



MODEL CURRICULUM



Qualification Name: | BASIC RIGGER
Qualification Code: SSD/Q0301
Qualification Version: 1.0
NSQF Level: 3
Model Curriculum Version: 1.0

SAFETY SKILL DEVELOPMENT FOUNDATION

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Training Parameters

Sectors	Hydrocarbon, Iron & steel, Mining, Power, Automotive, Construction, Chemicals & Petrochemicals, and others.
Sub-Sector	-
Occupation	Lifting & Rigging Engineering & Management
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7215.0100
Minimum Educational Qualification and Experience	10th Grade Pass or equivalent or 9th Grade Pass with 1.5 years' experience or 8th Grade Pass with 3 years' experience or Previous relevant qualification of NSQF Level 2.5 with 1.5 years' experience
Pre-Requisite License or Training	Nil
Minimum Job Entry Age	18 years
Last Reviewed On	22-10-2024
Next Review Date	22-10-2027
Version	1.0
NSQC Approval Date	22-10-2024
Model Curriculum Creation Date	22-10-2024
Model Curriculum Valid Up to Date	22-10-2027
Model Curriculum Version	1.0
Minimum Duration of the Course	360 Hours
Maximum Duration of the Course	360 Hours



Program Overview

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

Training Outcomes

After completing the program, the participant will be able to:-

- Demonstrate a clear understanding of rigging terminology and basic principles.
- Accurately calculate load weight and identify center of gravity for known configurations.
- Select and use appropriate basic rigging equipment and hitches.
- Apply safety standards and regulations to ensure safe rigging practices.
- Communicate effectively with team members using rigging terminology.
- Identify and describe the applicable safety standards and regulations for rigging and lifting activities.
- Recognize and evaluate hazards in rigging environments and implement risk management strategies.
- Ensure compliance with safety protocols, proper use of PPE, and adherence to company-specific safety policies.
- Maintain accurate safety records, complete compliance documentation, and report safety incidents effectively.
- Perform thorough inspections of all rigging equipment, identifying and addressing any defects or non-compliance issues.
- Document inspection results accurately and communicate findings effectively to relevant stakeholders.
- Apply industry-specific standards and guidelines to ensure rigging equipment is safe and compliant for use.
- Recognize the impact of environmental and operational factors on equipment integrity and take appropriate measures to mitigate risks.
- Identify and differentiate between various rigging sling types, ropes, and their properties.
- Select and use the appropriate rigging slings, ropes, knots, and hardware based on load characteristics, safety requirements, and environmental conditions.
- Conduct inspections of rigging equipment, ropes, and knots and perform basic maintenance to ensure safe usage.
- Apply correct rigging configurations, including knot-tying techniques, to maintain load stability and control during lifting operations.
- Identify and understand the properties, applications, and limitations of various lifting devices and below-the-hook lifters.
- Select, use, and operate lifting devices and below-the-hook lifters safely and effectively in accordance with manufacturer specifications and safety standards.
- Conduct thorough inspections of lifting devices and perform necessary maintenance to ensure safe functionality.
- Apply rigging configurations and calculate load dynamics to maintain stability and control during lifting operations.
- Identify, select, and operate manual hoists safely and effectively based on load requirements and environmental conditions.
- Perform pre-use inspections and routine maintenance of manual hoists to ensure equipment safety and compliance with industry standards.
- Handle loads using manual hoists in a controlled and stable manner, applying appropriate lifting techniques and configurations.



- Identify potential hazards during load handling and implement measures to prevent accidents and equipment damage.
- Maintain accurate documentation of inspections, maintenance activities, and safety concerns in accordance with company procedures and regulatory requirements.
- Understand and apply different rigging techniques to maintain load stability during lifting operations.
- Calculate sling angles and assess load dynamics to ensure balanced and controlled lifting.
- Monitor load movement and make necessary adjustments to rigging configurations to maintain stability.
- Identify potential stability-related hazards and implement measures to mitigate risks.
- Communicate load stability issues and corrective actions effectively to ensure safe rigging and lifting operations.
- Identify potential emergency scenarios that could arise during rigging operations and assess their impact on safety and equipment.
- Develop effective contingency plans with clear response procedures, roles, and communication protocols.
- Execute emergency response actions in accordance with the contingency plan, ensuring the safety of personnel and equipment.
- Conduct emergency drills and training to test the effectiveness of contingency plans and ensure preparedness.
- Evaluate emergency incidents and update contingency plans based on lessons learned to improve future responses

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
SSD/N0301 v 1.0: Introduction to Basic Rigging	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
Module 1: Introduction to Training Program, Overview, assessments, role of Basic Rigger, employment opportunities in Industries	04:00 Hours	00:00 Hours	5:00 Hours	00:00 Hours	09:00 Hours
Module 2: Foundational knowledge and understanding of rigging operations, including essential terminologies, principles of lifting, weight estimation, and the use of basic rigging equipments	08:00 Hours	08:00 Hours	5:00 Hours	00:00 Hours	21:00 Hours
SSD/N0302 v 1.0 : Safety Standards and Regulations	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
Module 3: Understand and implement safety standards and regulations, ensuring safe and compliant rigging operations in all work environments	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
SSD/N0303 v 1.0 : Rigging Inspections	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours



