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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 28784.2-2014**

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**Mechanical vibration -- Measurement of vibration on ships --  
Part 2: Measurement of structural vibration**

机械振动 船舶振动测量 第2部分：结构振动测量

**(English Translation)**

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## Table of Contents

|                                                    |    |
|----------------------------------------------------|----|
| Foreword .....                                     | 3  |
| Introduction .....                                 | 5  |
| 1 Scope .....                                      | 6  |
| 2 Normative references .....                       | 6  |
| 3 Terms and definitions .....                      | 6  |
| 4 Measurement conditions and manoeuvres .....      | 7  |
| 5 Measurement positions .....                      | 9  |
| 6 Signal acquisition, processing and storage ..... | 9  |
| 7 Test report .....                                | 10 |
| Annex A .....                                      | 12 |
| Annex B .....                                      | 14 |
| Annex C .....                                      | 16 |
| Annex D .....                                      | 20 |
| Bibliography .....                                 | 21 |

### 1 Scope

This Part of GB/T 28784 gives guidelines, and specifies requirements and procedures for the measurement, diagnostic evaluation and reporting of structural vibration of ships, excited by the propulsion plant. Structural vibration can be of global or of local nature. Here, primarily global vibration is dealt with.

Local vibration of deck structures from a habitability point of view is dealt with in GB/T 7452. Occurrence of local vibration leading to fatigue damage is rare and strongly related to the individual configuration. Therefore, no general guideline for the measurement of such type of vibration is provided within the scope of this Standard (all parts). For reference, some basic information regarding the design of structures with respect to local structural vibration is provided in Annex D.

This Part does not consider transient ship vibration phenomena, e.g., as excited by slamming.

Even though torsional shaft or crankshaft vibration can in some cases cause relevant structural vibration, they are not considered here. In this connection, reference can be made to the relevant classification rules and Part 4 of this

Standard.

## **2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2041 Mechanical vibration, shock and condition monitoring -  
Vocabulary

## **3 Terms and definitions**

For the purposes of this document, the terms and definitions given in ISO 2041 and the following apply.