







# Material Handling Equipment (MHE) Maintenance Technician

QP Code: LSC/Q2315

Version: 3.0

NSQF Level: 4

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### LSC/Q2315: Material Handling Equipment (MHE) Maintenance Technician

### **Brief Job Description**

Material Handling Equipment (MHE) Maintenance Technician in the Logistics industry is also known as MHE Maintenance Associate. Individuals in this role are responsible for the smooth functioning of MHE. Individuals are responsible for picking items according to an inventory list. They are required to carry out preventive and breakdown maintenance to ensure that the MHE are consinuously available. Additional responsibilities include maintaining records pf maintenance activities carried out and preparing detailed reports.

#### **Personal Attributes**

This job requires the individual to work well individually and with his/her team and achieve joint goals. The individual must be able to prioritize and execute tasks within scheduled time limits. The individual should be able to maintain high concentration levels throughout his/her shift.

### **Applicable National Occupational Standards (NOS)**

### **Compulsory NOS:**

- 1. LSC/N2321: Prepare for maintenance
- 2. LSC/N2322: Perform Maintenance Operations
- 3. LSC/N2323: Perform Post Maintenance Activities
- 4. LSC/N2330: Maintain Health, Safety and Security measures for carrying out maintenance activities on MHE
- 5. DGT/VSQ/N0102: Employability Skills (60 Hours)

### **Qualification Pack (QP) Parameters**

Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	MHE Maintenance Technician
Country	India
NSQF Level	4







Credits	15
Aligned to NCO/ISCO/ISIC Code	NCO-2004/7231.90
Minimum Educational Qualification & Experience	OR Diploma (Completed 1st year of 3-year diploma (after 10th) and pursuing regular diploma) OR 10th Class ( plus 1-year NTC/ NAC) OR 8th Class (plus 2-year NTC + 1 Year NAC) OR 8th Class (plus 1-year NTC + 1-Year NAC plus CITS) OR 10th Class (and pursuing continuous schooling) OR 10th Class with 2 Years of experience relevant experience OR Certificate-NSQF (Warehouse Associate - level 3 with minimum education as 5th Grade pass ) with 2 Years of experience relevant experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	Trained in operating and maintaining MHE
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	27/01/2025
NSQC Approval Date	27/01/2022
Version	3.0
Reference code on NQR	2022/TLW/LSC/06867
NQR Version	1.0







### **LSC/N2321: Prepare for maintenance**

### **Description**

This unit is about preparing for maintenance

### Scope

The scope covers the following:

- · Obtain information and checklists
- Collect necessary tools and supplies

### **Elements and Performance Criteria**

#### Obtain information and checklists

To be competent, the user/individual on the job must be able to:

- **PC1.** collect the daily maintenance checklist from the supervisor
- **PC2.** find out from the supervisor if there is any breakdown or problems in any of the Material Handling Equipment (MHE) and collect the special maintenance checklist.
- **PC3.** in case of special maintenance, understand which particular machine(s) are to be checked and where they are located.
- **PC4.** understand which is the critical MHE and attend to it first so as to minimize losses to the company
- **PC5.** find and read up on maintenance history from previous reports of the specific equipment if required.
- **PC6.** plan the sequence in which the maintenance would be carried out so as to optimize time and travel distance

#### Collect necessary tools and supplies

To be competent, the user/individual on the job must be able to:

- **PC7.** collect and wear all the necessary Personal Protective Equipment (PPE).
- **PC8.** assess the tooling requirement and collect the necessary tools from the tool crib/storage racks
- **PC9.** collect any grease, lubricants, fluids or replacement parts that would be used from the store area.
- **PC10.** fill out any forms required by the store after receiving the supplies.

