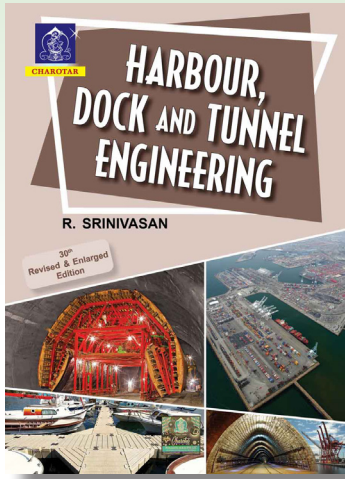


# HARBOUR DOCK AND TUNNEL ENGINEERING



REVISED  
& ENLARGED

By  
R. Srinivasan

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## ABOUT THE BOOK

In the subject of Transportation Engineering, study of Harbour, Dock and Tunnel Engineering is essential. This well-known text-book now in its twenty-ninth thoroughly Revised and Enlarged edition, concisely formulates the basic principles of the subject matter in simple, lucid and easy language presented in two sections.

### Section I – Harbour and Dock Engineering

is well-divided in twelve chapters. It discusses the topics on Harbour and Ports; Natural Phenomena: Tides, Wind and Waves; Protection facilities: Mound Breakwater, Wall Type Breakwater, Special Type Breakwater such as Floating Type, Hydraulic Type and Pneumatic Type Breakwater; Planning and Layout of Ports; Various other Facilities such as Docking Facilities (Wet Docks, Basins and Lock Gates); Repairing Facilities (Dry Docks, Slipways and Floating Docks); Approach Facilities (Entrance and Lock Gates); Loading Unloading Facilities (Quay Walls, Wharves, Piers, Dolphins, Jetties and Fenders); Storing Facilities (Aprons, Transit Sheds and Warehouses); Dredging Facilities and Guiding Facilities.

### Section II – Tunnel Engineering

is also well-divided in twelve chapters. It discusses the topics on General Aspects of Tunnelling; Stages in Tunnel Construction; Shafts and Portals; Soil Classification and Various Tunnelling Methods for Soft Soils and Other Methods of Tunnelling; Tunnelling in Water Bearing Soils; Tunnelling in Rock; The New Austrian Tunnelling Method (NATM) — Sequential Excavation Method; Tunnel Lining; Drainage of Tunnels; Lighting, Ventilation and Dust Control in Tunnels; and Safety in Tunnel Construction.

### The Salient Features of this book are

243 Self explanatory neatly drawn sketches, photographs and more than 321 examination questions at the end of each chapter.

The book in the present form will prove to be extremely useful to the students preparing for the Degree examinations in Civil Engineering of all the Indian Universities, Diploma examinations conducted by various Boards of Technical Education, Certificate Courses as well as for the A.M.I.E., U.P.S.C., G.A.T.E., I.E.S., and other similar competitive and professional examinations. It should also be an immense use to practicing Civil Engineers.

## CONTENT

### SECTION I : HARBOUR AND DOCK ENGINEERING

- 1: HARBOURS AND PORTS
- 2: NATURAL PHENOMENA: TIDES, WIND AND WAVES
- 3: PROTECTION FACILITIES: MOUND BREAKWATER
- 4: PROTECTION FACILITIES:  
WALL TYPE AND SPECIAL BREAKWATERS
- 5: PLANNING AND LAYOUT OF PORTS
- 6: DOCKING FACILITIES  
(WET DOCKS, BASINS, LOCK GATES)
- 7: REPAIRING FACILITIES  
(DRY DOCKS, SLIPWAYS, FLOATING DOCKS)
- 8: APPROACH FACILITIES  
(ENTRANCE AND LOCK GATES)
- 9: LOADING UNLOADING FACILITIES  
(QUAY WALLS, WHARVES, PIERS, DOLPHINS,  
JETTIES, FENDERS)
- 10: STORING FACILITIES  
(APRONS, TRANSIT SHEDS AND WAREHOUSES)
- 11: DREDGING AND DREDGING EQUIPMENT
- 12: GUIDING FACILITIES

