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| Overview | This standard covers the competence to plan for and control the operation of marine auxiliaries, auxiliary boilers and service machinery. Procedures and changes are to minimise the risk of damage to the machinery, disruption of operations and the requirements and limits for ship safety. Revised machinery conditions are communicated to all relevant personnel.  **Target Group**  This standard applies to individuals at the management level with responsibility for controlling the operation of auxiliaries on any size vessel working in any operational area. |

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| **Performance criteria**  You must be able to: | 1. prepare a plan and carry out operations to alter machinery conditions in accordance with established safety rules and regulations and environmental protection 2. prepare a plan to carry out bunkering and ballast operations, in accordance with established safety rules and regulations and environmental protection 3. control the preparation of machinery, equipment, systems and ancillaries for operation 4. control the start up and shut down of the machinery, systems and operations in the correct sequence required to meet operational requirements and the actual condition of machinery 5. monitor and establish auxiliaries and service machinery performance in accordance with established technical specifications, safety rules and regulations and vessel demands 6. identify deviations, malfunctions and faults and the need for alterations 7. control the adjustment of machinery conditions and methods to minimise the risk of machinery damage and disruption to operations 8. ensure that arrangements for safe operation and condition of the auxiliaries and service machinery are maintained for all emergencies including emergency shutdown 9. ensure that arrangements for safe and efficient operation and condition of the auxiliaries and service machinery are maintained for all contingency situations including the failure of remote control systems 10. communicate the operating conditions and methods using organisational procedures and define clearly the times and occasions when to seek assistance 11. ensure that reports are made to all relevant organisational and regulatory parties within an appropriate timescale |

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| Knowledge and understanding  You need to know and understand: | 1. the preparation, start up operation and shut down of marine auxiliary machinery, auxiliary boilers and control systems 2. the safe operation of marine main auxiliary machinery in all modes of control 3. the normal plant parameters, operating limits and running adjustments to maintain performance 4. the limiting values for safe operation of marine auxiliary machinery and auxiliary boilers outside normal operating parameters 5. the safe and efficient operation and maintenance of fuel and ballast systems to prevent pollution of the marine environment 6. the construction and operation of pollution prevention equipment and systems 7. the use of internal communication systems, communicating with engine room and bridge personnel and effective forms of communication 8. statutory and organisational reporting requirements 9. the importance and use of records for commercial and legislative purposes 10. how to evaluate and apply Statutory Regulations and guidelines, organisational instructions and guidance, and vessel contingency plans |

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