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** types of documentation used in organization e.g. daily maintenance checklist and importance of the same
- **KU2.** risk and impact of not following defined procedures/work instructions
- **KU3.** records to be maintained and implications of non-maintenance of the same







- **KU4.** knowledge of security procedures e.g. secure storage of inventory
- **KU5.** rules and regulations of shop floor as per companys standard operating procedure (SOP)
- **KU6.** risk and impact of not following safety procedures
- **KU7.** escalation matrix for reporting identified problems
- KU8. cost of equipment and loss for the company that results from damage of equipment
- **KU9.** implications of delays in process to the company
- **KU10.** controls and switches used to operate the MHE properly
- KU11. basic physics and mechanics associated with the MHE
- **KU12.** road signs, factory signs and other safety and emergency signals
- **KU13.** ability to understand the hazard labels for the supplies being used
- **KU14.** correct maintenance procedures for mhe.
- **KU15.** response to emergencies e.g. fire
- KU16. safety regulations while operating the mhe
- KU17. optimal working condition of mhe and their components
- KU18. optimal levels of fluids and lubricants.
- **KU19.** MHE Components and particular areas that require greasing.
- **KU20.** knowledge of all the mhe components and their functions
- KU21. ability to handle MHE such as forklifts, pallet trucks, cages and lifts
- **KU22.** ability to test and safely carry out maintenance tasks on the MHE.
- KU23. ability to identify deviations from normal operations, diagnose and repair MHE

#### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** fill out checklists, maintenance logbooks detailing maintenance activities conducted
- **GS2.** ability to prepare detailed technical reports.
- **GS3.** read labels to identify product and its associated hazard.
- **GS4.** read and understand instructions from checklists /company log books and records
- **GS5.** read safety manuals and safety signs on the warehouse floor
- **GS6.** communicate clearly with supervisors and peers
- **GS7.** regularly communicate with all employees in the chain of activities on the shop floor to ensure activities are running smoothly
- **GS8.** provide advice and guidance to peers and juniors
- **GS9.** act objectively, rather than impulsively or emotionally when faced with difficult/stressful or emotional situations
- **GS10.** ability to make a judgment as to whether the MHE are in good condition or not.
- **GS11.** adjust according to volume, capacity and manpower needs during peak and non-peak hours
- GS12. prioritize and execute tasks within the scheduled time limits
- **GS13.** maintain schedules and punctuality, avoid absenteeism
- **GS14.** be a team player and achieve joint goals.







- **GS15.** flexibility to re-assess schedule in case of delays/additional orders.
- **GS16.** understand the internal customer requirements and ensure that they are met
- GS17. identify trends/common causes for errors and suggest possible solutions to the supervisor
- **GS18.** suggest methods to streamline the maintenance process
- **GS19.** ability to assess the condition of each MHE.
- **GS20.** ability to concentrate on task at hand and complete it without errors







### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Obtain information and checklists	20	40	-	-
<b>PC1.</b> collect the daily maintenance checklist from the supervisor	2	6	-	-
<b>PC2.</b> find out from the supervisor if there is any breakdown or problems in any of the Material Handling Equipment (MHE) and collect the special maintenance checklist.	2	10	-	-
<b>PC3.</b> in case of special maintenance, understand which particular machine(s) are to be checked and where they are located.	4	10	-	-
<b>PC4.</b> understand which is the critical MHE and attend to it first so as to minimize losses to the company	2	4	-	-
<b>PC5.</b> find and read up on maintenance history from previous reports of the specific equipment if required.	6	2	-	-
<b>PC6.</b> plan the sequence in which the maintenance would be carried out so as to optimize time and travel distance	4	8	-	-
Collect necessary tools and supplies	10	30	-	-
<b>PC7.</b> collect and wear all the necessary Personal Protective Equipment (PPE).	2	7	-	-
<b>PC8.</b> assess the tooling requirement and collect the necessary tools from the tool crib/storage racks	3	8	-	-
<b>PC9.</b> collect any grease, lubricants, fluids or replacement parts that would be used from the store area.	2	8	-	-
<b>PC10.</b> fill out any forms required by the store after receiving the supplies.	3	7	-	-
NOS Total	30	70	-	-







### **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2321
NOS Name	Prepare for maintenance
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	MHE Maintenance Technician
NSQF Level	4
Credits	3
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022







