

ICS 07.060
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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 12763.8-2007

Replacing GB/T 13909-1992

**Specifications for oceanographic survey - Part 8: Marine
geology and geophysics survey**

海洋调查规范 第8部分：海洋地质地球物理调查

Issued on: August 13, 2007

Implemented on: February 1, 2008

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine;
Standardization Administration of the PRC**

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Foreword

GB/T 12763 "oceanographic survey" is divided into 11 parts.

- Part 1. General;
 - Part 2. oceanographic observations;
 - Part 3. Marine meteorological observations;
 - Part 4. Seawater chemical elements investigation;
 - Part 5. Ocean Sound, light elements investigation;
 - Part 6. Marine Biological Survey;
 - Part 7. Marine survey data exchange;
 - Part 8. Marine Geological Geophysical Survey;
 - Part 9. Marine Ecological Survey Guidelines;
 - Part 10. seabed topography survey;
 - Part 11. Marine Engineering Geological Survey.
- Part 9. Marine Ecological Survey Guide, Part 10. A survey of the seabed topography and the Section 11. Marine engineering geological survey correspond In GB/T 12763-1991 is a new section. This section GB/T 12763 "oceanographic survey" Part 8, instead of the GB/T 13909-1992 "sea oceanographic survey Yang geological and geophysical investigations. " This part of GB/T 12763 Part 1, Part 7 and Part 10 supporting the use. This section compared with the GB/T 13909-1992 main changes are as follows: GB/T 13909-1992 versions of articles, chapters, articles, paragraphs, Part edition according to GB/T 1.1 "Standardisation Guideline 1. The structure and preparation of standard requirements "to chapter, section, subsection structure. Excerpts of Table 1 compared with GB/T 13909-1992 version has four changes.
- Deleting "open sea", "offshore" parts and its contents, are far from the sea near the same requirements;
 - Deleting 1.200 x 10⁴ scale survey content, part of the project to increase 1.10 x 10⁴ scale investigation and 1.5 x 10⁴ content;

1 Scope

Part 8 of China's specifications for oceanographic survey, covering marine geology and geophysics - the work by which the sea floor and what lies beneath it are mapped and sampled. It is one of the largest parts of a large series, and it stands behind the country's resource assessment, its offshore engineering, its cable and pipeline routes and its territorial and continental shelf claims: a survey done to a different standard produces data

that cannot be merged with the national holdings, which is the reason for a specification of this kind. This part specifies the basic content, the methods and the requirements for the compilation of the results of marine geological and geophysical surveys. The geological half covers the sampling and description of the sea bed: the grab and core sampling, the sub-bottom sampling and drilling, the handling, description, storage and analysis of the sediment and rock recovered, and the photography and observation of the bottom. The geophysical half covers what is measured rather than recovered: the single and multibeam bathymetry that gives the shape of the floor, the side scan sonar that gives its texture, the sub-bottom profiling and the seismic reflection and refraction that image the layers beneath, and the marine gravity and magnetic surveys. Running through both is the part that makes the data usable afterwards: the navigation and positioning to which every observation is tied, the corrections applied to it, the quality control, and the format and content in which the results and the report must be compiled. On a survey where the observations cannot be repeated and the ship time cost a great deal, the provisions on recording and on data compilation are worth as much as the ones on measurement. Issued on 13 August 2007 and in force since 1 February 2008, it replaces GB/T 13909-1992.

GB/T 12763 provisions of this part of the marine geological, geophysical survey of the basic content, methods, and data compilation of survey results Claim. This section applies to marine geological, geophysical, environmental infrastructure elements of the investigation, a number of professional, also refer to the use of special investigation.

2 Normative references

The following documents contain provisions which, through

GB/T 12763 reference in this text, constitute provisions of this part. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 12763.1 specification for oceanographic survey - Part 1. General

GB/T 12763.6 specification for oceanographic survey - Part 6. Marine Biological Survey

GB/T 12763.7 specification for oceanographic survey - Part 7. Marine survey data exchange Part 10

GB/T 12763.10 oceanographic survey. seabed topography survey

GB/T 50123 standard soil test method

3 Terms and Definitions

The following terms and definitions apply to this section.

3.1 Some use of natural radioactive decay half-life of certain laws, determining absolute geological radioactive elements coexist Of period of analysis methods.

3.2 It refers to the Earth's interior heat conduction mode, in unit time through unit surface area of the seabed outward heat loss.

3.3 Geothermal difference unit depth.

3.4 Based on plate kinematic theory of thermal mode. It is assumed that the ocean newborn oceanic crust continuously generated from the mid-ocean ridge, and to promote two Side of the oceanic crust on both sides to expand, due to the high temperature of the newborn oceanic heat and gradually cooled, thus forming a crust with age and heat flow diminishes to Low trend. According to the theoretical model, it can be measured with the theoretical value of heat flow heat flow comparison, calculate the age of oceanic crust.

3.5 Acoustic receiver voltage gain of the variation with time.

7.1 And

7.2 respectively "towed shallow stratigraphic profiling" and "boat-load detection shallow stratigraphic section" instead of the original version of "stratigraphic profiling" and "sea The end of the multi-frequency probe "and delete the contents of calculation and abundance of polymetallic nodules coverage; Chapter 9, the "gravity anomaly" to replace the original word "free-air gravity anomaly," word;

9.4.1.1 marine gravity measurements of the original note Acceptance levels recorded in the standard d paragraph "a continuous online measurement missing records less than 10% of the survey line length, total length of survey line missing less than 20%, not Eligible survey line is less than 10% of the total survey line, "was changed to" a lack of continuous recording survey line survey line length is less than 5%, less than the cumulative lack of measurement 10% of the long line, measuring line failure less than 5% of the total survey line. " Original Article 6 of Chapter 10, "marine sediment paleomagnetic measurements," notes

6.9 sediment paleomagnetic measurements. This section of the Appendix A, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F, Annex G and Annex H are normative appendix. This part by the State Oceanic Administration. This part is administered by the National Oceanic Standards and Metrology Center. This part of the State responsible for drafting the Second Institute of Oceanography (Amendment), Ministry of Land and Guangzhou Marine Geological Survey, National Oceanic First Institute of Oceanography Bureau participated in the drafting (Amendment). The main drafters of this section. Lijia Biao, Ko Chang-chih, Kang Shouling at dawn fruit, Wang Xiaobo, Zhang Fu Yuan, Songlian Qing Hua ancestral roots, Chen Jianfang, First Qianjiang money wing Peng, Lu n, Li Quanxing, Fan Tan, Xu Cong Friends of the sound and AIDS and so on. This part of the standard replaces the previous editions are.