Module 4: Conduct thorough inspections of rigging equipment, components, and configurations to ensure safe and compliant lifting operations	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
SSD/N0304 v 1.0 : Rigging Equipment and Sling	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
Module 5: Comprehensive understanding of various rigging equipment and sling types used in lifting and material handling operations.	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
SSD/N0305 v 1.0 : Lifting Devices and Below-the-Hook Lifters	24:00 Hours	26:00 Hours	10:00 Hours	00:00 Hours	60:00 Hours
Module 6: Knowledge and skills required to safely operate, select, and maintain various lifting devices and below-the-hook lifting equipment	24:00 Hours	26:00 Hours	10:00 Hours	00:00 Hours	60:00 Hours
SSD/N0306 v 1.0 : Manual Hoists and Load Handling	24:00 Hours	21:00 Hours	15:00 Hours	00:00 Hours	60:00 Hours
Module 7: Proper selection, operation, and maintenance of manual hoists and the safe handling of loads during lifting operations	24:00 Hours	21:00 Hours	15:00 Hours	00:00 Hours	60:00 Hours
SSD/N0307 v 1.0 : Rigging Techniques and Load Stability	24:00 Hours	21:00 Hours	15:00 Hours	00:00 Hours	60:00 Hours
Module 8: Comprehensive knowledge and skills necessary to ensure safe and stable handling of loads using various rigging techniques	24:00 Hours	21:00 Hours	15:00 Hours	00:00 Hours	60:00 Hours
SSD/N0308 v 1.0 : Contingency strategies for emergency situations.	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
Module 9: Knowledge and skills required to respond effectively to emergency situations that may arise during rigging and lifting operations	12:00 Hours	08:00 Hours	10:00 Hours	00:00 Hours	30:00 Hours
DGT/VSQ/N0101: Employability Skills	12:00 Hours	18:00 Hours	00:00 Hours	00:00 Hours	30:00 Hours
Module 10: Understand scope in employment, financial dealing, digital literacy and communication with employer or customer.	12:00 Hours	18:00 Hours	00:00 Hours	00:00 Hours	30:00 Hours
Total Duration	144:00 Hours	126:00 Hours	90:00 Hours	00:00 Hours	360:00 Hours



Module Details

Module 1: Introduction to Training Program, Overview, assessments, role of Basic Rigger, employment opportunities in Industries.

Mapped to SSD/N0301, v1.0

Terminal Outcomes:

- Discuss role of Basic Rigger role, sectors & industries.
- Employment opportunities, career development & International opportunities.
- Course approach, duration, training & assessment processes.

Duration: 04:00	Duration: 00:00
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
• Role & responsibilities of Basic Rigger. • Career progression in the occupation. • Employment & international opportunities. • Training approach & methodology. • Assessment process & Certification. • The assistance provided by AB/TP/LMIS in employment.	
Classroom Aids:	
Black/White Board, Computer, Projection Equipment, Power Point Presentation and software, Facilitator’s Guide, Participant’s Handbook.	
Tools, Equipment and Other Requirements	
Nil	

Module 2: Foundational knowledge and understanding of rigging operations, including essential terminologies, principles of lifting, weight estimation, and the use of basic rigging equipments

Mapped to SSD/N0301, v1.0

Terminal Outcomes:

- Demonstrate a clear understanding of rigging terminology and basic principles.
- Accurately calculate load weight and identify center of gravity for known configurations.
- Select and use appropriate basic rigging equipment and hitches.
- Apply safety standards and regulations to ensure safe rigging practices.
- Communicate effectively with team members using rigging terminology.

Duration: 8 Hours	Duration: 8 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
• Define key terminologies and basic concepts in rigging (e.g., hitches, slings, load). • Explain the fundamental principles of rigging, including weight distribution, load angles, and center of gravity. • Describe the roles and responsibilities of a Basic Rigger. • Identify different types of rigging tools and their applications. • Calculate the weight and center of gravity of a load using basic formulas and estimations. • Identify different types of lifting equipment and their appropriate use for various load types. • Explain the impact of load angles on lifting and rigging safety. • Identify the different types of slings (wire rope, chain, synthetic) and their properties. • Select appropriate slings and rigging hardware for specified lifting tasks. • Demonstrate the correct use of basic hitch configurations for securing loads.	• Demonstrate the use of specific rigging terms during inspections and rigging operations to ensure clear and precise communication. • Perform calculations and assessments based on basic rigging theory to determine the suitability and safety of rigging setups. • Inspect rigging hardware for fitness of service, identifying wear and tear or other defects that would render them unsafe. • Choose the correct type of sling based on load requirements and working conditions. • Evaluate the advantages and limitations of different rigging hardware pieces in specific, unique situations to ensure optimal selection and use. • Accurately match wire rope slings to their weighted capacity and demonstrate their use in lifting various loads.

- Outline the safety standards and regulations applicable to basic rigging operations.
- Identify potential hazards in rigging operations and the appropriate measures to mitigate them.
- Apply safety protocols during rigging tasks, including the use of personal protective equipment (PPE).

- Determine the best sling type for a given industry and working load limit and demonstrate their application in lifting operations.

Demonstrate the use of various hitch types in lifting operations.
- Utilize manufacturer guidelines and ASME standards in the selection and use of sling protection, ensuring compliance with safety regulations.
- Show the proper use of different types of sling protection equipment in practical scenarios, explaining their importance in protecting slings from damage.
- Conduct a detailed analysis of accidents involving rigging, identifying actions, inactions, or conditions that led to the incident.
- Maintain accurate and verifiable records of compliance audits to ensure ongoing adherence to safety standards.

Classroom Aids:

Black/White Board, Computer, Projection Equipment, Power Point Presentation and software, Facilitator's Guide, Participant's Handbook.

Tools, Equipment and Other Requirements

Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Calipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.

Module 3: Understand and implement safety standards and regulations, ensuring safe and compliant rigging operations in all work environments

Mapped to SSD/N0302, v1.0

Terminal Outcomes:

- Identify and describe the applicable safety standards and regulations for rigging and lifting activities.
- Recognize and evaluate hazards in rigging environments and implement risk management strategies.
- Ensure compliance with safety protocols, proper use of PPE, and adherence to company-specific safety policies.
- Maintain accurate safety records, complete compliance documentation, and report safety incidents effectively.