### **LSC/N2322: Perform Maintenance Operations**

### **Description**

This OS unit is about performing maintenance operations

### Scope

The scope covers the following:

- Carry out preventive maintenance
- Carry out breakdown maintenance

### **Elements and Performance Criteria**

#### Carry out preventive maintenance

To be competent, the user/individual on the job must be able to:

- **PC1.** observe the overall functioning of the MHE to identify problems if any.
- **PC2.** make any minor adjustments in settings or parameters if required to ensure smooth functioning
- **PC3.** in case of a machine overhaul, plan well in advance and perform it during holidays or non peak hours.
- **PC4.** check for damage in tyres, parking break, main horn, reverse horn, warning lamp, etc
- **PC5.** check fluid levels of engine, transmission, differential, hydraulic, radiator coolant and brake oil and top up any fluids as required.
- **PC6.** apply grease and lubricants where required
- **PC7.** replace any parts that have worn out at the times specified by the manufacturer.
- **PC8.** complete and check off all the line items in the preventive maintenance checklist
- **PC9.** test the MHE to ensure that it is fully functional and safe for use.
- **PC10.** assess the MHE and escalate to supervisor if there is a likelihood of future problems or replacement is required
- **PC11.** conduct regular awareness on battery charging and safety methods to all operators
- **PC12.** regularly maintain spare batteries and ensure they are fully charged
- **PC13.** prepare health card for every MHE.

### Carry out breakdown maintenance

To be competent, the user/individual on the job must be able to:

- **PC14.** examine the MHE to determine the source of the problem.
- **PC15.** determine if the problem could be resolved using existing skills or if it requires the attention of a specialized technician from the manufacturing company
- **PC16.** if the problem could be resolved, determine whether the part could be repaired or if replacement is necessary
- **PC17.** if the part could be repaired, carry out repairs using available machine shop equipment
- **PC18.** if part cannot be repaired or if replacement is required, obtain the required parts from the store (if available) or inform inventory clerk to place orders.







- PC19. receive required parts and change the parts as per manufacturer's guidelines
- **PC20.** check fluid levels of engine, transmission, differential, hydraulic, radiator coolant and brake oil and top up any fluids as required
- PC21. apply grease and lubricants where required
- PC22. complete and check off all the line items in the breakdown maintenance checklist
- **PC23.** test the MHE to ensure that it is fully functional and safe for use.
- **PC24.** escalate to supervisor in case of delays or if a specialized technician from the manufacturing company is required to solve the problem.

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** types of documentation used in organization e.g. daily maintenance checklist and importance of the same
- **KU2.** risk and impact of not following defined procedures/work instructions
- **KU3.** records to be maintained and implications of non-maintenance of the same
- **KU4.** knowledge of security procedures e.g. secure storage of inventory
- **KU5.** rules and regulations of shop floor as per companys standard operating procedure (SOP)
- **KU6.** risk and impact of not following safety procedures
- **KU7.** escalation matrix for reporting identified problems
- **KU8.** cost of equipment and loss for the company that results from damage of equipment
- **KU9.** implications of delays in process to the company
- **KU10.** controls and switches used to operate the MHE properly
- **KU11.** basic physics and mechanics associated with the MHE
- **KU12.** road signs, factory signs and other safety and emergency signals
- **KU13.** ability to understand the hazard labels for the supplies being used.
- **KU14.** correct maintenance procedures for MHE.
- KU15. response to emergencies e.g. fire
- **KU16.** safety regulations while operating the mhe
- **KU17.** optimal working condition of mhe and their components
- KU18. optimal levels of fluids and lubricants.
- **KU19.** MHE Components and particular areas that require greasing
- **KU20.** knowledge of all the MHE components and their functions
- **KU21.** ability to handle MHE such as forklifts, pallet trucks, cages and lifts.
- KU22. ability to test and safely carry out maintenance tasks on the MHE
- KU23. ability to identify deviations from normal operations, diagnose and repair MHE.

