

The drydocking course is presented through classroom lectures, student participation in projects and practical application exercises. The course addresses the deck plate level of practical operation needed by the dock operator and the universally accepted mathematical calculations required to carry out operations in accordance with established sound engineering practices. The course has accreditation with the Society of Naval Architects and Marine Engineers (SNAME) and the Royal Institution of Naval Architects (RINA). The course curriculum includes:

- Dry docking terminology
- Calculations
- Vessel stability
- Dry dock planning
- Dry docking procedures
- Lay period
- Undocking procedures
- Incidents/accidents

Day 1:

DRY DOCK TRAINING COURSE OUTLINE

INTRODUCTION

TYPES OF DRY DOCKS AND DRYDOCKING METHODS

SHIP STABILITY

SYMBOLS, ABBREVIATIONS, DEFINITIONS

MATH REVIEW

CHAPTER 1 - ORGANIZATION OF INFORMATION

- A. Gathering pertinent information
- B. Important dry dock references
- C. Docking plans
- D. Limitations

CHAPTER 2 - PREPARING THE DRY DOCK

- A. Quick reference sheet
- B. Determine docking position of the vessel
- C. Determine physical location of blocking
- D. Keel block locations
- E. Trapezoidal loading

- F. Draft of instability
- G. Multiple Calculations
- H. Pumping plans
- I. Seismic /wind considerations
- J. Blocking preparations and construction
- K. Soft Caps
- L. Shores
- M. Blocks
- N. Quality assurance

Day 2:

CHAPTER 3 - READINESS TO DRY DOCK

- A. Establishing dock / vessel communication
- B. Physical inspection of the vessel
- C. Listed vessels
- D. Trimmed vessels
- E. A docking checklist
- F. Systems in support of the docking / undocking operation
- G. Ship support systems
- H. Work force support systems
- I. Emergency systems
- J. Readiness of gear
- K. Readiness of services
- L. Readiness of personnel
- M. Line handling
- N. Safety precautions
- O.

CHAPTER 4 - THE DRYDOCKING EVOLUTION

- A. Preparation for docking
- B. Critical stages in the docking process
- C. The deflection plane
- D. Summarized actions to be taken
- E. Steps for a typical docking procedure
- F. Casualty procedures

CHAPTER 5 - LAY PERIOD OF SHIP IN THE DRY DOCK

- A. Preparation for docking
- B. The deflection plane
- C. Critical stages in the docking process
- D. Summarized actions to be taken
- E. Steps for a typical docking procedure
- F. Casualty procedures

CHAPTER 6 - THE UNDOCKING EVOLUTION

- A. Weight control accounting
- B. Pre-undocking checks
- C. Final check of the dock basin
- D. Final preparation for undocking
- E. Ballasting and lift off of the ship
- F. Flood to depth for exit
- G. The ship is hauled out of the dock
- H. De-ballast and inspect dock
- I. Dock list control during undocking

Day 3:

CHAPTER 7 - SPECIAL DRY DOCKING SITUATIONS

- A. Unique situations
- B. Specially designed ships
- C. Unique work in dry dock
- D. Multiple ship dockings
- E. Hauling a ship in off-center
- F. Cold weather precautions
- G. Extreme overhangs
- H. Damaged ships
- I. Special ship supports

CHAPTER 8 - DRYDOCKING ACCIDENTS/INCIDENTS

- A. Background
- B. Analysis

CHECKLISTS

DRYDOCKING SITUATIONS EXERCISES

EXAM

TRAINING WRAP-UP