Duration: 12 Hours	Duration: 8 Hours
Theory—Key Learning Outcomes	Practical—Key Learning Outcomes
• Identify and describe the key safety standards and regulations applicable to rigging operations, including OSHA, ANSI, and other relevant standards. • Explain the legal requirements for workplace safety and the responsibilities of a Basic Rigger in maintaining safety compliance. • Demonstrate knowledge of the company's safety policies and procedures related to rigging activities. • Identify potential hazards in rigging and lifting operations, such as load instability, equipment failure, and environmental factors. • Evaluate risks associated with identified hazards and implement strategies to control or mitigate them. • Develop and implement a risk management plan that addresses common hazards in rigging environments. • Ensure proper use of personal protective equipment (PPE) and inspect PPE for compliance with safety standards before use. • Adhere to safety protocols and procedures when performing rigging tasks, including load handling, lifting, and securing activities. • Report safety issues or non-compliance with safety regulations to supervisors or safety officers.	• Identify key national and international safety standards (e.g., OSHA, ANSI, LOLER) applicable to rigging operations. • Explain the role of regulatory bodies in enforcing safety standards in rigging. • Conduct thorough risk assessments for rigging operations, identifying potential hazards such as load stability, environmental conditions, and equipment malfunctions. • Develop safety plans and implement control measures to mitigate identified risks. • Properly select rigging equipment based on the load requirements, environmental factors, and regulatory guidelines. • Perform routine inspections of rigging equipment, recognizing signs of wear, damage, and non-compliance with safety standards. • Demonstrate the correct use of personal protective equipment (PPE) during rigging operations. • Apply safe load-handling techniques to ensure stability, balance, and control during lifting and moving operations. • Implement workplace practices that align with legal requirements for rigging operations, ensuring compliance with current safety regulations. • Maintain accurate documentation of rigging inspections, safety audits, and certifications as per regulatory requirements. • Develop and implement emergency response procedures for rigging-related incidents, including load failures and equipment malfunctions.

● Maintain accurate records of safety inspections, equipment inspections, and incident reports as per regulatory requirements. ● Complete safety checklists, hazard assessments, and compliance reports in accordance with industry standards. ● Communicate safety concerns and compliance issues effectively with team members and supervisors.	● Conduct safety drills to ensure preparedness for emergency situations, such as load drops or entrapments. ● Educate team members on the importance of adhering to safety standards and regulations during rigging. ● Encourage continuous improvement in safety practices through regular training, safety meetings, and feedback sessions. ● Evaluate environmental factors (e.g., weather, terrain, and confined spaces) that could impact rigging safety. ● Adjust rigging procedures to ensure safety in adverse or challenging environments.
Classroom Aids:	
Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Calipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.	

Module 4: Conduct thorough inspections of rigging equipment, components, and configurations to ensure safe and compliant lifting operations

Mapped to SSD/N0303, v1.0

Terminal Outcomes:

- Perform thorough inspections of all rigging equipment, identifying and addressing any defects or non-compliance issues.
- Document inspection results accurately and communicate findings effectively to relevant stakeholders.
- Apply industry-specific standards and guidelines to ensure rigging equipment is safe and compliant for use.
- Recognize the impact of environmental and operational factors on equipment integrity and take appropriate measures to mitigate risks.

Duration: 12 Hours	Duration: 8 Hours
Theory—Key Learning Outcomes	Practical—Key Learning Outcomes
• Inspect slings, chains, wire ropes, and other rigging components for any visible signs of damage, such as cuts, abrasions, corrosion, or deformation, before each use. • Check for correct labeling and identification markings on rigging equipment to ensure compliance with manufacturer specifications and safety standards. • Verify the operational functionality of hooks, shackles, and other hardware to ensure they are free from defects and operational. • Conduct periodic inspections according to industry standards and company policies, documenting findings and scheduling maintenance or replacements as necessary. • Perform post-use inspections to identify any damage or wear incurred during rigging activities, ensuring that equipment is safe for future use. • Tag out or remove from service any rigging equipment found to be defective or unsafe and report the issue to the supervisor for corrective action. • Evaluate the condition of rigging equipment, looking for signs of excessive wear, stretching, fatigue, or mechanical damage. • Measure wear parameters, such as chain elongation or wire rope diameter reduction, to determine if equipment remains within acceptable safety limits. • Identify environmental factors, such as exposure to chemicals, heat, or moisture, that may affect the integrity of rigging components. • Maintain detailed inspection records, including dates, inspection results, identified issues, and corrective actions taken. • Complete compliance reports according to industry and company-specific requirements, ensuring accurate and timely documentation.	• Recognize various types of rigging equipment (e.g., slings, hooks, shackles, spreader bars) and their applications in lifting operations. • Understand the function and importance of each component in maintaining safe rigging configurations. • Identify the safety standards and regulations (e.g., OSHA, ASME, LOLER) governing the inspection of rigging equipment. • Explain the required frequency and thoroughness of inspections based on equipment use, environmental conditions, and industry standard • Conduct detailed visual inspections to identify wear, deformation, cracks, corrosion, or other damage on rigging equipment. • Perform functional inspections to assess the operational integrity of mechanical components, such as hooks and shackles, ensuring they function properly under load. • Verify the load ratings and capacity limits of rigging components by inspecting markings, tags, and manufacturer specifications. • Assess the suitability of equipment for the specific lifting operation based on load requirements and working conditions. • Identify signs of wear or damage on different types of slings (e.g., wire rope, synthetic, chain), including fraying, kinks, broken wires, and heat damage. • Measure the elongation, stretch, or reduction in sling diameter that could indicate unsafe conditions. • Inspect the rigging configurations for proper alignment, balance, and connection points, ensuring safe and stable lifting operations. • Check that lifting angles, hitch types (e.g., vertical, choker, basket), and load distribution are within safe limits for the specific rigging setup. • Recommend corrective actions for equipment that fails inspection, such as repairs, replacements, or adjustments to rigging configurations. • Perform basic maintenance on rigging equipment to ensure its continued safe use, including lubrication, cleaning, and proper storage.



Communicate inspection findings to relevant stakeholders, including safety officers and supervisors, to facilitate prompt resolution of issues.	- Perform pre-operational inspections before each lifting operation, ensuring that all rigging equipment and configurations meet safety standards. - Verify that load paths are clear and that all rigging components are securely fastened and properly aligned.
Classroom Aids:	
Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Calipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.	

Module 5: Comprehensive understanding of various rigging equipment and sling types used in lifting and material handling operations
Mapped to SSD/N0304, v1.0

Terminal Outcomes:

- Identify and differentiate between various rigging sling types, ropes, and their properties.
- Select and use the appropriate rigging slings, ropes, knots, and hardware based on load characteristics, safety requirements, and environmental conditions.
- Conduct inspections of rigging equipment, ropes, and knots and perform basic maintenance to ensure safe usage.
- Apply correct rigging configurations, including knot-tying techniques, to maintain load stability and control during lifting operations.