### **Generic Skills (GS)**

User/individual on the job needs to know how to:







- GS1. fill out checklists, maintenance logbooks detailing maintenance activities conducted
- **GS2.** ability to prepare detailed technical reports.
- **GS3.** read labels to identify product and its associated hazard.
- **GS4.** read and understand instructions from checklists /company log books and records
- **GS5.** read safety manuals and safety signs on the warehouse floor
- **GS6.** communicate clearly with supervisors and peers
- **GS7.** regularly communicate with all employees in the chain of activities on the shop floor to ensure activities are running smoothly
- **GS8.** provide advice and guidance to peers and juniors
- **GS9.** act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations
- **GS10.** ability to make a judgment as to whether the mhe are in good condition or not.
- **GS11.** adjust according to volume, capacity and manpower needs during peak and non-peak hours
- **GS12.** prioritize and execute tasks within the scheduled time limits
- GS13. maintain schedules and punctuality, avoid absenteeism
- **GS14.** be a team player and achieve joint goals
- GS15. flexibility to re-assess schedule in case of delays/additional orders
- **GS16.** understand the internal customer requirements and ensure that they are met
- **GS17.** identify trends/common causes for errors and suggest possible solutions to the supervisor
- **GS18.** handle day to day problems like delays, staffing shortage, etc.
- **GS19.** suggest methods to streamline the maintenance process
- **GS20.** ability to assess the condition of each mhe.
- **GS21.** ability to concentrate on task at hand and complete it without errors







### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out preventive maintenance	17	38	-	-
<b>PC1.</b> observe the overall functioning of the MHE to identify problems if any.	2	3	-	-
<b>PC2.</b> make any minor adjustments in settings or parameters if required to ensure smooth functioning	1	4	-	-
<b>PC3.</b> in case of a machine overhaul, plan well in advance and perform it during holidays or non peak hours.	2	3	-	-
<b>PC4.</b> check for damage in tyres, parking break, main horn, reverse horn, warning lamp, etc	1	3	-	-
<b>PC5.</b> check fluid levels of engine, transmission, differential, hydraulic, radiator coolant and brake oil and top up any fluids as required.	1	4	-	-
PC6. apply grease and lubricants where required	1	3	-	-
<b>PC7.</b> replace any parts that have worn out at the times specified by the manufacturer.	1	3	-	-
<b>PC8.</b> complete and check off all the line items in the preventive maintenance checklist	1	4	-	-
<b>PC9.</b> test the MHE to ensure that it is fully functional and safe for use.	2	3	-	-
<b>PC10.</b> assess the MHE and escalate to supervisor if there is a likelihood of future problems or replacement is required	1	2	-	-
<b>PC11.</b> conduct regular awareness on battery charging and safety methods to all operators	1	4	-	-
PC12. regularly maintain spare batteries and ensure they are fully charged	1	1	-	-
PC13. prepare health card for every MHE.	2	1	-	-
Carry out breakdown maintenance	13	32	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> examine the MHE to determine the source of the problem.	1	3	-	-
<b>PC15.</b> determine if the problem could be resolved using existing skills or if it requires the attention of a specialized technician from the manufacturing company	1	3	-	-
<b>PC16.</b> if the problem could be resolved, determine whether the part could be repaired or if replacement is necessary	1	1	-	-
<b>PC17.</b> if the part could be repaired, carry out repairs using available machine shop equipment	2	2	-	-
<b>PC18.</b> if part cannot be repaired or if replacement is required, obtain the required parts from the store (if available) or inform inventory clerk to place orders.	1	4	-	-
<b>PC19.</b> receive required parts and change the parts as per manufacturer's guidelines	2	3	-	-
<b>PC20.</b> check fluid levels of engine, transmission, differential, hydraulic, radiator coolant and brake oil and top up any fluids as required	1	4	-	-
PC21. apply grease and lubricants where required	1	3	-	-
<b>PC22.</b> complete and check off all the line items in the breakdown maintenance checklist	1	3	-	-
<b>PC23.</b> test the MHE to ensure that it is fully functional and safe for use.	1	3	-	-
<b>PC24.</b> escalate to supervisor in case of delays or if a specialized technician from the manufacturing company is required to solve the problem.	1	3	-	-
NOS Total	30	70	-	-







