



DBCE

Dry Bulk Centre of Excellence

Subject Area no. 19: Mooring & anchoring

Principle: The company develops and implements planning and operational processes for mooring, anchoring and access, to ensure these are carried out effectively without injury to people and damage to the environment.

Level	Expectations	Targets	Suggested objective evidence
Basic	<p>The company has procedures for mooring, anchoring and use of tugs.</p> <p>The company has procedures for providing safe access (for pilots and ship/shore)</p> <p>There is a maintenance program in place for all mooring, anchoring and access equipment.</p>	<p>Procedures exist for all mooring and anchor stations, and provide guidance on:</p> <ul style="list-style-type: none"> - roles, responsibilities and training. - planning, risk assessments, toolbox talks, PPE etc. - mooring arrangements and layouts, snap back areas, anchoring methods. Working with tugs. <p>Maintenance procedures are in place for mooring, anchoring and access equipment.</p>	<p>Verification of mooring, anchoring and towage procedures.</p> <p>Verification of maintenance program</p>



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Level	Expectations	Targets	Suggested objective evidence
Basic (Cont'd)	The company has procedures to ensure that ropes, wires, joining shackles and stoppers are in good condition.	The company has procedures covering stowage, inspection and replacement of mooring ropes wires and shackles. The company ensures that sufficient spare moorings are carried aboard.	Verification that inspection programme incorporates manufacturers guidance.
Intermediate	Fully detailed procedures are in place for mooring, anchoring and use of tugs. The company has procedures to cover keeping the vessel securely moored alongside.	Procedures provide guidance on PPE, supervision, communication, risk assessment review, etc. The company provides guidance on scope of anchor, anchor watches and heaving up in advance in heavy weather. Procedures ensure sufficient personnel are available to tend the moorings, safety related concerns of tending moorings, early deployment of additional moorings/calling tugs/vacating berths in advance of adverse environmental conditions.	Verification of mooring, anchoring and towage procedures.



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Intermediate (Cont'd)	The company has procedures that specify replacement of in-service mooring lines and may include the rotation of mooring lines.	Procedures for replacing mooring ropes and wires should be based on removal of ropes and wires prior to failure.	Verification that inspection programme incorporates manufacturers guidance
Advanced	The company has procedures to ensure that ropes, wires, joining shackles and stoppers are regularly inspected to identify defects that may lead to failure. Mooring winch brakes should be tested in accordance with winch brake manufacturers or shipbuilder's guidance or following repair or modification of associated parts; tests are conducted at least annually.	Records of winch brake testing, including the torque required to achieve the correct rendering load, should be maintained on board. Visiting superintendents should verify that winch brake testing is completed in accordance with company procedures at internal audits.	Ropes and wires inspection program. Verification of winch brake rendering tests & maintenance checks during visits.



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Advanced (Cont'd)	Comprehensive anchoring procedures	Anchoring procedures include: - amount of cable, scope, holding ground, anchor holding power, proximity of shoreline, anchoring in the ballast condition & the use of additional ballast, use of ECDIS, deep water anchoring, anchoring OPL, congested anchorages, emergency anchoring, emergency departure from anchorage.	
Excellence	Comprehensive mooring inspections and audits are carried out by competent shore staff at regular intervals. The company maintains a database for port facilities and relevant mooring requirements.	Competent shore staff regularly carry out inspections and audits of mooring operations on the vessel. The company maintains and promulgates records of mooring and port requirements for terminals called at by company vessels	Records of mooring operations, inspections/audits. Database of port facilities.