Duration: 12 Hours	Duration: 8 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
Identify the different types of rigging slings, including wire rope slings, chain slings, synthetic web slings, round slings, and metal mesh slings.	Recognize the various types of rigging equipment used in lifting operations, including shackles, turnbuckles, hooks, chains, wire ropes, eyebolts, and hoists.

- Describe the properties, strengths, and limitations of each sling type in terms of load capacity, flexibility, and durability.
- Select the appropriate sling type for different load characteristics, lifting conditions, and environmental factors.
- Evaluate the load weight, center of gravity, and lifting requirements to choose the correct rigging equipment and configuration.
- Select and attach appropriate rigging hardware, such as hooks, shackles, clips, and turnbuckles, to enhance load stability and control.
- Demonstrate the correct use of sling hitches, including vertical, choker, and basket hitches, for effective load handling.
- Select and tie the appropriate knot, such as bowline, clove hitch, square knot, or double half hitch, using manila, fiber, or synthetic ropes for securing loads during rigging operations.
- Understand the properties and limitations of different types of ropes, such as manila, fiber, and synthetic, and how these properties impact knot selection and load securing.
- Inspect rigging slings, equipment, and ropes before use to identify any signs of wear, damage, or deformation.
- Perform basic maintenance on rigging slings, equipment, and ropes as per manufacturer guidelines and industry standards.
- Remove from service and tag out any rigging slings, equipment, or ropes found to be unsafe or defective during inspection.
- Use rigging hardware such as hooks, shackles, eye bolts, and clips according to manufacturer specifications and safety guidelines.
- Calculate load angles and stress factors when using multiple rigging slings, ropes, or attachments to ensure balanced lifting.
- Employ proper rigging techniques, including tying appropriate knots and securing with rigging hardware, to prevent sling slippage, rope untying, load swinging, or tipping during lifting operations.

- Understand the purpose and application of each type of rigging equipment in lifting and material handling tasks.
- Identify the different types of slings, including wire rope slings, synthetic web slings, synthetic round slings, and chain slings.
- Explain the specific use cases and advantages of each sling type based on material, load requirements, and environmental conditions.
- Interpret manufacturer load capacity ratings for rigging equipment and slings and understand the significance of safe working load limits (SWL) and maximum load capacity.
- Calculate the safe working load (SWL) for rigging equipment based on configuration, hitch type, and angle of lift.
- Assess the suitability of different sling types for specific lifting operations based on factors such as weight, shape, and material of the load.
- Choose the correct sling type and size for a given load, considering the environmental factors (e.g., temperature, moisture) that may affect the sling's performance.
- Apply different hitch types (vertical, choker, basket) correctly using the appropriate sling type for stable and secure lifting.
- Attach slings to rigging equipment (e.g., shackles, hooks) safely, ensuring proper alignment and tension for load balance and control.
- Inspect slings for signs of wear and damage, such as fraying, broken strands, corrosion, cuts, and elongation.
- Identify the signs of wear, deformation, or defects in other rigging equipment, ensuring compliance with safety standards.
- Implement protective measures for slings during lifting operations to prevent damage from sharp edges, abrasion, or excessive heat.
- Perform routine maintenance tasks, such as cleaning, storing, and lubricating rigging equipment and slings to prolong their lifespan and ensure safety.

	- Assess how environmental factors such as extreme temperatures, humidity, and corrosive environments affect the strength and durability of different slings and rigging equipment. - Modify equipment selection and handling procedures to accommodate challenging environmental conditions. - Understand and apply industry regulations and standards (e.g., OSHA, ASME) related to the selection, use, and maintenance of rigging equipment and slings. - Ensure all rigging operations meet legal and safety requirements by adhering to best practices and safety protocols.
Classroom Aids:	
Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Calipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.	

Module 6: Knowledge and skills required to safely operate, select, and maintain various lifting devices and below-the-hook lifting equipment

Mapped to SSD/N0305 v1.0

Terminal Outcomes:

- Identify and understand the properties, applications, and limitations of various lifting devices and below-the-hook lifters.
- Select, use, and operate lifting devices and below-the-hook lifters safely and effectively in accordance with manufacturer specifications and safety standards.
- Conduct thorough inspections of lifting devices and perform necessary maintenance to ensure safe functionality.
- Apply rigging configurations and calculate load dynamics to maintain stability and control during lifting operations.

Duration: 24 Hours	Duration: 26 Hours
Theory—Key Learning Outcomes	Practical—Key Learning Outcomes
● Identify different types of lifting devices and below-the-hook lifters, including lifting beams, spreader beams, plate clamps, lifting magnets, and vacuum lifters. ● Describe the properties, applications, and limitations of each lifting device in relation to load characteristics and lifting conditions. ● Select the appropriate lifting device based on load requirements, lifting points, and environmental factors. ● Demonstrate the proper use of lifting beams and spreader beams, ensuring balanced load distribution and stability. ● Operate clamps, lifting magnets, and vacuum lifters in accordance with manufacturer specifications and safety guidelines. ● Attach and secure lifting devices to loads using appropriate rigging techniques to prevent load slippage or tipping. ● Conduct pre-use inspections of lifting devices and below-the-hook lifters to identify defects, wear, or other signs of damage. ● Perform basic maintenance on lifting devices as per manufacturer guidelines to ensure safe and continued functionality. ● Remove from service and tag any lifting device found to be defective or unsafe and report the issue to the supervisor for further action. ● Calculate load weights, center of gravity, and load distribution when using below-the-hook lifters to ensure stability. ● Assess the impact of load angle factors, load integrity, and environmental conditions on the safe operation of lifting devices. ● Apply appropriate rigging configurations and hitch types to maintain control and stability during lifting operations.	● Recognize different types of lifting devices, such as cranes, hoists, forklifts, and derricks, and their applications in various lifting operations. ● Identify types of below-the-hook lifting equipment (e.g., spreader bars, lifting beams, clamps, magnets, and vacuum lifters) and understand their specific functions. ● Interpret manufacturer specifications, load capacity charts, and safety ratings for various lifting devices and below-the-hook equipment. ● Calculate the maximum load capacity, taking into account dynamic forces and operating angles to ensure safe use during lifting operations. ● Assess lifting requirements (e.g., weight, shape, dimensions of the load) and environmental conditions to select the most suitable lifting device and below-the-hook equipment. ● Match lifting devices and below-the-hook attachments to the type of load and rigging configuration needed for the specific operation. ● Interpret the load capacity and Safe Working Load (SWL) ratings for lifting devices and below-the-hook equipment based on manufacturer specifications. ● Calculate the total load, including dynamic factors such as angle, weight distribution, and lifting configuration, to ensure the load does not exceed the equipment's rated capacity. ● Perform pre-use inspections of lifting devices and below-the-hook equipment to identify signs of wear, deformation, or damage, ensuring compliance with safety standards. ● Check that all lifting equipment is certified, labeled with the correct load ratings, and free from any visible defects that could compromise safety. ● Demonstrate how to securely attach below-the-hook lifting equipment to loads, ensuring proper alignment, tension, and balance for safe lifting.