### **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2322
NOS Name	Perform Maintenance Operations
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	MHE Maintenance Technician
NSQF Level	4
Credits	4
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022







### LSC/N2323: Perform Post Maintenance Activities

### **Description**

This unit is about performing post maintenance activities

### Scope

The scope covers the following:

- Carry out housekeeping
- Reporting and documentation

### **Elements and Performance Criteria**

### Carry out housekeeping

To be competent, the user/individual on the job must be able to:

- **PC1.** dispose any damaged/worn out components and used up fluids appropriately as per company policy.
- **PC2.** return any unused fluids or components back to the store
- **PC3.** carry out a basic visual safety inspection of the work area where maintenance activities were carried out.
- **PC4.** remove any sharp objects and clean up any spills in the work area
- **PC5.** return any tools used to the tool crib/storage racks.
- **PC6.** return any PPE used to their respective storage racks

#### Reporting and documentation

To be competent, the user/individual on the job must be able to:

- **PC7.** escalate to supervisor if parts have not been received or any other reasons which would increase the downtime
- **PC8.** notify supervisor regarding any concerns faced during the day.
- **PC9.** provide daily report to manager regarding condition of equipment, damage if any,etc.
- **PC10.** complete any forms as required by the store and by management
- **PC11.** log any maintenance activity undertaken
- **PC12.** update MHE condition in the appropriate health card and the next review dates in the maintenance schedules
- **PC13.** prepare a detailed report explaining the cause for the problem, solution, expected lifespan and suggested replacement dates

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

**KU1.** types of documentation used in organization e.g. daily maintenance checklist and importance of the same







- **KU2.** risk and impact of not following defined procedures/work instructions
- **KU3.** records to be maintained and implications of non-maintenance of the same
- **KU4.** knowledge of security procedures e.g. secure storage of inventory
- **KU5.** rules and regulations of shop floor as per companys standard operating procedure (SOP)
- **KU6.** risk and impact of not following safety procedures
- KU7. escalation matrix for reporting identified problems
- **KU8.** cost of equipment and loss for the company that results from damage of equipment
- **KU9.** implications of delays in process to the company
- **KU10.** controls and switches used to operate the MHE properly
- KU11. basic physics and mechanics associated with the MHE
- KU12. road signs, factory signs and other safety and emergency signals
- **KU13.** ability to understand the hazard labels for the supplies being used.
- **KU14.** correct maintenance procedures for MHE.
- KU15. response to emergencies e.g. fire
- **KU16.** safety regulations while operating the MHE
- **KU17.** optimal working condition of MHE and their components
- KU18. optimal levels of fluids and lubricants.
- **KU19.** MHE Components and particular areas that require greasing
- **KU20.** knowledge of all the MHE components and their functions
- **KU21.** ability to handle MHE such as forklifts, pallet trucks, cages and lifts
- **KU22.** ability to test and safely carry out maintenance tasks on the MHE.
- **KU23.** ability to identify deviations from normal operations, diagnose and repair MHE.

#### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** fill out checklists, maintenance logbooks detailing maintenance activities conducted
- **GS2.** ability to prepare detailed technical reports
- **GS3.** read labels to identify product and its associated hazard.
- **GS4.** read and understand instructions from checklists /company log books and records
- **GS5.** read safety manuals and safety signs on the warehouse floor
- **GS6.** communicate clearly with supervisors and peers
- **GS7.** regularly communicate with all employees in the chain of activities on the shop floor to ensure activities are running smoothly
- **GS8.** provide advice and guidance to peers and juniors
- **GS9.** act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations
- **GS10.** ability to make a judgment as to whether the mhe are in good condition or not.
- **GS11.** adjust according to volume, capacity and manpower needs during peak and non-peak hours
- **GS12.** prioritize and execute tasks within the scheduled time limits