### SECTION II : TUNNEL ENGINEERING

- 13: GENERAL ASPECTS OF TUNNELLING
  - 14: STAGES IN TUNNEL CONSTRUCTION
  - 15: SHAFTS AND PORTALS
  - 16: SOIL CLASSIFICATION AND TUNNELLING  
METHODS FOR SOFT SOILS
  - 17: OTHER METHODS OF TUNNELLING
  - 18: TUNNELLING IN WATER BEARING SOILS
  - 19: TUNNELLING IN ROCK
  - 20: THE NEW AUSTRIAN TUNNELLING METHOD (NATM)  
[SEQUENTIAL EXCAVATION METHOD]
  - 21: TUNNEL LINING
  - 22: DRAINAGE OF TUNNELS
  - 23: LIGHTING, VENTILATION AND  
DUST CONTROL IN TUNNELS
  - 24: SAFETY IN TUNNEL CONSTRUCTION
- INDEX: HARBOUR AND DOCK ENGINEERING  
INDEX: TUNNEL ENGINEERING

Catalogue Checklist

**HARBOUR, DOCK AND TUNNEL ENGINEERING**  
**DETAILED CONTENTS**

**SECTION I HARBOUR AND DOCK ENGINEERING**

**CHAPTER 1 HARBOURS AND PORTS**

- 1-1. Introduction
- 1-2. Water transportation
- 1-3. Evolution of water transport

**HARBOURS**

- 1-4. Classification of harbours
- 1-4-1. Classification of harbour depending upon the protection needed
- 1-4-2. Classification of harbour depending upon the utility
- 1-4-3. Classification of harbour based upon the location
- 1-5. Accessibility and size of harbours
- 1-5-1. Site selection
- 1-5-2. Shape of the harbour
- 1-5-3. Harbour depth
- 1-5-4. Marine surveys
- 1-5-5. Harbour planning
- 1-5-6. Features of a port
- 1-5-7. Defects in harbours
- 1-5-8. Requirements or characteristics of a good harbour
- 1-5-9. Ship characteristics
- 1-5-10. Common terms for ship characteristics

**PORTS**

- 1-6. Ports
- 1-7. Indian Ports
- 1-8. Requirements of a good port
- 1-9. Facilities at a major port
- 1-10. Port design
- 1-11. Types of ships

Questions 1

**CHAPTER 2 NATURAL PHENOMENA:  
TIDES, WIND AND WAVES**

- 2-1. General
- 2-2. Littoral drift
- 2-3. Sea water waves
- 2-4. Tide generation
  - Tidal waves and tidal theory
- 2-5. Types of Lunar tides
- 2-6. Solar tides
- 2-7. Tides due to moon and sun
- 2-8. Total number of tides
- 2-9. Major tides
  - Spring tides and neap tides
- 2-10. Water levels of sea during tides and tidal ranges
- 2-11. Uses of tides
- 2-12. Effect of tides
- 2-13. Age or establishment of tide
- 2-14. Tide prediction
- 2-15. Wind
- 2-16. Dynamic effect of wave action
- 2-17. Modification of sea waves
- 2-18. Air compression
- 2-19. Water hammer
- 2-20. Harbour maintenance/Shore protection works

Questions 2

**CHAPTER 3 PROTECTION FACILITIES**

- mound breakwater
- 3-1. General
- 3-2. Classification of breakwaters
- 3-3. Heap or mound breakwater
- 3-4. Selection of type of breakwater
  - Functions of components of mound breakwater
- 3-5. Details of energy dissipation in mound breakwater

- 3-6. Characteristics of mound breakwater
  - 3-7. Rubble mound Breakwater
  - 3-8. Concrete block mound breakwater
  - 3-9. Rubble mound breakwater supplemented by concrete blocks
  - 3-10. Rubble mound breakwater supplemented by patented stones
  - 3-11. Mound with superstructure or Composite breakwater
    - Mound construction with top part made solid
  - 3-12. Mound construction
- Questions 3