	● Verify that all hooks, shackles, slings, and other attachments are properly positioned and tightened to prevent accidental disengagement during the lift. ● Evaluate how environmental conditions (e.g., wind, rain, uneven surfaces) and load characteristics (e.g., center of gravity, distribution) impact the safety of lifting operations. ● Adjust lifting techniques, configurations, and equipment selection to accommodate for these variables, ensuring a safe operation in challenging conditions. ● Apply relevant safety standards (e.g., OSHA, ASME B30, ANSI) to the operation, selection, and maintenance of lifting devices and below-the-hook equipment. ● Maintain proper documentation of inspections, certifications, and maintenance logs to ensure equipment remains in compliance with legal and industry safety requirements
Classroom Aids:	
Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Calipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.	

Module 7: Proper selection, operation, and maintenance of manual hoists and the safe handling of loads during lifting operations

Mapped to SSD/N0306 v1.0

Terminal Outcomes:

- Identify, select, and operate manual hoists safely and effectively based on load requirements and environmental conditions.
- Perform pre-use inspections and routine maintenance of manual hoists to ensure equipment safety and compliance with industry standards.
- Handle loads using manual hoists in a controlled and stable manner, applying appropriate lifting techniques and configurations.
- Identify potential hazards during load handling and implement measures to prevent accidents and equipment damage.
- Maintain accurate documentation of inspections, maintenance activities, and safety concerns in accordance with company procedures and regulatory requirements.

Duration: 24 Hours	Duration: 21 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
● Identify different types of manual hoists, including chain hoists, lever hoists, and hand-operated winches, and describe their properties and applications. ● Determine the appropriate manual hoist type based on load weight, lifting height, and environmental conditions. ● Explain the limitations of manual hoists in terms of load capacity, operational distance, and required force. ● Operate manual hoists safely, ensuring that loads are lifted and lowered in a controlled and stable manner. ● Use appropriate lifting techniques, including correct positioning and alignment of the hoist, to prevent load sway and imbalance. ● Attach loads securely to the hoist using appropriate rigging techniques and hardware to ensure safe lifting. ● Perform pre-use inspections of manual hoists to check for signs of wear, damage, or malfunction, such as chain defects, hook deformation, or gear damage. ● Inspect hooks, chains, and other components to ensure they meet safety standards and manufacturer guidelines. ● Conduct routine maintenance of manual hoists, including lubrication and adjustment of mechanical components, as recommended by the manufacturer. ● Estimate load weight and center of gravity to ensure safe and balanced lifting with manual hoists.	● Recognize the different types of manual hoists (e.g., chain hoists, lever hoists, wire rope hoists) and understand their specific uses in lifting operations. ● Explain the advantages and limitations of manual hoists compared to powered lifting devices in various lifting tasks. ● Interpret the load capacity and Safe Working Load (SWL) ratings for manual hoists based on manufacturer specifications. ● Calculate the total load and ensure it does not exceed the manual hoist's rated capacity, considering factors like dynamic loads and angles. ● Evaluate the load characteristics (e.g., weight, shape, size) and environmental conditions (e.g., space constraints, working height) to select the most suitable manual hoist. ● Ensure that the manual hoist is compatible with the type of lifting operation and any specific requirements such as lifting height or load stability. ● Conduct pre-use visual inspections of manual hoists, checking for signs of wear, damage, or deformation, including chain links, hooks, gears, and brakes. ● Verify that the hoist is properly labeled with load ratings and that all safety features, such as brakes and safety latches, are functional. ● Demonstrate proper hand and body positioning when operating

● Identify potential hazards, such as overhead obstacles or unstable ground, and implement measures to mitigate these risks during load handling. ● Apply appropriate lifting configurations, including vertical, angled, or multiple hoist setups, to ensure load stability and control. ● Document inspection results, maintenance activities, and any identified issues according to company procedures and industry standards. ● Report safety concerns, equipment defects, or incidents to supervisors and safety officers for prompt resolution. ● Ensure compliance with OSHA, ANSI, and other regulatory guidelines related to the use of manual hoists and load handling.	manual hoists to minimize physical strain and ensure safe handling of loads. ● Use manual hoists in accordance with safety procedures, ensuring smooth and controlled lifting, lowering, and positioning of the load. ● Demonstrate how to securely attach loads to the hoist using appropriate slings, hooks, and shackles, ensuring proper balance and alignment. ● Ensure that all attachment points and rigging connections are properly fastened and checked before starting the lift to prevent slippage or load shifts. ● Apply proper load-handling techniques, ensuring the load remains stable, balanced, and controlled during lifting, lowering, and transport. ● Recognize the center of gravity and weight distribution of loads to prevent tipping or uneven lifting, ensuring safe handling throughout the operation. ● Evaluate how environmental factors, such as working height, confined spaces, and proximity to other objects, may affect the safe operation of manual hoists. ● Adjust lifting techniques to account for these conditions, ensuring safe load movement in complex or restricted work environments.
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Classroom Aids:

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

Tools, Equipment and Other Requirements

Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Calipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.