- **GS13.** maintain schedules and punctuality. avoid absenteeism
- **GS14.** be a team player and achieve joint goals
- GS15. flexibility to re-assess schedule in case of delays/additional orders
- **GS16.** understand the internal customer requirements and ensure that they are met.
- GS17. identify trends/common causes for errors and suggest possible solutions to the supervisor
- GS18. handle day to day problems like delays, staffing shortage, etc
- **GS19.** suggest methods to streamline the maintenance process
- GS20. ability to assess the condition of each mhe
- **GS21.** ability to concentrate on task at hand and complete it without errors







### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out housekeeping	9	39	-	-
<b>PC1.</b> dispose any damaged/worn out components and used up fluids appropriately as per company policy.	1	9	-	-
<b>PC2.</b> return any unused fluids or components back to the store	1	6	-	-
<b>PC3.</b> carry out a basic visual safety inspection of the work area where maintenance activities were carried out.	2	6	-	-
<b>PC4.</b> remove any sharp objects and clean up any spills in the work area	1	5	-	-
<b>PC5.</b> return any tools used to the tool crib/storage racks.	2	7	-	-
<b>PC6.</b> return any PPE used to their respective storage racks	2	6	-	-
Reporting and documentation	16	36	-	-
<b>PC7.</b> escalate to supervisor if parts have not been received or any other reasons which would increase the downtime	3	7	-	-
<b>PC8.</b> notify supervisor regarding any concerns faced during the day.	2	6	-	-
<b>PC9.</b> provide daily report to manager regarding condition of equipment, damage if any,etc.	2	5	-	-
<b>PC10.</b> complete any forms as required by the store and by management	2	4	-	-
PC11. log any maintenance activity undertaken	2	4	-	_
<b>PC12.</b> update MHE condition in the appropriate health card and the next review dates in the maintenance schedules	3	4	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> prepare a detailed report explaining the cause for the problem, solution, expected lifespan and suggested replacement dates	2	6	-	-
NOS Total	25	75	-	-







### **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2323
NOS Name	Perform Post Maintenance Activities
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	MHE Maintenance Technician
NSQF Level	4
Credits	3
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022







## LSC/N2330: Maintain Health, Safety and Security measures for carrying out maintenance activities on MHE

### **Description**

This unit is about Health, Safety and Security measures

### Scope

The scope covers the following:

• Maintain Health, Safety and Security measures during all activities

### **Elements and Performance Criteria**

### Maintain health, safety and security measures during all activities

To be competent, the user/individual on the job must be able to:

- **PC1.** comply with safety regulations and procedures in case of fire hazards, biohazards, etc.
- **PC2.** wear all safety equipment including protective gear, helmets etc. when checking inbound/outbound consignments.
- **PC3.** follow organization procedures with respect to documentation
- **PC4.** recognize and report unsafe conditions and practices
- **PC5.** in case of signs of any emergency situation or accident or breach of safety immediately follow organizational protocol to deploy action
- **PC6.** identify reasons for occurrence of incident
- **PC7.** capture reasons and response/action taken into incident report/note to manager
- **PC8.** report any deviations from standard protocol along with reasons (if any)
- **PC9.** visually inspect the activity area and equipment for appropriate and safe condition.
- **PC10.** ensure appropriate protocol is followed in case of any incident by all relevant staff

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** knowledge of organizational products and procedures
- **KU2.** procedures for dealing with loss or damage to goods
- **KU3.** risk and impact of not following defined procedures/work instructions
- **KU4.** knowledge of computer systems used for documentation in the organization.
- **KU5.** knowledge of all relevant safety and security procedures
- **KU6.** knowledge of Standard Operating Procedures (SOPs) and how to react in emergencies.
- **KU7.** knowledge of how to prepare the required documents and the number of copies needed
- **KU8.** knowledge of transport companies the organization works with and their processes
- **KU9.** knowledge of processes involved in inbound and outbound transport







- **KU10.** knowledge of legal requirements, rules and regulations to be followed while preparing forms and documents
- **KU11.** knowledge of each form required for inbound/outbound transport.
- **KU12.** knowledge of details to be filled into each form.
- **KU13.** knowledge to use the computer for electronic documentation
- **KU14.** types of workplace hazards that one can encounter on the job and safe operating practices
- **KU15.** knowledge of possible difficulties in documentation.

### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** note down details regarding documentation for each inbound and outbound consignment
- **GS2.** fill out forms, inspection checklists for inbound and outbound consignments
- **GS3.** prepare detailed reports for management
- **GS4.** read and follow instructions in the checklists
- GS5. read and understand details required in the forms
- **GS6.** communicate clearly with managers and peers
- **GS7.** regularly communicate with all employees to ensure activities are running smoothly
- **GS8.** provide advice and guidance to peers and juniors
- **GS9.** act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations
- GS10. adjust according to volume, capacity and manpower needs during peak and non-peak hours
- **GS11.** prioritize and execute tasks within the scheduled time limits
- GS12. maintain schedules and punctuality, avoid absenteeism
- **GS13.** be a team player and achieve joint goals
- **GS14.** flexibility to re-assess schedule in case of delays/additional orders
- **GS15.** understand the customer requirements and ensure that they are met.
- **GS16.** identify trends/common causes for errors and suggest possible solutions to the transport manager.
- **GS17.** help resolve any documentation issues faced by the truck drivers en route
- GS18. handle day to day problems like delays, staffing shortage, etc
- **GS19.** suggest methods to streamline the documentation process.
- **GS20.** ability to check that all the forms required in the checklist have been filled out and are ready.
- **GS21.** ability to concentrate on task at hand and complete it without errors







### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain health, safety and security measures during all activities	30	70	-	-
<b>PC1.</b> comply with safety regulations and procedures in case of fire hazards, biohazards, etc.	3	7	-	-
<b>PC2.</b> wear all safety equipment including protective gear, helmets etc. when checking inbound/outbound consignments.	3	7	-	-
<b>PC3.</b> follow organization procedures with respect to documentation	3	7	-	-
<b>PC4.</b> recognize and report unsafe conditions and practices	3	7	-	-
<b>PC5.</b> in case of signs of any emergency situation or accident or breach of safety immediately follow organizational protocol to deploy action	3	7	-	-
PC6. identify reasons for occurrence of incident	3	7	-	-
<b>PC7.</b> capture reasons and response/action taken into incident report/note to manager	3	7	-	-
<b>PC8.</b> report any deviations from standard protocol along with reasons (if any)	3	7	-	-
<b>PC9.</b> visually inspect the activity area and equipment for appropriate and safe condition.	3	7	-	-
<b>PC10.</b> ensure appropriate protocol is followed in case of any incident by all relevant staff	3	7	-	-
NOS Total	30	70	-	-







### **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2330
NOS Name	Maintain Health, Safety and Security measures for carrying out maintenance activities on MHE
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	MHE Maintenance Technician
NSQF Level	4
Credits	2
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022







### **DGT/VSQ/N0102: Employability Skills (60 Hours)**

### **Description**

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

### Scope

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

### **Elements and Performance Criteria**

### Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

- **PC1.** identify employability skills required for jobs in various industries
- PC2. identify and explore learning and employability portals

### Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

- **PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- **PC4.** follow environmentally sustainable practices

### Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

- **PC5.** recognize the significance of 21st Century Skills for employment
- **PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

### Basic English Skills

To be competent, the user/individual on the job must be able to:







- **PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- **PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- **PC9.** write short messages, notes, letters, e-mails etc. in English

### Career Development & Goal Setting

To be competent, the user/individual on the job must be able to:

- **PC10.** understand the difference between job and career
- **PC11.** prepare a career development plan with short- and long-term goals, based on aptitude *Communication Skills*

To be competent, the user/individual on the job must be able to:

- **PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13. work collaboratively with others in a team