**CHAPTER 4 PROTECTION FACILITIES: WALL TYPE AND SPECIAL BREAKWATERS**

- 4-1. Wall type breakwater
  - 4-2. Types of wall breakwater
  - 4-3. Causes of failure of wall breakwater
  - 4-4. Forces on upright wall breakwater
  - 4-5. Essentials for wall type breakwater
  - 4-6. Typical cross-section of wall breakwater
    - Alternate cross-section of wall breakwater
  - 4-7. Advantages and disadvantages of wall breakwater
  - 4-8. Method of construction – staging system
  - 4-9. Bonds for wall breakwater
  - 4-10. Wall type breakwater of larger units
  - 4-11. Breakwater height
  - 4-12. Comparison of mound type and wall type breakwaters
  - 4-13. Breakwater failures
  - 4-14. Special breakwaters
- Questions 4

**CHAPTER 5 PLANNING AND LAYOUT OF PORTS**

- 5-1. General
  - 5-2. Facilities at a port
  - 5-3. Layout of ports
- Questions 5

**CHAPTER 6 DOCKING FACILITIES  
(WET DOCKS, BASINS, LOCK GATES)**

- 6-1. General
  - 6-2. Classification of Docks
  - 6-3. Classification of wet docks
  - 6-4. Advantages and disadvantages of tidal wet docks
  - 6-5. Advantages and disadvantages of enclosed wet docks or impounded basins
  - 6-6. River ports
  - 6-7. Form and arrangements of basins and docks
  - 6-8. Design and construction of basin or dock walls
  - 6-9. Other aspects of construction details of basin or dock walls
  - 6-10. Dock entrances
  - 6-11. Sizes of dock entrances
- Questions 6

**CHAPTER 7 REPAIRING FACILITIES  
(DRY DOCKS, SLIPWAYS, FLOATING DOCKS)**

- 7-1. General
- 7-2. Classification of repairing facilities
- 7-3. Graving dry dock
- 7-4. Facilities to be provided at a graving dry dock
- 7-5. Method of dry docking
- 7-6. Size of graving dock
- 7-7. Forces acting on a graving dock
- 7-8. Conditions for design of graving dock
- 7-9. Constructing graving dock
- 7-10. Floor design of graving dry dock
- 7-11. Advantages and disadvantages of graving dry dock
- 7-12. Marine railway dry dock

**HARBOUR, DOCK AND TUNNEL ENGINEERING**  
**DETAILED CONTENTS**

- 7-13. Slipways
- 7-14. Lift dry dock
- 7-15. Floating type dry dock
- 7-15-1. Types of floating docks
- 7-15-2. Design considerations for floating docks
- 7-15-3. Advantages and disadvantages of floating dock
- Questions 7

**CHAPTER 8 APPROACH FACILITIES  
(ENTRANCE AND LOCK GATES)**

- 8-1. General
- 8-2. Direction of an entrance of harbour
- 8-3. Direction of entrance for river harbours
- 8-4. Dimensions of entrances
- 8-5. Types of entrances
- 8-6. Entrance locks
- 8-7. Lock foundations
- 8-8. Dimensions of entrances and locks
- 8-9. Construction of lock gates
- 8-10. Types of lock gates
- 8-11. Forces on the gates
- 8-12. Shape of gates
- 8-13. Support for dock gates
- 8-14. Working of gates
- Questions 8

**CHAPTER 9 LOADING-UNLOADING FACILITIES  
(WALLS, WHARVES, PIERS, DOLPHINS,  
JETTIES, FENDERS)**

- 9-1. General
- 9-2. Design of quay walls
- 9-3. Types of quay walls
- 9-4. Other details of quay walls
- 9-5. Wharves
- 9-6. Piers
- 9-7. Types of piers
- 9-8. Additional points for Piers
- 9-9. Pierheads
- 9-10. Dolphins
- 9-11. Jetties
- 9-12. Differences between wharf and jetty
- 9-13. Fenders
- 9-13-1. Basic features of marine fenders
- 9-13-2. Classification of fenders
- 9-13-3. Type of fenders
- 9-14. Slip
- 9-15. Moles
- Questions 9

**CHAPTER 10 STORING FACILITIES (APRONS, TRANSIT  
SHEDS, AND WAREHOUSES)**

- 10-1. General
- 10-2. Aprons
- 10-3. Transit sheds
- 10-4. Design of transit shed
- 10-5. Warehouses location of warehouse
- 10-6. Cold storages
- 10-7. Guard houses
- Questions 10