Module 8 : Comprehensive knowledge and skills necessary to ensure safe and stable handling of loads using various rigging techniques

Mapped to SSD/N0307, v1.0

Terminal Outcomes:

- Understand and apply different rigging techniques to maintain load stability during lifting operations.
- Calculate sling angles and assess load dynamics to ensure balanced and controlled lifting.
- Monitor load movement and make necessary adjustments to rigging configurations to maintain stability.
- Identify potential stability-related hazards and implement measures to mitigate risks.
- Communicate load stability issues and corrective actions effectively to ensure safe rigging and lifting operations.

Duration: 24 Hours	Duration: 21 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
• Define key rigging concepts, including load angles, center of gravity, load weight distribution, and the effect of sling angles on load stability. • Explain the principles of load dynamics, including how forces and movements affect load stability during lifting operations. • Identify different rigging techniques such as vertical, choker, and basket hitches, and describe their impact on load handling and stability. • Select and apply the appropriate hitch configurations (vertical, choker, basket) based on load characteristics and lifting requirements. • Calculate and manage sling angles to minimize stress and ensure balanced load lifting. • Use multiple slings, spreader beams, or lifting beams to distribute the load evenly and prevent tipping or swinging. • Assess load stability by determining the center of gravity and applying rigging techniques to keep the load level during lifting. • Monitor load movement and make necessary adjustments to sling tension and configurations to maintain load control. • Implement safety measures, such as tag lines or secondary rigging, to control load movement and prevent unwanted load shifts.	• Identify and explain various rigging techniques such as vertical hitches, choker hitches, basket hitches, and bridle slings. • Differentiate between techniques used for specific load types, such as heavy, irregular, or delicate loads, and understand when each technique is most appropriate. • Identify key rigging components (e.g., slings, shackles, eyebolts, hooks, and chains) and explain their roles in securing and lifting loads. • Understand the selection criteria for rigging components based on load weight, size, and the working environment. • Interpret Safe Working Load (SWL) and Working Load Limit (WLL) ratings for rigging equipment, based on manufacturer guidelines and applicable safety standards. • Perform load calculations to determine the total weight to be lifted, ensuring the selected rigging configuration can safely handle the load. • Assess load characteristics such as weight, shape, size, and center of gravity to determine the most suitable rigging method. • Ensure that the chosen rigging technique promotes load stability and balance, preventing shifting or tipping during the lift. • Demonstrate the correct attachment of slings, hooks, and shackles to loads, ensuring all connections are secure and balanced.

- Identify potential hazards associated with load stability, such as imbalanced loads, swinging, and load tipping, and assess their impact on lifting operations.
- Apply risk management strategies to mitigate identified hazards, including adjusting rigging configurations and using additional rigging equipment.
- Communicate stability-related hazards and control measures to team members and supervisors to ensure safe lifting operations.

- Utilize proper tensioning and alignment of rigging equipment to ensure load stability during lifting and movement.
- Conduct thorough pre-use inspections of rigging equipment, identifying signs of wear, damage, or defects that could compromise safety (e.g., frayed slings, bent shackles).
- Verify that all rigging components are certified, properly labeled, and meet the required safety standards before beginning the lift.
- Apply proper rigging configurations to maintain load stability throughout lifting and transportation, preventing load shifts, sways, or tipping.
- Monitor the center of gravity and ensure even load distribution to reduce the risk of imbalance.
- Calculate and assess sling angles in multi-leg rigging configurations, ensuring they are within safe limits to avoid overstressing the equipment.
- Adjust the rigging setup to ensure equal load distribution across slings and attachments, promoting safe and balanced lifting.
- Evaluate environmental conditions such as wind, confined spaces, or uneven terrain that could affect the safety of rigging operations.
- Modify rigging techniques and equipment selection to account for these factors, ensuring safe load handling in different environments.
- Apply industry standards (e.g., OSHA, ASME) and safety regulations related to rigging techniques, equipment, and load handling operations.
- Maintain accurate records of rigging inspections, equipment certifications, and training to ensure compliance with legal and safety requirements.
- Implement safe shutdown and load securing procedures in the event of rigging equipment failure or load instability.
- Develop and practice emergency response plans to address rigging-related incidents, ensuring the safety of personnel and loads.

Classroom Aids:

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

Tools, Equipment and Other Requirements

Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Calipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.

Module 9: Knowledge and skills required to respond effectively to emergency situations that may arise during rigging and lifting operations

Mapped to SSD/N0308 v1.0

Terminal Outcomes:

- Identify potential emergency scenarios that could arise during rigging operations and assess their impact on safety and equipment.
- Develop effective contingency plans with clear response procedures, roles, and communication protocols.
- Execute emergency response actions in accordance with the contingency plan, ensuring the safety of personnel and equipment.
- Conduct emergency drills and training to test the effectiveness of contingency plans and ensure preparedness.
- Evaluate emergency incidents and update contingency plans based on lessons learned to improve future response.

Duration: 12 Hours	Duration: 8 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
• Identify potential emergency scenarios that could arise during rigging operations, such as equipment failure, load instability, structural collapse, or environmental hazards. • Assess the impact of identified emergency scenarios on personnel safety, equipment integrity, and the surrounding environment. • Evaluate the probability and severity of each emergency scenario to prioritize response strategies. • Develop contingency plans for handling identified emergency scenarios, including clear procedures for equipment shutdown, load securing, and evacuation. • Establish roles and responsibilities for personnel during emergency situations, ensuring that all team members are aware of their duties and actions. • Create communication protocols for emergency situations, including notification of supervisors, safety personnel, and first responders.	• Identify potential emergency scenarios that can occur during rigging and lifting, such as equipment failure, load imbalance, falling loads, or rigging component failure. • Understand how environmental factors (e.g., high winds, rain, unstable ground) can contribute to emergencies in lifting operations. • Recognize early warning signs of equipment malfunction or failure, such as unusual sounds, visible stress or deformation of rigging components, or load instability. • Understand how to assess situations where loads may become unstable or off-balance during lifting operations. • Create a step-by-step emergency response plan tailored to specific lifting and rigging operations, including clear roles and responsibilities for team members. • Conduct regular safety drills to ensure that all personnel are familiar

- Execute emergency response actions in accordance with the developed contingency plan, ensuring the safety of personnel and equipment.
- Secure unstable loads or equipment to prevent further hazards and minimize the risk of injury or damage.
- Coordinate with safety personnel and first responders to facilitate a quick and effective emergency response.
- Conduct regular emergency drills to test the effectiveness of contingency plans and ensure personnel are familiar with emergency procedures.
- Provide training on emergency response actions, including equipment shutdown, evacuation, and hazard control.
- Review and update contingency plans based on the outcomes of emergency drills and feedback from participants.
- Conduct a post-emergency evaluation to assess the effectiveness of the response actions and identify areas for improvement.
- Document the emergency incident, including the sequence of events, actions taken, and any injuries or damages sustained.
- Implement corrective actions and update contingency plans based on evaluation findings and lessons learned.

with the emergency response procedures and can act quickly in real-life situations.

- Demonstrate proper procedures for responding to rigging component failure, such as slings, chains, or shackles breaking or becoming damaged during the lift.
- Implement safe lowering techniques for loads that are at risk due to equipment failure, ensuring no harm to personnel or damage to the load.
- Apply techniques to stabilize loads that have become unstable during lifting operations, minimizing the risk of tipping or shifting.
- Safely lower unstable or off-balance loads to the ground using appropriate control measures to prevent further accidents.
- Demonstrate how to activate emergency stop functions on lifting devices, such as cranes or hoists, to halt operations immediately when a critical situation arises.
- Understand the conditions under which the emergency stop should be engaged to prevent accidents or damage.
- Execute evacuation procedures to ensure personnel are moved away from the danger zone in the event of a rigging or lifting emergency, such as a dropped load or equipment failure.
- Communicate evacuation instructions clearly and efficiently to all personnel, ensuring orderly and timely evacuation.
- Understand and implement proper response techniques when a load falls or drops unexpectedly, including securing the surrounding area and alerting all personnel.
- Safely assess and recover fallen loads, ensuring no further risks to personnel or damage to the environment.
- Use appropriate communication methods (e.g., radios, hand signals) to quickly alert the team of an emergency and coordinate a safe and effective response.
- Complete incident reporting procedures following any emergency situation, documenting causes, actions taken, and preventive measures for future operations.
- Recognize the types of injuries that could occur during rigging and lifting emergencies, such as crush injuries or falls, and know how to

	administer basic first aid. • Facilitate prompt medical attention by coordinating with emergency services, ensuring injured personnel receive immediate care. • Review the effectiveness of emergency response actions taken during an incident, identifying areas for improvement to enhance future preparedness. • Update emergency response plans regularly based on lessons learned from real incidents or safety drills. • Train all personnel on recognizing potential hazards and the importance of following emergency procedures during rigging and lifting operations. • Foster a proactive safety culture that encourages reporting of hazards and taking preventive actions to reduce the likelihood of emergencies.
Classroom Aids:	
Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Personal Protective Equipment (PPE), Wire Rope Slings, Synthetic Slings (Nylon, Polyester), Chain Slings, Shackles (Anchor and Chain), Hooks (Swivel, Grab, Eye, Self-locking), Eye Bolts and Hoist Rings, Turnbuckles, Load Binders, Chain Hoists, Lever Hoists, Come-Along, Manual Hoists, Electric Hoists, Air Hoists, Pallet Jacks, Dollies, Roller Skids, Toe Jacks, Hydraulic Jacks, Measuring Tapes, Spirit Levels, Plumb Bobs, Digital Callipers, Load Cells and Dynamometers, Inspection Tools, Wrenches and Spanners, Screwdrivers, Hammers and Mallets, Pliers and Wire Cutters, Socket Sets, Torque Wrenches, First Aid Kits, Fire Extinguishers, Emergency Response Plans, Lockout/Tagout (LOTO) Kits, Rescue Ropes and Equipment.	

Module 10: Understand scope in employment, financial dealing, digital literacy and communication with employer or customer

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe the traits of an individual at the workplace.
- Demonstrate apply employability and entrepreneurship skills at workplace.

Duration: 12:00	Duration: 18:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Discuss the importance of Employability Skills in meeting the job requirements. • Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. • Discuss 21st century skills. • Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations. • Discuss the significance of reporting sexual harassment issues in time. • Discuss the significance of using financial products and services safely and securely. • Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws. • Explain the importance of managing expenses, income, and savings. • Discuss the significance of using the internet for browsing and accessing social media platforms, safely and securely. • Discuss the need to identify opportunities for potential business, sources for arranging money and potential legal and financial challenges. • Differentiate between types of customers. • Explain the significance of identifying customer needs and addressing them. • Discuss the significance of maintaining hygiene and dressing	• Show how to practice different environmentally sustainable practices. • Use appropriate basic English sentences/phrases while speaking. • Demonstrate how to communicate in a well -mannered way with others. • Demonstrate working with others in a team. • Show how to conduct oneself appropriately with all genders and PW. • Show how to operate digital devices and use the associated applications and features, safely and securely. • Create biodata. • Use various sources to search and apply for jobs

appropriately. • Discuss the significance of dressing up neatly and maintaining hygiene for an interview. • Discuss how to search and register for apprenticeship opportunities	
Classroom Aids:	
• Black/White Board, Computer, Projection Equipment, Power Point Presentation and software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
• Laptop/computer, internet, mobile	

On The Job Training Plan: Basic Rigger

SSD/N0301 v 1.0: Introduction to Basic Rigging: 10 Hours
Key Learning Outcomes
• Apply a clear understanding of rigging terminology and basic principles. • Calculate load weight and identify center of gravity for known configurations. • Use appropriate basic rigging equipment and hitches. • Apply safety standards and regulations to ensure safe rigging practices. • Communicate effectively with team members using rigging terminology.
SSD/N0302 v 1.0 : Safety Standards and Regulations: 10 Hours
Key Learning Outcomes
• Apply safety standards and regulations for rigging and lifting activities. • Recognize and evaluate hazards in rigging environments and implement risk management strategies. • Demonstrate safety protocols, proper use of PPE, and adherence to company-specific safety policies. • Maintain accurate safety records, complete compliance documentation, and report safety incidents effectively.
SSD/N0303 v 1.0 : Rigging Inspections: 10 Hours
Key Learning Outcomes
• Perform inspections of all rigging equipment, identifying and addressing any defects or non-compliance issues. • Document inspection results accurately and communicate findings effectively to relevant stakeholders. • Apply industry-specific standards and guidelines to ensure rigging equipment is safe and compliant for use.

Recognize the impact of environmental and operational factors on equipment integrity and take appropriate measures to mitigate risks.
SSD/N0304 v 1.0 : Rigging Equipment and Sling Types.:10 Hours
Key Learning Outcomes
- Identify and differentiate between various rigging sling types, ropes, and their properties. - Select and use the appropriate rigging slings, ropes, knots, and hardware based on load characteristics, safety requirements, and environmental conditions. - Conduct inspections of rigging equipment, ropes, and knots and perform basic maintenance to ensure safe usage. - Apply correct rigging configurations, including knot-tying techniques, to maintain load stability and control during lifting operations.
SSD/N0305 v 1.0 :Lifting Devices and Below-the-Hook Lifters: 10 Hours
Key Learning Outcomes
- Identify and understand the properties, applications, and limitations of various lifting devices and below-the-hook lifters. - Operate lifting devices and below-the-hook lifters safely and effectively in accordance with manufacturer specifications and safety standards. - Conduct thorough inspections of lifting devices and perform necessary maintenance to ensure safe functionality. - Apply rigging configurations and calculate load dynamics to maintain stability and control during lifting operations.
SSD/N0306 v 1.0 : Manual Hoists and Load Handling: 15 Hours
Key Learning Outcomes
- Operate manual hoists safely effectively based on load requirements and environmental conditions. - Perform pre-use inspections and routine maintenance of manual hoists to ensure equipment safety and compliance with industry standards. - Handle loads using manual hoists in a controlled and stable manner, applying appropriate lifting techniques and configurations. - Identify potential hazards during load handling and implement measures to prevent accidents and equipment damage. - Maintain accurate documentation of inspections, maintenance activities, and safety concerns in accordance with company procedures and regulatory requirements.
SSD/N0307 v 1.0 : Rigging Techniques and Load Stability: 15 Hours
Key Learning Outcomes
- Apply different rigging techniques to maintain load stability during lifting operations. - Calculate sling angles and assess load dynamics to ensure balanced and controlled lifting. - Monitor load movement and make necessary adjustments to rigging configurations to maintain stability. - Identify potential stability-related hazards and implement measures to mitigate risks. - Communicate load stability issues and corrective actions effectively to ensure safe rigging and lifting operations
SSD/N0308 v 1.0: Contingency strategies for emergency situations:10 Hours
Key Learning Outcomes

- Identify potential emergency scenarios that could arise during rigging operations and assess their impact on safety and equipment.
- Develop effective contingency plans with clear response procedures, roles, and communication protocols.
- Execute emergency response actions in accordance with the contingency plan, ensuring the safety of personnel and equipment.
- Conduct emergency drills and training to test the effectiveness of contingency plans and ensure preparedness.
- Evaluate emergency incidents and update contingency plans based on lessons learned to improve future responses.

Total Duration of OJT – 90 Hours (1.5 weeks)



Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
ITI/12 th Pass	Any domain	5	Relevant Domain	0	-	
Graduate in any discipline / Diploma in Engineering	Graduate in Civil, Mechanical , Automobile, Electrical Engineering. Graduate with Science.	3	Relevant Domain	0	-	
M. Tech/ B. Tech	Graduate in Civil, Mechanical , Automobile, Electrical Engineering. Graduate with Science.	1	Relevant Domain	0	-	

Trainer Certification	
Domain Certification	Platform Certification
Certified as Trainer for the Qualification “ SSD/Q0301 : Basic Rigger” or higher qualification as per career progression by SSDF.	Recommended that the Trainer is certified for the Job Role: “Trainer (VET and Skills),” mapped to the Qualification Pack: “MEP/Q2601 v2.0”. The minimum score of 80%.



Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
ITI/12 th Pass	Any domain	5	Relevant Domain	0	-	
Graduate in any discipline / Diploma in Engineering	Graduate in Civil, Mechanical , Automobile, Electrical Engineering. Graduate with Science.	3	Relevant Domain	0	-	
M. Tech/ B. Tech	Graduate in Civil, Mechanical , Automobile, Electrical Engineering. Graduate with Science.	1	Relevant Domain	0	-	

Assessor Certification	
Domain Certification	Platform Certification
Certified as assessor for the Qualification “SSD/Q0301 : Basic Rigger “or higher qualification as per career progression.	Recommended that the Assessor is certified for the Job Role: “Assessor (VET and Skills),” mapped to the Qualification Pack: “MEP/Q2701 v2.0”. The minimum accepted score is 80%.



Assessment Strategy

The assessment will be based on the concept of third-party assessments through certified assessors with empaneled Assessment Agencies of NCVET. The certification of each assessor will be done by SSDF through a process of selection, training, assessment & certification through training of assessor's program.

The assessments will include both formative & summative. The progressive assessments will be through the trainer during the progress of the training. The summative assessments will be carried out by an assessor through assessment agencies.

The assessment process will determine whether the candidate or professional is competent or not to perform the job as per expected performance criteria. The assessment plan contains the following information:

- a) Assessment elements – Competencies based on performance criteria of each NOS.
- b) Methods of assessment – Written test (online/offline), viva and practical/ field exercises.
- c) Time of assessment – The assessment will be done both formative and summative (post orientation/training) of candidates.
- d) Place i.e., context of the assessment - The assessment will be conducted through theory, viva voce and practical/ field exercises, on simulators and will be both online and offline modes.
- e) The criteria for decision making– It will be based on assessment criteria & guidelines as given in the qualification pack.
- f) Questions – The written questions, viva & practical questions will be set to cover all aspect of performance criteria and would have been validated from experts in the subject matter.



Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood to accomplish or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do 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).
OJT(M)	On-the-job training(Mandatory);trainees are mandated to complete specified hours of training on site
OJT(R)	On-the-job training(Recommended);trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work or produce a tangible work output by applying cognitive, affective, or psycho motor skills.
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 Standard
AB	Awarding Body
AA	Assessment Agency
TP	Training Partner