### **Diversity & Inclusion**

To be competent, the user/individual on the job must be able to:

- PC14. communicate and behave appropriately with all genders and PwD
- PC15. escalate any issues related to sexual harassment at workplace according to POSH Act

### Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- **PC16.** select financial institutions, products and services as per requirement
- **PC17.** carry out offline and online financial transactions, safely and securely
- **PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- **PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

- **PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22. use basic features of word processor, spreadsheets, and presentations

### Entrepreneurship

To be competent, the user/individual on the job must be able to:

- **PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- **PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- **PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

#### **Customer Service**

To be competent, the user/individual on the job must be able to:

- **PC26.** identify different types of customers
- **PC27.** identify and respond to customer requests and needs in a professional manner.







PC28. follow appropriate hygiene and grooming standards

### Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

- PC29. create a professional Curriculum vitae (Résumé)
- **PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- **PC31.** apply to identified job openings using offline /online methods as per requirement
- **PC32.** answer questions politely, with clarity and confidence, during recruitment and selection
- **PC33.** identify apprenticeship opportunities and register for it as per guidelines and requirements

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** need for employability skills and different learning and employability related portals
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- **KU6.** importance of career development and setting long- and short-term goals
- **KU7.** about effective communication
- KU8. POSH Act
- **KU9.** Gender sensitivity and inclusivity
- **KU10.** different types of financial institutes, products, and services
- **KU11.** how to compute income and expenditure
- **KU12.** importance of maintaining safety and security in offline and online financial transactions
- **KU13.** different legal rights and laws
- **KU14.** different types of digital devices and the procedure to operate them safely and securely
- **KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.
- **KU16.** how to identify business opportunities
- **KU17.** types and needs of customers
- **KU18.** how to apply for a job and prepare for an interview
- KU19. apprenticeship scheme and the process of registering on apprenticeship portal

### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** read and write different types of documents/instructions/correspondence
- **GS2.** communicate effectively using appropriate language in formal and informal settings







- GS3. behave politely and appropriately with all
- **GS4.** how to work in a virtual mode
- GS5. perform calculations efficiently
- **GS6.** solve problems effectively
- GS7. pay attention to details
- GS8. manage time efficiently
- GS9. maintain hygiene and sanitization to avoid infection







### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	2	4	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
Basic English Skills	2	3	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> understand the difference between job and career	-	-	-	-
<b>PC11.</b> prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	1	2	-	-
<b>PC14.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
<b>PC16.</b> select financial institutions, products and services as per requirement	-	-	-	-
<b>PC17.</b> carry out offline and online financial transactions, safely and securely	-	-	-	-
<b>PC18.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC19.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	4	-	-
<b>PC20.</b> operate digital devices and carry out basic internet operations securely and safely	-	-	-	_
<b>PC21.</b> use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Entrepreneurship	2	3	-	-
<b>PC23.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC24.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC25.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	1	2	-	-
PC26. identify different types of customers	-	-	-	-
<b>PC27.</b> identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC30.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC31.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC32.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC33.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-







### **National Occupational Standards (NOS) Parameters**

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/09/2025
NSQC Clearance Date	29/09/2022

### Assessment Guidelines and Assessment Weightage

### **Assessment Guidelines**

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each Element/ PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions validated and approved by the SSC.
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 5. To pass the Qualification Pack, every trainee should score a minimum of 70% for NSQF level 4 & above job roles and 50% for NSQF level 1 to 3 job roles.
- 6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level: 70







(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

### **Assessment Weightage**

### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
LSC/N2321.Prepare for maintenance	30	70	-	-	100	20
LSC/N2322.Perform Maintenance Operations	30	70	-	-	100	20
LSC/N2323.Perform Post Maintenance Activities	25	75	-	-	100	20
LSC/N2330.Maintain Health, Safety and Security measures for carrying out maintenance activities on MHE	30	70	-	-	100	20
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	20
Total	135	315	-	-	450	100







### **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training







### **Glossary**

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.







Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.