**CHAPTER 11 DREDGING AND DREDGING EQUIPMENT**

- 11-1. Introduction
- 11-2. Purpose of dredging
- 11-3. Application of dredging required areas

- 11-4. Classification of dredging
- 11-4-1. Primary dredging or Capital dredging
- 11-4-2. Secondary dredging or Maintenance dredging
- 11-5. Objectives of dredging
- 11-6. Types of dredged materials
- 11-7. Disposal of the dredged material
- 11-8. Types of dredging equipment
- 11-8-1. Mechanical dredgers
- 11-8-2. Hydraulic dredgers
- 11-8-3. Specialised types of dredgers
- 11-9. Choice of dredger
- 11-10. Execution of dredging work
- Questions 11

**CHAPTER 12 GUIDING FACILITIES**

- 12-1. Necessity for guiding facilities
- 12-2. Fixed and floating light stations
- 12-3. Lighthouse
- 12-4. Signals
- 12-5. Light signals
- 12-6. Fog signals
- 12-7. Audible signals
- 12-8. Moorings
- 12-9. Mooring accessories
- 12-10. Off-shore moorings
- Questions 12

**SECTION II TUNNEL ENGINEERING**

**CHAPTER 13 GENERAL ASPECTS OF TUNNELLING**

- 13-1. General
- 13-2. Categories of obstacles
- 13-3. Definitions
- 13-4. Comparison of bypassing alternatives tunnel, open cut, bridge and surface road
- 13-5. Advantages and disadvantages of tunnels and open cuts
- 13-6. History of tunnels constructed
- 13-7. Developments in tunnelling methods
- 13-8. Important years in tunnel construction
- 13-9. Economics of tunnelling
- 13-10. Alignment of a tunnel
- 13-11. Classification of tunnels
- 13-12. Tunnel approaches
- 13-13. Shapes of tunnels
- 13-14. Size of tunnels
- 13-15. Problems in tunnelling
- Questions 13

**CHAPTER 14 STAGES IN TUNNEL CONSTRUCTION**

- 14-1. Investigations at tunnel site
- 14-2. Setting out of tunnel
- 14-3. Methods of getting extra faces to work upon tunnel
- 14-4. Excavation
- 14-5. Blasting
- 14-6. Temporary supports
- Temporary supports for steel
- 14-7. Permanent supports
- 14-8. Ventilation at the time of construction
- 14-9. Muck removal
- 14-10. Supplementary operations
- 14-11. Miscellaneous
- Questions 14

**CHAPTER 15 SHAFTS AND PORTALS**

- 15-1. General
- 15-2. Advantages of shafts
- 15-3. Size of shafts
- 15-4. Location of shafts
- 15-5. Classification of shafts

**HARBOUR, DOCK AND TUNNEL ENGINEERING**  
**DETAILED CONTENTS**

- 15-6. Construction of shafts in rock
  - 15-7. Construction of shaft in soft ground
  - 15-8. Design of shaft supports
  - 15-9. Precautions for shaft sinking work in soft soil
  - 15-10. Protection round the shaft opening
  - 15-11. Portals
  - 15-12. Twin tunnels
- Questions 15

**CHAPTER 16 SOIL CLASSIFICATION AND TUNNELLING METHODS FOR SOFT SOILS**

- 16-1. Soil classification
  - 16-2. Choice of tunnelling methods in soft soils
  - 16-3. Methods of tunnelling (soft soils)
  - 16-4. Forepoling method
  - 16-5. Needle beam method
  - 16-6. Army method or case method
  - 16-7. American method
  - 16-8. English method
  - 16-9. Belgian method
  - 16-10. German method
  - 16-11. Austrian method
  - 16-12. Timbering in soft soil tunnelling
- Questions 16

**CHAPTER 17 OTHER METHODS OF TUNNELLING (LINER PLATE METHOD)**

- 17-1. Liner plate method

**CUT AND COVER TUNNEL CONSTRUCTION METHOD**

- 17-2. Cut and cover tunnel construction method
- 17-3. Features of cut and cover tunnel construction methods
- 17-4. Types of cut and cover tunnel construction methods

**SHIELD AND TUNNEL BORING MACHINE METHOD**

- 17-5. Tunnelling with shield
    - 17-5-1. Parts of shield
    - 17-5-2. Terms commonly used with shield
    - 17-5-3. Primary lining in shield
    - 17-5-4. General steps of tunnelling with shield
    - 17-5-5. Shield tunnelling in different types of soils
    - 17-5-6. Common equipment with shield
    - 17-5-7. Sequence of tunnelling using the shield
    - 17-5-8. Mechanized shields
  - 17-6. Mechanised tunnel boring machine
  - 17-7. Factors for selection of TBM
  - 17-8. Sequence of mechanised TBM
  - 17-9. Types of mechanised TBM
  - 17-10. Open type TBM for hard rock
    - 17-10-1. Open type TBM without shield
    - 17-10-2. Enlargement tunnel boring machines (ETBM)
  - 17-11. Double shield (open face) tunnel boring machine (DSTBM)
  - 17-12. Closed type single shield TBM for soft soil
    - 17-12-1. Slurry pressure tunnel boring machine (SPTBM)
    - 17-12-2. Earth pressure balance tunnel boring machine (EPBM)
  - 17-13. Multi-mode tunnel boring machine (MMTBM)
  - 17-14. Difference between open type TBM and closed type shield TBM
  - 17-15. Difference between single shield TBM and double shield TBM
- Questions 17

**CHAPTER 18 TUNNELLING IN WATER BEARING SOIL**

- 18-1. General
  - 18-2. Well points system Procedure to bring down ground water table
  - 18-3. Equipment with Plenum process of tunnelling or compressed air method
  - 18-4. Use of pipes and conduits in water bearing soils
  - 18-5. Compressors, generators and pumps
  - 18-6. Methods of tunnelling in water bearing soils
- Questions 18

**CHAPTER 19 TUNNELLING IN ROCK**

- 19-1. General
  - 19-2. Sequence of operations for tunnelling in rock
  - 19-3. Faces of operation for tunnelling in rock
  - 19-4. Methods of tunnelling in rock
  - 19-5. Mucking
  - 19-6. Mucking in steep grade tunnelling
  - 19-7. Hauling
  - 19-8. Other aspects
  - 19-9. Drill-bits
  - 19-10. Nipper cars
  - 17-11. Explosives
  - 17-12. Safety precautions in rock tunnelling
- Questions 19

**CHAPTER 20 NEW AUSTRIAN TUNNELLING METHOD (NATM) [SEQUENTIAL EXCAVATION METHOD]**

- 20-1. Introduction to NATM
  - 20-2. Objectives of NATM
  - 20-3. Features Based on NATM
  - 20-4. Components and sequence of execution in NATM
  - 20-5. Conclusions
- Questions 20

**CHAPTER 21 TUNNEL LINING**

- 21-1. Necessity of lining
  - 21-2. Objects of tunnel lining
  - 21-3. Materials for lining
  - 21-4. Design of thickness of lining
  - 21-5. The sequence of lining a tunnel
- Questions 21

**CHAPTER 22 DRAINAGE OF TUNNELS**

- 22-1. General
  - 22-2. Pre-drainage
  - 22-3. Dewatering
  - 22-4. Permanent drainage
- Questions 22

**CHAPTER 23 LIGHTING, VENTILATION AND DUST CONTROL IN TUNNELS**

- 23-1. Tunnel Lighting
    - 23-1-1. Spacing of lights
    - 23-1-2. Types of tunnel lights
  - 23-2. Ventilation in tunnels
    - 23-2-1. Objects of tunnel ventilation
    - 23-2-2. Requirements of tunnel ventilation
    - 23-2-3. Volume of air required
    - 23-2-4. Methods of ventilation
    - 23-2-5. Equipment required for tunnel ventilation
    - 23-2-6. Permanent ventilation and noise pollution
  - 23-3. Dust control and methods
- Questions 23

**CHAPTER 24 SAFETY IN TUNNEL CONSTRUCTION**

- 24-1. General
  - 24-2. Safety precautions in tunnelling
  - 24-3. Health protection in tunnel construction
- Questions 24

**INDEX HARBOUR AND DOCK ENGINEERING**

**INDEX TUNNEL ENGINEERING**