

# ANCHORING OF FLOATING STRUCTURES

- If you want to receive any information from below, please indicate your enquiry on the boxes.

## **1. DESCRIPTION OF ANCHORING SYSTEMS**

- 1.1 Description and Characteristics of Anchor Lines.
- 1.2 Description and Characteristics of Anchors.

## **2. ENVIRONMENTAL LOADS ON FLOATING STRUCTURES**

- 2.1 Definition of Environmental Conditions.
- 2.2 Wind Loads on Floating Structures.
- 2.3 Current Loads on Floating Structures.
- 2.4 Wave Action Loads on Floating Structures.

## **3. DESIGN OF ANCHORING LINES**

- 3.1 Geometry of Anchoring Lines.
- 3.2 Behavior of Two Opposing Lines.
- 3.3 Line Force Calculations.
- 3.4 Safety Factors for Anchoring Systems.
- 3.5 Line Choice and Dimensioning.

## **4. SOIL SURVEYS BEFORE INSTALLATION OF ANCHORING SYSTEMS**

- 4.1 Characterization of Seafloors and Soils.
- 4.2 Soil Survey Before Anchor Setting.

## **5. HOLDING POWER OF ANCHORS**

- 5.1 Anchor Work Kinematics.
- 5.2 Anchor Holding Power Parameters.
- 5.3 Predicting the Holding Power of Anchors.
- 5.4 Prediction Tests Using Small-Sized Anchors.
- 5.5 Anchor Line Friction on the Seabed.

## **6. CHOICE OF ANCHOR: TYPE AND SIZE**

- 6.1 Anchor Selection Criteria.
- 6.2 Comparative Performance of Different Anchor Types.
- 6.3 Anchor Dimensioning.

## **7. INSTALLATION AND CHECKING OF ANCHORING SYSTEMS**

- 7.1 Installation of Anchoring Systems.
- 7.2 Anchor Couplings.
- 7.3 Recovery of Anchoring Systems.
- 7.4 Checking of Anchoring Systems.
- 7.5 Anchor Line Corrosion.

## **8. ANCHORING TESTS**

- 8.1 Determination of the Test Load.
- 8.2 Load Application.
- 8.3 Practical Performance of the Anchoring Test.
- 8.4 Measurements and Checks During the Test.
- 8.5 Validity of Anchoring Tests.
- 8.6 Examples of Anchoring Tests.