Mooring Safety – Large Vessels Meeting Kit

WHAT’S AT STAKE

Mooring for large vessels refers to the process of securing and stabilizing a large ship or maritime vessel to a fixed structure, such as a dock, pier, or buoy. Mooring is essential for various operations, including loading and unloading cargo, passenger embarkation/disembarkation, and vessel maintenance.

WHAT’S THE DANGER

COMMON HAZARDS WITH MOORING LARGE VESSELS

Proper training, adherence to safety, regular maintenance, and effective communication among the mooring team contribute to the successful and safe mooring of large vessels.

Line snap-back: The sudden release or tensioning of mooring lines can cause them to snap back with significant force, posing a risk of serious injury or even fatality to personnel in the vicinity.

Slips, trips, and falls: The presence of wet or slippery surfaces, uneven terrain, or obstacles on the vessel or the dock increases the risk of slips, trips, and falls during mooring operations.

Pinch points and crush hazards: Moving mooring lines, winches, bollards, and other equipment can create pinch points or crush hazards if personnel get caught between them or between the vessel and the dock.

Entanglement and falls overboard: Crew members handling mooring lines can become entangled or inadvertently fall overboard, particularly when working in challenging weather conditions or inadequate lighting.

Strong currents and tides: Mooring in areas with strong currents

or tidal flows can make the handling of mooring lines more challenging, increasing the risk of lines being dragged or personnel being swept away.

Collisions and impact hazards: Improper mooring techniques or failure to maintain proper line tension can result in the vessel drifting, colliding with other vessels, or impacting dock infrastructure, causing damage or injury.

Falling objects: During mooring, objects such as loose equipment, tools, or cargo may fall from the vessel, posing a risk of injury to personnel working below or on the dock.

Weather conditions: Strong winds, heavy rain, or rough seas, increase the difficulty of mooring operations.

Structural failure: Inadequate maintenance or failure of mooring equipment, including lines, winches, bollards, or fenders, can lead to equipment failure, posing hazards to personnel and the vessel.

Limited visibility: Poor visibility due to fog, darkness, or adverse weather conditions can hinder mooring operations and increase the risk of accidents and injuries.

HOW TO PROTECT YOURSELF

BEST PROTECTION PRACTICES TO PREVENT ACCIDENTS IN MOORING OPERATIONS WITH LARGE VESSELS

Proper planning: Before mooring, thorough planning should be done, taking into account factors such as weather conditions, tide and current, berth availability, and vessel characteristics.

Experienced crew: Crew members should have a clear understanding of their roles and responsibilities during the operation, including communication protocols and safety procedures.

Adequate equipment: High-quality mooring lines, winches, bollards, and other equipment should be used. Regular inspection and maintenance of the equipment are necessary to ensure they are in

good working condition and can withstand the forces exerted during mooring.

Communication: Effective communication between the vessel's crew and the shore personnel is crucial.

Risk assessment: A comprehensive risk assessment should be conducted before mooring. Potential hazards, such as strong currents, limited maneuvering space, or underwater obstacles, should be identified.

Proper line handling: During the mooring process, crew members should wear appropriate personal protective equipment (PPE) and follow safe line-handling practices.

Emergency preparedness: Crew members should be trained in emergency response procedures, including equipment failure, sudden weather changes, or personnel injuries.

Continuous monitoring: The mooring operation should be continuously monitored to ensure that the vessel remains securely moored. Regular checks of line tension, fender conditions, and the vessel's position relative to the berth should be conducted.

EMPLOYEE QUALITIES FOR MOORING SAFETY

Technical expertise: Possess a thorough understanding of mooring procedures, equipment, and relevant maritime regulations. Knowledge of different types of mooring lines, knots, winches, and bollards is essential.

Safety-conscious: Prioritize safety at all times. Adhere to safety protocols, wear appropriate personal protective equipment (PPE), and be vigilant about identifying and mitigating potential risks and hazards.

Communication skills: Excellent communication is crucial for coordinating mooring operations effectively. Be able to convey information clearly and listen actively to instructions from supervisors and other team members.

Teamwork and collaboration: Mooring operations require close

coordination and collaboration with fellow crew members, shore personnel, and port authorities. Work as a team, to ensure safe mooring processes.

Problem-solving ability: Possess strong problem-solving skills to address unexpected challenges or complications during mooring operations. Be able to think quickly and make sound decisions to ensure the safety of all.

Adaptability: Mooring operations can vary depending on vessel types, weather conditions, and port facilities. Be adaptable and flexible in adjusting to different situations and requirements.

Attention to detail: Pay close attention to details during mooring operations. Ensure proper line tension, correct attachment of mooring lines, and secure positioning of fenders. Small oversights can lead to significant safety risks.

Physical fitness: Mooring operations can involve physically demanding tasks, such as handling heavy lines and equipment. Maintain good physical fitness to perform these tasks safely and efficiently.

Professionalism: Display a professional attitude and conduct yourself responsibly and ethically. Respect the chain of command, adhere to regulations and company policies, and maintain a positive work ethic.

Continuous learning: Engage professional development to enhance your skills and knowledge in the field.

FINAL WORD

Mooring is essential for maintaining the safety, stability, and operational efficiency of large vessels. Proper mooring practices contribute to the protection of personnel, infrastructure, and the environment, supporting smooth port operations and minimizing risks during vessel activities.