the different types of attachments for MHE ● Explain the risk assessment in handling unusual or irregular loads ● Describe the principles of safe MHE operation when attachments are in use ● Explain the safe operating speeds and conditions with the attachments ● Describe emergency procedures in case of equipment or attachment failure ● Explain the types of hazards associated with different attachments (e.g., hydraulic leaks, pinch points, dropped loads). ● Describe housekeeping requirements in the workplace, like keeping aisles clear, ensuring attachments are stored in designated areas, and preventing fluid spills and debris buildup 	<ul style="list-style-type: none"> ● Assess the load accurately before handling. ● Select the appropriate attachment based on load type. ● Demonstrate the ability to adjust operating techniques ● Operate MHE smoothly and safely with the attachment, maintaining load balance and control. ● Adjust driving techniques (reduced speed, careful cornering, wider clearance) when attachments are fitted. ● Perform communication and signalling in shared work areas. ● Perform safety checks consistently before and during use of special attachments (locking pins, hoses, hydraulics). ● Demonstrate good personal discipline and responsibility by adhering to PPE and warehouse safety rules.
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Packaging symbols & standards, Shrink wrap, Stretch wrap, Strapping machine, Wrapping machine, Straps, Tape gun, Tape, Cling Film, PPE	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Any degree	Warehousing	2	Warehousing			

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Material Handling Equipment (MHE) Operator ” mapped to QP: “LSC/Q0401, V3.0”. Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/Q2601, V3.0”. Minimum accepted score is 80%

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Any degree	Warehousing	2	Warehousing			

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Material Handling Equipment (MHE) Operator ” mapped to QP: “LSC/Q0401, V3.0”. Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/Q2701, V3.0”. Minimum accepted score is 80%

Assessment Strategy

The emphasis is on 'learning-by-doing' and practical demonstration of skills and knowledge based on the performance criteria. Accordingly, assessment criteria for each job role is set and made available in qualification pack.

The assessment papers for both theory and practical would be developed by Subject Matter Experts (SME) hired by Logistics Sector Skill Council or with the LSC accredited Assessment Agency as per the assessment criteria mentioned in the Qualification Pack. The assessments papers would also be checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement etc.

Each NOS in the Qualification Pack (QP) is assigned a relative weightage for assessment based on the criticality of the NOS. Therein each Element/Performance Criteria in the NOS is assigned marks on relative importance, criticality of function and training infrastructure.

The following tools would be used for final assessment:

1. **Practical Assessment:** This comprises of a creation of mock environment in the skill lab which is equipped with all equipment required for the qualification pack.

Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc. is ascertained by observation and marked in observation checklist. The outcome is measured against the specified dimensions and standards to gauge the level of their skill achievements.

2. **Viva/Structured Interview:** This tool is used to assess the conceptual understanding and the behavioural aspects with regard to the job role and the specific task at hand. It also includes questions on safety, quality, environment and equipment etc.
3. **On-Job Training:** OJT would be evaluated based on standard log book capturing departments worked on, key observations of learner, feedback and remarks of supervisor or mentor.
4. **Written Test:** Question paper consisting of 100 MCQs (Hard:40, Medium:30 and Easy: 30) with questions from each element of each NOS. The written assessment paper is comprised of following types of questions:
 - i. True / False Statements
 - ii. Multiple Choice Questions
 - iii. Matching Type Questions
 - iv. Fill in the blanks
 - v. Scenario based Questions
 - vi. Identification Questions

QA Regarding Assessors:

Assessors are selected as per the “eligibility criteria” laid down by LSC for assessing each job role. The assessors selected by Assessment Agencies are scrutinized and made to undergo training and introduction to LSC Assessment Framework, competency-based assessments, assessors guide etc. LSC conducts “Training of Assessors” program from time to time for each job role and sensitize assessors regarding assessment process and strategy which is outlined on following mandatory parameters:

- 1) Guidance regarding NSQF
- 2) Qualification Pack Structure
- 3) Guidance for the assessor to conduct theory, practical and viva assessments
- 4) Guidance for trainees to be given by assessor before the start of the assessments.
- 5) Guidance on assessments process, practical brief with steps of operations practical observation checklist and mark sheet
- 6) Viva guidance for uniformity and consistency across the batch.
- 7) Mock assessments
- 8) Sample question paper and practical demonstration

References

Glossary

Term	Description
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards